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An exploration on how Information Systems (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)

A thesis submitted to



TRINITY COLLEGE DUBLIN
COLLAISTE NA TRINOIDE, BAILE ATHA CLIATH

THE UNIVERSITY OF DUBLIN

For the degree of Doctor of Philosophy

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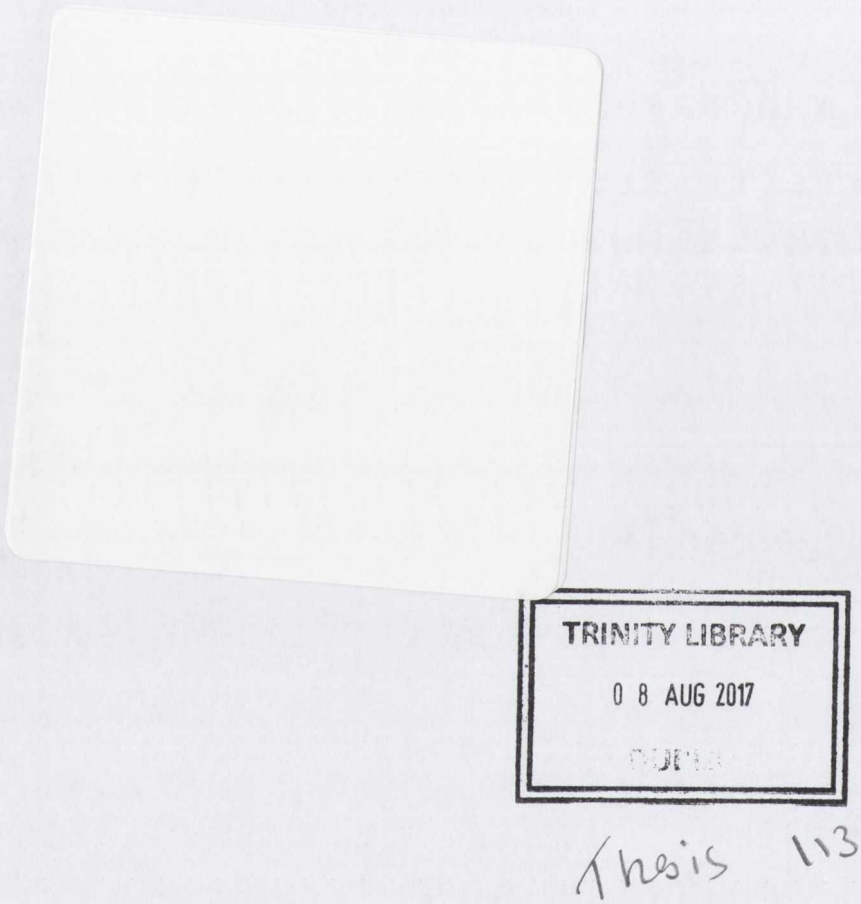
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Dedication

This work is dedicated with all love to my my wife Muna and my children Yara and Yusuf

Acknowledgements

All praise be to Allah (God), whose help and guidance we seek, and who commanded us to thank Him for those blessings, saying "Therefore remember Me (by praying, glorifying). I will remember you, and be grateful to Me (for My countless favours on you) and never be ungrateful to Me".

And as His prophet Mohammad (peace be upon him and all prophets) said "He who does not thank people, does not thank Allah". He also added: "Whoever does you a favour, then reciprocate, and if you cannot find anything with which to reciprocate, then pray for him/her until you think that you have reciprocated him/her"

In delivering this thesis, I have been the beneficiary of a number of supports, encouragements and feedback. A short written acknowledgment would be a minor token in return for the attention given to me by some wonderful individuals who deserved to be thanked overtly - that would be the least I can do. I would like to start with my supervisor Prof. Joe McDonagh and thank him sincerely for all his supports, guidance, patience and friendship. I owe a debt of gratitude to him. I also would like to thank our administration office in the business school, namely, Valerie McCarthy (retired), Joan Reidy and Samantha Peavoy for their enormous supports during my work from the school. I also would like to deeply thank Dr. Brian Dempesy for his on-going support during this PhD endeavours. Special thanks go out to Dr. Jeff Hughes for his encouragement and advise. I must also thank my colleagues in the IS research group, namely, Jim Holohan, Deepak Saxena and Anne Burke for their helps, advise and moral support.

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Abstract

This thesis is situated in the domain of Strategic Alignment (SA) within the field of Information system (IS) strategy to explore "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?". SA research is experiencing a 'practice turn' from a focus on what SA can do for organisational level performance to a newer focus on what practices constitute SA. Underlying this turn are impulses to move the field beyond current problematic overwhelming evidence on what-to-aligning rather than how-to-aligning, that is, to animate the 'worldliness' of SA enactment as an activity that practitioners do as opposed to the representation of SA under the dichotomy of 'aligned' vs. 'misaligned' organisations. From its inception, by leveraging the theory of practice, the pragmatist conception of what practitioners do is enjoying a renaissance in the Strategy-as-Practice (SAP) perspective within the strategic management field. As such, SAP perspective has been taken in this thesis as an alternative theoretical lens to facilitate inquiring into the micro-end of the spectrum by investigating aligning activities of IS executives within their situated practices.

The empirical part of this thesis is comprised of an interpretive/qualitative case-based inquiry. This involved two cases underpinned by the SAP lens as a sharpening tool to provide precision across all the research design elements to enable answering the thesis question in the manner that is tied to the SAP perspective. The design encapsulates the imperatives of theoretical sampling relative to the thesis question. In this sense, the appropriate setting and cases were deemed to be from the Irish PSOs as the most appropriate for the conduct of the research. Data from multiple-levels were collected in close engagement with practitioners in the fieldwork. These data were then analysed through the coding technique from the constructivist stream with the Grounded Theory (GT) method. This conventional data analysis was supplemented by the notion of 'writing as a method of discovery', a process from which the narratives for each case was developed to obtain contextual understanding about the enactment of SA in all its richness and complexity. The fruit of this analysis was the development of a multi-level theoretical framework which exposed a set of aligning activities – namely, Inscribing, Instrumentalizing, Effectuating, Monetizing, Disciplining, Demystifying, Incrementalizing and Harmonizing - which were central to how IS executives in both cases triggered SA development within their organisational practices. The framework was presented under the notion of theorising where I undertook to disclose my own thought process that preceded the development of the theory before embedding the theory to the extant literature of SA. The thesis put forward some contributions, implications and recommendation for future research, subject to certain some limitations.

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Abbreviations

AMIT	Journal of Accounting, Management, and Information Technology
CMOD	Centre for management and organisation development
DJEI	Department of Job Enterprise and Innovation
DPER	Department of Public Expenditure and Reforms
ECF	Employment Control Framework
EJIS	The European Journal of Information Systems
ESD	External Service Delivery
GT	Grounded Theory
ICIS	International Conference on Information Systems
IS	Information System
ISJ	Information System Journal
ISR	Journal of Information System Research
JIT	Journal of Information Technology
JMIS	Journal of Management Information System
JSIS	Journal of Strategic Information Systems
SA	Strategic Alignment
SAP	Strategy as Practice
SLR	Systematic Literature Review
MISQ	Journal of Management Information System Quarterly
NAMA	National Asset Management Agency
NRP	National Recovery Plan
PA1	Public Agency – Case 1
PA2	Public Agency – Case 2
PfG	Programme for Government
PoW	Programme of Work
PSC	Public Spending Code
PSO	Public Service organisation
PSRP	Public Sector Reform Plan
SIM	Society for Information Management
SMEs	Small and medium sized businesses
VFM	Value for Money
3Ps	Practice, praxis and practitioners

Chapter 1

INTRODUCTION

1.1 Introduction

This thesis research is situated in the domain of Strategic Alignment (SA) within the wider IS strategy field (Chen et al., 2010, Gable, 2010). It was undertaken to contribute to SA research by adopting a lens from the strategic management field, known as the Strategy-as-Practice (SAP) perspective (Whittington, 2006a, Paroutis et al., 2013). A great achievement of SA extant research efforts has been to convey the message that SA is a rational decision-making activity in an ideal type of organisations. Therefore, it is expected that practitioners in all organisations will follow the same route towards moulding their processes to realise positive outcomes at organisational level performance (Bruce, 1998, Sabherwal et al., 2001, Cumps et al., 2006, Wilson et al., 2013). However, opening up the black-box of SA activities at practitioner level has been overlooked by the bulk of SA scholars thus far (Sarhan and McDonagh, 2014a, Karpovsky and Galliers, 2015). Thus, this thesis intends to shed some light on SA research by taking SAP as a lens towards investigating the doing and enactment of SA as effectuated by practitioners in the real life world of their lived experience.

This chapter (1) presents introductory remarks to set the scene for this thesis and is organised into six sections. In 1.2, I introduce the motivation behind undertaking this research which is primarily driven to fill the lacuna of 'how to do SA', as opposed to 'what organisations have to cast' regarding process and events to realise better performance following the achievement of SA. Following this, in 1.3, I offer a summary of the current state of the field of SA by sketching on the main areas where the field has been exposed to a set of critiques that, to a certain degree, remain valid today. Then, in 1.4, I present a macro view on SA research over 38 years with the purpose of showing the theoretical underpinnings and their associated drawbacks which fuelled the extant research of SA. Therein, I argue for the necessity and timeliness to embrace the SAP perspective in the quest of SA as an alternative theoretical lens to address the set of issues alluded to in the preceding two sections. In 1.5, I proceed to delineate the research aim, manifesting the steps undertaken to formulate a precise research question to guide the inquiry and, finally, unpacking the wording components of the research question and articulating their relevance to the aim and purpose of this thesis research. In 1.6, I outline the structure of this thesis. Finally, in 1.7, I draw this chapter to a close, and offer a link to the next chapter (2), a literature review consisting of three sets of literature, namely,

practice theory, Narrative Review on the SAP perspective, and Systematic-Literature-Review on the extant SA research.

1.2 The motivation for this research thesis

Alignment of organisational and Information System (IS) strategies, known as Strategic Alignment (SA), is one of the main quests in IS strategy research within the wider IS management field (Tanriverdi et al., 2010, Alsurori and Salim, 2011). Research has thus far documented SA, through surveys and case studies, as having the most notable impact on organisational level performance (Chan et al., 1997, King et al., 2000, Tallon and Kraemer, 2003, Ali and Qing, 2009). The central argument underlying this research stream is that organisations perform well when key IS resources (infrastructure, applications and managerial) are deployed in alignment with organisational strategic imperatives (Croteau and Bergeron, 2001, Sabherwal and Chan, 2001, Byrd et al., 2006, Schwarz et al., 2010, Baker and Niederman, 2014). Therefore, it is hardly surprising to see that the lure of SA features prominently in studies of the voice of those whose interests are serviced, namely, IS executives. For the last 25 years, SA is continuously regarded as desirable and important for IS executives and has persistently been at the top of the list relating to their critical issues in IS management (Dickson et al., 1984, Watson et al., 1997, Luftman et al., 2006, Derksen and Luftman, 2014).

After many years of research on SA, the net result of this effort appeared recently on the 36th anniversary of annual IS executive surveys conducted by the Society for Information Management (SIM), that is, SA yet remains among IS executives' top three personal worries in their IS management practices (Kappelman et al., 2016). Concerns about why SA still matters are not new and rather reported intermittently in the extant SA literature. Ciborra (1997; P. 72) criticised mainstream SA research outputs as being infeasible in practical application by practitioners due to the idealistic conceptualization of SA that does not take account the day-to-day frustrations within a typical organisation. The author thus invited us, as academic researchers, to "*go back to basic evidences, and encounter the world as it presents itself in our everyday experience*". Others have gone so far as to offer a critique to our dominant research style in SA that is less concerned with contextual configuration sets under which SA is practiced, thus making it difficult for practitioners to interpret our research recommendations and take these on board in the work setting (Simonsen, 1999, Sabherwal et al., 2001, Pelletier and Raymond, 2014). With a bolder move, some SA scholars argued that we are overwhelmed by contributions that investigated SA implications on organisation-level performance, we nonetheless produce little, if at all, clear understanding about the doing of SA itself (Campbell, 2005, Weiss and Anderson, 2004, Wilson et al., 2013, Karpovsky and

Galliers, 2015); thereby we have no agenda on the table to serve the long-held concerns of IS executives and how they can effectuate SA in everyday practice.

So where does this leave us? So to speak, common presentations of SA in mainstream research follow the norms of academic prose, tending to be conceptual and not reflecting on actual practices derived from the mundane existence of practitioners (Ciborra, 1997, Karpovsky and Galliers, 2015). The SA case that we continue to see in academic publications as a major concern for IS executives, would invite us, as academics, to envision SA as it is applied every day by practitioners; and remind ourselves of the need to take into account the realities of accomplishments in the organisational setting rather than limiting ourselves to the world of idealised and conceptual models. I thus would concur with the view put forward by Coltman et al. (2015; P. 2) in their recent editorial paper for the special issue of 'Revisiting Strategic Alignment: twenty-five years on' published in the Journal of Information Technology (JIT) who state: "*the fact that [SA] remains a top priority for [IS executives] compels the academic community to consider taking a fresh approach to the issue of [SA]*". While it may be premature to say now in this section that we need to deal with a set of theoretical perspectives within the mainstream of SA studies, the fact remains that we have been, in SA research, unable to answer a very basic question: 'How is the work of alignment carried out in practice?'. It is this overarching question that motivates me to penetrate that zone of the doing of SA.

1.3 Summary on the current state of the SA field

One of the striking features of the literature on SA is the limited attempts to provide an understanding of how practitioners practice SA within organisations (Ciborra, 1997, Maes et al., 2000, Chan and Reich, 2011, Wilson et al., 2013, Karpovsky and Galliers, 2015). As I alluded above, research studies have tended to envision SA as outcomes that positively influence organisational performance once SA is achieved (Cragg et al., 2002, Kefi and Kalika, 2005, Kearns and Sabherwal, 2007, Chan and Reich, 2011). The enduring theme within these outcome-oriented studies deliver SA on the extent of linkage, fit, coordination, harmony or consensus between organisational and IS strategies variables (Pyburn, 1983, Zviran, 1990, Avison et al., 2004). If we were content with their methodological approach which is mainly positivism, then it is safe to argue that mainstream studies fall short of considering other external variables such as legislations, sector or industry that induce effects on organisational strategy from time-to-time and therefore require SA to follow closely.

What is more important is that the above conceptualization on SA surmised the presence of strategy and held the view that the attainment of SA is highly unlikely if organisations lack formal and documented organisational strategy (Luftman and Brier, 1999, Ali and Qing,

2009, Wang et al., 2011). Indeed, the nature of organisational strategy was taken-for-granted in the extant SA literature and somehow passed unnoticed with no challenges about how "*to align a relatively fixed [IS] that is implemented in an organisation with a business strategy and associated information requirements that are in constant need of adjustment*" (Galliers, 2007; P. 2). This conundrum remains valid today. The extant SA literature suggests that the intended organisational strategy is the driver for SA, thus neglecting the view that it can be varied when operationalized by practitioners in practice and, by analogy, result in the form of SA that is outdated and no longer appropriate for organisations (Simonsen, 1999, Galliers, 2004, Peppard et al., 2014, Marabelli and Galliers, 2016). Coltman et al. (2015) advance the argument further, demonstrating that the extant SA literature confined SA to single strategy; thus falling short of exploiting synergies between organisational -, business units, and functional-level strategies which are, to some extent, the nature of operating models in contemporary organisations. Above all, the state of SA can be questioned when exposed to the world of practice as the strategy literature tells us that strategy is not such a clear concept as to lend itself to being regularly documented and, instead, can be formed of practices (Ciborra, 1997, Galliers, 2004, Whittington, 2006a, Wilson et al., 2013).

Moreover, to question the nature of strategy in the extant SA literature, then we will have to turn our attention to the other side of SA, that is, IS strategy itself. The notion of IS strategy is recognized in the extant SA literature as a critical IS management practice to drive SA, but is often portrayed as static, working towards pre-specified or fixed outcomes through converting intended organisational strategy into a planned IS initiative portfolio that will subsequently meet the defined targets of the strategy (Lederer and Mendelow, 1989, Burn, 1996, Cumps et al., 2006). Ironically, the extant SA literature tends to ignore an up-to-date and practically relevant understanding of IS strategy. Galliers (2004, 2007 and 2011) advanced a series of discourses to argue that mainstream IS strategy research should not confine the doing of IS strategy to deliberate planning practice only, which involves the mere exploitation of existing ideas and resources to support organisational strategy. While he does not in principle reject this notion, he instead views it as an overlap with the other side of IS strategy works that involve the exploration part of adopting and refining new contexts and circumstances emerging from strategy or technology itself which may differ from our initial assumptions. Under this new conceptualization of IS strategy, which is now established, applauded and supported within the IS community (Chen et al., 2010, Henfridsson and Lind, 2013, Teubner, 2013), one pertinent question to ask is how the new form of applying IS strategy may trigger SA development in organisations. This would require fresh thinking as the existing SA paradigms are products of IS strategy that is fixed over its lifecycle, neither reviewed nor altered to align with emerging changes in circumstances and imperatives.

The nature of probing SA in the extant literature is worth mentioning from the outset to highlight the limitation regarding the lack of contextualisation and institutionalisation of SA development in organisations. Here, the mainstream SA research is dominated by a high proportion of studies, many from US-based publications, and is positivist-oriented and draws upon participant organisations across industries or even across regions. This mainstream approach carries with it the view that SA development in all organisations takes place along the same lines, thus bringing about issues regarding the extent to which this research program has considered variances in organisational complexities, strategies and the environment in which SA occurs (Weiss et al., 2007). For now, it is safe to succinctly indicate here that this approach has already thrown up challenges to the application of our research findings by IS executives (Ciborra, 1997, Pelletier and Raymond, 2014). As a consequence, since these findings do not recognize the different context as being of paramount importance for SA development, it is hardly supervising to continually see IS executives rank SA as their top management concern, especially given that our academic findings do not appear sufficiently relevant to their work setting (Avison et al., 2004).

1.4 Alternative theoretical lens for SA

Beyond the apparent limitations in the extant SA literature, there is a solid base on which to build understanding. Therefore, my critique in the previous section and subsequent critical discourses implicated in this research thesis are not intended to trivialise the extensive body of research that contributed to the development of our thinking about this topic of SA. Rather, so to speak, this thesis is undertaken to promote the state-of-the-art, extend current theoretical perspectives, and pose - and begin to answer - new questions concerning the embedded nature of SA development as enacted by practitioners within, and as part of, their specific practices. Indeed, in taking a closer look at the research program on SA over the last 38 years, as shown in Figure 1-1 below, we might conclude that we need "a *renewed look*" (Pelletier and Raymond, 2014; P. 2) or "*a fresh approach*" (Coltman et al., 2015; P. 2) to rekindle research on SA, to at least "*lift the lid*" (Wilson et al., 2013; P. 2) on how to do alignment.

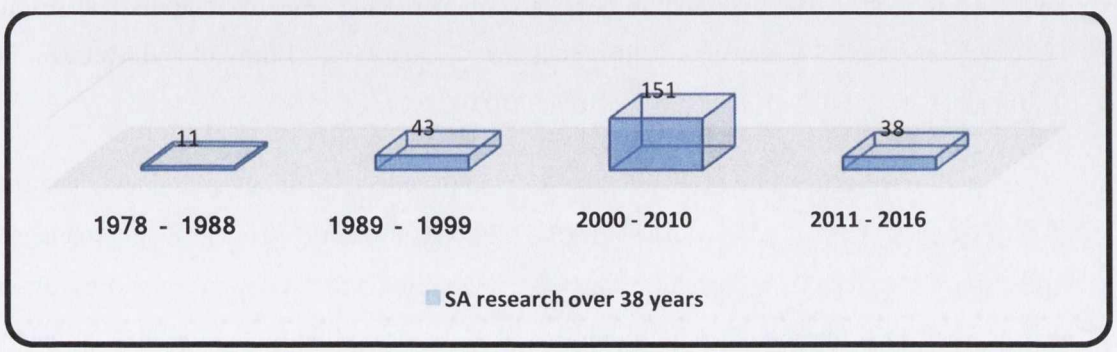


Figure 1-1 Presents a macro view on SA research over 38 years based on my EndNote library that contained 243 studies on SA

As depicted in Figure 1-1, the genesis of SA first emerged in the late 1970s and was led by among other King (1978), Pyburn (1983) and Henderson and Sifonis (1988). The central thrust of these works was the notion of exploiting the strategic potential of IS to support organisational strategy. While it might be expected that research on SA during the first decade had to be relatively low as the field was progressively developing its central tenet, it would however be remiss not to attribute this to a divergence of focus between what was actually being researched in the IS community and what was considered necessary by IS executives. The work of Grover and Sabherwal (1989) is illustrative. They used a list of 26 key issues deemed important by IS executives to categorise 858 articles published in four major IS outlets. The amount of research on each issue was then compared with the importance rating of the issue by IS executives over the decade 1977-86. Their results suggested that the notion of SA appeared in the category of IS research that had fallen short of the perceived importance to IS executives; thereby the authors argued that IS researchers should pay greater attention to the concerns of practitioners.

To some extent, Grover and Sabherwal (1989) set the scene for IS scholars in the second decade to attain the SA concerns of IS executives. At this embryonic stage, studies including (but not limited to) Tavakolian (1989), Zviran (1990), Henderson and Venkatraman (1991), Broadbent and Weill (1993), Burn (1993), Luftman et al. (1993) and Reich and Benbasat (1996) were undertaken to applaud the notion of SA, viewing it as instrumental to the formulation of an operationally-feasible approach that can help organisations deploy IS according to their organisational objectives. These were followed by a series of empirical studies attesting to the organisational benefits yielded from achieving SA (Sabherwal and Kirs, 1994, Teo and King, 1996, Chan et al., 1997). These demonstrated benefits became the motivators for a large number of further studies that marked the third decade of SA research. The result of the third decade brought an astonishing set of approaches, models and frameworks that examine SA at the process level by seeking integration between business strategy, IS, structure, and management processes (Chan and Reich, 2007a, Leonard and Seddon, 2012, Hiekkanen et al., 2013). In parallel, enormous surveys on IS executives appeared to affirm the SA community with ever-increasing research outputs that resonated with the expressed SA concerns from practising IS executives (Luftman and McLean, 2004, Luftman et al., 2006, Luftman and Ben-Zvi, 2010a).

As with all maturation, however, the process did not proceed without uneasiness. The root of SA research at its peak offered a lens through universal theories from strategic management literature, i.e. industry positioning, resource-based views, and dynamic capabilities, obscured by the barriers of jargon and multiple terms, and confused by competing models that foster complication through which it seems easy to get lost. From the practitioner perspective, there

is a challenge in knowing which, when and how to apply a model (Sabherwal et al., 2001, Hiekkanen et al., 2013). This is because these mechanistic models did not account for the particular setting of organisations, assuming that modelling of the various entities involved in SA concepts is useful in all situations (Ciborra, 1997, Aversano et al., 2012, Leonard and Seddon, 2012).

There are signs that this is beginning to change, and that we are poised to witness a renaissance in SA research. There is increasing recognition - represented in the last column (2011-2016) - for a shift in paradigm from what SA can do for organisations to a newer focus on what practices constitute SA (Galliers et al., 2012). The carrier of this shift has been the re-conceptualization of SA in a manner that mirrors the latest developments in the highly relevant field of strategic management (Huang et al., 2014, Peppard et al., 2014). The strategic management field has undertaken a practical turn to form a conceptual alternative through leveraging practice theory, and that has eventually become the foundational assumption for what is known as the Strategy-as-Practice (SAP) perspective (Whittington, 2006a, Golsorkhi et al., 2010). This conceptual alternative, through its focus on how the activities of practitioners constitute strategy, sounds appealing for SA scholars dissatisfied with mainstream SA research which has been detached from the life experience of practitioners (Ciborra, 1997, Campbell, 2005). The embracing of SAP on the future SA agenda is now gaining ground on the premise of offering a finer-grained picture of how SA is constituted in practice (Galliers et al., 2012, Hiekkanen et al., 2013, Sarhan and McDonagh, 2014a, Karpovsky and Galliers, 2015). By 2002, Chan (2002) had posed the fundamental question: 'Why haven't we mastered alignment?'. One possible answer, which I put forward in this thesis, is to opt for the SAP perspective to deal with the set of limitations summarised in previous sections.

1.5 Research question and rationale

The aim of this thesis is to contribute to the understanding of how practitioners effectuate SA in practice; an area that has hitherto received little interest in extant SA research. As a departure from mainstream research that has quantitatively investigated, with rare exceptions, SA performance relationships at the organisational level, this thesis uses SAP as a lens to contribute to the qualitative understanding of actual works associated with SA. Under this aim, I assert, following a thorough analysis of the extant SA literature, that greater attention should be paid to the practices of practitioners in organisations that construct and enact SA. Therefore, this thesis is based on the dual concept of SA as enacted by practitioners and how this enactment occurs in particular organisational settings. This speaks to what Jarzabkowski et al. (2007; P. 6) have argued; those who are tempted to draw a SAP lens should be mindful

of the imperatives of the contextualization of micro-actions: "*micro-phenomena need to be understood in their wider social context*".

Studying those issues mentioned above began by synthesising *a priori* works on the extant SA literature to develop a specific research question to guide the investigation (Webster and Watson, 2002; Watson, 2015). Earlier, Webster and Watson (2002; P. xiv) challenged the IS community for not being structured about its synthesization of the literature, emphasising that more conceptual structuring in synthesising priori works would be critical in "*strengthening IS as a field of study*". In response to this lacuna, Levy and Ellis (2006) and Okoli and Schabram (2010) emulate a standardized methodology for synthesising prior works used in the health sciences, known as systematic literature review (SLR), to argue for a distinguishing feature of SLR in its scope and rigour to identify gaps and provide a framework for positioning research endeavours for the IS field. Recently, Chiasson (2015), Oates (2015) and Watson (2015) promote such synthesis practices and offer some commentary to encourage the IS community to conduct rigorous, explicit and thoughtful synthesis of the literature through SLR.

In the light of the above considerations, I undertook to synthesise SA literature through SLR. In this sense, I aim to set the grounding of my research through the disciplined incorporation of existing works in the extant SA literature, thereby producing an unbiased and transparent review process to provide a level of confidence in the outcomes. This notion of SLR was not taken for granted by this thesis and, instead, was adapted to suit the research context. To this end, I consulted IS-specific SLR guidelines to construct a framework that employs in one place the notion of 'systematic' in terms of adherences to step-by-step guidance and accompanies these steps with a SAP lens at some stage in the review. The SLR as executed in this thesis yields the identification of nine potential research avenues for future research endeavours in SA, from which the following research question was formed and pursued:

"How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?"

The SLR revealed that 'IS executives', who are central to the wording of the research question, and their doings relative to SA are under-represented, despite the fact that there is a strong tendency within the SA literature to charge them with primary responsibility for SA development (Stephens et al., 1992, Weiss and Jr, 2003, Peppard et al., 2011). Existing studies, while limited and not informed by SAP, fall short in giving attention to how IS executives effectuate SA in practice and, rather, focus on laying down some social mechanisms or tactics for IS executives to solve ambiguities around organisational strategy to foster SA (Campbell, 2005, Enns and McDonagh, 2012). This result from SLR does not run

counter to other results emerging from the SLR that highlight the over-emphasis in the extant SA literature on the content of strategies to drive SA with relatively insufficient acknowledgement to practitioners' SA-related actions (Maes et al., 2000). The wording of the research question continues to affirm that the focus of this thesis is on 'the practice of aligning' rather than the outcomes of achieving alignment at the organisational level. Thus, in contrast to much mainstream SA research, this thesis is more interested in the actual work of IS executives as they engage in aligning business and IS strategies. Where the research question refers to 'PSOs', the thesis here equally aims to contribute to a promising line of research on SA as practised in public organisations - an area that has received scant attention in the extant SA literature as the results of this SLR suggest.

1.6 The structure of the thesis

This chapter (1) forms the opening chapter of the thesis and is followed by a further five chapters. As depicted in Figure 1-2 below, the research question and chapters are inseparable and mutually constitutive, meaning that each chapter is driven by the research question, and the research question is informed by each of these chapters.

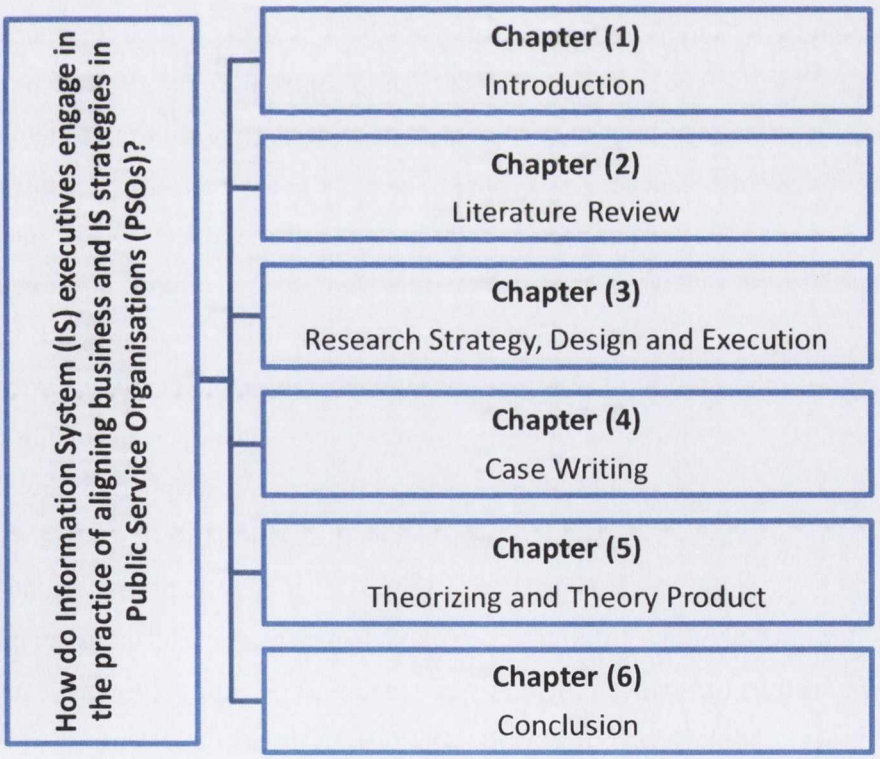


Figure 1-2 Presents the structure of chapters in this thesis

Chapter (2) deals with the theoretical foundation of the thesis and incorporates the review of three sets of literature, namely, practice theory, SAP and SA literature. In terms of consulting the practice theory literature, I argue the imperative of sketching the theoretical traditions

drawn upon by SAP scholars to shape the field in order to take some commitments from practice theory's fundamentals before drawing on SAP as the lens for this thesis. The chapter then proceeds to examine the SAP perspective itself through narrative-literature-review. The aim is to present the learning gained from a number of studies and expose SAP theoretical and methodological principles to guide the study. With this theoretical foundation in place, I then undertake to carry out SLR on the extant literature of SA with the aim of synthesising prior works through the SAP lens, illustrating their significances, identifying critical knowledge gaps, and mapping out potential future research directions. The contribution of this SLR is sliced into accumulating existing knowledge by providing a grid-shaped presentation on those areas of study in which the field of SA is better/less developed, and bringing new interpretations to the field of SA through the SAP lens.

Chapter (3) provides the research strategy, design and execution. In setting up the research strategy, I undertook to uncover the nature of the SAP-based inquiry to argue that if a substantive inquiry into my research question is to be generated through the SAP lens, I must be mindful of requirements related to the SAP programme of empirical studies. Thus, the findings from this exercise, along with the research question objective, help towards refining the research strategy relevant to the broad spectrum of paradigms: ontology ('taller-doing'), epistemology ('interpretive') and methodology ('case study') as the most appropriate paradigms for the conduct of this thesis. The chapter then proceeds to utilise SAP as a sharpening tool to construct a case-based design. Here, I justified the suitability of the two case design and developed an organising framework to aid the data collection strategy which is lined up with SAP methodological scaffolding. I then advocate for the integration of the Grounded Theory (GT) method into the case design and argue for the constructivist approach within GT as the most suitable analysis toolkit for this thesis. In this regard, I explained that the data analysis is not limited to the conventional practice of GT, but is instead intertwined with detailed case writing to deliver upon the contextualised understanding of SA and its associated actions. The chapter is drawn to a close with a description of how this thesis was executed in practice and how the two theoretically-sampled Irish PSOs were approached to form the backdrop for the study of IS executives' aligning activities. The contribution of this chapter lies in compiling SAP's gestalt methodological recommendations, supplemented with my own analysis of SAP empirical research, and then offering a systematic approach, along with the necessary tools and frameworks to probe SA through SAP lens.

Following from the preceding chapter, chapter (4) is dedicated to the presentation of a detailed and interpretive case-writing for each of the two cases selected in this thesis examination, namely, PA1 and PA2. The chapter is fuelled by the notion of 'writing as a method of discovery' to underpin the conventional method of GT undertaken in the collected

evidence towards gaining a fine-grained picture that captures the enactment of SA in all its richness and the complexities that lie behind it. In this chapter, I proceed to treat each case as a stand-alone entity, with the view to explaining the nature of IS executive engagement in the practice of aligning business and IS strategies as uniquely enacted in each case's situated practice. Therefore, the chapter is organised into three sections. In the first, I present the macro practices under which PA1 and PA2 were embedded, and which were implicated in determining some ingredients to be considered during the enactment of SA within the case study organisations. This is followed by two separate sections dealing with the enactment of SA within each case. Each section is designed to uncover some of the worldliness of SA enactment as presented within the situated practices of each case through weaving the fractured data collected from multiple levels within each case into an analytical, interpretive, and coherent story. The contribution of this chapter lies in exposing the insight obtainable from particularistic practices about the enactment of SA in its real-life setting from which the theoretical framework was developed and presented in the next chapter.

Chapter (5) deals with the theory emerging from this research. The central tenet of this chapter is the notion of theorising, that is, placing the emergent theoretical framework into the context in which it lives. To this end, the chapter consists of three main sections. Firstly, I disclose my thought process that preceded the development of the theory used in this thesis. Secondly, I present the emergent theory which consists of a multi-level theoretical framework resonating within the SAP lens adopted by this thesis. Thirdly, I embed this theory into prior works within the extant literature of SA as part of my commitment to the notion of theorising. The contribution of this chapter lies in exposing an integrated understanding on the situated enactment of IS executive aligning praxis in the interplay between meso and macro practices. Such a framework would serve as 'recipe' for the holistic enactment of SA within organisations.

Chapter (6) draws this thesis to a close by presenting the contributions of this work, its implications for both theory and practice, limitations faced, and finally potential avenues for future research in SA are suggested.

1.7 Conclusion

This opening chapter (1) has positioned my thesis inquiry in the domain of SA within the IS strategy field. The chapter outlined the motivation behind undertaking this thesis research. It offered a summary of the current state of the field of SA and followed this with unpacking the timeliness for an alternative theoretical lens, that is, of the SAP perspective to deal with the set of limitations sketched out by this chapter. The chapter then proceeded to offer the objective and relational aim of the research question which asks "How do Information

System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?". According to the thesis structure presented in this chapter, the task now in the following chapter (2) is to introduce the set of literature consulted by this thesis, namely, practice theory, SAP perspective and SA quest.

Chapter 2

LITERATURE REVIEW

2.1 Introduction

In the extant SA literature, there is substantial research evidences regarding the importance of SA to organisational performance. Thus it has been regarded as desirable and importance for IS executives and has persistently been at the top of list relating to their IS management concerns. However, there is surprisingly no evidence to answer a very basic question: "How is the work of developing SA is carried out in practice?". There is even less research on the doing of SA and how practitioners can go about initiating SA in their organisation. In succinct terms, the extant SA literature showed considerable slant towards what "outcomes" SA could deliver to firm level organisational performance, rather than considering how SA is achieved. Thus, this thesis undertakes to contribute to the doing of SA by seeking out an answer to the research question of "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?". The principle literature that is concerned with the doing of practitioners is known as Strategy as Practice (SAP) perspective within the field of strategic management. SAP, which draws on the notion of practice theory, is taken as the body of literature that is used as a lens to provide an understanding on the doing of SA. Therefore, insights from SAP perspective is now utilised in this chapter to provide a theoretical foundation to answer my research question.

Overall, three set of literature are presented in this chapter. In 2.2, I consulted the practice theory literature to identify the theoretical traditions that SAP scholars have drawn upon to shape their field. Following this review, in 2.3, I present my narrative review of SAP perspective as a means of addressing my research question. After that, in 2.4, I conducted an SLR on SA literature. In this vein, the major contribution of this systematic review is that I have employed in one place the notion of "systematic" in the sense of a step-by-step guide, and have executed these steps within the specific research context - that is of SAP lens. In 2.5, I will draw this chapter to a close and offer a link to the next chapter (3), that is, research strategy, design and execution. It is important to note that the route followed in this chapter is straightforward. I started each literature set with a clearly defined goal and purposes, and drew each section to close by offering a closing remark. Thus, I hope that this strategy will go somewhat to show the purpose and the links between the reviewed set of literature.

2.2 Positioning the practice lens into the research context

2.2.1 Purpose & Overview

This section focuses on the underlined word in the following research question: "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?". It aims to position this term under the broad umbrella of practice and to situate this research in the different ways that the concept of practice has been employed in organisational studies (Whittington, 2002, Feldman and Orlikowski, 2011, Nicolini, 2013). For the purposes of this research study, the SAP perspective within the field of strategic management (Rouleau, 2013), which draws on the notion of practice theory (Jarzabkowski, 2005, Whittington, 2006b), is taken as the body of literature that refers to the word "practice" and is used as a lens to answer the research question. However, before a review of SAP literature, it is necessary to identify the theoretical traditions that SAP's scholars have drawn upon to shape the field (Golsorkhi et al., 2010).

To this end, this section (2.2) is organised into the following five sub-sections. First, in 2.2.2 I briefly introduce three modes of engaging with practice in organisational research. The aim is to rationally locate SAP and, for consistency, to situate this research in the second mode – practice as a perspective. Following that, in 2.2.3 I introduce the theoretical traditions that are echoed in the second mode as understood from the relevant practice theorists. This section, in particular, will act to crystalize my theory of practice in the manner that is consistent with the theory of practice as envisaged in the second mode, in which SAP is positioned. Next, 2.2.4 will introduce the learning outcomes from reviewing practice theory from the second mode perspective. These suggest three implications for my understanding of the study of organisational phenomena from a practice-based perspective. In 2.2.5, I take the strategy field as a case in point for the wider implications of the second mode in organisational research. The aim is to argue that the application of practice theory (second mode) in the strategy field is behind the emergence of what has become widely known as SAP perspective. The section also includes a discussion on what lies behind this conceptual alternative that the strategy field has taken up. Sub-section 2.2.6 will draw this literature set to a close and provide a link to the next area of literature, that of SAP narrative literature review.

2.2.2 Practice and organisational research

In outlining the sheer scope of the notion of practice in organisational studies, Orlikowski (2010) identifies three modes of engaging with practice in organisational research, of which each entails different assumptions, different contributions and represents different

implications for the conduct and outcomes the research. The first mode emphasises *practice as phenomena* – the concept involves the assumption that a gap exists between theory and practice, or the claim that there are differences between what practitioners do in practice and what is discussed academically. In this view, researchers' contributions are understood in terms of bridging the gap by engaging closely with practitioners' activities in lived reality through in-depth field investigations. The second mode recognizes *practice as a perspective* – the mode that grounds itself explicitly in 'practice theory' to break with the traditional approach to studying what people do that sheds little light on the relationship between people's activities and how they are operated within different contexts (Feldman and Orlikowski, 2011, Nicolini, 2013). Practice as a perspective, informed by practice theory, places its emphasis on the situation in which activities are enacted. Thus, it views organisational phenomena as a set of practices, and the meaning of people's activities is unveiled through the situatedness of their activities in these practices (Feldman and Orlikowski, 2011, Nicolini, 2013). The third mode is that of *practice as a philosophy* – the mode that could arguably be regarded as the extremist version of practice as perspective. It necessitates a stronger commitment to the theory of practice to insist that everything we do is a practice (Coulter, 2001). Thus, the claim is made that all social life – not just particular phenomena – is constituted in practice (Orlikowski, 2010). Note, however, practice theorists themselves have put forward arguments for a kinder view of practice as a philosophy as envisaged in the works of Barnes (2001) and Coulter (2001).

The field of strategic management, as a key construct in organisational studies (Jarzabkowski and Wilson, 2006), has leveraged the second mode of engaging in practice as perspective (Feldman and Orlikowski, 2011) to form a conceptual alternative with which to study the notion of strategy as distinct from the mainstream strategy research (Jarzabkowski, 2005, Whittington, 2006a). This conceptual alternative has eventually become the foundational assumptions for what is widely known as SAP perspective within the strategic management literature (Whittington, 2002, Regnér, 2008, Golsorkhi et al., 2010). In this vein, this current research thesis establishes that SAP perspective is a lens through which the research question to be addressed, but meanwhile this means that the present research is in sympathy with the second mode of engaging with practice as perspective. Subsequently, my point of departure in the following passage is to sketch on the second mode as envisaged by key inflectional practice theorists in this realm. The aim stems in part from the presence of those practice theorists' works in SAP community to justify their approach (Rasche and Chia, 2009, Orlikowski, 2010). But largely, through a discussion of practice theory from the second mode perspective, I attempt to crystallise my theory of practice in line with the second mode; thereby future arguments relating to SAP terminology can be understood through my

appreciation of the notion of practice as exemplified by practice theorists within the second mode.

2.2.3 Practice theory: A view from practice as a perspective

Practice theory literature is characterised by a body of highly diverse works by thinkers who have various theoretical differences in approaching the notion of practice (Rouse, 2001, Schatzki, 2001a, Reckwitz, 2002, Orlikowski, 2010). This is not a criticism of this literature *per se*. Indeed, it is the spirit of practice approaches to providing different ways of theorising practice (Nicolini, 2013). Faced with this plurality, the opportunity exists, according to Nicolini (2013), to use some of these approaches in combination, mobilising them together, and to exploit their similarities and differences to enrich our understanding of practice. Taking Nicolini (2013) view on board, choosing one approach may come at the expense of the richness provided by different approaches, signalling the importance of embracing this plurality.

Nevertheless, Postill (2010) offers a useful distinction between two generations of practice theorists. The first generation was led by theorists such as Bourdieu (1977), Harari (1979) and Giddens (1979, 1984), who laid the theoretical basis for the second generation who are extending, analysing and elaborating on practice theory (Orlikowski, 2010). The second-generation's work, as represented by contributors such as Barnes (2001), Coulter (2001), Schatzki (2001a, 2005) and Reckwitz (2002), is the stream of work that was extended to other organisational disciplines, including the field of strategic management (Whittington, 2006a, Jarzabkowski et al., 2007, Postill, 2010). Accordingly, my theory of practice is located in the concepts presented by the second generation, partly because they are employed in SAP literature (Postill, 2010), and largely because their work offers a theoretically systematic view of practice theory (Reckwitz, 2002) and a more explicit illustration of the implications of practice approaches in understanding and analysing social and organisational phenomena than is available within the work of first generation theorists (Schatzki, 2005, Johnson et al., 2007, Nicolini, 2013).

Ironically, practice theory (Schatzki, 2001a), practice turn (Nicolini, 2013) or theory of social practices (Reckwitz, 2002) – all three refer to a type of social theory that places social and organisational phenomena in practices (Reckwitz, 2002). It thus treats the field of practices as the place to study their subject matter (Schatzki, 2001a, Nicolini, 2013), suggesting that such phenomena occur within and are components of the field of practices (Schatzki, 2001b). The overall prime agreement among practice theorists is that practices are sets of human actions that involve bodily doing and saying (Schatzki, 2001a, Schatzki, 2001b, Barnes, 2001, Reckwitz, 2002, Schatzki, 2005, Nicolini, 2013). Notwithstanding, variations reign

upon a specific view of human actions on which the single author holds and what beyond human action that is indispensable to constitute or explain practices from each author's perspective. These variations can be exemplified in the two discrete works undertaken by Reckwitz (2002) and Schatzki (2001a, 2001b, 2005).

To begin with, Reckwitz (2002; P. 249) defines practice as "*a routinized type of behaviour which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge*". This definition carries with it the view that practices are beyond the nexus of human doing and saying alone. Thus the uniqueness of practice theory comes from the interconnectedness and the conceptualization of the smallest units of social theory, that is, 'body, minds, things, knowledge, structure and individual'. According to Reckwitz's view, practice is constituted through routinized bodily activities that are linked to sets of routinized mental activities 'certain ways of knowing how to perform something and particular ways of understanding'. At the core of his view is the idea that participants who carry out a practice must follow certain bodily and mental activities that constitute the practice they are participating in. With this recognition of mental and bodily routine as an integral part of practice, Reckwitz acknowledges the necessity of objects in particular practices. Therefore, when objects are important to carry out practice, Reckwitz sees them as significant as bodily and mental activities in producing practices. Bodily activities, mental activities and objects hold together according to specific forms of knowledge that belong to particular practices. At this point, Reckwitz insists that this knowledge is more than knowing/understanding how to do things. Indeed, it is a set of collective understandings that embrace ways of understanding along with particular routinized modes of intentionality, emotionality, and ways of wanting and feeling that belong to particular practices.

Reckwitz, as manifested in his definition, regards the practice as interconnected routines, that is, routinized bodily and mental activities, and routinized modes of understanding, desiring and using objects. The idea of 'routines' implies two other things. On the one hand, they occur in sequences of time and repetition. On the other hand, however, individuals are subjected to everyday situations and emerging circumstances, which makes him/her liable to break with their routines and perform bodily-mental activities that do not conform to the code of a particular practice, but rather to other social practices. Finally, to account for individuals in practice theory, Reckwitz sees them as the connection points of various practices that populate the social world, in which each practice involves a multitude of different routines enacted by individuals.

In slightly different manner on what constitute as practice, the work of Schatzki (2001a, 2001b, 2005), in fact, merits particular and detailed attention, especially his work in the field of organisational studies in his later writing (Schatzki, 2005, Nicolini, 2013, Orlikowski, 2010). At the basic level, Schatzki (2005) places social phenomena into a kind of context – called 'site' - that is composed through a mesh of *practices* and *material arrangements*. Another way of formulating this is that any social phenomena occur or exist as part of this site, thereby implying that 'site' is crucial for analysing and explaining any social phenomena. Having said that social phenomena exist as part of nexuses of practices and material arrangements, or sites, demands an articulation of these two prominent dimensions in which that social phenomena exist.

Practice, according to Schatzki, is a set of bodily doings and sayings that are orgnised around three elements: pool of understanding, set of rules and teleo-affective structure (Schatzki, 2001a, Schatzki, 2001b, Schatzki, 2005). In the accomplishment of a particular practice, participants do what makes sense for them to do which is determined by their abilities that appertain to those actions and their understanding of rules – sets of directives and instructions- that compose a particular practice. These together are linked to its teleo-affective structure. The term refers to an array of acceptable or correct tasks, beliefs and emotions that are carried out for the sake of specific ends (Schatzki, 2001a, Schatzki, 2001b). An important implication of Schatzki's view of practice is that practices are the chief context of human activities that organise their actions through understanding, rules and teleo-affective structure. However, these organisations are not static. Indeed, they can change over time in response to changes in circumstances. In other words, what makes sense for people to do may be influenced by an organisation of other practices. Schatzki is thereby indicating that what people do is beholden to a nexus of interwoven practices (Schatzki, 2001b). Social phenomena, to reiterate, are a mesh of practices and material arrangements. These material arrangements refer to a set of objects, artefacts and things that are used by participants in carrying on a particular practice. Indeed, Schatzki regards them as inseparable as practices in composing social phenomena. On this point, Schatzki underlines that these practice-material bundles link and overlap with larger nets of practices-material bundles. In turn, this larger net of practice-material bundles is tied to even larger bundles. Subsequently, social phenomena are a feature or slice of this web of practice-material bundles (Schatzki, 2005).

In the context of organisation studies, Schatzki offered analytical axes for empirical organisational research that adhere to his view of social phenomena. Fundamentally, Schatzki (2005; P. 473) sees organisations as *"social phenomena"*, that is, the product of actions performed in the extant, new or modified mesh of practice-material bundles. To grasp an understanding of inner-organisational phenomena or extra-organisational phenomena, one

must look for the actions that compose these phenomena and identify the practice-material bundles in which these actions were carried out. Schatzki (2005; P. 477) adds that researchers, of course, do not need to track and register the "*potentially labyrinthine complexity of bundles, nets of bundles, and so on*", and observes that all that is needed is "*an overviews of social phenomena and their workings that are couched in terms referring, not to the details of practice-arrangement bundles, but to entire formations and their relations*".

According to Nicolini (2013; P. 179), the intimations in Schatzki's work can be powerful tools to sensitize researchers in their theorising activities by directing their attention towards certain aspects of their organisational phenomena under study, but it lacks empirical mechanism to tell researchers "*where does a practice ends and what are the boudaries for [the practice-material bundles relative to the phenomena being investigated]*". One possible reading of Nicolini's critic, while to some extent agreeable, was that he did not intend to detract Schatzki's monumental effort. Instead, Nicolini viewed the work of Schatzki as to constitute a promising, yet still open and beg for further development for empirical execution purposes. Ironically, the recent work of Huang et al. (2014) from IS strategy research adopted Schatzki's site perspective and find their way to deal with the notion of site empirically through coding technique analysis; thereby signalling that the concept of site is not a mystery to be adopted empirically.

2.2.4 Learning and implications

A primary objective of this sub-section is to draw out recognisable learning outcomes from the practice literature as described above. These outcomes would afford at least three core implications for my understanding of the study of organisational phenomena from a practice-based perspective. Firstly, when conceptualizing and researching organisational phenomena from a practice theory perspective, the investigator would essentially need to place his/her organisational matter into the field of practice. This suggests that practice is an ontological choice (Lloyd, 2010, Nicolini, 2013) that implies the belief that organisational phenomena occur within and are aspect or components of the field of practice (Schatzki, 2001a; P. 11). This entails commitments that the field of practice is the main organisational phenomenon under investigation (Schatzki, 2001a), that human actions are understood as being enabled by organisational and wider social practices (Golsorkhi et al., 2010, Vaara and Whittington, 2012), and that eventually the analysis will be conducted on the basis of such premises (Schatzki, 2001a, Nicolini, 2013).

This leads me to the second point; that is, the centrality of the concept of activity in terms of what people do is not taken for granted in practice theory. Practices, as put nicely by Wenger (1998; P. 47), "*connotes doing, but not just doing in and of itself. It is doing in [...] a social*

context that gives structure and meaning to what we do. In this sense, practice is always social". Thirdly, the practice eye sees human actions as predominantly exercised in interwoven practices (Reckwitz, 2002, Schatzki, 2001b). This conclusion is highly suggestive in terms of drawing attention to the nexus nature of practices that populate the social world. In this sense, the investigator is in demand to seek connections between what people do and these practices; as these connections are responsible for shaping human actions. Connections here can be bounded through Schatzki (2005) view to which he indicates to not to track all potential connections of bundles. Rather, it is desirable to provide an overview of those closely related net of bundles in which the human actions are contextualized.

2.2.5 Practice theory implications: the case of strategy field

Applications of practice theory became increasingly visible within organisational studies (Golsorkhi et al., 2010, Arvidsson et al., 2012) and have made inroads as a lens used to study many organisational phenomena (Whittington, 2002, Feldman and Orlikowski, 2011). These studies range from technology use in practice (Orlikowski, 2000, Orlikowski, 2002, Levina and Vaast, 2006) and management accounting research, in which account information contributes to strategy development (Jørgensen and Messner, 2010, Cuganesana et al., 2012), to marketing in the form of value creation through e-invoicing (Korkman et al., 2010) and studying activities and practices to investigate the phenomena of strategy making in practice (Vaara and Whittington, 2012). For strategic management literature, as a case in point here, it would, however, be remiss not to attribute the practice turn in strategy research to strategy scholars' dissatisfaction with mainstream strategy research that merely focuses on how strategies as a property of organisation are related to company's performance (Nordqvist and Melin, 2008), being detached from practitioners' practices that constitute strategy, and how these practices influence strategy (Jarzabkowski, 2005, Statler et al., 2008, Golsorkhi et al., 2010, Nordqvist and Melin, 2010).

This leads us to highlight the key motive behind the emergence of the practice turn in the strategy field via its attempt to bring human actors at the centre of strategy research (Spee and Jarzabkowski, 2009, Golsorkhi et al., 2010). While it could be argued that the examination of human actors is present in mainstream strategy research, nevertheless, the focus within this tradition has been individualist (Vaara and Whittington, 2012), fixed merely on internal organisational actors (Whittington, 2007), focusing solely on micro managerial activity and roles (Whittington, 2006b) and concerning itself in the main with senior executives (Johnson et al., 2007). The concern that arises from this traditional research can be placed into two levels. On the one hand, its emphasis on managerial activities only leads to the treatment of individuals as discrete from context, leaving behind wider social forces that have been under-theorised (Whittington, 2006a, Vaara and Whittington, 2012). Furthermore, focusing solely

on senior executives as strategic decision makers neglects other influencers on strategy and facilitators for its implementation who may be located at different organisational levels and who may have no formal strategic roles (Johnson et al., 2007, Regnér, 2008, Spee and Jarzabkowski, 2009).

Indeed, the promise of the practice turn in strategy literature that draws on practice theory (Jarzabkowski, 2005, Whittington, 2006a) is to attend to these concerns by looking closer to practitioners' performance – *"bodily doing and saying"* (Rasche and Chia, 2009; P. 721) in relation to strategy rather than firm performance – economic return and fast decision making (Whittington, 2007, Nordqvist and Melin, 2008), including examination of a broader group of practitioners as influencers in its analysis by way of reflecting the current nature of strategy work (Johnson et al., 2007), and paying attention to what practitioners do within their organisational and wider social contexts (Whittington, 2002, Regnér, 2008). In this way, the practice turn in strategy research, known as SAP perspective, can supplement and enrich mainstream strategy research (Ericson, 2013) and serve as a useful basis for contemporary strategy research that is practice theory based (Golsorkhi et al., 2010, Tsoukas, 2010, Bromiley and Rau, 2014).

2.2.6 Concluding practice theory

The aim of this section (2.2.) was to briefly describe the background to and the justification behind the emergence of SAP perspective, which is the lens for this inquiry implicated in the wording of my research question. The section started by positioning this inquiry within the second mode of practice as perspective. This has been rationally justified on the bases that the SAP lens is located within this second mode of engaging with practice. As a consequence, for connectivity purposes, I undertook to trace the theoretical traditions of the second mode that is responsible for developing the field of SAP. This proved to be valuable for my understanding of the notion of practice in terms of offering clarifications to some of the practice theory terms that are used within the SAP literature with no explanation of the logic behind them. Also, this review of practice theory proved to be of considerable value for my ability to critique the SAP literature, serving to answer the 'why' questions that emerged during my review of the SAP literature.

The fact remains that the notion of practice would afford at least three implications for a study of organisational phenomena from the practice theory perspective. I framed these implications in three points with the aim of indicating the necessity of making some commitments to some of the practice theory fundamentals before drawing on SAP, which has its root again in practice theory. This is followed by outlining the application of practice theory to wider organisational research, taking forward the strategy field as a case of interest.

This sub-section has discussed the reasons behind the practice turn in the strategy field and the key motive behind the emergence of the SAP perspective within the field of strategic management. After this positioning section (2.2.), this research will now proceed, in the next section (2.3), to offer a comprehensive review of SAP with the aim of showing the suitability of this perspective for addressing the specific research question of "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?". The next section is characterised as a narrative literature review with the aim of showing what SAP perspective is, highlighting its unique perspective and its value for future inquiry as relates to this thesis.

2.3 The nature of Strategy as practice (SAP)

2.3.1 Purpose & Overview

After clarifying what is meant by the word practice in my question "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?" which refers to the SAP perspective, the primary task for this section (2.3) is to present this perspective as a means of addressing the research question. According to Grant and Booth (2009)'s typology of reviews, the review of SAP literature is characterized here as a 'narrative literature review' with the aim of drawing on published materials in SAP literature to provide an understanding of the current state of the field, highlighting its significant findings, and synthesising them to unveil the field's value and contribution to future research (Grant and Booth, 2009). These published material consist of 56 studies of which, according to Rowe (2012)'s classification, 46% were theoretical (26 studies), 43% were empirical (24 studies) and 11% were reviews (5 reviews and 1 Guest editor). These materials were sourced from a variety of academic sources (see appendix-1).

In order to provide the reader with a comprehensive background of SAP as a lens for this research, this section (2.3) is organised into six sub-sections, as follows. In 2.3.2, I present how the nation of strategy is treated in SAP as distinct from mainstream strategy research. This treatment is informed by practice theory as outlined previously in (2.2) and consistent with its view in terms of placing the phenomena to be studied into the field of practice. After that, in 2.3.3 I show how SAP is presented, in the wider strategy field, as a perspective which has some contours that are shaped by practice theory tenets. The aim here is to articulate, in a detailed analysis, the three pillars of SAP: Practice, Praxis, and Practitioners (3Ps). The review of SAP continues in 2.3.4 to unveil how theorisation takes place through the 3Ps. The aim is to show the interconnectedness nature of the 3Ps as a means to provide the theoretical resources for an empirical examination. For this particular purpose, I use Whittington's framework, and subjected it to detailed analysis and showed the connection between the framework and practice theory. This is followed, in 2.3.5, by an examination of the context in which SAP studies have been executed. This analysis derives its significance from the fact that the execution of strategy work is not same for everyone and occurs in an interplay between coexisting levels within organisations and the wider social context, which requires a readiness from researchers to continually investigate them. Finally, this literature set will draw to a close by offering a conclusion on SAP literature and linking to the next literature set, that of SA.

2.3.2 Strategy under SAP perspective eye

The treatment of strategy in SAP has been re-imagined in a way that is consistent with the adoption and application of practice theory (Sarhan and McDonagh, 2014b). To begin with, strategy – as a phenomenon - is a social practice (Hendry, 2000, Jarzabkowski et al., 2007, Whittington, 2007) that involves an organised bodily doing and saying (Schatzki, 2005, Whittington, 2007, Rasche and Chia, 2009). Just as with any social practice, the strategy here is in a sense an institutionalised practice within society whereby its meaning is derived from the social context it evolves in and whatever practitioners make of it (Hendry, 2000, Whittington, 2007, Golsorkhi et al., 2010). Once strategy is conceptualised as a social practice, the doing of it must, for consistency, be similarly re-conceptualised. The doing-of-strategy that comprises the actions, interactions and negotiations of multiple actors is increasingly referred as 'strategizing' (Whittington, 1996a, Whittington, 2002, Kaplan and Jarzabkowski, 2006, Jarzabkowski et al., 2007), suggesting at least four interrelated interpretations of strategizing.

First, the use of a verb would entitle the movement towards humanising the field of strategy and bringing human actors into the centre of its research focus (Jarzabkowski and Spee, 2009, Paroutis et al., 2013). Thus, second, SAP sees strategizing as something people do and which is socially accomplished (Whittington et al., 2006, Kaplan and Jarzabkowski, 2006), rather than something the organisation may achieve (Johnson et al., 2007). Third, as it stands in practice theory, these strategizing activities are situated in the field of social practice (Jarzabkowski, 2005, Johnson et al., 2007), implying that society, not only organisations, suffuses practitioners and their strategizing activities (Jarzabkowski, 2005, Whittington, 2007). Fourth, SAP therefore spans levels by investigating what goes inside organisations and interrogates the wider social contexts that influence practitioners' strategizing activities within organisations (Hendry, 2000, Johnson et al., 2007).

What has become apparent from the above explanations is that strategy is defined, in SAP, by its concerns rather its products in terms of economic value for organisations (Hendry, 2000). SAP sees strategy as a situated and socially accomplished activity (Jarzabkowski, 2005) that is concerned with strategizing, and how this strategizing is influenced organisational and institutional context (Johnson et al., 2007). Another way of formulating this is that SAP precisely concerns the minutiae of strategy (Whittington, 2007) and "*who does it, what they do, how they do it, what they use* and *what implication this has for shaping strategy*" (Jarzabkowski and Spee, 2009; P. 69). It aims to uncover practitioners' detailed activities of which strategy is constituted (Hendry and Seidl, 2003, Whittington, 2003, Johnson et al., 2010b).

2.3.3 Approaching the SAP perspective

SAP is envisaged as a perspective within the broader field of strategic management (Paroutis et al., 2013, Rouleau, 2013, Jarzabkowski et al., 2016a) This perspective has dome features that offer theoretical resources for its empirical domain and they are of significance to be explicated upfront within the two following points. **First**, one of the most important keywords in the strategy field is the notion of 'performance' (Vaara and Whittington, 2012, Gurrard et al., 2013, Jarzabkowski et al., 2016a), which has been subject to reconceptualization in the SAP literature. On the one hand, as strategy in SAP is something people do rather than something organisations have, SAP is concerned more with the performance of people - bodily doing and saying in relation to strategy - rather than the performance of firms in terms of economic return per se (Whittington, 2007, Nordqvist and Melin, 2008). On the other hand, as SAP concerns itself with people's performance, performance may refer to strategists' successful attempts to opt for alternatives during strategizing discussions (Rasche and Chia, 2009). Furthermore, performance may refer to the consequences of involving a particular type of practitioner and how that influences strategizing (Vaara and Whittington, 2012), or it may be interpreted in terms of a practice's own success in acquiring wide diffusion and adoption (Whittington, 2007). Thus, SAP has broadened the notion of performance beyond firms' economic performance per se, to one that embraces a wide range of strategy outcomes (Vaara and Whittington, 2012).

Second, SAP builds its perspective on three primary pillars: Practice, Praxis, and Practitioners (Whittington, 2006a, Johnson et al., 2007, Jarzabkowski and Spee, 2009) which are informed by various theories of practice (Whittington, 2002). While these concepts are discrete, they are also interconnected (Whittington, 2006a, Paroutis et al., 2013), as it is not possible to examine one in isolation from aspects of the others (Jarzabkowski et al., 2007). SAP argues that strategizing occurs at the nexuses of these pillars (Jarzabkowski et al., 2007, Golsorkhi et al., 2010), however, for empirical purposes it is perfectly justifiable that one concept, for instance, "practice", may become the study's focus, but this will unavoidably involve practitioners and their praxis (Jarzabkowski et al., 2007). Due to the significance of these concepts for SAP examinations and for the purpose of giving richer explanations of these concepts, I have opted to discuss them separately in three sub-sections. Importantly, the aim is to deal with empirical examinations within SAP to contribute to my understanding of the SAP perspective, the manner in which previous studies have been executed, and to demonstrate how existing empirical studies have used these concepts to unveil what has been theoretically advocated.

2.3.3.1 Practice – mutiple faces

Given the nature of practice theory literature that involves various theoretical ways to theorise practices (Rouse, 2001, Schatzki, 2001b, Reckwitz, 2002, Nicolini, 2013), it is not surprising to see different concepts of practices used in the SAP field (Jarzabkowski, 2005, Jarzabkowski and Spee, 2009). To address this, a number of attempts have been made in the SAP literature to broadly categorise the notion of practices in SAP (Jarzabkowski, 2005, Johnson et al., 2007, Jarzabkowski and Spee, 2009, Vaara and Whittington, 2012, Mirabeau and Maguire, 2013) with no recognition of any dominant view on practice in the field (Jarzabkowski and Spee, 2009, Rouleau, 2013). Interpreting these categorisations along my examination, Table 2-1 below aims to embrace the plurality of practices as envisaged in SAP and articulating them one by one. Note, while the table below illustrates studies that place practices at the centre of their focus, it will become apparent that the SAP practices research agenda are not merely about practices per se. Indeed, it aims to unveil how these practices shape practitioners' strategizing activities. Therefore, these agenda are seen as of primary importance in the SAP perspective (Jarzabkowski and Spee, 2009), and I have subjected them here to detailed analysis.

Multiple faces of practices				
	Institutional	organisational	Episodic	Strategy tools
Studies	5	1	6	8
	Total studies: 20			

Table 2-1 Shows the multiple faces of practices as envisaged in the SAP field and supplemented each view with the relevant empirical works found in SAP.

2.3.3.1.1 Institutional practices

Institutional practices refer to the accepted ways of strategizing (Vaara and Whittington, 2012) that include traditions, norms, rules, guidelines and procedures of how to strategize (Whittington, 2006a, Jarzabkowski and Spee, 2009, Paroutis et al., 2013). They are shared between practitioners (Vaara and Whittington, 2012), routinized over time and contextually embedded into local practices of organisations (Jarzabkowski and Spee, 2009) and serve as the infrastructure through which strategizing activities are constructed (Jarzabkowski and Balogun, 2009). They are the range of practices such as strategic planning practices, annual reviews, resource allocation and budgeting that provide symbolic resources for practitioners to interact about strategy (Jarzabkowski, 2005, Johnson et al., 2007, Jarzabkowski and Balogun, 2009).

For example, Nordqvist and Melin (2010) highlight how strategic planning acted as a mechanism for coordination and control in three family businesses, showing, for instance,

that the variety of interests of multiple influencers in the family business context (owner, family member and board member) can be aligned formally through strategic planning practice, leading family businesses to organise their strategic work in line with professional firms. Somewhat similarly, Jarzabkowski and Balogun (2009) show, in a single European multinational, how strategic planning practice acts as a mediator between actors with different interests and from diverse units across Europe. While it could be argued that strategic planning practice would have integrative effects on practitioners through participation and communication in the practice of strategic planning, the study reveals the integration activities between these diverse units towards shared strategic goals. For instance, practitioners with intra-organisation power and unit planning experience in large European markets have dominated the participations and communications, thereby shaping the interests of practitioners with less power and leading them to accept their subordinate role. Upon the emergence of this situation, practitioners were able to reach globally integrated strategies in the organisation as a whole.

Hendry et al. (2010) reveal, drawing on six cases from different sectors, how board members exercise "procedural" strategic planning practice "with its formal planning and budgeting" to maintain a current strategy that they express no concern about it. In this sense, board members' key activities include review, approval, monitoring and signing off of strategic plans and budgets that have been prepared by management, thereby indicating that such a practice is deemed to be an efficient mechanism for a board with limited involvement in strategy and willing not to introduce changes. On the other hand, "interactive" strategic planning practice, with its face-to-face, formal and informal social interactions, was an ideal practice to deal with the complexities inherent in changing strategic direction. Research informed by SAP such as this of Hendry et al. (2010) has regarded strategic planning practice as a mediator for interactions between practitioners, revealing what practitioners do and how they strategize, both through their social interactions and within the specific practices they engage in. It also provides an understanding of the conditions in which practitioners put relatively more emphasis on particular strategic planning practices in line with internal and external environmental changes that shape their views on whether to maintain or change the organisation strategic direction.

2.3.3.1.2 organisational practices

organisational practices refer to organisation-specific localised settings; that is, norms and operating procedures embedded in routines, which guide and shape strategizing activities in particular organisations (Whittington, 2006a, Johnson et al., 2007). SAP gets closer to these organisational practices, revealing the micro activities that underpin practices at the

organisational level and how these local practices shape strategizing (Whittington, 2006a, Rouleau, 2013). While the study of this type of practice remains marginal in SAP research (Rouleau, 2013), it sounds appealing from a practice perspective as it involves the micro perspective of how strategy is shaped at the nexus of organisational context and localised routines and practices

A unique example comes from Jarzabkowski and Wilson (2002) to show how, in a single public UK university, the top management team (TMT) reinforced their own strategic thinking through the interplay of organisational context and localised practices. For instance, on the one hand, they showed how TMT draw upon their position, knowledge about the external environment and experiences to legitimately establish organisational norms that define strategic goals and locate strategic actions in terms of excellence in areas such as research ranking, income-generation and teaching. Such norms are formally exercised within centralised committees which control areas such as formal operating procedures for resource allocation, strategic decision-making and financial planning. For instance, in bringing departments' performances in line with the TMT's defined goals, decisions about resource allocation are legitimised to the extent to which each department complies with the core strategic area, thereby encouraging departments to contribute towards the university's goals because their resources are negotiated on that basis. On the other hand, these centralised committees are underpinned through localised routines of interaction. For instance, overlapping committee memberships for TMT members and informal interactions between them both serve to establish shared team knowledge and ensure that decisions within each committee are in line with overall university strategic goals. Eventually, these formal committees and localised routines of interaction act as a framework within which TMT thinking can go ahead.

2.3.3.1.3 Episodic practices

Practitioners' strategizing activities take place in episodes (Whittington, 2006a, Jarzabkowski and Spee, 2009). These episodes are seen in SAP as practices that shape and organise practitioners' strategizing activities (Jarzabkowski and Spee, 2009, Vaara and Whittington, 2012), and which are responsible for provoking change or reinforcing stability in an organisation's strategy (Jarzabkowski, 2005). Such episodes that include meetings, workshops and away days have been subject to a detailed analysis in the SAP literature, revealing the micro of how strategizing is shaped by the practices within a particular episode (Jarzabkowski and Spee, 2009).

Drawing on Luhmann (1968)'s theory, Hendry and Seidl (2003; P. 174) define strategic episodes as "*a sequence of communications structured in terms of beginning and ending*".

While any communication would start and end at a certain point, a strategic episode is marked as a temporal point at which the beginning of an episode sees a switch from the operational context into the strategic context, and the end constitutes a switch back to the existing operational context. According to Hendry and Seidl (2003), only through this shift can a manager, with no formal strategic role, escape his or her operational structure and engage in strategic communication. Hendry and Seidl's major contribution was the development of a conceptual framework for studying episodes, which consists of three concepts: initiation, conduct and termination. **Initiation** is the point at which the structure of normal activities is suspended and a new structure is established within the episode which determines the choice of participants, the specification of goals and output, and time limits. **Conduct** refers to activities inside the episode including the development of the episode's procedure and routine to allow practitioners to perform as intended. **Termination** is the point at which the newly established structure is dissolved and the practitioners involved return to their existing operational structure. This is also the point where outcomes are communicated to the whole organisation in the form of recommendation reports, documents or presentations.

Drawing on Hendry and Seidl (2003)'s strategic episodes framework, Jarzabkowski and Seidl (2008) examined the role of meetings in stabilising existing strategic orientation or proposing change in strategic orientations (destabilising). Observing 51 formal strategic meetings, they identified practices that exemplified each concept (initiation, conduct and termination), revealing how specific meeting practices contributed to either stabilising or destabilising strategic orientation. For instance, practices such as restricted discussion and administrative discussion, as forms of meeting conduct, were used to enable firms to stabilise their existing strategy. In contrast, practices such as the formation of working groups and free discussion were found to contribute to destabilising strategic initiatives. In their large-scale survey in the UK, Hodgkinson et al. (2006) examined the role of strategy workshops in strategizing, offering valuable insights into this particular form of episode. Strategic workshops served the purpose of coordination and communication of strategy. Data indicated that workshops served as a form of strategy debate where managers focused on key issues within their organisation and drew on their experiences and knowledge to feed into strategy development. Such a practice was found to provide a means for managers to manipulate strategic analytical tools and use these as guidance for discussion rather than for their original analytical purposes.

2.3.3.1.4 Tools as practices

Strategic tools can be understood as frameworks, techniques, approaches and methodology which are used by managers to support strategy making decisions (Clark, 1997). SAP

researchers regard them as practices and do not evaluate tools per se nor what tools are being used. Rather, SAP pays close attention to how these tools are used in practice (Gunn and Williams, 2007), how practitioners engage with them (Jarzabkowski and Kaplan, 2008) and how these tools mediate interactions between practitioners during strategizing activities (Kaplan and Jarzabkowski, 2006). This new approach in examining strategy tools is motivated by empirical findings that indicate that strategy tools are not solely used to conduct analysis and problem solving (Hansen, 2011). Indeed, strategic tools appear to serve as a means of enabling or constraining interaction concerning strategy between practitioners, signalling that they are being employed for multiple strategic tasks beyond their immediate remit (Spee and Jarzabkowski, 2009).

For instance, Hodgkinson et al. (2006) showed how strategic analytical tools applied in workshops were used to guide the discussion rather than employed for their original analytical purposes. Hill and Westbrook (1997) revealed how SWOT analysis outcomes in most of their 20 cases were not used as an input into strategy decisions and were used only as a method for initiating strategy discussion. Kaplan and Jarzabkowski (2006) have taken an ethnographical approach to examining how practitioners search for rationality and objectivity through the use of two tools, one of them developed internally. They highlighted that, while managers introduced tools to search for rationality and objectivity in their strategy, the tools turned out to be the subject of managers' disputes over the legitimacy of the tools themselves, that is, where the outcomes of the tools conflicted with their personal interests or where tools did not cover dimensions that are deemed critical for them. Although the tools did not provide the objective answers they were looking for, they generated concepts and questions, leading to a great deal of discussion around strategy.

2.3.3.1.5 Practice - multiple faces: closing remarks

In summary, I have identified the multiple faces of practice and how these multiple faces have been explained within existing SAP empirical studies. The point that needs to be taken into consideration is that these faces bring together the various approaches that are responsible for shaping practitioners' actions and ultimately their strategizing. While I take Jarzabkowski and Spee (2009)'s point that there is considerable work on theorising practice available in the practice literature and yet to be brought into SAP, it is fair to indicate here that the development of the elements of practice identified here have their roots in and belong to the domain of practice theory literature. For instance, when a tool becomes essential for strategizing, SAP, in line with practice theory, regards it as a practice, and of equal importance to practitioners' activities in strategizing.

2.3.3.2 Praxis - multi-layered nature

The actual stream activities (routine and the non-routine, formal and informal) of what practitioners do to accomplish strategy are broadly referred to as praxis (Whittington, 2006a, Whittington, 2007, Jarzabkowski and Spee, 2009). However, given the nature of SAP research that endeavour not to only document practitioners' strategizing activities in itself (Vaara and Whittington, 2012) but within its organisational and wider social context; praxis when interpreted and defined needs to capture such essence. Therefore, I follow Jarzabkowski et al. (2007; P. 9) definition for praxis as "*the nexus of what is going on in society and what people are doing*". In this sense, praxis comprises the interconnectedness of practitioners' micro actions in their local organisational practices with the wider social context in which these actions are located and to which they contribute (Jarzabkowski, 2005, Jarzabkowski et al., 2007). Noticeably, this suggests that praxis-focused studies cannot be examined in isolation from the practices in which they take place (Whittington, 2006a, Jarzabkowski et al., 2007).

Intriguingly, Jarzabkowski and Spee (2009) have nicely demonstrated three levels to which praxis can be operationalized and empirically studied. These three levels of praxis upon practitioners may engage in to strategize are known as the micro, meso and macro praxis. Depending on the study focus, **micro** praxis refers to those studies that aim to uncover what practitioners do as they engage in their immediate local practices, e.g. meeting or workshop. Hoon (2007)'s study of committee meetings is a case in point. She examined how middle managers recognised their strategic role and the praxis that enabled them to escape their operational responsibilities and engage in strategic communication. She revealed the micro praxis of how middle managers draw on informal interaction (strategic conversation) with senior managers around the formal committee meeting, which served as a complement to frame and influence the formal discussion.

Meso praxis relates to the examination of practitioners' engagement in strategy praxis at the organisational or sub-organisational level. At this level, according to Jarzabkowski and Spee (2009), studies seek to make a link between what practitioners do and how their doing shapes and influences strategy praxis in organisations or sub-organisational units. For instance, in her ethnographic single case study of a clothing company, Rouleau (2005) drew near to middle managers who were involved in implementing strategic change in their organisation. She drew on their routines and conversations to show how these middle managers work as 'interpreters' for the company's new strategic change and as 'sellers' of this change at micro-level in customer and shareholder interactions. Studies such as this one, informed by SAP, show the meso-level phenomena of strategic change at the organisational level that has been transmitted to external actors through middle managers' praxis. Praxis can also be studied at

the **Macro** level, where the aim is to explain the link between practitioners' actions in widely diffused activities within the macro level of industries, markets or institutions. Jarzabkowski and Spee (2009) found and reported only one study of Vaara et al. (2004) that can be said to explain practitioners' engagement at the macro level of praxis, and that is due to rareness and difficulties in finding a direct relationship between practitioners and macro praxis . In their study, Vaara et al. (2004) firstly show how alliances became the dominant norms of competition in the airline industry. They draw on discourse practices of members from multiple European airline companies to show how their discourse strategizing practices have legitimised alliances in their companies.

2.3.3.2.1 Praxis - multi-layered nature: closing remarks

In sum, praxis does not take place in a vacuum, but ultimately occur in organisational practices that have interconnectedness with the wider social context. Where praxis became the primary focus of any given investigation, the classification of Jarzabkowski and Spee (2009) opens a new vista for researchers to examine praxis as they occur on more than one level upon which practitioners may engage to strategize.

2.3.3.3 Practitioners - multiple players

Practitioners are the point of connection between the two concepts above 'practice and praxis'. They exercise praxis and carry out its practices (Whittington, 2006a). Practitioners are defined widely in SAP to the manner that regards strategizing as far more than top-down formulation. Indeed, there are many influencers on strategy and facilitators for its implementation who may be located at different organisational levels and have no formal strategic role (Rouleau, 2005, Hoon, 2007). Note, however, that this does not mean that SAP discards the study of the roles of senior executives in strategizing. However, SAP sheds light on the increasing role played by other levels who have no formal strategic role and who are still able to shape strategy and act as strategists (Jarzabkowski et al., 2007). Accordingly, SAP sheds light on this plurality of actors involved in strategizing to include in its examination individual practitioners, aggregate groups of practitioners, those internal to organisations from multiple levels and those external to organisation hierarchy (Jarzabkowski and Spee, 2009).

The examinations of the strategic roles of middle managers by Rouleau (2005) and Hoon (2007), outlined previously, take the view that strategizing is not merely a matter for senior executives. Likewise, Lavarda et al. (2010) who showed how middle managers acted between top and bottom levels by participating in the decision-making process and transmitting decisions to the whole organisation. SAP has extended its direction to focus on how

practitioners as a group do strategize. The previously mentioned study of Jarzabkowski (2003) offered valuable explanations of how TMTs strategized as a group in their particular universities. Similarly, Paroutis and Pettigrew (2007) have examined how strategy teams in a multi-utility business firm strategized, revealing the importance of interactions across strategy teams (coordination, supporting and collaborating) and the micro-activities that comprised each practice. Through these interactions, the work of strategizing occurred and firms were able to make sense of strategy and discuss new strategic initiatives.

SAP also recognises strategizing as no longer solely shaped within formal organisational structure; instead, it involves players from outside the organisation. Nordqvist (2011) elaborated how a strategic consultant played the role of 'mediator' to create a balance between family and non-family involvement in strategy development in one company. This research, informed by SAP, revealed consultant praxis in strategic planning practice including elements such as the evaluation of strategic ideas and ensuring a family's interests were incorporated into strategy development. Somewhat similarly, Nordqvist and Melin (2008) demonstrated, in the family business context, how a strategic consultant can be an effective planning practitioner, make a difference where he/she is involved, and go beyond board members' expectations. They revealed that in addition to being an analytical planner and strategic thinker, a strategic consultant must be a *social craftsperson*, an *artful interpreter* and *known stranger*. What emerges from these studies is that external actors are able to act as strategists, which make them susceptible to SAP examination.

2.3.3.3.1 Practitioners - multiple players: closing remarks

In sum, the plurality of actors involved in strategizing is taken seriously in SAP empirical examinations, signalling the current nature of strategizing that allows strategy to be shaped and influenced by multiple actors (Johnson et al., 2007). Furthermore, the inclusion of these broader groups in SAP analysis implies that the field of SAP finds worthy of study different practitioners (group/individual) who are intra/extra to organisations that exercise strategic activities. Such a broad analysis would work well with relevant organisational research to further extend this analysis to include practitioners from various functional areas in organisations towards unveiling their strategizing activities that shape or are shaped by organisational and social practices.

2.3.3.4 Approaching the SAP perspective: closing remarks

Having discussed the three concepts separately, I have offered richer explanations of them by articulating the multiple faces of practice, the multi-layered nature of praxis and the plurality of players involved in strategizing. This leads to the summary that any strategizing involves

practices that can be norms, tools, episodes, and practitioners who do the work, and their praxis that is shaped by practices available in their organisational and social context. Importantly, while each of these concepts is unique, their interconnectedness provides theoretical understanding and instruments for analysing from a SAP perspective (Jarzabkowski et al., 2007). The task now is to introduce a framework that is capable of drawing out all insights that SAP focuses on. I have selected and subjected Whittington (2006a)'s framework to analysis because of its consistency with the notion of practice as perspective as expressed previously in 2.2.3.

2.3.4 Theorizing though the 3Ps

In drawing on practice theory in general, Whittington contributed decisively to showing how SAP can be studied through the interconnectedness of the 3Ps (Whittington, 2002, Whittington, 2006a, Whittington, 2007). Despite the fact that his framework (see Figure 2-1 below) has yet to be used empirically, it merits particular and detailed attention for two main reasons. At one level, it provides a means for understanding the nexus nature of the 3Ps by way of offering an understanding of how they interact during strategizing activities. In this sense, his framework, by and large, is capable of linking the 3Ps together along their different subsets. Secondly, I would argue that there is a relationship between what Whittington has argued in his framework and practice theory perspective as noted previously. This relationship will be elucidated during the discussion to show how this framework captures the main characteristics of practice theory as expressed above. This discussion will end with what could be regarded as the limitations of this framework.

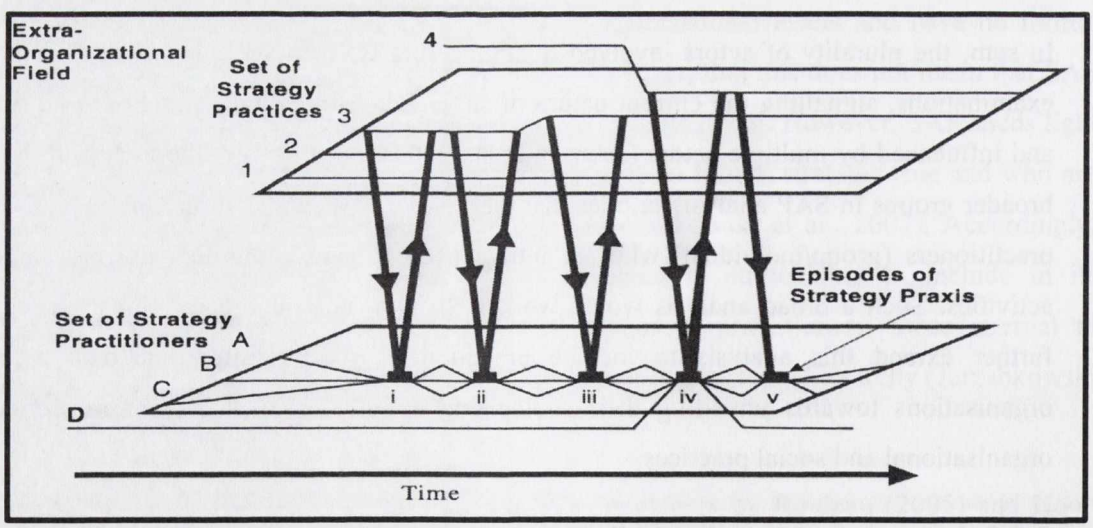


Figure 2-1 Adapted from Whittington (2006a)

At the basic level, practitioners are at the centre of this framework. They are able to make links between intra/extra-organisational practices and intra-organisational praxis that take place in strategic episodes. As they strategize, practitioners perform specific activities

(praxis) at specific places and times (episodes), and they may draw upon specific routines and formulae for strategizing (practices) that have been laid down by their corporation. Alternatively, they may draw upon established sets of practices that are available within the wider social contexts in which their organisations are embedded. Basically, those practitioners can be members of the same organisation (A, B and C), or may belong to the extra-organisational field (D).

Continuing the focus on practitioners, Whittington regards them as responsible for invoking change deep inside the organisation's practices and possibly in extra-organisational practices. From a practice point of view, the social world is populated by various practices (Reckwitz, 2002), and what make sense for people to do depends on the nexus of these interwoven practices (Schatzki, 2001b). In Whittington's terms, practitioners may exploit this plurality by carrying out new practices that are currently outside the accepted practice of their particular organisation and regard this as a legitimate way of strategizing. Or extra-organisational practitioners, such as strategy consultants, may introduce the new practice. The organisation would then solidify and synthesise this new practice as a legitimate means of strategizing.

Whittington's framework, of course, appreciates to some extend the contribution practitioners may make to extra-organisational practices. Upward arrows from episodes to practices indicate that practitioners' praxis may be responsible for the creation of practices. From this point of view, practitioners may adopt the existing practices by changing the ingredients of their praxis. Given the potential power of some strategy practices that may go beyond particular organisation, Whittington let us to think about how this adopted practice became institutionally accepted by extra-organisational field as a new legitimate way of strategy practice. To account for such affair and its logic, practice theorists endorse the dualism between praxis and practice to which their overall prime agreement is that practices are set of people praxis (Schatzki, 2001a, Reckwitz, 2002, Nicolini, 2013). From this point of view, Whittington's argument is legitimate to some extend in a sense that existing practices, adopted practices and new practices are the product of practitioners' praxis. In short, the stock of practices available are reproduced, amended and introduced by practitioners.

With full appreciation for Whittington's contributions to our understanding of strategizing through 3Ps, I here, however, argues that a complete understanding of some aspects of the framework would require taking note of some explanations available in practice literature as expressed previously in (2.2.3) to enable overcoming some of the framework's deficiencies. To begin with, when taking 3Ps as a theoretical underpinning to conceptualise strategizing, one of the problems relates to the interrelated and interwoven nature of practices that are responsible for shaping practitioners' praxis (Jarzabkowski and Spee, 2009). This implies that a bundle of practices rather than signal practices that surround practitioners' praxis.

Indeed, Whittington is on the side of this plurality of practices available within the organisation and extra-organisational field to which practitioners reinforce them by drawing upon them during strategizing.

However, the framework lacks the necessity of setting the boundary that allows empirical investigators to concentrate on a defined set of practices rather than track all potential practices that are responsible for shaping strategizing. The attractive feature of the notion of 'site' in practice literature as illustrated previously by Schatzki (2005) is valuable when taking Whittington's framework empirically. The remarkable aspect of the notion of site is to give avenue for such affair of interwoven practices by encouraging investigators to look for the closely tied bundles of practices that compose the phenomena under-investigation. While for the most part the notion of site is a theoretical outline (Nicolini, 2013), today Huang et al. (2014) drawn on some aspect of this nation to understand how practitioners, IT-enabled practices and praxis create a particular site of practice; thereby remark the possibility of taking this notion empirically. Finally, a complete picture of how small instances of praxis would lead to legitimising new practice would require acknowledgement to, in Whittington terms, a kind of practitioners associated with the transfer of practices. Indeed, the influential role of certain practitioners and their abilities to contribute to extra-organisational practices would require to some extend consideration to their identity and rules. The work of Coulter (2001) and his notion of 'occasional relevance' is a case of point in this affair.

In sum, my purpose in this section has been to explore how, and to what extent, the 3Ps can be brought empirically. In doing so, Whittington's framework was selected and subjected to analysis for its most relevance to the practice perspective as forwarded at the beginning of this chapter. Indeed, the framework flags up a couple of implications for those interested in SAP perspective. First, for investigator to be aware that practitioners may reinforce or influenced by practices that currently outside their current organisational practices. In this sense, there is a need to trace through the implications of interwoven practices that are available at extra-organisational field that are responsible for shaping strategizing within the organisation. This highlights the importance of drawing, to some extent, on the notion of 'site' for the sake of identifying such effect of relevant practices at practitioners strategizing. Second, the framework, as suggested by Whittington, indicates to the link between intra and extra organisational level. In this sense, SAP as perspective is distinctive in terms of unveiling praxis deep inside the organisation, practitioners and practices extending outside, regarding them all as central to its view and empirical examination of strategizing.

2.3.5 The nature of inquiry in SAP

The discussion in this section emerged from the examination of the context under which SAP empirical studies have been executed. The section derives its importance on the basis that the practice of strategizing is not same for everyone (Whittington, 1996b). This implies that an effective execution of SAP research would require a readiness to work within local contextual levels (Jarzabkowski and Wilson, 2002) through which strategizing occurs in interplay within coexistent levels within organisations and wider social context (Johnson et al., 2007, Paroutis et al., 2013). It is, therefore, I am invited to explore under which contextual condition that SAP's scholars have executed their empirical examinations. A total of 24 empirical studies were examined in this review revealed that SAP scholars have carried out their examinations in both public (33%) and private (46%) sectors, and under certain circumstances they employed both sectors simultaneously (21%) as illustrated in Table 2-2 below. By and large, I will discuss studies within each sector separately, and draw out commentary conclusion thereafter.

	Public	Private	Cross-sectors
Studies	8	11	5
Percentage	33%	46%	21%
		Total studies: 24	

Table 2-2 Shows SAP empirical studies divided by sectors

2.3.5.1 Public sector

The review unveils eight studies that specifically investigate SAP in public sector context. These types of studies mostly targeted public education sector by selecting sample from public UK universities (Jarzabkowski and Wilson, 2002, Jarzabkowski, 2003, Jarzabkowski, 2005), public Spain university (Lavarda et al., 2010), public German university (Hoon, 2007), Danish upper secondary schools (Hansen, 2011); and finally one single study was carried out in public British rail sector (Johnson et al., 2010a). A significant number of these studies drew on case study methodology ranging from a single case study (Hoon, 2007, Lavarda et al., 2010), single embedded case study (Jarzabkowski and Wilson, 2002), and maximum three cases (Jarzabkowski, 2003, Jarzabkowski, 2005). However, a single study of Hansen (2011) used survey and followed up with some interviews for the purpose of identifying which strategic management tools are applied in Danish upper secondary school. Such purpose is served by large survey inquiry into the chosen sector. See Table 2-3 below.

Type of the sector	Number of study/studies
Education	7
Rail services	1

Table 2-3 Indicates to SAP research as executed in public sector

2.3.5.2 Private sector

A relatively higher number of studies have inquired into the private sector. These ten studies targeted multi-national firms (Vaara et al., 2004, Jarzabkowski and Balogun, 2009), multi-divisional telecommunication manufacture (Kaplan and Jarzabkowski, 2006), large corporation in utility sector (Paroutis and Pettigrew, 2007, Moisander and Stenfors, 2009), medium and multi-generational family firms (Nordqvist and Melin, 2010), medium family business (Nordqvist and Melin, 2008, Nordqvist and Melin, 2010) and private clothing manufacture context (Rouleau, 2005). Dominantly, single case research has been the approach to inquiry by adopting both longitudinal study (Paroutis and Pettigrew, 2007, Jarzabkowski and Balogun, 2009, Mirabeau and Maguire, 2013) and ethnographic inquiry at the other end (Rouleau, 2005, Kaplan and Jarzabkowski, 2006, Moisander and Stenfors, 2009). Some studies performed multiple case research set in context, i.e. family business context (Nordqvist and Melin, 2008, Nordqvist, 2011) and mid-sized international airlines companies (Vaara et al., 2004). Table 2-4 below illustrates SAP research divided by industries in private sector.

Type of the sector	Number of study/studies
Multinational firm	1
Telecommunications	2
Manufacturing	2
Airlines	1
Utility	2
Family business	3

Table 2-4 Indicates to SAP research as executed in private sector

2.3.5.3 Cross sectoral studies

The remaining five studies have been found to inquire into private and public sectors simultaneously. These types of studies mostly adopted large number of cases to seek out, e.g. the application of particular practices in six cases from both public and private sectors (Hendry et al., 2010), ten mixed cases to explore the involvement of three episodic practices during strategizing (Whittington et al., 2006), and thirty cases to find out how senior executives engage with particular strategy tools (Jarratt and Stiles, 2010). Somewhat ironically, given the same purpose of seeking out the application of particular practices in

both sectors, some studies found their way in surveying both sectors to present managerial experiences in workshop practices (Hodgkinson et al., 2006) and unveiling the application of particular strategy tool in practice (Gunn and Williams, 2007). By and large, these studies, within this domain, went to the field with pre-defined goals that is merely looking for the application of certain tools and practice in both sectors, rather than seeking out how strategizing shape or are shaped by these episodes and tools. The main aim served by large number of cases or large-scale survey to mainly determine how often tools or particular practices occur in participants' organisations.

2.3.5.4 The nature of inquiry in SAP: closing remarks

The above discussion has drawn into sharp focus relates to two points. First, cross-sectorial studies are not up to the task of investigating how strategizing occur in the interplay between organisational and social context, which is the primary focus of SAP perspectives. Indeed, these cross-sectorial studies helped the field in determining the diffusion of particular practices in public and private sectors, thereby building insight on the deployment of these practices by practitioners during their strategizing activities. Second, the above discussion does not intend to argue that there is a better sector to execute SAP research than other. Indeed, a close inspection on studies mentioned in the above discussion highlights that there are set of contextual configurations conditions that make the case site as contextually unique for SAP examinations. For instance, public sector exhibits features such as divergent interests of multiple stakeholders at all organisational levels and dependency on government in terms of resources allocations, guidelines, rules, and requirements (Jarzabkowski, 2005, Hoon, 2007). Indeed, these features in public sector context showed that there is a strong relationship between extra-organisational field and intra-organisational strategizing activities, which would prove promising to study how strategizing occur and is shaped in the interplay between these two levels. This goes some way to justify the employment of public sector in SAP research through which strategizing is developed by specific combinations of multiple actors and influencers.

Likewise, when private sector subjected to examinations, SAP's scholars emphasised the set of contextual characteristics that is deemed fruitful for their empirical examination. Private sector showed the feature of divergent interests and diffused of power between practitioners. This is evident in the examinations of large multi-national corporations (Jarzabkowski and Balogun, 2009), large multi-divisional company (Kaplan and Jarzabkowski, 2006) and global multi-physical sites corporations (Mirabeau and Maguire, 2013). In addition, private sectors may involve a diverse set of players that influence strategizing. In this sense, family business firm exhibited a contextually unique case in terms of studying how strategizing occur through the interaction between family members and board members in organisations (Nordqvist and

Melin, 2008, Nordqvist and Melin, 2010). In sum, it is the condition that is the main driver behind the nature of SAP inquiry and is not the sector as I have exemplified above.

2.3.6 Concluding SAP narrative review

The aim of this narrative review of the SAP literature has been to offer a comprehensive background on the SAP as a lens to the inquiry in my research. In undertaking this review, I have unpacked the theoretical goals that the SAP perspective endeavours towards, noting the field's fundamental principles and contours, and articulating in depth the manner in which SAP studies have been executed. The section started by offering SAP's view on the notion of strategy, which has been re-imagined in a way that is consistent with the adoption and application of practice theory. I have made it abundantly clear that strategy, from the SAP perspective, is a social practice that involves bodily, doing and saying; and derives its meaning from the organisational and social context within which it evolves. In this way, the re-conceptualisation on the notion of strategy suggests that the field of SAP concerns the doing of strategy, rather than its product in terms of economic value for the organisation.

The discussion proceeded to show the implications of conceptualising strategy as a social practice. On one level, the doing of strategy - increasingly referred to as 'strategizing', has been re-conceptualised to comprise actions, interactions and negotiations involving multiple practitioners. As it stands in practice theory, these strategizing activities are situated in the field of social practice, implying that society, not only organisations, suffuses practitioners and their strategizing activities. On another level, the notion of 'performance' has also been re-envisioned beyond a firm's economic performance per se, to one that embraces the performance of practitioners – their bodily doing and saying in relation to strategizing. The discussion went on to offer an in-depth analysis of the three main pillars on which SAP builds its perspective: Practice, Praxis and Practitioners. I undertook to discuss these separately for the purpose of giving a richer explanation of each concept. I have shown that the concept of practice within the SAP literature has been characterised as having multiple faces, with no dominant view emerging in the field of SAP. Therefore, I have embraced this plurality of practices, articulated them one by one, and supported each face with empirical examples. I argued that these faces together bring together the various approaches that are responsible for shaping practitioners' strategizing.

In relation to the concept of praxis, I noted that praxis should not be interpreted as merely the activities of practitioners towards accomplishing strategy. Rather, these praxis activities need to be seen, consistent with practice theory, as to occur and take place in the interplay between organisational and social practice. After that, I moved on to articulate the three levels of praxis (micro, meso and macro) which practitioners might engage in to strategize. The third

pillar - that of practitioners - has been given particular emphasis, since practitioners are seen to be the point of connection between the two concepts of practice and praxis. I have indicated to the plurality of practitioners (group/individuals) involved in strategizing who are intra/extra to organisations.

While I discussed the 3Ps separately, I noted that they are interconnected and have a dependency on one other. In this vein, I opted for Whittington's framework as, on the one hand, it is up to the task of showing the coexistence between inter-relatedness of the 3Ps. On the other hand, the framework itself captures the main characteristics of the second mode of engaging with practice as perspective. Furthermore, I argued that a complete understanding of certain aspects of the framework would require us to take note of explanations available in practice literature to overcome some of the framework's deficiencies. Following this, I draw the section to close by offering an in-depth analysis of the context within which SAP studies have been executed. I noted that this examination derives its significance from the fact that the practice of strategizing is not the same for every organisation. This indicates the importance of the researcher being prepared to work within local contextual levels, where strategizing occurs in the interplay between organisations and the wider social context. In this regard, I showed that SAP scholars have carried out their examinations in both the public and private sectors, and that under certain circumstances they have covered both sectors simultaneously. At the end of my examination, I noted that neither the public nor the private sector offers the researcher better conditions in which to carry out SAP research. Indeed, it is the contextual configuration conditions that make a case site fruitful for SAP examination.

Following on from the articulation of the SAP perspective offered in this section, this research will now proceed to illustrate the utilization of this perspective for inquiry into my specific research question: "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?" This utilisation is twofold: first, literature-based utilisation - one that draws on the SAP perspective to critique the SA literature in order to offer new interpretations and research avenues for this particular set of literature. This form of utilisation will be explained in the next section (2.4) within this chapter; second, SAP methodological utilisation – in order to settle on a research design and strategy that is philosophically and methodologically capable of capturing what the SAP perspective endeavours towards. Explanation of this form of methodological utilisation, and of how I intend to go about answering my research question form the basis of chapter (3) - research strategy, design and execution.

2.4 Strategic Alignment literature

2.4.1 Purpose & Overview

In previous sections, in particular the practice theory (2.2) and SAP (2.3), I attempted to deconstruct my research question as a means of clarifying each element of the question, thereby indicating the relevance of the literature(s) drawn upon to inform my research question. I illuminated the fact that the word 'practice' in the research question refers to the field of SAP perspective within the strategic management literature. I then proceeded to present the SAP perspective as a lens to address my research question. The primary task now for this section (2.4) is to explicate the underlined words of the research question "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?"; this refers to the domain of SA within the IS strategy field. This particular section (2.4) is regarded as a 'systematic literature review (SLR)', according to Grant and Booth (2009) typology of reviews, through which I aimed to follow an "*explicit and reproducible method for identifying, evaluating and synthesizing the existing body of completed and recorded work produced by researchers, scholars and practitioners*" (Fink, 2010; P. 3). The purpose of conducting this type of review on the primary literature in the thesis is to ensure a level of confidence in the results of this review and to minimise bias through the exhaustive nature of the literature search (Tranfield et al., 2003).

The central tenet of SLR is the notion of being 'systematic'. In elucidating this term, Okoli and Schabram (2010) noted that SLR must be systematic in following a detailed methodological approach, explicit in the way it has been conducted and reproducible by others who will follow the same approach in reviewing the topic. To satisfy this requirement of systematism, this type of review often adheres to guidelines when it is conducted (Grant and Booth, 2009). To this end, I opted to consult IS specific guidelines in developing the framework (Figure 2-2 below) to guide the task in this section where its major points are drawn and combined from the following sources: Webster and Watson (2002) general guidance on how to write literature reviews in IS research, Levy and Ellis (2006) paper on a system approach to conducting a systematic literature review in support of IS research, and Okoli and Schabram (2010) work on how to conduct a systematic literature review tailored to IS research. It is important to note that the route followed in my research is underpinned by the SAP perspective. With such a perspective, I bring the five steps of the framework to the extant SA literature and accompany these with the SAP lens at steps four and five. Therefore, the major contribution of this SLR is that I have employed in one place the notion of

'systematic' in the sense of a step-by-step guide, and have executed these steps within the specific research context - that being the SAP lens.

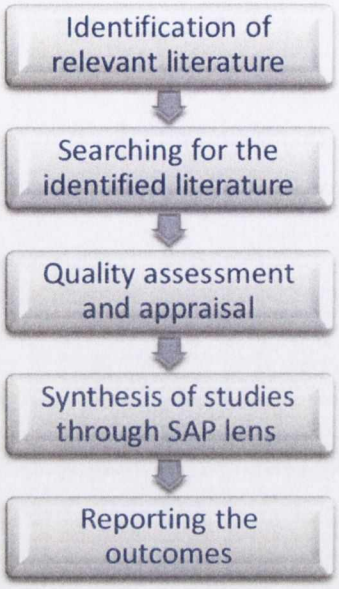


Figure 2-2 Shows the steps through which this systematic review was conducted

2.4.2 Identification of relevant literature

An SLR should utilise sources that substantiate the presence of the phenomena under investigation (Webster and Watson, 2002, Levy and Ellis, 2006). That is, conducting an SLR does not merely serve the purpose of refining the generated amount of information to a manageable set of data (Cronin et al., 2008), but serves to locate potential contributions and amalgamate these into a coherent body of knowledge (Tranfield et al., 2003, Levy and Ellis, 2006). To show how this principle might be implemented, this section determines that the relevant literature in this SLR is the quest of SA within the domain of IS strategy that resides in the wider IS management field. Consequently, the outcomes of the SLR are relevant to this particular quest of SA.

The academic field of IS management is concerned with "*the use and implications of [IS] in organisations*" (Avgerou, 2000; P. 567). It simultaneously combines technical components and human activities by focusing on the efforts made by organisations in terms of IS infrastructure and personnel to manage the lifecycle of IS within the organisation (Chan and Huff, 1992, Avgerou, 2000, Avgerou and McGrath, 2007, Chen et al., 2010). Due to the growing importance of IS to organisations and practitioners (Chan and Huff, 1992, Watson et al., 1997, Weiss and Anderson, 2004, Luftman et al., 2009, Ullah and Lai, 2013), understanding its strategic value has become the focus of the sub-field of the IS strategy domain (Teubner, 2007, Chen et al., 2010, Leonard and Seddon, 2012). The IS strategy domain is thus defined as "*an organisational perspective on the investment in, deployment,*

use, and management of IS" (Chen et al., 2010; P. 237). This deployment of IS for strategic purposes has been perceived of as being of significant importance for IS scholars and practitioners (Chan and Huff, 1992, Chen et al., 2010, Teubner, 2013). The literature suggests that the domain of IS strategy has been examined from a variety of angles, proffering that the IS strategy domain is reflected, as illustrated in Table 2-5 below, in a number of research streams that centre around the promise of IS strategy research in terms of providing a framework for effective deployment of IS for strategic purposes (Leonard and Seddon, 2012).

Studies	Stream (1)	Stream (2)	Stream (3)
Chen et al (2010)	IS Strategic planning	SA	IS for competitive
Tanriverdi et al (2010)	IS integration	SA	IS for competitive
Gable (2010)	E-Commerce	SA	IS for competitive
Alsurori and Salim (2011)	-	SA	IS for competitive

Table 2-5 Shows the streams of research that reflect IS strategy, where SA remains consistent in all the above studies

While each stream of research has its uniqueness and limitations with regard to potential contributions to IS strategy research and practice (Chen et al., 2010, Gable, 2010, Tanriverdi et al., 2010), there is a consensus among IS scholars and practitioners that further research on the chosen quest of SA are most likely to be welcomed. From the academic perspective, Chen et al. (2010) showed, following their SLR of 48 articles published in major IS journals focused on IS strategy domain, that SA is one of the core conceptions in IS strategy research. Similarly, Gable (2010), in an archival analysis for the Journal of Strategic Information Systems (JSIS), revealed that SA had dominated the journal's output for the period of 1992-2009. Tanriverdi et al. (2010) and Alsurori and Salim (2011) have asserted that SA is one of the main quests of IS strategy research. While these studies provide affirmative signals that further research on SA would serve the interests of its academic audience, IS practitioners have expressed their interest in SA from among other streams of IS strategy research. Indeed, SA has been regarded as desirable for IS executives and has persistently been at the top of the list relating to critical issues in IS strategy management for more than 25 years (Dickson et al., 1984, Kappelman et al., 2016). For now, it is sufficient to say that since this theme has remained at the top of the agenda for IS executives for many years, further empirical research is likely to have its own unique appeal for this audience as well.

Succinctly, this section asserts that although the phrase 'strategic alignment' exists within organisational research in the context of referring to various practices and efforts towards configuring strategies, action plans, and decisions across all organisational levels (Powell, 1992, Kathuria et al., 2007, Ravasi and Phillips, 2011, Caoa et al., 2012), the positioning

section here is distinct in the manner in which it expresses the notion of SA; that is, in this research it refers to the alignment between business and IS strategies in particular. Thus, locating the underlined words in the research question "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?", as well as emerging contributions from this SLR into SA quest in the domain of IS strategy within the wider IS management field.

2.4.3 Searching for the identified literature

Following the identification of the relevant literature, the primary task for this section is to gather research manuscripts related to the phenomenon under study (Levy and Ellis, 2006) – that is, of SA. A comprehensive and unbiased search is one of the key features of an SLR (Tranfield et al., 2003), thus searches should not be limited to leading published journals, according to Webster and Watson (2002), because these highly ranked journals have been criticized as conforming to generally accepted norms and editorial policy, thereby, to some extent, weeding out innovative research by reinforcing North American bias in terms of favoring particular research foci and styles (Willcocks et al., 2008). Therefore, the search strategy reported here comprises published journals and also refereed books, conference proceedings, early release reviews, and published commentary papers from known investigators within the SA field. Indeed, a relatively complete census of SA literature has been obtained in this research in three phases: an identification of the keywords search, a backward search and a forward search.

The pursuit of evidence supporting SA took place between October 2011 and 30 August 2016, using a list of keywords that comprise a number of terms synonymous with SA. These identified search terms (see appendix-2) were used in a number of electronic database engines including: ABI/INFORM Global, Business Source Complete, SAGE, Springer Link, Emerald Management, Science Direct and Google scholar. Following the keywords phase, I applied Webster and Watson (2002) tactics, those of backward and forward search, in order to advance the literature search. The backward search involves two sub-steps. On one level, this entails reviewing the references of articles yielded from the keyword search conducted above. On another level, the phase also involves a backward authors search - one that seeks out material published by authors before the article found in the keywords phase. The final phase consists of a forward search which also involves two sub-steps. On the one hand, I extended the search by seeking articles that have cited the article previously found in the keywords phase. On the other, I conducted forward authors search to identify what the authors have published since by running an electronic database search for all articles that include the authors' names. This search strategy resulted in 243 studies which were then stored and organised in my EndNote library (see appendix-3).

2.4.4 Quality assessment and appraisal

The 243 studies identified in the previous step were appraised before inclusion into my analysis. While the criteria for inclusion and exclusion of studies remains very much subjective (Tranfield et al., 2003, Okoli and Schabram, 2010), I developed a point-based system to include only applicable literature articles that were directly relevant to the phenomenon under study – SA. As shown in Table 2-6 below, five inclusion criteria were developed and applied to all 243 studies. A quality score of 4 points, out a total score of 5 points (one for each criterion), was set for each single study. Any study scoring below this quality score was excluded from my analysis.

The criteria	Definition	Point
Relevant title	The title of the paper should include SA or equivalent terms.	1
Relevant abstract	The abstract of the paper should indicate that the study, in the main, has SA purposes.	1
Keywords	The list of keywords in the paper should mention SA or its equivalent terms.	1
Relevant body	The remainder of the text in the study should show its relevance to SA.	1
Relevant outlets	The paper should be within IS outlets[1]	1
		5

Table 2-6 Shows the criteria for inclusions that have been applied for each single study

The next step involved filtering out any duplication, as certain studies had accidentally been saved twice to the library. Following that, I carried out a methodological appraisal, in which each empirical study had to exhibit information related to a type of data, the methodology adopted, data collection method and the context within which the study was carried out. This methodological appraisal is of significant importance since it is to feed into an analysis of the research style within the extant literature of SA which forms part of my discussion in chapter 3 (research strategy). Therefore, any study showing a lack of information regarding its methodological approach has been excluded from the analysis. The outcome of this appraisal process led me to consider 110 studies in this SLR. Of these studies, according to Rowe (2012) classification, 11% were theoretical (12 studies) and 10% were reviews (11 studies),

[1] I have drawn on the works of Willcocks et al (2008) and Myers and Liu (2009) to identify IS outlets for this SLR. While these woks are concerned with IS journals and conferences ranking, I have, however, used their list of IS journals and conferences rather than their ranking.

while the majority, 79%, were empirical examinations (87 studies). These studies were found in the following academic sources, as outlined in table Table 2-7 below:

Journals, book publications and conferences	Number of studies
MIS quarterly executive	12
MIS quarterly	10
Information and management	7
Communication of the association for information system	7
Journal of information technology	7
Journal of strategic information system	6
Journal of management information system	5
Journal of computer information system	4
International journal of information management	4
Hawaii international conference on system sciences	4
Information system management	3
Information system research	3
European conference on information system (ECIS)	3
Oxford university press	2
European journal of information system	2
American conference on information system (AMCIS)	2
Scandinavian journal of information system	2
IBM system journal	2
Procedia Technology	1
Journal of enterprise information management	1
Pacific Asia conference on information system (PACIS)	1
Asian conference on information system (ACIS)	1
European business review	1
Business quarterly	1
Association for information system conference	1
International conference on information system	1
organisation science	1
Strategy and leadership	1
IEEE transactions on engineering management	1
Information strategy: the executive's journal	1
Australian journal of information system	1
California management review	1
Government information quarterly	1
Engineering management journal	1
Journal of information system	1
Information system and E-business management	1
Int. conference on digital enterprise design and management	1
ACM transactions on management information system	1
Information system audit and control association	1
Idea group publishing	1
CIONET	1
Annual conference of southern association for IS	1
University of Van Amsterdam – Dep. of information management	1
	110 studies

Table 2-7 Shows SA sources used in this systematic review

2.4.5 Synthesis of studies through SAP lens

The synthesis of the 110 studies identified, selected and assessed in previous stages are here combined and rearranged in order to make comprehensive sense of these studies in an attempt to transform each finding through new conceptualizations and interpretations (Webster and Watson, 2002, Levy and Ellis, 2006). The synthesis stage is commonly underpinned by the researcher's approach to inquiry in his/her research (Okoli and Schabram, 2010), which is the SAP lens in the case of this study. Notwithstanding the importance of this step, it is important to highlight the efforts made to embrace the SAP perspective in IS strategy literature, and SA thereafter. Taking note of the manner in which SAP is embraced in the chief domain of IS strategy and its SA quest would increase the connectedness of the embracement of SAP in my research question and the wider turn towards SAP in IS strategy and more recently in the SA quest. These efforts are now discussed in the two following sub-sections.

2.4.5.1 From IS strategy towards IS strategizing

The strategic management field, in particular, is highly relevant to the IS strategy agenda in the sense that IS strategy literature tends to mirror developments in the strategic management field (Chan and Huff, 1992, Huang et al., 2014, Peppard et al., 2014). Due to the highly interconnected nature of the relationship between strategic management and IS strategy, it is not surprising to witness important efforts evolving to foster the SAP perspective in the future IS strategy research agenda. Catalysts for embracing SAP meant shedding light on dominant understanding within the extant IS strategy literature, which considers the doing of IS strategy rather simply as undertaking intra-organisational works. In this sense, mainstream thinking envisages IS strategy as merely the product of a deliberation process to determine future actions in the form of formal decision-making (Chen et al., 2010, Henfridsson and Lind, 2013). However, defining the doing of IS strategy in this manner has its limitations and is therefore somewhat problematic.

Galliers (2004, 2007, 2011) made an early contribution to challenge the mainstream by shifting the perspective from strategy towards strategizing in his 'IS strategizing framework' wherein he indicated the manner by which he drew on the SAP perspective; it is from this that the term 'strategizing' was coined (Whittington, 1996b). Galliers, while developing his IS strategizing framework, noted that the gaining of a full picture of IS strategizing lies in combining deliberate managerial actions, which he calls 'Exploitation strategy', with 'Exploration strategy' which sheds light on the other dimensions of IS strategizing. According to the framework, IS strategizing involves some tensions, e.g. between formal and informal approaches, and between human and IS aspects. IS strategizing in its exploitation aspects encapsulates the mainstream thinking, e.g. adopting IS products, hiring IS personnel,

and developing IS applications will each contribute to the exploitation of strategy in line with existing cognitive beliefs. But the framework highlights the dynamic nature of IS strategizing in its exploration endeavours for digesting emerging needs and circumstances, adapting to a new context, learning from one project to another, and informal information collection (Marabelli and Galliers, 2016). The fact remains that Galliers' turn towards IS strategizing has been applauded within IS strategy research, and calls for further development of this perspective have since been made (Teubner, 2013, Teubner and Pellengahr, 2013).

In taking the IS strategizing agenda forward, editors in JSIS called for a special issue on 'Information Systems Strategy-as-practice: Micro Strategy and Strategizing for IS'(Galliers et al., 2012); thus creating the opportunity for scholars to embrace the SAP as a lens for their future IS strategy research agenda. This special issue has already seen its first outcomes appended with the SAP lens, as illustrated in Leonard and Higson (2013) and Henfridsson and Lind (2013), who both drew on Jarzabkowski (2005) framework from the SAP literature. Furthermore, Whittington (2014), who has contributed decisively to SAP literature, opened up a new vista for IS strategizing by highlighting a natural synergy between both research agendas. In his commentary paper, Whittington sheds light, by means of the 3Ps (practice, praxis and practitioners), on the most promising ideas available to IS strategy researchers to further develop the IS strategizing agenda. To sum up, it now appears that SAP is being progressively fostered in the field of IS strategy, signalling the affinities of SAP to the IS strategy research agenda and, in turn, to research streams related to IS strategy as well, SA being a case in point in the next section.

2.4.5.2 From the dichotomy of aligned and misaligned towards aligning

The quest of SA has been widely criticised as somewhat impoverished in terms of its use of theories due to its heavy reliance on the strategic management field (Chan and Reich, 2007b, Chan and Reich, 2011). Nonetheless, in line with the paradigmatic shift in the chief domain of IS strategy, the SAP lens already seemed to be gaining ground in the forthcoming SA research agenda. Editors, in the special JSIS issue, extended their call to consider the SA quest supplemented by SAP. The proposition was to explore how practitioners interact and are involved in the real doing of SA (Galliers et al., 2012). To some extent, this call may indicate that academic journal reviewers have become faithful to the incorporation of the SAP perspective into the future SA agenda.

In addition to the above, conference papers are the master carrier for SAP initiatives thus far. They have departed from the extant SA literature by looking at evident issues and limitations to emphasise the need for a renewed look at this research stream. For instance, Wilson et al. (2013) call for a strategizing view on SA by way of framing the understanding of SA as being

constituted from the everyday actions of practitioners. Thus, they advocate a shift away from the dichotomy of 'aligned' and 'misaligned' organisations that showed a considerable slant towards SA as outcomes in the direction of an 'aligning' view that envisages SA as being a situated and contextually localised phenomenon accomplished by practitioners. Similarly, Hiekkanen et al. (2013) conducted a literature review and put forward a classification of SA approaches by various schools of thought in the strategic management literature. They emphasised, due to evident limitations in the extant SA literature, the necessity for and timeliness of embracing the SAP perspective in future SA. Likewise, Sarhan and McDonagh (2014a) called for the SA quest to be re-conceptualised in line with the SAP perspective to overcome key limitations evidenced in the extant SA literature. Indeed, the fruits of these conference papers go some way to suggesting that SAP is being progressively fostered, signalling to the affinities of SAP to the SA research agenda.

There has been some recent significant attempt, led by editors in JIT, to identify new opportunities for future work to address shortcomings that have emerged over the last 25 years in the quest of SA. This attempt was actualized in introducing the special issue for 'Strategic Alignment: 25-years on" which has already seen its outcomes appended with the work of Karpovsky and Galliers (2015). What is unique about this work, which was applauded by Coltman et al. (2015), is its emphasis on the study of SA-in-the-making based upon what practitioners do in their day-to-day activities. The axiom of studying aligning practices is reflected in the SAP perspective, thus indicating to further catalysts to embrace SAP, as an accepted lens, into SA quest.

2.4.5.3 Synthesising SA studies

In the endeavours to synthesise SA research through a SAP lens, I adapted Jarzabkowski and Spee (2009) typology system which was used to map SAP literature based on how each study conceptualised the three types of practitioner - "internal individual practitioner, aggregate practitioners within the organisation and external aggregate practitioners" - involved in strategizing and the three levels of praxis - "micro, meso and macro" – in which those practitioners engage. The typology itself takes the form of a grid-shape with nine domains, each of which represents a possible future research area. The typology also provides a useful presentation on those areas of study in which the field is better/less developed. Thus, each of the 110 studies selected in (2.4.4) has been placed into its most relevant domain area, revealing those areas of study in which the field of SA is better developed and also where gaps remain (see Table 2-8 below). It is important to note that this section exclusively offers a macro level view. Therefore, full reflections on and explanations of how each study was placed into its relevant domain and, indeed, what lies behind the presence of SA studies in

each domain, are dealt with and discussed in the final stage, 'reporting the outcomes', of this SLR.

Level of Praxis	Individual actor Within organisation	Aggregate actor within organisation	Extra-organisational aggregate actor
Macro	C Empirical=0 Theoretical=0	F Empirical=3 Theoretical=0	I Empirical=0 Theoretical=0
Meso	B Empirical=4 Theoretical=1	E Empirical=76 Theoretical=21	H Empirical=4 Theoretical=1
Micro	A Empirical=0 Theoretical=0	D Empirical=0 Theoretical=0	G Empirical=0 Theoretical=0

Type of practitioners

Table 2-8 Adapted from Jarzabkowski and Spee (2009), within the SAP literature, to typologically map SA literature by type of practitioner and level of praxis

Domain A: focuses on the individual practitioner's engagement in the micro incidents of episodic praxis, e.g. meetings, workshops or away-days. The extant SA literature contains no single study within this domain.

Domain B: contains a total of five studies with its focus on explaining how the individual practitioner goes about SA in his/her particular organisation. Such studies within this domain hold the view that the catalysts for individual practitioners to engage with SA are part of organisational endeavours to trigger SA development.

Domain C: includes no single examination that explains how the individual practitioner responds to SA initiatives received from the Macro praxis. Study within this domain aims to explain how the individual practitioner assimilates requests from the Macro, i.e. government proposals or acquisitions, when initiating SA within his/her organisation.

Domain D: shows no single study with an interest in explaining how intra-organisational practitioners collectively interact during discussions, in particular in meetings or workshops, relating to SA development within their organisation.

Domain E: shows that a great majority of SA studies focus on how the actions of aggregate practitioners within the organisation can contribute to differences which may be realised at

the organisational level. A total of 95 studies attempted to argue that the catalysts for a set of practitioners to trigger SA development are part of their endeavours to achieve better organisational performance outcomes.

Domain F: with relatively few studies (three in total) that explore how aggregate practitioners within the organisation go about developing SA in a particular form – one that is induced by industry or sector into which the organisation is embedded.

Domain G: the extant SA literature contained no single study that examined how decisions concerning SA within organisational -specific episodes are shaped by extra-organisational actors, e.g. consultants, vendors or hired IS project managers.

Domain H: within this domain, four empirical papers were found to acknowledge the involvement of extra-organisational practitioners at some stage during the development of SA within organisations. In the extant SA literature, the evidence of extra-organisational practitioner involvement is incidentally reported where these four papers have not stated a central focus on those extra-practitioners. Rather, their involvement is unveiled through closer inspection in discussions related to either case background or the study's findings on those analyses. In addition, one conceptual paper argues that SA scholars should consider the role played by extra-organisational practitioners in shaping SA development in organisations.

Domain I: contains no single study with a focus on how extra-organisational practitioners engage in SA development fostered from the macro context. Study within this domain is expected to explain how actors, e.g. consultants or project managers, play their roles in seeking SA in the context of acquisitions or mergers.

2.4.6 Reporting the outcomes

The final stage in developing SLR is reporting the findings. It is vital at this stage not only to include an examination of past research in the field; rather, for the purposes of making it significant, outcomes should offer a new interpretation of the findings, outline novel findings by identifying critical knowledge gaps, and map out a potential future research direction (Okoli and Schabram, 2010). Thus, I conceptualised the findings of this SLR within two dimensions. In the first, I drew on Webster and Watson (2002; P. xix) general guidance for the writing stage of developing an SLR, particularly for the IS field. In this regard, I used their 'logical reasoning' proposition to unveil a critical knowledge gap – one that highlights "*the discrepancy between what we know and what we need to know...[thus] motivating researchers to close this breach*". Such a style of writing will expose what we know from the literature and apply this to examples from the lived experience of practitioners in practice. The second dimension is concerned with utilising the SAP perspective in the extant SA

literature. In this vein, the three pillars, or the 3Ps (practice, praxis and practitioners), form part of the discussion within this SLR. The benefit of these to the SA literature is twofold: first, they offer a new interpretation to the extant SA literature; and second, as they are underpinned by logical reasoning, they describe the content and quality of knowledge already available, and readily present the significance of previous works, thereby creating a firm foundation around which knowledge can be accumulated and upon which subsequent works can be grounded.

The reporting of this SLR is structured around six primary sections. In 2.4.6.1, I offer a critique of current SA definitions based on the SAP lens selected for my research. This is followed by section 2.4.6.2 which is concerned with SA practices as identified in the extant SA literature. In 2.4.6.3, I analyse SA praxis as found in the literature with an end to articulating what lies behind considering SA at each praxis level (Micro, Meso and Macro). After that, I provide, in section 2.4.6.4, an examination of SA practitioners as referred to in the extant SA literature. In 2.4.6.5, I then examine the contextual configuration under which SA studies were executed. This is followed by section 2.4.6.6 which is concerned with the attractions and alternative afforded by SAP lens to SA research. In 2.4.6.7, I offer a chart for the research gap and potential future development for the SA literature; within which the thesis question was formed and pursued. Finally, in 2.4.6.8, this section of SLR on SA research is drawn to a close.

2.4.6.1 SA definitions

The treatment of SA in the extant literature is somewhat ambiguous for both IS academics and practitioners. It has been conceptualised and interpreted in various ways, resulting in a lack of consensus about its essential nature (Maes et al., 2000, Chan and Reich, 2011, Leonard and Seddon, 2012). Therefore, the purpose of this section is to re-assess the notion of SA by adopting the SAP lens as central to this assessment. I will do so by offering a critique on current conceptualizations, unveiling their shortcomings, and grounding my definition of SA on recent work found in the extant SA literature in line with the fundamentals of SAP adopted by this thesis.

This SLR suggests that the development of the notion of SA emerged from the focus on 'transforming' organisational sets (mission, objective and strategy) into another IS strategic set that delineates IS development within organisations (King, 1978). Shortly after this early emergence of SA, and indeed published in the same journal, Pyburn (1983) undertook an empirical study to argue that an effective deployment of IS is one that builds a 'consensus' between organisational and IS strategies. Lederer and Mendelow (1989) pointed to the major impact that can be affected by IS on the competitiveness of organisations, and hence

introduced the notion of 'coordination' to affirm that reviewing and introducing IS systems should both be relevant to overall organisational strategy. Definitions of SA continued to be abstract, vague and broadly included additional synonymous terms. Zviran (1990), in his empirical study based on a sample of 131 organisations, emphasised the need to 'associate' IS objectives to those of organisation towards formulating an operationally-feasible approach that can help organisations to determine their IS objectives. Teo and King (1996) took a deeper approach and advanced the argument for 'integration' of contents between organisational and IS strategies to ensure that the IS function supports all levels within the organisation. Indeed, in an attempt to resolve this irresoluteness in defining SA in the extant literature, Avison et al. (2004; P. 225) demonstrate that SA in all the above pseudonyms refers to "*the integration of strategies relating to the business and its IS*".

At this stage, the key contribution made by all the above preceding definitions would reflect the earlier motivations to SA, namely, to ensure that IS strategy is formulated in accordance with the pre-existing organisational strategy. The focus has been to concentrate on a high-quality set of interrelated organisational and IS strategies as an avenue to articulate the notion of SA (Campbell, 2005, Chan and Reich, 2007b, Chen et al., 2010). However, the concern arises from these academic conceptualisations and the use of divergent pseudonyms to refer to SA might be interpreted as inadequacies in how the nature of SA is understood. More importantly, from an academic perspective, how SA scholars can contribute to a coherent body of knowledge while using different terms to refer to it (Avison et al., 2004, Leonard and Seddon, 2012). From a practitioner's standpoint, multiple terms and definitions would give rise to some ambiguity around what the goal of SA might be: how to refer to it using different 'buzz words', whether SA concerns integration between organisational and IS strategies, or whether it is based on understanding organisational strategy (Luftman et al., 2009, Luftman and Ben-Zvi, 2010b, Leonard and Seddon, 2012).

Subsequent conceptualisations of SA, from the voices of practitioners, bear several differences to those of earlier academic theories. Campbell and Peppard (2009; P. 15) put forward the term 'co-evolution' which is derived from focus group participants having defined SA as "*business and IT personnel working together to achieve a common goal*". A point of significance in this definition is that the participating practitioners made no reference to strategies that had been mentioned in previous academic definitions. Indeed, the meaning they apply to SA is very straightforward, despite the authors having gone to the length of labelling their meaning with another pseudonym, 'co-evolution'. Of course, practitioners recognized that the world of reality is messy, organisational and IS strategies are rarely documented; and thus seeing SA as merely the results of the availability of these strategies has already been questioned (Ciborra, 1997, Campbell, 2005, Campbell, 2007, Teubner,

2013, Teubner and Pellengahr, 2013). Another major implication of this definition is the recognition of the people involved in the doing of SA. In this sense, and to some extent, the definition regards SA as the doing of practitioners 'business and IT' rather than something achieved by the organisation through strategy integration. This is somewhat consistent with the SAP view on strategy as previously outlined. Nevertheless, it may be problematic to take this definition as it now stands since it lacks the distinguishing activities related to SA from other types of organisational activities. This suggests that the definition may require some extension rather than replacement to be considered truly informative when operationalized empirically in this thesis.

This leaves me with the result of this SLR, which unveils recent work that partly fills the lacuna that appeared in the preceding definition of Campbell and Peppard (2009). However, it intrinsically resides with other results in this SLR that unveil the severe critiques levied at the classical conceptualisations of SA for their inappropriateness, since they are very much confined to the world of the idealised (Ciborra, 1997, Campbell, 2005, Benbya and McKelvey, 2006, Fearon et al., 2013, Wilson et al., 2013, Pelletier and Raymond, 2014). In fact, Karpovsky and Galliers (2015; P. 3-4) succinctly questioned, in the light of the SAP perspective, the extant academic conceptualisations of SA that lead us neither towards a greater understanding of the nature of SA, nor towards a more detailed understanding of how practitioners effectuate SA in practice. Thus, they undertook to broadly re-conceptualise SA as all "*activities that may contribute to tightening links between IT and business across an organisation ... [observing that these activities can be] any action that any particular organisational actor takes in the process of finding and/or implementing [adapting or maintaining] IS that would potentially support business needs*". The point of significance in this conceptualisation, which is adopted by this thesis, is that it may be a way to go beyond notions such as integration, fit and association to a new vision that centralizes practitioners who have thus far been insufficiently acknowledged by SA scholars (Maes et al., 2000, Avison et al., 2004). Indeed, this work diverged significantly from previously-discussed academic definitions in a number of ways:

- They clearly suggest that it is through practitioners rather than organisations that SA can be accomplished. As a consequence,
- They do not confine SA to the availability of strategies. Indeed, SA is attained socially through any practitioners involved in the doing of SA. Hence,
- These doings rather than intended strategies are constitutive of SA. By analogy,
- Staying conceptually close to the SAP fundamentals adopted in this thesis.

In conclusion, I grounded my view on SA based upon the definition put forward by Karpovsky and Galliers (2015) to argue that the understanding and study of the notion of SA should be distanced from the idealised world that envisages SA as a phenomena that is extensively documented in strategies or is contingent upon the availabilities of those strategies in practice (Ciborra, 1997, Wilson et al., 2013, Pelletier and Raymond, 2014). Approaching this through an SAP lens, I am determined to argue that the notion of SA must be defined and interpreted under the premise that it is through how practitioners enact SA that we will become better able to enhance our understanding, and in turn solve the lacuna of divergent pseudonyms and definitions in our accumulated body of knowledge.

2.4.6.2 Organisational practices for SA enactment

This SLR of SA suggests that organisations that seek to attain SA should importantly have three practices in place to promote SA, namely, organisational strategizing, IS strategizing and IS executive as an upper echelon. These set of practices are envisaged as the accepted ways, norms and guidelines that serve as the infrastructure through which practitioners draw upon them to enact SA. The discussion in this section is designed to detail each practice separately, along with its assumptions, and its expected contributions to SA enactment. Then, following Webster and Watson (2002), each practice is exposed to the world of practice, unveiling the disparity between what is recommended in the extant SA literature and what practitioners apply. For convenience, I present this section (2.4.6.2) in four sub-sections. The first three sub-sections will deal with each of the three SA practices separately. Following that, the forth sub-section will mirror the discussions as presented in the first three sub-section, offering a concluding comment on SA practices identified in the extant literature.

2.4.6.2.1 Organisational strategizing

Since the early motivation to SA, the extant literature has repeatedly outlined the fundamental importance of organisational strategizing for SA development (King, 1978, Lederer and Mendelow, 1989, Broadbent and Weill, 1993, Byrd et al., 2006). This view, adopted by the bulk of SA researchers, suggests that IS executives desire to be involved in formation episodes during organisational strategizing to mesh IS and organisational strategies right from the start and that, jointly, business and IS executives, attempt to manage technology-related opportunities and challenges relative to their intended organisational strategy (Tan, 1995, Rathnam et al., 2005, Benbya and McKelvey, 2006). This involvement of IS executives in such a practice is often envisaged as a pre-requisite for attaining SA in organisations (Croteau and Bergeron, 2001, Ullah and Lai, 2013). For instance, in their survey of 527 IS executives and 524 business executives from diverse industries, Luftman et al. (1999) reported that IS executives' participation in organisational strategizing was ranked as the

second most important enabler of SA. Likewise, Campbell et al. (2005), derived from a focus group of six IS executives, the understanding that, according to the practitioners in their research, without IS executives' being invited to organisational strategizing episodes, it would be difficult for SA to occur. Thence, studies as such confine itself to a view which suggests that IS executives' exclusion from organisational strategizing would result in organisational strategy ambiguities, which is regarded as a major concern for IS executives when considering SA in organisations (Campbell, 2005, Campbell, 2007).

The extant literature continues to focus on organisational strategy, even in less typical situations where IS executives are excluded from participating in organisational strategizing. In such cases, studies have illustrated that it falls upon organisations to ensure that their organisational strategizing yielded well-defined and documented objectives; which can be analysed by IS executives towards initiating SA in organisations (Bruce, 1998, Luftman and Brier, 1999, Wang et al., 2011). The central tenet then of this stream of research is that SA is a result of clearly defined and documented organisational strategy, and that, from this, IS strategy follows to facilitate the initiation of SA. For instance, Zviran (1990) advocated the need for organisational strategy documents to not only include a statement of intention, but to also formulate clear objectives that specify performance targets to serve as a reference point for developing IS strategy for the sake of effective SA patterns. In the same line, Ali and Qing (2009) pointed to the importance of having documented organisational strategy that IS executives can use to identify the organisation's objectives in order to plan for how IS can contribute to the identified targets as declared in the organisational strategy document. Indeed, the will to accomplish SA in this stream can be demonstrated on two interconnected levels. On the one hand, a clearly defined and documented organisational strategy must be available, and, on the other hand, IS executives, who are not participants, are expected to pursue strategy documents, analyse these, source IS aid for the defined targets and, finally, ensure that SA is adequately attained.

However, the findings of this SLR suggest that the relevance of organisational strategizing and strategy as well to SA development is confined to the world of the idealised - that is, the contribution of such practices have been intermittently challenged and questioned as described in the following two points. **First**, SA is accomplished, according to the typical setting, when IS executives participate into organisational strategizing. However, this enthusiastic view of SA can be easily criticised as being inappropriate and rigid for failing to reflect what happens in practice. For example, Stephens and Mitra (1995) reported that IS executives' participation in organisational strategizing remains a problematic area, with only 18% of 100 IS executives surveyed having been found to attend all strategizing episodes. Likewise, Gartlan and Shanks (2007) reported some discrepancy between IS executives and

CEO in relation to participation in organisational strategizing. In their survey of 69 IS executives and CEOs, they reinforced the view that IS executives desired to be involved in organisational strategizing, but that a surprising proportion of CEOs do not always believe that to be necessary. On the basis of these studies, one could question the persistence of the extant SA literature in placing much emphasis on what IS executives should be eager to do in order to attain SA "participation in organisational strategizing", while neglecting what is effected in practice in this regard, and thereby placing the accomplishment of SA from this view under question.

Second, to some extent, a stream of the extant literature shows acknowledgement of the possibility of retreating IS executives from organisational strategizing, but persistence in affirming the importance of the outcomes of these strategizing in terms of clearly defined and documented strategy. Again, this stream of research is faced with significant challenges when exposed to the world of practice On the one hand, this stream suggests that the intended strategy rather than strategy in use is the driver for SA, thereby neglecting the view that strategies can be varied when operationalized by practitioners in practice (Chan and Reich, 2007b). This focus on the intended strategy, while strategy in use continually evolves, may result in a form of SA that is outdated and no longer appropriate for organisations (Chen et al., 2008, Fearon et al., 2013, Baker and Niederman, 2014). More importantly, on the other hand, one can argue that SA in the world of practice does not exist as the strategy literature tells us that strategy is not such a clear concept as to lend itself to being constantly documented and can be formed of practices (Ciborra, 1997, Simonsen, 1999, Chan and Reich, 2011).

In conclusion, on the basis of the above-idealised view, to some extent, I recognise the worth of Avison et al. (2004)'s view in terms of whether organisational strategizing is an appropriate way for practitioners to attain SA. This is because the SLR here indicates the messiness of organisational strategizing and the uncertainty surrounding IS executives' involvement, and because the notion of having clearly defined and documented strategy is proved to be unattainable in practice.

2.4.6.2.2 IS strategizing

The importance of IS strategy is widely recognised in the extant SA literature as a critical IS management practice with a primary focus on initiating SA in organisations. Attention has been given to the ways in which IS strategy documents can convert intended organisational strategy into a planned, prioritised and justifiable IT portfolio that will subsequently meet the defined targets in the organisational strategy (Burn, 1996, Bergeron et al., 2004, Wang et al., 2011). For the purpose of attaining SA, the extant SA literature points out that appropriate IS

strategy content should ideally receive the attention and involve the participation of senior business executives in formal IS strategizing practice (Chan et al., 1997, Burn and Szeto, 2000, Kearns and Sabherwal, 2007).

For instance, Lederer and Mendelow (1989), in their suggestions for overcoming difficulties related to attaining SA, identified three approaches for IS executives to draw business executives' attention to IS strategy. Specifically, IS executives may wish to hold meetings with business executives to learn of their plans and to obtain their feedback on IS strategy. Business executives might be encouraged to jointly set IS priorities for their organisation, or alternatively IS executives may appeal to each business function to write down their own specific IS plan. Likewise, Teo and Ang (1999), in their survey of 169 IS executives from diverse industries, demonstrating their Critical Success Factors (CSFs) for SA, found that successful IS strategizing takes place when business and IS executives work together to formulate IS strategy that contains the development, evaluation and prioritisation of IS projects relative to strategic priorities. Studies as such regards SA as a product of formal IS strategizing that involved joint venture between business and IS executive to yielded the development of formal IS strategy documents that can be the driver for SA.

Presumably, the extant SA literature retains some distance again from the world of practice when placing business executives' participation into IS strategizing as central to SA development. Henderson and Venkatraman (1993) argued that business decision makers are inclined towards making business strategic choices relative to their organisational environment, rather than considering strategically IT choices available in the marketplace to support the organisational strategy. Furthermore, Gartlan and Shanks (2007), in their survey to 69 business and IS executives, found that business executives may not always be prepared to participate in a strategy (including IS strategy) formation process outside of their own area. From his survey of European banks, Baets (1996) concluded that only business executives who could see specific ways to solve banking problems via IS would exhibit a positive attitude towards IS strategizing. On the basis of these observations, one may wonder at the state of SA in the world of practice if business executives are retreating themselves from participating in IS strategizing to drive SA in organisations.

Much more striking than what precede, SA paradigms are a product of an IS strategy that encapsulates the classical thinking of IS strategy research, which has now been revisited by IS strategy scholars. To reflect the reality of IS strategizing in practice, as alluded before, Galliers (2004, 2007 and 2011) has already questioned the classical view on IS strategizing similar to the one put forward in the extant SA literature. He challenged the mainstream thinking that confines IS strategizing to the mere of formal and deliberate practices, with orientation towards the exploitation and documentation of existing ideas and resources to

support organisational strategy. While he does not on principle reject this notion, he sees IS strategizing as also concerning the exploration parts of human interactions, learning from the communities of practice, learning from one project to another, adopting and refining new contexts, informal information collection, as well as the typical formal decision-making process. This view is latterly supported by Chen et al. (2010) and Teubner (2013) who agree on the limitation of locating IS strategizing as merely a product of formal episodes, indicating that IS decisions may be made all the time, and at any time, and that they may arise without a formal IS strategizing deliberation, incorporating learning, and involving experience and consistent revisions in response to day-to-day circumstances. Thus, in practice, diligent IS strategy that consists in a deliberated and documented IS initiatives aligned with organisational strategy are exposed to the daily circumstances which mean that they are seldom be implemented completely as initially planned and anticipated (Teubner, 2013).

In conclusion, and in the light of these observations, the question which emerges from this SLR is that of how the new form of IS strategizing in practice might form the basis for SA development in organisations. The above observations suggest that IS strategizing is far more that formal deliberation practices to be documented as suggested in the extant SA literature. One such development in the extant SA literature would be to embrace the up-to-date and practically relevant understanding of IS strategizing in practice and to consider how SA might emerge in such a context.

2.4.6.2.3 IS executive as an upper echelon to drive SA

The target of SA in the extant literature is the organisational strategy, and as a consequence IS executives must have a formal position that allows them to access the level through which organisational strategy is formulated to identify the required IS support for this strategy (Campbell, 2007, Banker et al., 2011). That is to say that IS executives are better off reporting to the highest level executives, who normally have a long running vision for the organisation to ensure every organisational priority has an IS element, thus ensuring that SA is addressed (Weiss and Anderson, 2004, Luftman and Kempaiah, 2007, Banker et al., 2011). The optimal reporting structure, as suggested in the extant literature, is one that engineers the structure of the organisation so that the IS executive can directly report to the CEO (Preston and Karahanna, 2005, Banker et al., 2011). Such an exemplary reporting structure is underpinned by the importance of reaching a shared management understanding between IS executives and CEO regarding the role of IS within the organisation. This is posited to develop SA in organisations (Ali and Qing, 2009, Westerman, 2009).

For instance, in their comparison of different IS executives' reporting structure forms in 197 organisations, representing a wide range of industries from different regions, Luftman and

Kempaiah (2007) suggest that having IS executives reporting directly to the CEO could provide the best structure to enable SA in organisations. This view is supported by Preston and Karahanna (2005) who found the direct reporting structure as a major driver for shared understanding of development, and SA thereafter. This widely held assumption among SA scholars continues to advocate that shared understanding between IS executives and the CEO is of significant importance to SA development. For instance, based on their survey of 202 pairs of IS executives and CEOs in different industries, Johnson and Lederer (2010) came to the view that SA emerged through IS executives' efforts to cultivate a shared understanding of the potential role of IS in the organisation. In another study, Johnson and Lederer (2007) argued IS that executives should invest more time in communicating with the CEO to clarify any issues surrounding strategy and to obtain immediate feedback on the role of IS in the organisation. Succinctly, the main point of this stream of research is the importance of having IS executives report directly to the CEO towards achieving a shared understanding of the role of IS in the firm relative to the organisational strategy as a driver for SA development.

To accomplish SA, another stream in the extant literature espouses the broader view of an emphasis on shared understanding with other TMT members, thus emphasising the importance of IS executives securing a formal position in TMT to play a part which is equal to that of each top business executive member in TMT (Simonsen, 1999, Reich and Benbasat, 2000, Tallon, 2007). The expectation is that IS executives can promote shared IS vision, exchange ideas about IS initiatives, and assure proposals are heard by the appropriate executive, thus facilitating his/her role in initiating SA. For example, Preston and Karahanna (2005) pointed to the greater opportunity, due to his or her formal position, afforded the IS executive, to manage TMT members' expectations of IS, allowing them to understand how IS can be realistically utilized to meet targeted objectives; as consequence, IS executives and other TMT members can jointly reach a common understanding that drives SA development within their organisation. In another study that involves survey responses from 243 matched IS executives-TMT member pairs from different industries and interviews with a small set of IS executives, Preston and Karahanna (2009a) stated that formal access to TMT enables IS executives to initiate SA by understating the strategic needs of the organisation and the 'mindset' of TMT members. As such, this stream signals to the importance of IS executives' formal membership in TMT to promote shared understanding among TMT members as a basis for SA development.

While these studies above have prescribed the optimal IS executives' formal position in organisations to develop SA, the result of this SLR raises two concerns against this stream of research. **Firstly**, in terms of IS executive-CEO reporting structure, we may question whether this is indeed always the best reporting structure for all organisations that intend to develop

SA. A challenge to those seeking SA from the consensus of an IS executive-CEO reporting structure is that the target, as envisioned, may not always be optimal. There is evidence from practice that correctly structuring IS executives' reporting is best described not as a single approach that is always ideal for all firms, but as a means of creating business value by allowing the IS executive to work under the most appropriate C-level executive to deliver appropriate IS initiatives.

For instance, the stream of surveys of IS executives showed that the degree of their reporting to the CEO decreased when their organisations were faced with IS cost-cutting measures, where a significant percentage of IS executives tended to report instead to Chief Financial Officers (CFOs) in such conditions (Luftman et al., 2006, Luftman and Kempaiah, 2008, Luftman et al., 2009, Luftman and Ben-Zvi, 2010b, Luftman and Ben-Zvi, 2011, Luftman et al., 2012, Derksen and Luftman, 2014). Indeed, according to Banker et al. (2011)'s findings, IS executives-CFO can be equally as successful as an IS executives-CEO reporting structure as it tacitly implies that IS is effectively used to pursue organisational cost leadership strategy that focuses on quantifiable targets for efficiency and cost cutting, by allowing IS executive to work closely with top finance executive. Thus, the extant SA literature would properly need to extend its focus to incorporate the role of reporting between IS-executives and the CFO and other C-level members in attaining SA.

Second, the extant SA literature is of the view that SA is better initiated when the IS executive holds TMT membership. Notwithstanding the importance of this membership, this stream of research been criticised for its narrowness since it regards the execution of SA as being implemented at lower levels, but in the manner intended by those at TMT levels (Chan et al., 1997, Ciborra, 1997, Campbell, 2007). Moreover, the continued relevance of this top-down approach is questionable as it does not reflect the practices that can be observed in actual organisational settings (Simonsen, 1999). The reality is that the development and deployment of SA in practice may require adjustments to end users' needs to be made at lower levels to ensure continual SA. Thus, it should be acknowledged that this top-down approach does not satisfactorily account for the fact that SA may be in the hands of other players at different organisational levels and not only at TMT level (Ciborra, 1997, Benbya and McKelvey, 2006).

In conclusion, I neither seek to diminish the importance of the IS executive-CEO reporting structure nor the importance of IS executives' membership of TMT. Nonetheless, what practitioners are faced with in practice in this regard, would suggest that there is insufficient empirical evidence in the extant literature to explain how SA is effectuated in the absence of other forms of reporting structure or in the case of non-membership of TMT. Many questions

thus remain unsolved regarding extent to which SA may be realised or impeded in light of the IS executive's formal position in the organisation.

2.4.6.2.4 organisational practices for SA enactment: closing remarks

The application of the SAP perspective in this SLR generates three organisational practices that are anticipated to contribute to SA development. First, in the literature, organisational strategy is presented as a key driver to develop SA in organisations. The literature suggests that IS executives should seek participation in organisational strategizing, or at that they should least conduct some analysis of the formal strategy document, thereby addressing SA in their organisations. Second, formal IS strategizing is recognised in the extant literature as curial for SA development. In this regard, the extant literature advances the argument that appropriate IS strategizing should ideally receive the attention and involve the participation of business executives. Third, the practice of formally positioning IS executives within the organisation is argued to have an impact on the realisation of SA in organisations. In this sense, the literature suggests to some extent that the IS executive with a high formal hierarchical level and membership of TMT is able to effortlessly initiate SA.

Despite the fact that some level of disparity has been revealed between the expectation of these practices in terms of their contribution to SA and what practitioners are faced in their day-to-day practices, it is worth noting that we should not trivialise the presence of these practices in the extant literature of SA. Rather, I argue that we should build on these and seek new sets of practices. The avenue for this new set of practices, as viewed by Ciborra (1997; P. 72), is that "*[w]e go back to basic evidences, and encounter the world as it presents itself in our everyday experience*". This invites us to envision SA as practitioners in their everyday life effectuate it, and to remind ourselves of the need to take account of the realities of the day-to-day frustrations and accomplishments within a typical organisation, rather than limiting ourselves to a set of 'quarrelsome' practices.

2.4.6.3 SA praxis in the extant literature

I have framed the discussion in this section around the three levels at which SA has been studied in the extant literature, namely, at the Micro, Meso and Macro level; as shown earlier in (2.4.5.3). The purpose here is to articulate what lies behind considering SA at each praxis level, and the reasoning behind placing the selected SA studies at their most relevant praxis level.

2.4.6.3.1 SA praxis at micro level

The result of this SLR detects no theoretical background nor empirical evidence for SA praxis at the micro level thus far. Those studies that analyse how practitioners play out and shape SA development in their immediate local episodic practices have been neglected in the extant SA literature. While it is strongly emphasised in the extant literature, as demonstrated above, that SA is fostered by IS executives developed shared management understanding with CEO and other TMT members, the reviewed body of SA literature contained no studies that explore their interactions within micro incidents of praxis, i.e. meeting, workshops or away-days.

2.4.6.3.2 SA praxis at Meso level

In the extant SA literature, as previously exemplified in 2.4.5.3, SA has been dominantly operationalized as a meso organisational praxis. This is because the widely held view, documented in the extant SA literature through surveys and case studies, that practitioners are more likely to attain SA for their organisational performance benefits (Chan et al., 1997, King et al., 2000, Tallon and Kraemer, 2003, Chan and Reich, 2011). For instance, Croteau and Bergeron (2001), supported by their findings, have argued that organisations should deploy IS with respect to their organisational strategy, thus ensuring SA is utilised to enhance their organisational performance. In drawing on statistical financial and sales growth data to measure organisational performance, Cragg et al. (2002) indicated a positive relationship between organisational performance and the existence of SA in firms – a finding which is supported by studies including (but not limited to) King et al. (2000), Kearns and Lederer (2000), Croteau et al. (2001), Sabherwal and Chan (2001), Choe (2003), Pollalis (2003), Kefi and Kalika (2005), Chan et al. (2006), Yayla and Hu (2009) and Schwarz et al. (2010). These preceding studies are characterised as hypothesis tests, and all come to a firm conclusion that SA outcomes are related to organisational performance.

The Meso praxis of SA continues to enjoy a relationship of interconnectedness between SA outcomes and organisational performance in the extant literature. Byrd et al. (2006) found that SA can indirectly impact on performance by acting as a moderator between IS investment and organisational performance. In this sense, the usefulness of SA is in leveraging the organisational existing investment, and not simply in investing more in IS. Likewise, Bergeron et al. (2004) concluded that SA can be the basis for developing systematic and comprehensive IS strategy that evaluates IS portfolio in terms of profitability and cost-effectiveness, and organisational priorities for better performance purposes. Additionally, Kearns and Sabherwal (2007) found that SA can be utilised to evaluate the quality of IS project planning and implementation, thus contributing to organisational

performance financially by potentially preventing resources being wasted during IS projects. Tallon and Pinsonneault (2011) found that SA itself, by pursuing strategy, can contribute to organisational performance by preparing firms to shift key IS resources to extract value form IS following each change in strategy.

In conclusion, SA has been envisaged as having the most notable impact on organisational level outcomes, thereby signalling to the harmony with the findings of most SA studies conducted at the meso level as observed in (2.4.5.3). Indeed, it would be incongruent not to see SA as residing exclusively at the meso level, given the widely held argument that SA is worth considering in organisations due to its value and benefits. Overall, therefore, those studies with a focus on organisational outcomes have been categorised as meso level praxis.

2.4.6.3.3 SA praxis at Macro level

Relatively few studies in this SLR were placed within the macro praxis level. In this level, practitioners are more likely to attain SA not, in the first instance, for the benefit of their organisation, but due to institutional, industrial and sectoral forces that invite the initiation of SA in organisations. In more explicit terms, where SA has been initiated by a context outside the immediate organisational context, SA studies can be categorised decisively in the macro praxis level. For instance, Fedorowicz et al. (2009) elucidate how the macro initiative taken by the US government to introduce an e- procurement system resulted in an announcement by three participating federal public agencies to engage in SA development to address technical and operational challenges in alignment with the new government initiative. Similarly, Baker and Niederman (2014), in the context of mergers and acquisitions (M&A), showed how SA unfolded within the acquired and acquiring organisations, thus indicating that the invitation for SA was requested under M&A rather than catalysts engendered from within organisations.

2.4.6.3.4 SA praxis in the extant literature: closing remarks

There is nothing wrong per se with continuing to see SA as meso praxis, but with this focus on SA as outcomes, according to Campbell (2005), we do not come any nearer to understand the doing of SA. The focus on 'what' outcomes SA will bring to organisations as opposed to understanding 'how' SA is achieved, has resulted in a failure in the extant literature to clearly identify the doing of SA as effectuated by practitioners (Ciborra, 1997, Pelletier and Raymond, 2014). With the support of empirical findings that showed how aligned organisations arrived at positives performance implications through SA outcomes, Cragg et al. (2002; P. 122) stated in their conclusion that they "*[did] not know how this alignment was achieved. It may or may not have been planned*", thus suggesting a lack of knowledge in

regard to how SA can be attained. In this vein, Wilson et al. (2013) rejected this dichotomy of 'aligned' versus 'misaligned' organisations that are typical in outcomes-oriented studies, favouring instead the term 'aligning' – one that pays attention to what practitioner do in relation to SA in their everyday practices. Furthermore, another key issues with outcomes-oriented studies is that, one the one hand, there is no universally recognized measure for monitoring organisational performance yielded from achieving SA (Croteau and Bergeron, 2001), with studies shifting between objective financial data (Choe, 2003, Yayla and Hu, 2009) and subjective measurements that draw on participants' perceptions (King et al., 2000), and, on the other hand, as emphasised by Sabherwal et al. (2001), that these outcomes-focused studies on SA can be characterized as static, with a focus on SA at one point in time and only consideration of only short-term performance implications.

I settled on a view that does not contradict the dominance of the meso level of SA praxis within the extant SA literature, of which the underlying assumption is that SA can contribute to organisational performance and is therefore persistently desired by practitioners. Rather, I emphasise, based on the above argument, that there is a necessary and urgent need to narrow the gap by focusing on the doing of SA as opposed to outcomes – something that has received very limited attention despite its significant importance in terms of bringing clarity to how SA can be achieved. In this sense, this shift in focus from organisational level outcomes would necessitate a broadening of the notion of performance in the extant SA literature – one that goes beyond organisational economic value per see, to one that embraces practitioner performance as emphasised earlier in the SAP literature.

2.4.6.4 SA practitioners in the extant literature

This section provides an illustration on SA practitioners as they are referred to in the extant SA literature. The aim is to explain how the selected papers in this SLR conceptualise the different types of practitioners, namely, extra-organisational aggregate practitioners, aggregate practitioners within organisation and individual practitioner within organisation involved in SA development. Furthermore, the discussion within each of the three sub-sections below carries with it a reflection on the grounds on which each study was placed within the framework given in 2.4.5.3.

2.4.6.4.1 Extra-organisational aggregate practitioners

In the SAP literature, the term 'extra-organisational practitioners' refers to those practitioners performing roles extra to the traditional roles commonly performed within organisations, such those of senior managers, middle managers or TMT members, and includes external practitioners within the institutional field that have no allocated hierarchical role within a

particular organisation. In the extant SA literature, whilst a limited number of studies were identified in this SLR as having extra-organisational practitioners involved in shaping the development of SA, none of these studies explicitly expressed a focus on this type of practitioner per se. Indeed, on closer inspection of these studies, I was able to distinguish two groups of studies, to which the domain of external-aggregate practitioners is the most closely related.

The first group comprises studies that make explicit reference to the conceptual importance of incorporating extra-organisational practitioners into the examination of SA studies. In such instances, these studies can be decisively classified as featuring extra-organisational practitioners. The work of Avila et al. (2009) is a case in point. In their framework, they proposed, among other things, consideration of collective practitioners within the institutional field, such as competitors, customers and regulators who might shape the development of SA in the organisation. In the second group of studies, extra-organisational practitioners have been unintentionally reported, with signals to their involvement being spotted only during discussion sections related to either case background or the study's findings. These studies which made only minor or secondary reference to players from outside the organisation were also placed into the domain labelled as featuring extra-organisational practitioners, as a means of acknowledging that SA, during its development, can be shaped by practitioners external to organisational hierarchy.

For example, Simonsen (1999), in his discussion of the setting of his Dane 'Denmark' public organisation, reported that external consultants and vendors were involved during the development and design of IS. This raised the question of the extent to which their involvement may have impacted SA through recommendations, modifications and the offering of alternatives to the desired IS initiative. Somewhat similarly, Wang et al. (2011) showed how SA was addressed by consultants and IS professionals who were involved in discussions with TMT members in a Chinese firm. It is evident in their paper that those extra-organisational practitioners shaped SA development through their questioning of the value of the proposed IS investment given the organisational strategic direction towards cutting cost. Another example can be found in Fearon et al. (2013) who show that external consultants, seconded from their jobs with the IS vendor, were involved in review the organisational IS implementation plan; here SA was addressed through consultants' support and assurance of the implementation plan to avoid any loss of potential value from the proposed initiative.

In conclusion, this sub-section has detailed why specific studies reviewed here have been classified as featuring extra-organisational practitioners. Whilst some of these do not explicitly express a focus on the role of external practitioners in shaping SA, they do,

nevertheless, go some way to suggesting that SA can be shaped by external practitioners, despite the lack of empirical examination in this regard within these studies.

2.4.6.4.2 Aggregate practitioners within the organisation

It is unquestionable that multiple positional levels within the organisational structure, such as those of project managers, middle managers and senior managers, can aggregate intra-organisational practitioners variously (Jarzabkowski and Spee, 2009). In the extant SA literature, this type of practitioner has been the focus of SA scholars, with a significant proportion of SA research focusing on the remit of intra-organisational practitioners. This finding is not surprising given the following two points. Firstly, given that SA studies have predominantly been found at the meso praxis level, it is not surprising to see the focus in the extant literature on aggregate intra-organisational practitioners, namely, senior executives, who act at such an organisational level.

Secondly, those organisational practices, as described in 2.4.6.2, have tended to necessitate the involvement of aggregate practitioners from within the organisation –that is, senior executives collaboratively initiating SA; thus it is again unsurprising to see this group of practitioners receiving attention throughout the extant literature. In this vein, for instance, studies with a focus on the importance of joint participation between IS executives and other senior business executives in organisational strategizing to initiate SA (Chan et al., 2006, Gartlan and Shanks, 2007, Ali and Qing, 2009) can be placed firmly in the domain featuring aggregate practitioners within the organisation. Likewise, studies with a focus on the importance of business senior executives' involvement in IS strategizing (Chan et al., 1997, Burn and Szeto, 2000, Bergeron et al., 2004, Kearns and Sabherwal, 2007) can be classified as belonging to the group of aggregate intra-organisational practitioners. Similarly, studies with an emphasis on the importance of business and IS executives' arriving at a shared view regarding the role of IS in their organisation to develop SA (Preston and Karahanna, 2005, Johnson and Lederer, 2007, Preston and Karahanna, 2009a, Johnson and Lederer, 2010) are placed in the selfsame domain.

To conclude, this sub-section draws to close by showing that these studies conducted with the typical view that SA is developed jointly between business and IS executives can be assigned to the domain featuring aggregate intra-organisational practitioners. Given the predominance of meso praxis in the extant literature, it is worth noting that this group of practitioners receives most attention within the SA community, with a particular emphasis being placed on senior executives whose actions are performed at the organisational level.

2.4.6.4.3 Individual practitioners within the organisation

In the extant SA literature, with regard to individual practitioners within the organisation, attention is given to the IS executive (Avison et al., 2004), who may hold any one of various titles, such as Director of Management Information Systems (MIS) (Martin, 1982), IS manager (Campbell, 2005), IT executive (Marrone and Kolbe, 2010) or Chief Information Officer - CIO (Synnott and Gruber, 1981); but all of these pseudonyms refer to an individual organisational member who holds "*[the most] senior executive [position and is] responsible for establishing policy and controlling information resources*" (Grover et al., 1993; P. 108). At this stage, and prior to reporting the results of this SLR with regard to this type of practitioner, it is important to consult the IS practitioners' stream within the IS literature to clear up any ambiguity surrounding these various titles and to settle on a specific term for my thesis.

While these above terms are often used interchangeably (Grover et al., 1993, Peppard et al., 2011), the literature, to some extent, tells us that expectations on the individual practitioner may vary depending on the specific title he or she holds, thus reflecting the ever increasing importance of IS in organisations. For instance, the director of MIS existed in an era (1970s) that set its sights on system development, efficiency and delivering data process services. Thus line operational responsibilities were emphasised for the MIS director (Nolan, 1976, Ives and Olson, 1981, Martin, 1982). Following this era, increasingly, IS was recognized as a critical resource that required a form of management which could relinquish some line operational responsibilities to subordinates (Benjamin et al., 1985, Grover et al., 1993), focusing on the strategic role of IS (Ross and Feeny, 1999, Chun and Mooney, 2009) and taking responsibility for developing SA in organisations (Stephens et al., 1992, Weiss and Jr, 2003). This meant that a new title had to be coined to replace that of MIS director to reflect such significant changes in IS management from data processing to SA initiation (Hooper and Bunker, 2013). Thus, the shift towards a more managerially oriented senior executive in relation to IS management, led to the emergence of titles such as IS executive, describing a type of practitioner who had left the technician focus aside and acted in a manner equal to that of any other business executive (Grover et al., 1993, Carter et al., 2011). Thus, as is the case for any senior executive, the IS executive is able to initiate executive level discussions across the organisation, relating to how IS can be leveraged in the organisation (Peppard et al., 2011).

However, rather than IS falling within the remit of executives at the senior level, another view advanced by the literature is that it should be managed by C-level executives, known as "*high-level corporate positions in the top management team*" (Schobel and Denford, 2013; P. 261). In this vein, the concept of the CIO was introduced by Synnott and Gruber (1981) to

reflect the importance of managing IS strategically by means of participating and pursuing organisational strategy development (Gottschalk, 1999). The definition of the CIO position would suggest involvement in TMT. However, as I indicated previously, this might not always be the case, as found in Stephens and Mitra (1995) and Gartlan and Shanks (2007). Thus, it can be argued that the CIO position was created on the promise of an authority that is seldom offered (Grover et al., 1993).

On the above grounds, I settled with the view that there is inconsistency in the use of titles used to refer to the most senior executives for IS management (Grover et al., 1993). An interesting finding in this vein is that by Peppard et al. (2011), who reported that the CIO title is more established in US corporations, while European organisations preferred equivalent titles. The indication, however, is that, in practice, there are similarities in the responsibilities attached to each of these roles, regardless of the title, and that there is also a discrepancy in the definitions found in the literature for each title. Having said that, the title IS executive is the term I have settled on for the purposes of my thesis for two reasons. On the one hand, this research is conducted within the EU context, where the term CIO is not widely diffused. On the other hand, the term IS executive, as defined above, does not necessarily imply that this role is necessarily performed at the C-executive level as opposed to the CIO position as originally envisioned. Indeed, the chosen definition refers to an individual practitioner who holds the most senior executive position in relation to IS management, regardless of the likelihood of being part of TMT.

The finding from this SLR report that, from the perspective of a number of scholars, the pursuit of SA development is the IS executive's "*definitive function*" (Stephens et al., 1992; P. 449). This view is supported by Weiss and Jr (2003), Weiss and Thorogood (2011) and Hooper and Bunker (2013) and suggests that incumbents of the IS executive position hold a major responsibility for developing SA in their organisations. It is inevitable that SA development should be accredited to IS executives, since it has been indicated that SA is drawn from the field of IS. Notwithstanding the centrality of SA to IS executives' responsibilities, the result of this SLR indicated that what IS executives do in relation to SA is underrepresented in the extant literature. This result does not run counter to the reference made by Maes et al. (2000) to the insufficient acknowledgement of individual practitioners within the extant SA literature. A very small number of studies, among which none can be said to be informed by SAP, go some way to claiming that they offer a 'road map' to IS executives who intend to develop SA. Studies containing such a claim were placed in the domain featuring individual practitioners within the organisation. For instance, Campbell (2005 & 2007) offers some coping mechanisms for IS executives who wish to pursue SA while experiencing organisational strategy ambiguity. For instance, where conditions support

the development of relationships between executives, Campbell suggested that IS executives solve any strategy ambiguity by utilising personal relationships to gain information about strategy as it is being implemented. Somewhat similarly, Enns and McDonagh (2012), in their interviews with Irish CIOs from diverse industries, put forward some tactics for CIOs who intend to exercise influence on other senior business executives to promote technological innovations and enhance SA.

To conclude, this sub-section has specifically demonstrated that the IS executive is the key individual practitioner within the organisation responsible for SA enactment. The finding of this SLR showed that the examination of the IS executive as an individual in charge of developing SA is limited. In part, this limitation is a result, as Maes et al. (2000) stated, of the insufficient acknowledgement of the significance of the individual within the extant SA literature. However, this may also be attributed to the dominance of meso praxis of SA with its focus on organisational level and its relevant aggregate practitioners, and hence neglect of the role of the individual in attaining SA.

2.4.6.4.4 SA practitioners: closing remarks

I have presented the three types of SA practitioners, namely, extra-organisational aggregate practitioners, aggregate practitioners within the organisation and individual practitioner within the organisation. The examination revealed that the extant SA literature is dominated by studies featuring aggregate practitioners within the organisation, particularly those engaged in meso praxis. However, the result of this SLR indicates that the heavy slant towards aggregate practitioners within the organisation has come at the expense of extra-organisational practitioners, which raises concerns regarding the lack of attention to this type of practitioners. Given the evidence, as found in the reported studies, of their involvement in shaping SA development, it is surprising that the extant SA literature continues not to offer a specific examination on how SA is shaped by extra-organisational practitioners. Of equal concern is the relatively meagre examination of individual practitioners, specifically the IS executive. While the literature assigns the responsibility of developing SA to the IS executive, there is little evidence that, at best, to inform how SA is enacted.

2.4.6.5 The nature of inquiry in SA research

This section explores the contextual conditions under which SA scholars have executed their empirical studies. The importance of this section is to examine the extent to which SA scholars show a readiness to consider local contextual levels through which SA is developed. A total of 87 empirical studies were examined in this SLR, which can be placed into four categories, namely, single organisation (A), multiple organisations in one industry (B),

multiple organisations across industries (C) and multiple organisations across regions (D); through which SA scholars have carried out their examinations, as illustrated in Table 2-9 below. By and large, I will discuss studies within each category separately, and draw out a commentary and conclusion thereafter.

	Type of Contextual configurations			
	A	**B**	**C**	**D**
Public	1		1	
Private	6	9	16	8
Both public and private			35	11
Total studies	7	9	52	19
	Total studies across the four categories: 87 studies			

Table 2-9 Shows SA empirical studies across the four identified categories

2.4.6.5.1 Single organisation (A)

This SLR unveils seven studies in total that have specifically investigated a single organisation in either a public or private context. Within this category, most studies targeted the private sector by selecting a single organisation from the Australian financial industry (Avison et al., 2004), the USA financial industry (Rathnam et al., 2005), the USA insurance industry (Fonstad and Subramani, 2009), the UK education industry (Fearon et al., 2013), the UK airline industry (Wilson et al., 2013), and the Taiwan semiconductor industry (Chen et al., 2008). Finally, one single study was carried out in a Danish public organisation (Simonsen, 1999). One of the purposes of these studies, and the intended contribution, was to reflect upon the view of practitioners in relation to SA in a specific context, thus standing against the mainstream of SA research, which regards variance in contexts as not significant in impacting on SA. Typically, a significant number of these studies favoured the qualitative approach (6 studies), drawing on either case study (Rathnam et al., 2005, Chen et al., 2008, Fonstad and Subramani, 2009, Fearon et al., 2013, Wilson et al., 2013) or action research (Simonsen, 1999). However, a single study by Avison et al. (2004) drew on a quantitative case study for the purpose of validating the use of a specific SA model in practice.

2.4.6.5.2 Multiple organisations in one industry (B)

To some extent, studies within this category exhibited consideration of the specific context under which SA is constructed by selecting multiple organisations in one industry. Advocates of this approach hold the view that different industries exhibit different patterns of organisational interdependencies in relation to IS (Pollalis, 2003). Therefore, limiting the study to one industry is intended to control the effect of industry context on SA development

(Broadbent and Weill, 1993, Byrd et al., 2006). In this SLR, a total of 9 studies, which is relatively higher than the first category, were found to involve multiple organisations within one industry. Scholars selected samples from the private sector, including the US manufacturing industry (Pyburn, 1983, Byrd et al., 2006), the UK manufacturing industry (King et al., 2000, Cragg et al., 2002, Hussin et al., 2002), the Canadian insurance industry (Reich and Benbasat, 2000), the US computer component industry (Tavakolian, 1989), the US banking industry (Pollalis, 2003) and the Australian banking industry (Broadbent and Weill, 1993). Predominantly, quantitative and survey-based design involving a large number of organisations was the approach to inquiry in six studies within this category (Tavakolian, 1989, King et al., 2000, Cragg et al., 2002, Hussin et al., 2002, Pollalis, 2003, Byrd et al., 2006). At the other end, some studies favoured qualitative inquiry, selecting a small number of organisations for one context, i.e. eight US manufacturers (Pyburn, 1983), four Australian banks (Broadbent and Weill, 1993) and three Canadian insurance organisations (Reich and Benbasat, 2000).

2.4.6.5.3 Multiple organisations across industries (C)

This SLR reveals that 60% (52 studies) of the total number of empirical studies have investigated SA in multiple organisations across industries. Studies within this category worked on the assumption that the available options for SA development in a particular organisation are the same as those in other organisations. Thus, regardless of the context, SA development in all organisations takes place along the same lines (Sabherwal et al., 2001, Tallon, 2007, Wilson et al., 2013). The results of this SLR show that public organisations in different industries represent the least favoured choice in the extant SA literature, i.e. only a single study was found, that by Schobel and Denford (2013), which drew on three Canadian public organisations within health and education industries.

To a moderate degree, as compared to the public sector, cross industrial samples from the private sector received greater attention in the extant SA literature. In this vein, 16 studies were classified as having cross-industrial samples from the private sector, including (but not limited to) Turkish organisations in manufacturing, retail and telecommunications industries (Ali and Qing, 2009), Australian organisations in manufacturing and financial industries (Campbell, 2007), Canadian organisations in manufacturing, finance and service industries (Croteau and Bergeron, 2001) and US organisations in computing, retail, finance and healthcare industries (Tallon and Pinsonneault, 2011). Having found that some studies separated public and private sectors in their examination, the majority of studies within this category, however, included both public and private sector organisations. A total of 35

studies (out of 52) were found in this SLR not to make any distinction between public and private sectors when gathering their empirical data.

The nature of these cross-industrial studies which involve a number of participant organisations have permitted the survey-based design to be predominantly employed as a vehicle in this category. In this regard, the result of this SLR shows that 33 (63%) studies within this category drew quantitatively on surveys. Case studies were the second most popular approach within this category, with ten studies satisfying the criteria for classification as interpretive cases, and two as positivist case studies. Furthermore, mixed method was the choice for six studies within this category. Finally, a single study by Enns and McDonagh (2012) drew on a series of focused interviews with 23 Irish IS executives to determine tactics used to promote SA in collaboration with other executives.

2.4.6.5.4 Multiple organisations across regions (D)

This category, to some extent, can be regarded as an extremist version of the previous one. It goes beyond multiple organisations across industries within a specific country, to include participant organisations across industries, regions and borders. In total, 19 studies were found to contain such examinations. These have proven to be quite neglectful with regard to the set of contextual configurations conditions (industry norms and regulatory differences) that shape SA development in organisations. By and large, this category is characterised as including a large number of participant organisations across regions. Thus, it is not surprising to see a survey-based methodology being widely adopted here (in 16 studies), i.e. 164 North American firms operating in financial and manufacturing industries (Chan et al., 1997), 126 responses from public and private organisations across regions (US, Canadian and EU) and across various industries (Preston and Karahanna, 2005) and 63 public and private organisations in the US and EU across industries (Tallon and Kraemer, 2003). Only two studies were found in this category to draw on a small number of organisations. Here, multiple cases were selected from different regions, i.e. Sabherwal et al. (2001) selected three private organisations (large US, small US and large Australian) and Chan (2002) drew on data from eight private organisations from different industries, of which five were Canadian and three were US-based organisations.

2.4.6.5.5 The nature of inquiry in SA research: closing remarks

From a closer look at Table 2-9, one is led to conclude that the extant SA literature has proven to be quite neglectful of the diversity in contextual conditions under which SA is developed. Obviously, a significant number of studies have been conducted in categories C and D, where the nature of these studies is cross-industrial or even cross-regional. Such a

research stream does not recognise the different patterns of SA development for different organisations, and suggests erroneously a universalistic approach to attaining SA that takes little account of the respective organisation's complexity and of the environment in which SA occurs (Weiss et al., 2007). Thus, a major implication of adopting such research programmes is that the extant SA literature falls short of capturing how SA is enacted by practitioners within and as part of the specific situated context of its use (Wilson et al., 2013). Furthermore, with rare exceptions, quantitative survey methods were employed within this stream, a method that has been criticised as not giving the full picture of the reality (Croteau et al., 2001).

Despite the predominance of the above research programmes in the extant SA literature, the need to treat SA as a contextually dependent phenomenon that is interwoven with situated practices for each organisation has been expressed by a number of SA researchers. Bruce (1998; P. 19) elucidated that "*there is no (one-size-fits-all) solution to achieving SA*". This view is supported by Cumps et al. (2006), Weiss et al. (2007) and Tallon (2007) who advocate considering differences in developing SA since organisations do not desire the same SA due to variance in their strategies which necessitate different approaches and decisions to execute SA. Furthermore, as seen in the results of Wang et al. (2011), who drew on two cases, of which the first was a private retailer of electrical products and the second a public manufacturer, differences in contextual specifics, industry type and organisational objectives influence the organisation's approach to developing SA.

All of the preceding works go some way to suggesting that cross-sectional studies, that is those in C and D which are less concerned with contextual configuration sets, have already thrown up challenges to the application of our research findings by IS practitioners (Ciborra, 1997, Simonsen, 1999, Pelletier and Raymond, 2014). As a consequence, since these findings do not recognize the different contexts as being of paramount importance in determining the appropriate approach to developing SA in particular organisational setting (Sabherwal et al., 2001), it is hardly surprising that IS practitioners continue to place SA at the top of their IS management concerns since our empirical results do not appear sufficiently relevant to their work setting. Thus, it could be argued now that categories A and B are an area where those challenges can be tackled. By studying SA within a given organisational context, according to Pelletier and Raymond (2014), recommendations that are better suited to the realities of the organisation can be offered, thus rendering our findings more useable and doable in practice to IS practitioners. Although the number of studies within categories A and B remains relatively low, the freshness of these two categories should present an opportunity for SA scholars to expand upon prior works. To one that regards SA as not same for every

organisation, thus paying attentions to how SA is enacted in interplay between organisation's specific contexts and practices.

2.4.6.6 Attractions and alternative

Broadly speaking, and following the outcomes of this SLR along with 25 years of practitioners' concerns regarding SA, I shall stress five points: **first**, idealised practices surrounding SA must be confronted, and we must return to the basic evidence of how SA is actually constituted by practitioners in their everyday life experience; **second**, we must pay attention to the doing of SA, that is, 'how SA is enacted' as opposed to adopting a purely outcomes-based view; **third**, it must be emphasised that this doing of SA –which will be referred to as '*aligning*' (Wilson et al., 2013; P. 2) – is situated and is not enacted in a vacuum; **fourth**: we must acknowledge that SA is a contextually dependent phenomenon as opposed to working on the basis that one approach to SA will fit all organisations; and **finally**, the contributions of individual practitioners must be taken into account, specifically, that of the IS executive, who, on the one hand, is charged with the responsibility for SA development, and who, on the other, is insufficiently acknowledged.

To start with, the extant SA literature underlined that SA is constituted by one or a set of the following practices: organisational strategizing, IS strategizing and/or the IS executive holding rank among the upper echelon. As I hope has been made exceedingly clear, my point is not to trivialize these practices as they appear in the SA literature; despite the idealistic nature in which these practices are, to some extent, presented in the literature, I simply intended to pose certain questions which may reform our assumptions and expectations of these practices, which may be more/less relevant and/or important depending on the various conditions in which different organisations in different sectors and in different locations find themselves. My point is that there is insufficient empirical evidence in the extant SA literature to give an accurate picture of how SA is effectuated in the absence of these practices. For example, it has not been determined how SA is accomplished in the absence of IS executives from organisational strategizing. Can the strategy document always and adequately serve as a source for the IS executive in the quest for SA? And if so, what happens to SA in the case that the organisational strategy is modified during implementation or evolved to digest changes in priorities? Similarly, how is SA accomplished in the absence of an IS strategizing? To what extent can SA be impacted in the absence of other business executives' participation during IS strategizing? Finally, we might ask how the IS executive goes about SA development in the absence of formal TMT membership.

All of the above questions are merely illustrative of how we might put the development of SA in practice under question. In this vein, the SAP lens agenda, as reviewed in (2.3), would take

the existing SA research beyond its dominant focus on practices that are seldom present by bringing the multiple faces of practices through which SA can be constituted. This would broaden our view on other practices, as drawn upon by practitioners in their day-to-day life, which might contribute to SA development in organisations. It is through this intention to broaden our view of the practices that constitute SA that we gain much more insight into how SA is actually practised, taking account of day-to-day frustrations, as opposed to how it should ideally be practised.

My second and third points encourage a shift away from the dominant organisational level view on SA, which is, for the most part, concerned with SA organisational performance implications. This focus on what 'outcomes' SA could deliver to organisations, came at the expense of considering how SA is actually enacted. Departing from a conception of 'aligned' versus "misaligned" to measure the extent to which SA impacts on organisational performance at one point in time, the extant SA literature would need to embrace the aligning view to put forward a clear understanding of how practitioners effectuate SA in their everyday practices. The fact remains that the manner in which the extant SA studies is articulated tends to create a schism between the significance of SA outcomes to organisational performance and the importance of clearly identifying the aligning as carried out by practitioners. Such a schism can be addressed through bringing the human practitioner, as opposed to the organisation, to the centre of our focus in SA research.

In this regard, the SAP lens agenda is a welcome departure in its single-minded insistence on focusing essentially on what practitioners actually do (Chia and Rasche, 2010). Such a lens would lead to the assimilation of SA as something practitioners do as opposed to something which merely benefits organisations, bringing greater understanding to the SA literature by seeking out aligning that contribute to SA development, and eventually providing resources for analysing how aligning is carried out, and by whom. Indeed, it is through this shift from organisational level to individual level analysis that we understand the grounds on which the described schism could be resolved. In this vein, the SAP perspective reminds us that inquiry into the aligning view should not be confined to organisational practices. The agenda for understanding aligning praxis now, from the SAP perspective, must be through recognising the situatedness of this praxis, and the interplay between organisational and social practices – as outlined previously in my narrative review of SAP.

With regard to the fourth point, I would like to draw attention to the research style within the SA extant literature, which has been rather neglectful of the variance in contextual configuration conditions under which SA is constituted. This classical view suggests that organisations follow the same route towards developing SA, and desire the same pattern of SA regardless of their differences in strategy, and shows little appreciation of the changes in

the inner and outer context which influence the execution of SA from one organisation to another. I have previously noted the limitations of this 'context-less' approach, which makes it difficult for practitioners to interpret our research recommendations and to take these on board in their work setting; hence we continue to see SA in our academic publications as a major concern, which goes somewhat to saying that we are not any nearer to touching practitioners' real experience. In this sense, SA could find inspiration in the SAP lens that sees strategizing as distinct for every organisation, thus highlighting the importance of considering the coexistent levels within organisations and the wider social context within which strategizing is carried out. Indeed, this is to say that for the SA literature to take hold of the SAP lens and address the issues outlined in point four; it will ultimately have to analyse aligning in context. Given that our audience, namely IS practitioners, showed no acknowledgement of our recommendations, which have become remote from their specific work setting and context, the SAP lens has strong potential, especially as it endeavours towards explaining actions within the relevant contextual levels.

My final point draws attention to the massive underrepresentation of the individual practitioner, namely, the IS executive, in examinations of SA in the extant SA literature. Indeed, the number of studies (only five studies in total on meso level praxis), which are certainly not informed by SAP, is insufficient considering the strong tendency within the SA literature to charge him/her with primary responsibility for SA development. In noting this limitation, I do not argue that all future SA research must eschew other practitioners, be they intra or extra to organisations; rather, it would be more effective to begin our SA aligning agenda by informing IS executives, who ranked SA as a major concern, on how they can go about undertaking one of their primary responsibilities - that is SA. Again, I shall argue that SAP, with its broad view on practitioners at multiple organisational levels, can serve and accommodate our examination of the impact of IS executive praxis on SA, regardless of his/her position in the organisational structure.

In summary, I settle on Ciborra (1997)'s view that we need to truly understand the world as it presents itself in our everyday experience. We may, therefore, need to deal with a set of theoretical perspectives, within the mainstream of SA research, that may underlie the apparent limitations to the study of SA, as outlined in the outcomes of this SLR. The fact remains that we have been, in SA research, unable to answer a very basic question: 'How is the work of aligning carried out in practice?' One possible answer, which I put forward here in my thesis is to opt for the SAP perspective. My five points above go some way to acknowledging the limitations in SA research, but also show how they can be addressed through the SAP agenda.

2.4.6.7 Research gaps and future avenues

To systemize the wealth of research opportunities afforded to the SA literature by the SAP perspective, as presented above in (2.4.6.6), I shall refer back to Jarzabkowski and Spee (2009)'s typology framework that I drew upon in mapping the SA literature in (2.4.5.3). The key strength of this framework is the clear distinction made between those domains which are completely lacking in studies, those which include only a limited number of studies, and those domains containing a significant number of SA research studies. I now propose, through the framework, nine possible research avenues, and more importantly, locate my research in one of these avenues – that is in domain **B**.

Within the micro praxis level, the primary research avenue involves an exploration on how practitioners play out and shape SA development as they engage in their immediate episodic practices, i.e. meetings, workshops and away-days. At this micro level, future research could include: individual practitioners within the organisation, such as the IS executive (domain – A), group of practitioners within organisation such as IS and business executives (domain D), and group of practitioners extra to the organisation such as consultants (domain – G). SA research to date has missed the wider opportunities to understand how practitioners align in episodes, and what type of episodes they draw upon to align.

Given the widely held assumption that SA is a meso phenomenon because practitioners initiate SA for the benefit of their organisation, the research avenues at the meso praxis level involve the examination of how practitioners engage in and go about SA praxis at the organisational level. The research avenues for this level of praxis involve again the inclusion of individual practitioner within the organisation (domain – B), group of practitioners within the organisation (domain E), and group of practitioners extra to the organisation (domain – H). While it is true that domain "E" contains most SA research, nonetheless, much of this research has proven fruitless, as studies do not provide an understanding of the doing of SA. Hence, there is an opportunity for SA research to exploit the SAP perspective at this level towards solving the ever significant issue of how we attain SA. Finally, at the macro level, the opportunity for SA research is to unveil how practitioners engage with particular forms of SA that are initiated by the context outside the immediate organisational context. For instance, future research could potentially go about unveiling how the IS executive develops SA during the acquisition of his/her organisation (domain – C); how SA is shaped by a group of practitioners in the case a merger of organisation (domain- F); or, how a hired project manager or consultant might shape SA development within the organisation (domain – I).

2.4.6.8 Concluding the SLR on SA

The outcomes of this SLR, underpinned by the SAP perspective, are relevant to the SA literature. I demonstrate that we have a great number of opportunities to contribute to SA research by seeking out what practices constitute SA in day-to-day life, making the aligning praxis, which has received no attention in the extant literature, central to the agenda, and treating SA as a contextually dependent phenomenon that differs from one organisation to another. To systemize these opportunities, I suggested that we should start pursuing the proposed nine research avenues. These avenues point us towards an alternative and more fruitful way of understanding aligning praxis, together with an understanding of the contributions made by a wider range of types of practitioner(s) involved in SA enactment. In pursuit of this agenda, I started by framing a research question that can be located in domain –**B**. I embraced the notion that the IS executive is the key individual player in SA enactment, as explained previously, a notion which has not been adequately acknowledged in SA research. In addition, I am determined to focus on the aligning praxis of IS executives that make up SA in practice. Thus, I am breaking with the mainstream SA research, which predominantly focuses on what SA can bring to the organisation as opposed to how it can be instigated. Hence, my thesis research question emerged from this SLR is:

"How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?"

2.5 Concluding chapter (2)

This chapter has provided a review of three sets of literature. I began by consulting a particular stream within the practice theory literature, namely, practice as perspective – one that has been drawn upon by SAP scholars to shape their field. I drew out some learning outcomes from major works within this stream so as to crystallise my theory of practice in sympathy with the second mode, in which SAP is positioned. Following that, I proceeded by conducting a narrative review on the SAP perspective, which is the underlying lens of this thesis. Therein, I elucidated how the notion of strategy was re-imagined and envisaged with the SAP lens as a practice that involves the act of strategizing. I then moved to show how the strategizing view yielded the reconceptualising of the notion of 'performance' from organisational level performance to one that appreciates the performance of individual strategizing as an achievement in itself. Following this, I offered a detailed analysis on each of the 3Ps separately and then drew on Whittington (2006a) framework to show how they can collectively underpin theorising from a SAP perspective. Next, I proceeded to unpack another analysis on the nature of inquiry in SAP research. The section concluded with the argument that the SAP lens will be utilised theoretically to critique the extant literature of SA as well as to empirically settle on a research strategy and design capable of capturing what SAP lens endeavours towards.

The chapter then went on to conduct an SLR, underpinned by the SAP perspective, on the extant literature of SA. I offered new interpretations, explanations, and future research avenues to the field of SA from the perspective of SA. The result of this SLR provided an assessment on current conceptualisations of SA, showed their limitations, and then opted for an SA definition that is in sympathy with the SAP lens adopted in this thesis. The section then moved on to mould the extant concepts in SA research, and represent them under the mechanism of the 3Ps within the SAP literature. I offered a detailed analysis on what practices put forward in SA literature as constitutive of aligning enactment, how SA was operationalised at different praxis levels, and the identity of the SA practitioners, along with the extent to which they were acknowledged in SA research. I then proceeded to uncover my examination of the nature of inquiry in SA research. This is followed by offering conspicuous statements about the attraction of the SAP lens to SA research. Finally, the result of this SLR leads to the emergence of nine researchable areas that go somewhat to solve the key limitations identified in this review. Therein, I pursued one of these agendas and developed my research question of "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?"

Upon my review of the three sets of literature, my focus upon the empirical data collection will be in relation to how SA is enacted by IS executives in their situated practices, as opposed to how SA is achieved by organisations. In this vein, the SAP-based inquiry into my research question will form the basis of the next chapter (3) – Research strategy, design and execution.

Chapter 3

RESEARCH STRATEGY, DESIGN AND EXECUTION

3.1 Introduction

The preceding chapter (2), which consisted of a literature review, has led to the formulation of the following research question: "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?". The question is of an explorative nature and intends to build theory as no existing research on SA yet addresses this research question, which sets out to explore the aligning praxis as enacted by IS executives in natural settings. To this end, chapter (3) here is designed to serve this particular purpose and is organised into four main sections. In 3.2, I present the research strategy for this thesis, one that bears in mind the implication of the SAP empirical programme of research for this study. In this particular section, I provide insight into requirements related to the SAP programme of empirical research, which serve as an aid in defining the appropriate research design for my thesis. I follow this discussion with compatible decisions related to the chosen research paradigms of Ontology, Epistemology and Methodology, which best aid in this endeavour.

In 3.3, I present the research design which is consistent with the pre-established research strategy in the previous section. In this section, I constructed a case study design, involving two cases, by using the SAP lens as a sharpening tool across all the research design elements. Following this, in 3.4, I reveal how this study was operationalized in practice. I rigorously attend to providing justification for inquiring into two cases from Irish PSOs. This is followed by discussions of access negotiation, initial engagement, data collection and analysis as executed in practice. Finally, in 3.5, I draw this chapter to a close and offer a link to the next chapter (4) of case narratives. It is important to note that the route followed in this chapter is similar to what I did in the previous chapter. I started each section with a clearly defined goal and purpose, and drew each section to close by offering a concluding remark. Thus, I hope this strategy will go some way to showing the purpose of and the links between all sections.

3.2 Research strategy

3.2.1 Purpose & Overview

Primarily, the research strategy is constructed with a view to showing "*how the researchers will go about answering the research question*" (Saunders et al., 2009; P. 600). Of course, this involves logically sequential decisions that connect the research question to its conclusion (Yin, 2014). In this thesis, two dimensions have influenced the design of the research strategy. First, it is influenced by the criticism made of the dominant research style in SA research, as presented in (2.4.6.6), that embraces positivist assumptions and survey methodology, i.e. focusing on SA outcomes; assuming that organisations follow the same route towards developing SA; and showing no appreciation of the differences in the inner and outer context which influence the development of SA from one organisation to another. Second, the research strategy here is also inspired by the opportunities that have been identified in chapter (2) offered by the SAP lens, i.e. placing practitioners at the centre rather than organisation; focusing on practitioners' doing rather than organisational outcomes; and affirming that theses doings are situated into the organisational and extra-organisational practices.

Accordingly, the research strategy presented here is concerned with the situated doings of SA, that is, focusing on aligning praxis, practices and IS executive practitioners; and therefore this research strategy has no interest in the SA-performance relationship as examined by the mainstream SA research. To this end, this section of the research strategy (3.2) is organised into three primary sub-sections. In 3.2.2, I provide a discussion of the nature of SAP empirical inquiry. I argue that if a substantive inquiry into my research question is to be generated through the SAP lens, I need to be mindful of requirements related to the SAP programme of empirical research. In 3.2.3, I offer a rationale for where I stand on each of the three interrelated elements that constitute the research paradigms. In the last section 3.2.4, I draw this section of the research strategy to a close and offer the link to the next section of research design.

3.2.2 Guiding principles for SAP research

This section is primarily focused on what must be considered when executing research that is underpinned by the SAP lens. Here, I uncover the nature of such SAP-based inquiry, the characteristics of which have been synthesised from my narrative review on SAP perspective in (2.3). The goal is to draw on this as an aid in defining the appropriate research design for this thesis, which pursues what the SAP perspective endeavours towards. I have organised this section into four sub-sections. In (3.2.2.1), I reflect on argument surrounding the

determination of the unit of analysis in SAP research. I follow this, in (3.2.2.2), with a discussion on the interference between multiple levels of analysis, which necessitates a readiness on the part of researchers to take these into account. In (3.2.2.3), I argue that there is no best way to go about an SAP-based inquiry. Rather there are shared assumptions among the SAP community, which go some way to shaping decisions related to methodological choices. Finally, in (3.2.2.4), I offer a closing remark for this particular section and introduce a link to the subsequent section of research paradigms

3.2.2.1 Units of analysis interdependency

The unit of analysis refers to the level of precision in defining the object of the research - the entity about which one is aiming to draw conclusions (Johnson et al., 2007, Venkateswaran and Prabhu, 2010). At the logical level and that is driven by the research's focus and the question being tackled, SAP programme of research showed collections of units of analysis choices that range from very narrow micro analytical choices, e.g. individual practitioner (Rouleau, 2005, Hoon, 2007) or group of practitioners (Jarzabkowski, 2003, Paroutis and Pettigrew, 2007), to broader micro choices, such as strategic planning practice (Jarzabkowski and Balogun, 2009, Nordqvist and Melin, 2010) and episodic practices (Hendry and Seidl, 2003, Jarzabkowski and Seidl, 2008). While these illustrative studies indicate the variety of analytical choices within the SAP literature, the challenges emerged when researchers started to operationalize their analytical choices empirically (Johnson et al., 2007, Rouleau, 2013).

Arguably, adoption of the SAP perspective will inevitably mean that delineation of the unit of analysis is not always simple in empirical research (Johnson et al., 2007). This is due to the manner in which SAP views strategizing as to involving interrelation between the 3Ps. That is, focusing on only one unit of analysis (episodic practice, for instance) would necessitate reliance on practitioners and their praxis as instruments for understanding what is happening within the chosen practice. In this sense, the main unit of analysis shows its dependency on other analytical unit choices; thereby entitling any organisational phenomenon observed from the SAP lens to take account of this interconnectedness between the 3Ps (Jarzabkowski et al., 2007). Indeed, Whittington (2006a; P. 629) fittingly observed this aspect of interconnectedness, articulating that "*praxis deep inside organisations, and practitioners and practices extending outside, are all prime units of analysis*". Ironically, it is useful to note one tactic for dealing with this issue, which was nicely put forward by Johnson et al. (2007). In succinct terms, we need to acknowledge and reflect the ambiguity of our definitions to units of analysis in our research, and mobilise that within our research design. This basically means admitting the interconnectedness as a unique feature of the SAP perspective (Whittington, 2006a), but one must provide an explicit report when designing research for execution on the extent to which these units are recognised by the researcher (Johnson et al., 2007).

3.2.2.2 Levels of analysis interference

As emphasised in my narrative review of the SAP literature (2.3), SAP conventionally takes the view that strategy is something people do and which is socially accomplished (Kaplan and Jarzabkowski, 2006). Thus, it focuses on the micro of practitioners' strategizing praxis, which involves (formal and informal, routine and non-routine) actions, interactions and negotiations of multiple practitioners (Jarzabkowski and Spee, 2009, Golsorkhi et al., 2010). Notwithstanding the significance of this recurrent discussion in the literature, SAP's scholars firmly advocate that understanding this micro-strategizing praxis would require attending to multiple levels of analysis (Jarzabkowski et al., 2007, Huff et al., 2010) and, more importantly, to the relationship between these levels (Johnson et al., 2007). In this vein, Whittington (2006a; P. 618) forcefully argued that "*studies focused either at one level or the other tend to leave a sense of incompletion*". As such, the field of SAP deals with three levels of analysis that include: the level of individual strategizing praxis (Micro), local organisational level practices (Meso) and the level of extra-organisational practices (Macro) (Johnson et al., 2003, Valmra et al., 2006, Seidl and Whittington, 2014).

The central premise of SAP is to drill deep enough to understand practitioners' strategizing praxis, but also to aim to enable a sufficient understanding of the linkage between the detail of such actions and their organisational and wider extra-organisational practices (Regnér, 2008, Johnson et al., 2010b). While it is acknowledged that a perspective that must cover multiple levels of analysis and which aims to unveil their relationship might be challenging (Balogun et al., 2003, Venkateswaran and Prabhu, 2010), nonetheless without this vertical link between micro, meso and macro we run the risk of producing decontextualized outcomes which would be devoid of impact, on the one hand (Johnson et al., 2007), and difficult to understand outside the contexts in which they are enacted, on the other (Balogun et al., 2003).

3.2.2.3 Methodological specifications

Until now, SAP does not put forward singular methodological frame as recommended for researchers undertaking fieldwork (Rasche and Chia, 2009). The fact is that the field is progressively developing its methodological base, which must reflect the complicated nature of the field's theoretical side (Jarzabkowski et al., 2007, Grand et al., 2010). While articles are increasingly developing the methodological level of the perspective by presenting promising methodological approaches such as case study (Golsorkhi et al., 2010), action research (Johnson et al., 2010b) and ethnography (Rasche and Chia, 2009); Johnson et al. (2010b) acknowledge that there is no best way to go about conducting SAP-based inquiry. Rather, there are shared assumptions among the SAP community which act as requirements for how we do SAP based research. In this vein, I shall draw out three principles for SAP-

based inquiry that have certain implications for decisions regarding the methodological approach for this thesis.

First, the centrality of human practitioners is crucial in the SAP perspective, from its definition of strategy as something practitioners do, right up to its empirical focus, which aims to capture the minutiae of their doings (Jarzabkowski et al., 2007, Splitter and Seidl, 2011). This is to say that conducting SAP-based inquiry would require researchers to "*go out and look*" (Johnson et al., 2007; P. 52), engaging with practitioners (Johnson et al., 2010b), relying on their bodily doing and saying (Rasche and Chia, 2009), and finding ways to capture their doings as they occur in real settings (Johnson et al., 2003, Johnson et al., 2007). Researchers indeed need to draw practitioners in, by interacting with them through observations, interviews and conversations; as they can share their practices, provide an understanding of knowing how to do, and eventually aid sufficient interpretations of the context within which their actions are enacted (Balogun et al., 2003, Johnson et al., 2007, Splitter and Seidl, 2011). This focus on engaging with practitioners could eventually lead to the exclusion of methodologies that do not give real access to practitioners and their practices (Rouleau, 2013). This is to say that quantitative questionnaires, for instance, with their prior categories, are not up to task, at least not the sole use thereof (Johnson et al., 2003), since they may go some way to diluting what the SAP perspective aims to capture (Balogun et al., 2003, Johnson et al., 2007).

Second, analysis of multi units and levels characterises the SAP perspective. This implies a need for data gathering that can strengthen the empirical evidence among these constructs (Rouleau, 2013, Sarhan and McDonagh, 2014a). Moving beyond the importance that data be collected "close-to" practitioners, as outlined in the first point, Huff et al. (2010) put forward seventeen suggestions for data gathering that are more likely to make the aim of the SAP perspective achievable. To summarize their argument, they suggest 'working with more data' to support the examination from the SAP perspective; increasing the 'variety' of data, by drawing on multiple sources; and finally improving 'contextual understanding' by taking advantage of data already collected by the organisation and data available within larger systems, i.e. Government database sources.

My **third** point emerges from a warning given by Johnson et al. (2007; P. 61), that "*not just any available [...] site will do*". In saying this, they emphasise the principle of purposeful-sampling rather than drawing on random-populations when deciding on site for SAP based inquiry (Aguinis and Vandenberg, 2014). Indeed, given that my analysis on contextual configurations in the SAP literature (2.3.5), which shows that the uniqueness of the case's condition is what makes the site fruitful for SAP inquiry, it is not surprising to see SAP scholars affirm the importance of the purposeful selection of contextual conditions as an

element to be taken into account when designing a SAP inquiry (Johnson et al., 2007, Huff et al., 2010). The implications on researchers who take SAP as a lens for their research is to make explicit the logic behind selecting their samples 'thoughtfully and deliberately' as an important part of the methodological design, on the basis that purposeful selection holds the key to obtaining potential findings which would meet the objectives towards which SAP endeavours (Johnson et al., 2007).

3.2.2.4 Guiding principles for SAP research: closing remark

The above three points imply that researchers need to be mindful of the distinctiveness of SAP-based inquiry and to strive to better understand how such a lens should be executed. This distinctiveness is reflected in its multi-units and multi-levels nature and the associated implications for the design and execution of a programme of research in which a SAP lens is embedded. It is important to note that the three points listed above are not exhaustive for SAP-based design. Rather, they are meant to go some way towards translating the SAP theoretical contours into a feasible decision-making regarding the execution of empirical studies. These points will then certainly require compatible decision-making in other areas of the research strategy, as outlined below in subsequent sections.

3.2.3 Research paradigms

In this section, following Guba (1990; P. 17), I define research paradigm as a *"basic set of beliefs that guides action [...] in connection with a disciplined inquiry*". Research paradigms are human constructions that define the worldview of researchers and how they conduct inquiry. These belief systems, according to Guba and Lincoln (1994), consist of three interrelated elements: Ontology, Epistemology and Methodology, through which the researchers need to position themselves among the possibilities that each of the three elements holds and assumes. Indeed, the key for researchers is to achieve consistency among these elements as determined by the research question being tackled in the study (Johnson et al., 2007). In this particular section, I shall discuss these three paradigms, and rationally position myself among their possibilities in such a way that is consistent with a SAP programme of research and coherent with the aim of my research. I have organised this section on research paradigms (3.2.3) into four primary sub-sections.

In (3.2.3.1), I establish my ontological bases for this thesis. This ontological position, namely, Taller-doing, is employed from among the ontological scaffoldings afforded by practice theory, given that SAP lens has already made an ontological choice when drawing upon the notion of practice to shape the field, as outlined in (2.2). Following that, in (3.2.3.2), I offer a discussion on the second element of the research paradigms – that is, epistemology. In this sub-section, I review the three possible assumptions within the realm of epistemology upon

which the researcher may base his/her enquiry – that is of positivist, interpretivist and critical. I then offer a critique on the epistemological traditions within SA and SAP research. I conclude this sub-section by taking an interpretivist standpoint. This is a choice that is consistent with the ontological position already taken and which fits coherently with my research question. In (3.2.3.3), I emphasise that my methodological decision, which is for case-based study, is grounded on previous decisions already made within the research paradigms; the methodological specifications required by SAP; and, more importantly, the explorative nature of the research question which will require theory building through case-based inquiry. In the final sub-section (3.2.3.4), I draw this section of research paradigms to a close.

3.2.3.1 Ontological position: Taller-doing

The ontological assumption is concerned with the nature of the reality being studied (Guba, 1990), including "*how things really are and how things really work*" (Guba and Lincoln, 1994; P. 108). That is to say that ontological assumption has its prime focus on the very essence of the phenomena under study by questioning the manner through which the reality is to be investigated. In the context of this thesis, the appropriation of the SAP lens requires researchers to attend to ontological scaffoldings which are afforded by practice theory (Orlikowski, 2010) – specifically 'practice-as-perspective' as emphasised in (2.2.3). This is actually because SAP, in drawing on the notion of practice, has made an ontological commitment to the field of practice (Nicolini, 2013), thus imposing the belief that the nature of the reality under investigation occurs within and is an aspect or component of practice (Schatzki, 2001b, Johnson et al., 2007), and, further, that practitioners and their praxis are enabled by organisational and extra-organisational practices (Jarzabkowski, 2005, Whittington, 2007). In mapping out the different ontological choices available to SAP researchers, the work of Seidl and Whittington (2014), through which I established my ontological position for my research, shown in Figure 3-1, merits particular attention.

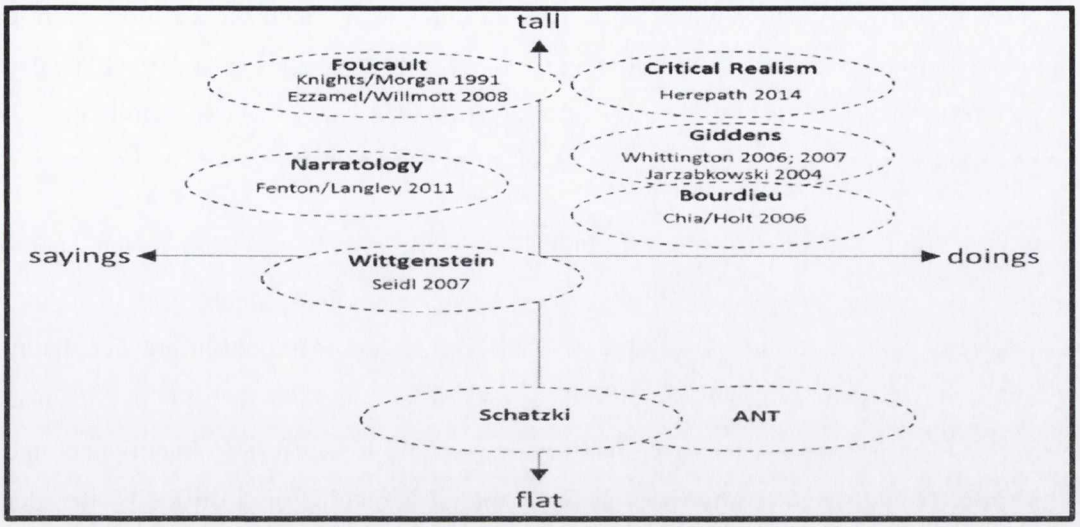


Figure 3-1 Adopted from Seidl and Whittington (2014) to locate my ontological position

Seidl and Whittington (2014) reviewed key SAP papers published in the Organisation Studies Journal, whose main aim has been the theorisation of the relation between local micro strategizing praxis and larger social phenomena. As each group of the selected papers drew on a particular theoretical perspective with specific mechanisms to address the interplay between local micro praxis and larger social phenomena, Seidl and Whittington (2014) undertook to systematically organise these theoretical perspectives within a grid formation (Figure 3-1) to allow empirical SAP researchers make explicit ontological choices among these theoretical resources, either by opting for Tall ontologies or by drawing on Flat ontologies.

According to Seidl and Whittington (2014; P. 8), taller ontologies "*tend to situate instances of local praxis in some kind of vertical hierarchy, where higher levels shape, enable or constrain what occurs on the ground*". On the doing side of Figure 3-1, is the taller ontology, with the view that micro praxis are shaped and are to be explained primarily by making reference to the meso and macro organisational levels. On the saying side, the taller ontology leans towards discursive approaches to describing how dominant discourse has various power effects on the individual in a particular society. In both cases, 'doing and saying' macro in terms of systems, cultural, political, economic and extra-organisational forces bear down on the praxis at the meso organisational level. Flatter ontologies, on the other hand, situate the local micro praxis in a web of interconnections. Thus, they take a different view on the macro - one that stretches out sideways in a network of relationships. This requires a willingness on the part of researchers to trace the network of connection that makes the reality possible. Notable here is the work of Schatzki (2005), as emphasised earlier in my review of practice theory (2.2.3), who argues that the social phenomena exist as part of nexuses of practices and material arrangement. From his perspective, grasping an understanding of the phenomena under investigation would require researchers to look for actions that compose this

phenomenon and identify the practice-material bundles in which these actions were carried out. According to Seidl and Whittington (2014), flatter ontologies are relatively neglected in SAP research as they lend themselves to an open-minded inquiry where existing theory offers few clues.

In conclusion, I have grounded my inquiry into my research question in the Taller-doing ontology. The choice between Taller and Flatter was settled on the basis that the Taller ontology fits with the theoretical discussions and reviews, as offered in practice theory (2.1) and SAP perspective (2.3), wherein I placed emphasis on the fact that it is the organisational and extra-organisational practices that are responsible for suffusing practitioners and their praxis. The choice for doing over saying in the taller ontology is justified by the identified gap in SA research, where the doing of SA, or better aligning, has been noted as being insufficiently acknowledged in the extant SA literature.

3.2.3.2 Epistemological options: Interpretivist

Epistemology is a "*comprehensive knowledge system*" (Spender, 1998; P. 237) that deals with two dimensions: first, our assumption of knowledge (Hirschheim, 1992, Myers, 1997); and second, how knowledge can be acquired (Hirschheim and Klein, 1989, Becker and Niehaves, 2007). Thus, it is concerned with the activities the researchers undertake, and the means they utilise, i.e., techniques and approaches to learn, understand and communicate the knowledge claim to human beings (Burrell and Morgan, 1979, Guba, 1990, Guba and Lincoln, 1994). According to Chua (1986), epistemological assumptions can be classified into Positivist, Interpretive and Critical. Each of these assumptions accommodates its view on knowledge, how it can be inquired into and the role of the researchers in accessing and communicating this knowledge. In this section, I will attempt to generally discuss these assumptions and their characteristics, articulate IS, SA and SAP traditions among these assumptions, and, finally, draw out a closing remark on the pertinence of the interpretive assumption, which is in line with my taller-doing ontology and my research question, as well.

3.2.3.2.1 Overview of epistemological assumptions

Positivist research is predicated upon an objectivist assumption on knowledge (Orlikowski and Baroudi, 1991, Myers, 1997, Villiers, 2005). It assumes that knowledge exists independently of human beings and their experiences (Chen and Hirschheim, 2004, Villiers, 2005), and, therefore, that knowledge is driven by immutable natural laws (Guba, 1990). This, in essence, means that there is a true nature of the world that operates separately from our knowledge claim (Guba, 1990). A positivist researcher, therefore, needs to observe this world and subsequently use it to attest the scientific validity of his/her knowledge. According

to Spender (1998), positivism entails separating the knower from the known, thus dealing with knowledge as being "out there" and irrelative to our human perceptions. As this is the nature of knowledge, a positivist observer would "*seek to explain and predict what happens in the social world by searching for regularities and causal relationships between its constituent elements*" (Burrell and Morgan, 1979; P. 5). In this vein, the positivist observer deals with empirical testability to "confirm, verify or falsify hypotheses" of his/her theory through scientific methods (Chua, 1986, Villiers, 2005); thus the result is expected to be replicable, generalizable, reliable and free from the perceptions and biases of the observer (Weber, 2004, Becker and Niehaves, 2007). In essence, this implies an attempt, on the part of the positivist observer, to apply models and methods derived from the natural sciences to the study of human affairs (Burrell and Morgan, 1979, Villiers, 2005, Becker and Niehaves, 2007).

Interpretive is firmly set against the 'observer' standpoint that characterises positivism, and hence denies the utility of natural science methods in the study of human affairs (Burrell and Morgan, 1979). For the Interpretivist, knowledge is built through social constructions such as language, consciousness and shared meanings (Myers, 1997, Klein and Myers, 1999, Weber, 2004). Thus, interpretive studies attempt to understand a phenomenon by accessing the meanings that people assign to the phenomena at the level of their subjective experiences (Burrell and Morgan, 1979, Myers, 1997). As this is the nature of knowledge, interpretive researchers, first, need to engage in the social setting of the phenomenon being investigated and to learn from social interactions with participants (Chen and Hirschheim, 2004). In this sense, generalizability to a population is not sought in interpretivism; rather, findings can be used to inform other settings (Orlikowski and Baroudi, 1991). Second, participants need to be recognised as interpreters for their actions and events, and as analysts of these actions and those of other participants (Doolin, 1996, Klein and Myers, 1999). Indeed, Walsham (1995b; P. 78) has fittingly described how interpretivist seeks the explanation of knowledge, within the frame of reference of participants and their meanings; stating that interpretive evidence yielded from "*reporting [researcher's] interpretations of other people's interpretations*". With these emphases on social setting and interpretative dualism, it became a requirement for interpretivist researchers to make an explicit report on the research site chosen, the justification for this choice, the number of participants involved and the period during which the research was carried out (Walsham, 1995a, Walsham, 1995b).

Critical research is set against both positivism, which can be said to reduce access to the world down to observation and measurement, and interpretivism, which reduces the world to human perceptions and experiences (Mingers, 2002, Mingers et al., 2003, Jr and Williams, 2012). It recognises, instead, that our access to this world is limited and always mediated by

our theoretical lenses (Mingers et al., 2003). The form of the argument in critical epistemology is transcendental. It begins with some accepted phenomenon and asks what the world must be like to generate a particular phenomenon (Mingers et al., 2003, Smith, 2006). In other words, it asks what form components within this reality must take in order to explain the occurrence of the phenomenon being studied (Jr and Williams, 2012). In this vein, the role of the criticalist researcher is to move away from descriptions of empirical events towards identifying the underlying causes of particular phenomena (Mingers et al., 2003, Jr and Williams, 2012).

3.2.3.2.2 Epistemological traditions in IS

For a holistic epistemological view on SA, I undertook to draw on publications that review the epistemological tradition within the IS literature (see Table 3-1 below). As IS literature is the chief domain of SA quest, and therefore has great implications; such a review may go some way to explaining the shape of the epistemological traditions within SA research when discussed in the subsequent section of (3.2.3.2.3).

Author(s)	No. of papers	Period of time	Positivist	Interpretive	Critical
Orlikowski & Baroudi (1991)	155	1983 - 1988	96.8 %	3.2 %	0 %
Chen and Hirschheim (2004)	1893	1991-2001	81%	19%	0%
Avison et al (2008)	548	1991-2008	29.1%	70.9%	0%

Table 3-1 Shows the epistemological traditions in the chief domain of IS literature

As shown in Table 3-1 above, the epistemological assumption made by IS researchers is, by and large, positivist. Orlikowski and Baroudi (1991) determined that during a five-year period (1983-1988) in the four major US-based IS publications they selected, i.e. Communications of the ACM, ICIS, Management Science, and MISQ; positivist studies (96.8%) overwhelmed interpretive (3.2 %). However, we may need to be wary when interpreting these findings for two reasons. First, the US-based outlets selected in their study are subject to an editorial policy that neither encourages interpretivism, nor offers any formal policy on the acceptability of interpretivism (Walsham, 1995a). Second, Orlikowski and Baroudi (1991; P. 3) themselves acknowledged that by including only US-based journals and excluding European journals "*[they had] limited the survey's exposure to non-traditional research work*", and therefore, in a sense, had not moved forward from an era in which there was almost no recognition of non-positivist research in IS literature (Mingers, 2003).

A subsequent study carried out by Chen and Hirschheim (2004) showed some level of recognition of interpretive research, which is likely due to their inclusion of European journals, as they noted, that embrace a non-positivist stance. They examined 1893 studies (1991-2001) sourced from four mainstream US-based publications, including MISQ, ISR, JMIS and ICIS – and four European journals: AMIT, ISJ, JIT and EJIS. Their findings show a slight increase in the proportion of IS research which is interpretive (19%), though positivism maintained its dominance in the field, with 81% of research being positivist-based. Indeed, these findings need to be seen in the light of a more general transformation in the field, that is, a growing tendency towards interpretivism, made possible by European outlets. At one level, their findings showed that US-based publications formed 65% of all research contribution, of which 58% was positivist and 7% was interpretive. A breakdown of the European publications, which formed 35% of all contributions, illuminated that the difference between the proportion of European studies which were positivist (23%) and those which were interpretive (12%) is considerably less significant.

A leaning towards advocacy of interpretivism in IS research, made possible by European journals, is illustrated in the work of Avison et al. (2008) who undertook to examine the output of the European-based ISJ. They determined that during the 17-year period their study covered (1991-2008), interpretive research dominated the output of the ISJ, representing 70.9% of 548 total contributions. This is no surprise since Avison et al. (2008) noted that one of the original aims of the journal's editors when they proposed the journal to the publishers in the late 1980s, was to provide a natural home for interpretive research papers. This aim was then softened to incorporate more pluralist epistemological assumptions, which goes some way to explaining the presence of positivist assumptions in the journal's outputs within the chosen period of study.

The above discussion distilled three key facts about the epistemological traditions within IS research. **First**, the proportion of IS contributions made by US-based outlets is relatively high. US-based publications represent the largest forums for IS research in the literature. Of these, the vast majority of the contributions were classified as positivist, thus reflecting the editorial policy within these particular outlets, which tends to be strongly weighted towards positivist-based research. **Secondly**, therefore, extending our analysis to include publications with non-traditional and non-positivist epistemological traditions may yield more accurate reflections on the IS field. In contrast to what we find in US publications, we can see in other publications the presence of interpretivism as an accepted epistemological assumption within the field of IS. The preceding studies showed the willingness of European journals, in particular, to be pluralist in their epistemological view, thus offering an area for interpretivism to gain ground and further attention. **Finally**, on the basis of Table 3-1 above,

critical assumption is not evident in the IS literature. This finding may suggest the need for studies with a much broader analysis than those described above, that is, studies which would include international IS outlets as well, to investigate the extent to which IS critical-based studies are available in the literature.

3.2.3.2.3 Epistemological traditions in SA

With regard to the extant SA literature, no single study has yet analysed the epistemological traditions with the SA literature. Therefore, I undertook to carry out this examination. I followed the criteria of Orlikowski and Baroudi (1991) and Chen and Hirschheim (2004) for categorising positivist studies as those that exhibited hypotheses testing, model formation, quantifiable measures of variables, and inferences about SA drawn from samples to populations. The criteria adopted for classifying studies as interpretivist were as follows: studies should not display any positivist characteristics, and inferences about SA should be drawn primarily from the perspective of participants. The outcome of this examination, as shown in Table 3-2, is based on the 87 empirical studies that were identified in my SLR of SA (2.4.4). As indicated in Table 3-2, SA research is dominated by two epistemological assumptions: positivism (69%) and interpretivism (31%).

Epistemology view	US	EU	Rest of the world	Cross regions	Total assumption
Positivism	29	10	9	12	60 studies (69%)
Interpretivism	11	4	10	2	27 studies (31%)
Total contributions	40	14	19	14	87 studies in total

Table 3-2 Shows the epistemological traditions as found in my analysis of SA literature

Positivist research accounts for 69% of SA empirical studies based on the sample frame selected for the SLR of SA literature. The high proportion of studies conducted based on positivist assumptions is largely attributable to survey design, where research involves testing hypotheses, and coming to a firm conclusion that relates SA outcomes to organisational performance (Cragg et al., 2002, Pollalis, 2003, Schwarz et al., 2010). Indeed, it is not surprising to see the predominance of positivist research in the extant SA literature, given that most SA research has been located at the meso-level praxis, as exemplified in (2.4.5). In more explicit terms, since SA is dominantly regarded as a meso praxis by which practitioners go about developing SA for the purpose of organisational benefit, it is predictable to see the implication of this meso-view on the methodological design through the narrow examinations of how SA is merely correlated with organisational performance. A further point of interest, as drawn from Table 3-2 above, concerns the dominance of US studies in SA publications,

with US studies accounting for 46% of total contributions to the SA literature. Of these US contributions, 72.5% consisted in positivist-oriented research. This may go some way to supporting the notion that the editorial issues prevalent in IS research, as discussed previously, may have offered little room for non-positivist research to take place in SA research.

Research based on interpretive assumptions accounts for 31% of empirical studies in the sample chosen for the SLR of SA research. Noticeably, the disparity between positivist and interpretive assumptions in SA research does not display the same level of divergence when compared with the chief domain of IS. Indeed, to some extent, interpretivism is an integral part of SA research rather than a meagre one. Interestingly, a relatively high number of interpretive contributions to SA came from US publications, thus indicating possible changes in their policy regarding the acceptability of non-positivist research. This is followed by interpretive contributions from the rest of the world, including and not limited to, Australia, Canada and Taiwan. Apparently, the relatively low level of interpretive contributions from EU publications, known to have more pluralist epistemological policies, could be attributable to the comparatively low overall rate of contributions made by these publications.

In conclusion, the epistemological traditions within the SA literature appear to be, to some extent, divided between positivism and interpretivism. The fact remains that the predominance of positivist assumption in the field of SA is due to US-based publications representing nearly half of contributions to the field of SA (46%), of which positivist studies form approximately 72.5% of total publications output. The next major insight is that unlike IS research, the SA community has arguably shown greater awareness of interpretivism. It seems that alternative outlets, i.e. European and international outlets provided the avenue for SA scholars to submit their interpretive works. This can be observed in the fact that approximately 60% of total interpretivist contributions came from non-US based publications. Furthermore, in his paper on the emergence of interpretivism in IS research, Walsham (1995a; P. 391) predicted that those US journals with an explicit positivist assumption have their own perils and that they "*in a few years' time may well have shifted*". His prediction may explain why we see the presence of SA interpretive research in these US-based publications, suggesting a possible change in their editorial policy towards accepting interpretivism.

3.2.3.2.4 Epistemological traditions in SAP

Since SAP focuses its analytical attention on what practitioners do, it actually departs from variance-model approaches 'that search for a set of dependent variables' and quantitative-based surveys, which are both typical of positivist assumption (Johnson et al., 2003, Johnson

et al., 2007, Tsoukas, 2010). This reflects the type of knowledge that the SAP perspective aims to capture the in-vivo experience of what practitioners do, while positivism is limited in its capacity to unveil the micro doing because it deals with knowledge as being irrelative to our human perceptions (Spender, 1998). So far as this is the case, it is not surprising to report that my analysis of the 24 empirical studies that formed part of the narrative review, as presented in (2.3), indicates that the field of SAP is dominated by interpretive inquiry. This result does not run counter with SAP advocates like Jarzabkowski (2003), Whittington (2006a) and Johnson et al. (2007) who have tended to rely on an interpretive assumption to peer into the everyday of strategizing.

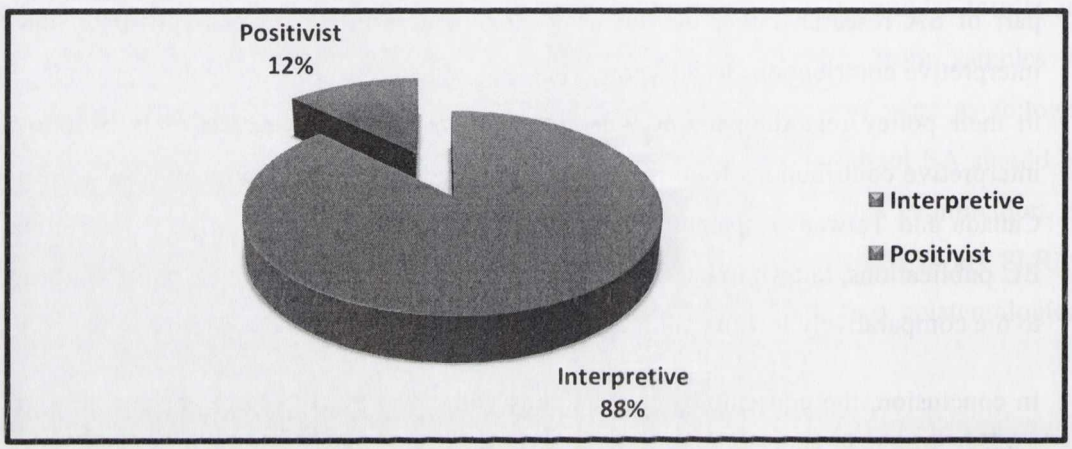


Figure 3-2 Shows my analysis of SAP epistemological traditions based on 24 empirical studies selected for my narrative review as presented in (2.3)

As depicted in Figure 3-2, interpretive research accounts for approximately 88% of a total of 24 empirical studies selected for the narrative review on SAP literature. These studies were inspired by interpretive assumption for the purpose of making sense of the phenomena being studied by analysing practitioners' doings, and interpreting their interpretations of the rationale for their actions according to the context these practitioners are put in (Jarzabkowski, 2003, Jarzabkowski, 2004, Whittington, 2006a). However, the most obvious fact about the presence of positivist in the SAP perspective (which represent 12% of studies selected for review) is that those studies are motivated by aims that break with what SAP endeavours towards in terms of uncovering what practitioners do. For instance, Hodgkinson et al. (2006) were primarily concerned with participants' experiences in strategic workshops rather than with unveiling what they do in these particular episodes. Likewise, Gunn and Williams (2007) acknowledge that their study appears to be based on positivist constructs with its focus on investigating the reasons behind advocating the use of strategic tools, and they admit that further in-depth analysis is required to unveil what tools might be appropriate in particular contexts; seemingly suggesting thereby that their positivist assumption was not up to task in capturing what SAP attempts to reveal when examining tools. Similarly, Hansen

(2011) hypothesised that different kinds of variables influence the application of strategic tools in Danish upper secondary schools, rather than examining how tools are used in practice by the school during their strategizing activities.

In light of the above observations, it could be argued now that the epistemological stance for SAP literature tends to be strongly weighted towards interpretive. This is perhaps due to the nature of the phenomena under study, which require an epistemological approach that prepares researchers for the task of understanding practitioners' doings as enacted in their own reality, accessing their interpretations, and filtering them through researchers' own conceptual apparatus (Walsham, 1995b, Doolin, 1998, Walsham, 2006). I argue that a positivist assumption has been adopted with only partial success in the field of SAP in specific circumstances as discussed above, thus suggesting the insufficiency of adopting such an assumption to study the realm of what people actually do in practice.

3.2.3.2.5 Epistemological options: closing remark

The interpretivist assumption is adopted to investigate 'How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?'. This choice is grounded on the following two bases. **First**, to achieve consistency between paradigm choices at this stage, it is essential to align the epistemological assumption with the previously selected ontological position (Burrell and Morgan, 1979, Johnson et al., 2007, Huff et al., 2010). Here it can be predicted that the chosen taller-doing ontology in (3.2.3.1), with its emphasis on praxis, would demand an epistemological approach with the capacity to capture and recognise praxis empirically. This would imply that positivist observation, seeking knowledge by drawing on natural science, is inadequate in investigating the aligning praxis of IS executives in this thesis. Therefore, the epistemology of interpretivism is far more appropriate for this research, due to SAP requirement, on the one hand, of close involvement with practitioners in their own context (Balogun et al., 2003, Johnson et al., 2003, Chia and Rasche, 2010) and, on the other hand, because, as pointed out by Doolin (1996; P. 302), interpretivism offers a "*legitimate basis for understanding human activities*", thereby signalling its suitability for inquiry into my research question.

Second, as alluded in the outcomes of the SLR of SA, Ciborra (1997; P. 70) gave a critique of the dominance of positivist assumption in the extant SA literature, placing emphasis on the shortcomings of its scientific-style empirical programme. Such a style of research estranges us from how SA is actually constituted by practitioners in their everyday practices. Therefore, he concluded his paper with a call for a "*different style of research*" that seeks the basic evidence of how SA presents itself in the worldliness of practitioners' experiences.

Furthermore, a more attentive reflection on this positivist research style reveals one of the primary issues in SA literature, as identified in (2.4.6.6) – the overemphasis on SA outcomes. Thus, falling short in capturing how SA is enacted by practitioners within, and as part of, the specific context of its use (Wilson et al., 2013). It is a research style that has been criticised as not giving the full picture of the reality of how SA is effectuated by practitioners in their everyday experience (Croteau et al., 2001) and brings us no nearer to understand aligning (Campbell, 2005). As such, conducting my thesis through interpretive assumption may go some way to providing "*insights that have not been possible with prior mostly positivist (SA) research*" (Campbell, 2005; P. 658). This is because interpretive assumption would reduce the distance brought about by positivism, by means of necessitating the direct engagement with practitioners in their everyday social world (Lee, 1991, Lawrence, 2010). Thereby suggesting the suitability of such assumption to investigate my own organisation towards developing an understanding on the aligning praxis of IS executives as contextually effectuated in their day-to-day life experiences.

3.2.3.3 Methodological choices: qualitative Case study

The methodological decision is concerned with the procedures by which the researcher intends to find out about the phenomena being studied (Guba, 1990, Guba and Lincoln, 1994). Essentially, for the purpose of consistency, this methodological decision involves two co-dependent fundamentals: first, it cannot be made in isolation from the answer already given to epistemology (Guba and Lincoln, 1994); second, this methodological decision should be underpinned by the research method: Quantitative or Qualitative. This method choice is constrained, again, by the epistemological answer (Guba and Lincoln, 1994, Weber, 2004). This implies that the methodological decision, epistemological position and research method are not mutually exclusive. To illustrate this relationship, Villiers (2005) has mapped these three constructs together, as shown in Figure 3-3 below.

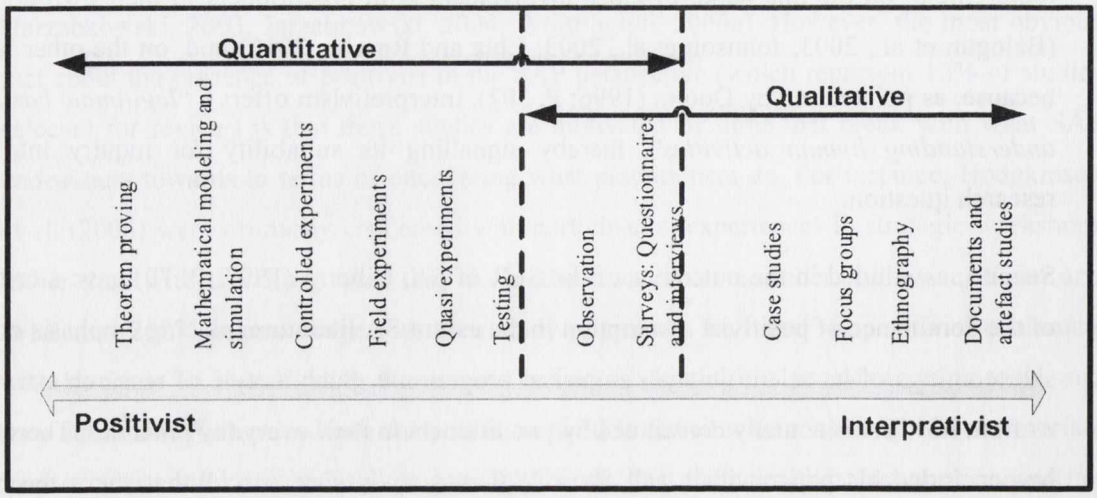


Figure 3-3 Adopted from Villiers (2005)

3.2.3.3.1 Quantitative methods

As depicted in Figure 3-3, quantitative methods are usually thought to reflect the positivist assumption (Chen and Hirschheim, 2004, Avison et al., 2008). Here, the logic of inquiry is deductive, which means that theory is the starting point for formulating hypotheses and propositions that will be tested in the empirical research (Boeije, 2010). In quantitative studies, natural science strategies such as surveys and experiments are employed with research methodologies such as questionnaires, observations and occasionally case studies (Myers, 1997, Tsang, 2014). Quantitative research takes the form of numerical data representations to explain the phenomena being studied and therefore uses statistical test techniques to say something about the phenomenon tested (Boeije, 2010, Denscombe, 2014).

3.2.3.3.2 Qualitative methods

Qualitative methods, on the other hand, reflect the interpretivist position (Chen and Hirschheim, 2004, Avison et al., 2008). These are inductive methods (Kaplan and Maxwell, 2005) with the goal of understanding phenomena by investigating the perspectives and meanings of the people in the natural settings within which they act (Kaplan and Maxwell, 2005, Boeije, 2010). They thus enable researchers to make contact with the people involved in the situation to the extent that is necessary to understand the phenomenon as it presents itself in the field (Boeije, 2010). Qualitative research takes the form of word-based data rather than numbers and is conducted through research methodologies such as Case Studies, Grounded Theory, Action Research and Ethnography (Myers, 1997, Denscombe, 2014, Tsang, 2014). Qualitative data is gathered through interviews, observations and documents (Kaplan and Maxwell, 2005, Myers and Newman, 2007), and then these data are analysed and interpreted by qualitative analytical techniques (Kaplan and Maxwell, 2005).

3.2.3.3.3 Methodological choices: closing remarks

In this thesis, in order to gain reliable insight into 'How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?", the qualitative case-based methodology is deemed appropriate based on the following set of justifications. To begin with, by deciding on the interpretive position, I am settled on a firm foundation to access the perspectives and meanings of IS executives' aligning as enacted in their natural setting. This interpretive account on aligning from the perspective of and based on the meaning of participants does imply that the data required is of a words-based nature, rather than numerical (Kaplan and Duchon, 1988), thus suggesting that qualitative methods are more appropriate for this thesis. The choice of qualitative methods is legitimized on the following bases: first, that SAP based inquiry is typically

qualitative, given the need for analysis of in-depth and rich data on the practitioners, praxis and practices at multiple contextual levels (Johnson et al., 2007, Jarzabkowski and Spee, 2009, Splitter and Seidl, 2011); second: given that the notion of aligning has not been examined in the extant SA literature, qualitative data better live up to such an explorative type of study, which aims at theory development (Boeije, 2010).

Subsequently, within the wider methodological choices within the qualitative method, it is of paramount importance that the chosen methodology to be lined up with the research question that acts as "*the linchpin of the research process*" (Bryman, 2007; P. 5). On such basis, I adopted the 'case study methodology' for this research in the context of the following set of preferences relative to the question posed in this thesis:

1- Often considered as one form of qualitative research informed by interpretive assumption (Chua, 1986, Tsang, 2014).
2- Suitable for answering my explorative 'HOW' type question (Brown, 1998, Eisenhardt and GraeBner, 2007).
3- Deliver on theory building objective since no existing research on SA currently addresses my research question (Eisenhardt, 1989).
4- Direct the research procedures towards studying a phenomenon in its natural setting and context (Silverman, 1998, Farquhar, 2012).
5- Embrace an investigation to capture the actual practices, meanings and interpretations that practitioners ascribe to the phenomena of SA under study (Johnson et al., 2006, Tsang, 2014).

In details, the case methodology, in its qualitative forms, is often acknowledged as the vehicle for interpretive investigations (Chua, 1986, Walsham, 1995b). The methodology in this manner is employed to generate an in-depth understanding of a phenomenon in its real-life context (Crowe et al., 2011, Hoon, 2013, Tsang, 2014). It is thus carried out in close interaction with practitioners in the field to understand what goes on in the setting, and to deal with the phenomenon being studied in its real situation (Gibbert et al., 2008). Case study, therefore, represents a methodology that is ideally suited for research questions, like in this thesis, that are connected to context and situation (Farquhar, 2012).

Case methodology lends itself well to capturing how, what and why explorative questions (Crowe et al., 2011, Farquhar, 2012, Denscombe, 2014). It addresses these types of questions by investigating one or a small set of cases, digging deep into many details within each case and context and gaining an understanding of the phenomena through multiple data sources (Farquhar, 2012). By simultaneously examining the detail of each case and the surrounding situation, case studies present researchers with an opportunity to link the micro of individuals' actions to the meso and macro organisational levels (Neuman, 2011). Moreover,

case study research is often viewed as particularly appropriate for building theory about phenomena where a theoretical base was previously lacking (Doolin, 1996, Eisenhardt and GraeBner, 2007). Adopters of case research are required to make frequent visits to the field site to draw on the actual meanings, and interpretations practitioners attribute to the phenomena being studied (Walsham, 1995b, Tsang, 2014). The most promising feature of the case study in this sense, therefore, is that it facilitates theoretical understanding and theory building by drawing on actual practices as they present themselves in natural settings (Farquhar, 2012, Denscombe, 2014).

The fact remains, however, that the case study methodology in itself is overarching. Thus, for the purpose of this thesis, the methodology is exposed to adaption for which the SAP lens acts as a sharpen tool to provide precision on how the case study methodology is employed in the manner that is tied to SAP principles for empirical research as outlined in (3.2.2). Therefore, the design of case study underpinned by SAP lens for this thesis is a matter to be dealt with in details within the subsequent main section of Research Design (3.3).

3.2.3.4 Research paradigms: closing remark

This section has presented discussions related to the three elements of the research paradigms: ontology, epistemology and methodology. While these have been discussed separately, it was evident that in order to assemble a full picture of the research paradigms, it is necessary to make compatible choices from among the wider range of assumptions that emerge from the various elements of the research paradigms. On the ontological level, I opted for the Taller-doing ontology, which is a choice that lines up with my argument in chapter (2) and fits coherently with my inquiring into aligning of IS executives. I followed this discussion by outlining the epistemological assumptions available to the researcher, arguing for interpretivism on the basis of the ontological choice already made and the nature of my research question, which necessitates close proximity to and engagement with practitioners in the work field. I followed this dissection by showing how a number of principles in my research call in some way for case-based methodology as an appropriate choice for attempting to answer my research question.

3.2.4 Research strategy: closing remark

This section presented the research strategy that guides the execution of this thesis. In 3.2.2, I strived to attain an understandable account on the nature of SAP based inquiry. But in the same time, I literally admitted that this understanding would incontrovertibly require compatible decisions in research paradigms before embarking on research design. As outline in 3.2.3, I defined the set of beliefs that underpin my research. The overall logical conclusion from this particular sub-section is that the interpretivist epistemological assumption to be

employed to the inquiry into my research question. This assumption is supported by the methodological choice of a case-based study. The task now, in the subsequent section of the research design, is to give a full account of the particular form the case study employed in this thesis will take. SAP-based inquiry, in particular, requires the methodological design to include particular contours, thus emphasising that case-based study, in SAP lens, is not quite a logical linear process; rather, it involves maximising the utilisation of case study features and executing them towards generating substantive inquiry into my research question through SAP lens.

3.3 Research design

3.3.1 Purpose & Overview

The research design is concerned with the structure of an enquiry by means of providing an action plan for collecting, interpreting and analysing evidence in consistency with the pre-established research strategy (Boeije, 2010, Harwell, 2011, Yin, 2014). In the previous section (3.2), I outlined that the explorative nature of the research question and the SAP lens underpinning this require collected data to be rich, context-specific and generated from actual practices. Then, I defined the set of beliefs that underpin my research, which provide the framework for the chosen case study methodology. In this section (3.3), I undertook to tweak the case study methodology, using SAP lens as a sharpen tool, towards a design that ensures the obtained evidence would enable answering my research question in the manner that is tied with what SAP perspective endeavours towards. This particular section (3.3) is organised into six sub-sections.

In (3.3.2), I unveiled the application of case-based research in SA and SAP literature. Through this examination, I argue that case-based research, despite its lesser presence in SA research, is desirable when a qualitative and interpretive view is taken, and when SAP's scholars pursued their investigations. In (3.3.3), I moved to discuss the necessity to carry out some forms of theoretical sampling in my case design in the realm of interpretive point of view, as well as SAP perspective. In (3.3.4), I argue that the use of multiple cases as opposed to a single case is more appropriate to the inquiry in research such as mine, which has as its intention the building of theory from these cases. I complement this discussion by deciding on two cases as optimal for my case design on the grounds of my analysis of SAP lens case research practice, and the time frame available for conducting this research as well. In (3.3.5), I review data collection strategies made feasible by case study and develop an organising framework that aims to aid data collection in my research in line with the SAP lens. Following this, in (3.3.6), I outline the procedure by which data analysis is exercised under the case deign of this research. Finally, in (3.3.7), I draw this section to close and offer a link to the next section of how this case design was executed in practice.

3.3.2 The application of case study methodology

Having said that the case methodology is appropriate for my research question, I undertook to conduct a review to examine to what extent the case-based research is valued within SA and SAP literature. Such a review may go some way to affirm that my choice of case methodology acted as an accepted and valid research methodology within the research domain of SA at one level. And, on the other level, indicate to the suitability of case

methodology, that was decided upon among SAP researchers, to deliver on what SAP lens endeavours towards.

To start with, from my examination of the 87 empirical studies that were identified in the SLR on SA (2.4.4), it can be argued that SA case-based researchers can legitimise their methodological choice on the basis of case study's being only second in predominance to survey methodology – as shown in Table 3-3 below. One caveat to mention here is that we should not neglect to note that the predominance of survey-based inquiry is attributable to the positivist assumption, as reflected previously in (3.2.3.2.3). Nonetheless, if one was to closely inspect case-based research in the extant SA literature, we can say with relative certainty that case methodology was overwhelmingly adopted over other qualitative methodologies when an interpretivist view is taken.

Survey	Case study		Grounded theory	Action research	Mix method	Others
	Interpretivist	Positivist				
	17	3				
53	20		3	1	7	3
	Total SA empirical studies: 87					

Table 3-3 Shows the application of case study in SA research as found in my SLR

In regard to the extant SAP literature, the wide prevalence of case-based research in SAP literature would require an unpacking of the features of case study methodology that make it advantageous for SAP-based inquiry. The Table 3-4 below indicates that case research accounts for 58% (14 studies) of SAP empirical studies based on the sample frame selected for the narrative review of the SAP perspective in (2.3).

Case study	Ethnography	In-depth interviews	Survey
14	3	4	3
Total SAP empirical studies: 24			

Table 3-4 Shows the predominance of case based research in the SAP perspective

It is interesting to note that the closeness to practitioners achieved through an in-depth ethnographic methodology is strongly emphasised in the SAP perspective (Chia and MacKay, 2007, Rasche and Chia, 2009). Vehement advocates for such a methodology argue that SAP consists in an everyday activity that requires researchers to conduct participant observations, to trace actions and to understand their meanings in different situations, rather than to act as interpreters of participants' meanings and intentions (Rasche and Chia, 2009). Arguably, the

richness of the data which needs to be collected from practitioners and their practices has led researchers to endorse such a direction. While there is no doubt that SAP researchers tend to conduct an in-depth investigation into their focus area, nonetheless, that does not actually mean that ethnography is the only means by which to pursue such research. The predominance of case research in SAP literature, as shown in Table 3-4 above, may indicate to some extent that SAP case researchers trade off the ethnographical perspective, which endorses participant observations only, despite its unique contribution (Sanday, 1979, Myers, 1997), and work on a wide set of data obtained through multiple methods facilitated by a case methodology. In this vein, SAP case researchers draw on interviews, observation (participant and non-participant) and extensive documentation analysis, increasing the variety of evidence to support their examination. Thus, the richness desired in theoretical works that endorse ethnography has actually been achieved through case research. This suggests that the case methodology is fit for purpose, and allows SAP scholars to satisfactorily explore all SAP's key insights.

In closing this sub-section, it was clearly evident that the case methodology has its own grounds in SA domain when qualitative and interpretive research is pursued. This is coupled with its predominance among SAP community as a research practice to deliver on what SAP lens endeavours towards. Thus, my engagement into case methodology in this thesis render its own right because it fits with my research question, and indeed present itself as an accepted research methodology within SA and SAP lens as well.

3.3.3 Theoretical sampling as essential

The significance of sampling procedures for the design of case methodology has been acknowledged in the literature from a variety of angles. Researchers do sampling when their research question is of an explorative nature and intended to develop theory (Eisenhardt and GraeBner, 2007, Neuman, 2011). In this vein, sampling means ensuring that the selected case(s) is/are particularly suitable for the research topic (Walsham, 2006, Neuman, 2011), provide theoretical insight for theory development (Eisenhardt and GraeBner, 2007) and maximize the value of the information from which inferences must be drawn (Johnson et al., 2007). In addition, sampling case site(s) - especially as practised in the interpretive assumption and SAP perspective – has been an integral, if not the most important, part in the design of case methodology. For interpretivist, as pointed out by Walsham (2006; P. 322), not "*any organisation is OK [for interpretivist]*". Likewise, SAP advocates emphasise the importance of purposeful case sites which has been demonstrated under SAP guiding principles for research in 3.2.2.2

The above argument is to affirm that the execution of case methodology in this thesis, within the realm of interpretivism and the SAP lens, implies that the chosen case(s) need to undergo purposeful sampling procedures rather than being randomly sampled from a population. Technically, the sampling of a single case site is straightforward in case methodology. Yin (2014), for instance, put forward five criteria for sampling single case, namely, that the case should be critical, unusual, common, revelatory or longitudinal. However, in situations where the research objectives call for multiple cases, the sampling strategy is based less on the uniqueness of a given case, and more on the potential for contribution to theory development within the set of cases (Eisenhardt and GraeBner, 2007). In this sense, Neuman (2011; P. 241) notes that in interpretive research, just as the SAP perspective advocates (Johnson et al., 2007), we are more likely to pick a few cases that essentially "*open up new theoretical insights*". This is to say that the design of multiple cases, in the interpretive and SAP lens realm, requires a sampling strategy that will ensure that the selected case(s), which typically involve a small number of sites, are especially informative for the research inquiry (Johnson et al., 2007).

3.3.4 Number of case(s) for theory building

As demonstrated before, case methodology is highly relevant for research intending to develop theory (Eisenhardt, 1989, Eisenhardt and GraeBner, 2007, Tsang, 2014), with relevant theory then being generated from the understanding gained through the actual practices (Silverman, 1998, Farquhar, 2012). While I discussed in the previous section (3.3.2) the imperative role of sampling strategy in my case design, I turn in this section to consider the number of cases required to develop theory in this thesis.

We should not dismiss the richness of description provided nor the in-depth nature of investigation facilitated by the single-case study (Leavy, 1994, Eisenhardt and GraeBner, 2007). The only fear in terms of conducting single-case research is that the case may not turn out to be quite the case that the researcher anticipated in terms of the uniqueness and criticality of the case (Farquhar, 2012). In this sense, Yin (2014; P. 64) warns that single case makes the researcher vulnerable in the sense that the researcher has "*put all [his/her] eggs in one basket*". This may explain why Leavy (1994) stated that multiple cases are a less risky approach to theory development. The view of Yin (2014) and Leavy (1994) is fully supported by Benbasat et al. (1987) and Eisenhardt and GraeBner (2007) who contend that multiple cases provide a stronger base for theory building. Multiple cases indeed create more robust theory because it is grounded in various forms of empirical evidence. On these grounds, I would like to opt for stronger evidential basis facilitated by multiple cases design; and this decision is relative to my research question that is of explorative nature and intends for theory development.

Now, the exact number of cases which need to be employed in multiple-case studies is left down to researchers, who must seek a balance between the depth and the breadth required in their investigations (Leavy, 1994). For instance, Yin (2014; P. 64), in response to the blunt criticism directed at single-case research, namely that putting all research efforts and resources into one case is a gamble as outlined above, stated that *" having at least two cases should be your goal"*. Similarly, Johnson et al. (2007), without giving an exact number, argued for a relatively small number of cases for SAP based inquiry, believing this to maximise the potential richness and insight of the study. In this thesis that is underpinned by SAP lens, a firm decision related to the optimal number of cases needed is grounded on my examination of SAP case research practice. It is clearly evident in Table 3-5 that when multiple cases are employed, the number usually ranges between two and three cases, thus suggesting a preference on the part of SAP researchers for in-depth investigations through a small number of cases, over opting for breadth through a larger number of cases.

	Single case	**Two-thee cases**	**More that 3**
Number of studies	8	5	1
	Total case-based research in SAP literature: 14 studies		

Table 3-5 Shows the number of cases employed in SAP literature

On the ground of my analysis of SAP lens case research practice, as shown above, I opted for two cases for my research design, given that SAP lens requires close proximity with practitioners in the field for in-depth data purpose. This decision is coupled with the anticipation that in-depth data from two cases fit within the scope of my research in terms of the timeframe available for doctoral research.

3.3.5 Data collection 'Multi-levels strategy'

Case methodology encompasses a variety of data sources, i.e. interviews, documentations, archival data, survey data, observation and participations (Yin, 2014). However, researchers need to maintain coherence between the objective of the research question and data collection strategy (Farquhar, 2012). To this end, I developed an organising framework as informed by SAP lens (Figure 3-4 below) to aid data collection in this thesis with the view to provide an explicit report on how data will be collected to inform each level and unit of analysis in this thesis. The conclusive goal of this framework is to keep an eye on the primary unit of analysis of IS executives' engagement in the practice of aligning business and IS strategies. But this primary unit is embedded within the second level of analysis, that of the meso-organisational practices. The two preceding levels are part of the macro-organisational practices. Thus, the framework observes the requirement in SAP perspective to collect data

from multi levels while showing how each unit of analysis in each level is to be nurtured with data in this thesis.



Figure 3-4 Shows an organizing framework to aid data collection strategy, which is lined up with the SAP perspective.

As depicted in Figure 3-4, the main data sources in this research design involve the conducting of interviews and the collection of internal and external documentations. This form of data-combination complements each other in valuable ways. First, interviews has been the principal data source for SAP case-based inquiry to evoke what practitioners do in practice and it has been consistently used in conjunction with other secondary data sources (Johnson et al., 2007, Rasche and Chia, 2009, Johnson et al., 2010b, Rouleau, 2013). Second, as elucidated by Leavy (1994), interviews can lead to the unearthing of further secondary data, which in turn often leads to fresh lines of inquiry to be pursued in subsequent interviews. Third, the use of this combination between primary and secondary sources may indicate that case research, like the SAP perspective, pursues the principle of multiple sources. This use of multiple sources of evidence allows researchers to establish convergent evidence and to improve the credibility on their findings in that these are based on more than a single source of evidence (Farquhar, 2012, Yin, 2014). On these grounds, I shall now discuss each of the two sources, namely interviews and documentation; to unveil their capabilities to capture evidence relative to the appropriate level of inquiry and unit of analysis, namely, the micro level of aligning praxis, meso organisational level practices and macro organisational practices.

3.3.5.1 Multi-levels Interviews 'semi-structured form'

The interview is a general term for several types that commonly include: unstructured, semi-structured and structured interviews (Boeije, 2010). The nature of the research question and

the objective are the main determinants for the type of interviews needed in the research (Farquhar, 2012). For a research question that is explorative and which aims to interpretably understand phenomena from the perspective of participants, interviews are usually not entirely pre-planned with respect to the question, sequence and answers; neither are they left entirely open. Indeed, understanding what is happening emerges through the researcher's preparation of a list of themes and questions to be covered at some point during the interview. This type of interview that fits explorative, interpretive and qualitative research, like in this thesis, is known as 'semi-structured' (Leavy, 1994, Saunders et al., 2009, Boeije, 2010).

The real value of semi-structured interview is its capability to inform understanding of what practitioners do, thus informing the micro level in Figure 3-4 above. It does so, as demonstrated by Paroutis and Pettigrew (2007), on the assumption that practitioners are knowledgeable, able to express in retrospect their activities, and able provide an accurate description of what they do. It is a technique that has been predominantly employed among the SAP community to gain insight into strategizing. Therein, understanding strategizing would have entailed more focused interview questions about practitioners' actions, their interpretations of these actions, and how they perceive their own actions within meso and macro practices (Orlikowski, 2002, Jarzabkowski, 2008, Jarzabkowski and Balogun, 2009). In this sense, it is the flexibility afforded by semi-structured interview that have equipped SAP researchers with toolkit to omit or add questions in particular interviews, depending on the specific meso and macro organisational practices that are encountered in relation to strategizing praxis (Jarzabkowski et al., 2007, Saunders et al., 2009). Moreover, this flexibility can be used to inform the meso practices in Figure 3-4 as well. In this vein, Yin (2014) pointed out the acceptability of framing questions about the organisation rather than the individual, obtaining, in this way, a kind of evidence from the individual about the organisational practices. Indeed, this type of interview, which involves a variety of questions and discussions would necessitate the capturing of what practitioners say through audio-recording of the conversations, of course, where feasible (Saunders et al., 2009).

3.3.5.2 Multi-levels documentations collection:

Having established the suitability of semi-structured interviews for this thesis, a richer insight is then gained by returning to documentary sources as an essential supplement to deepen contextual understanding (Saunders et al., 2009). For enriching the meso practices in Figure 3-4 above, the most useful data are likely to be proprietary to organisations, and thus include minutes of meetings, strategy documents, reports, and reviews. These types of secondary data have become more important in the SAP perspective as meso practices that impinge upon micro praxis in organisations (Huff et al., 2010). Indeed, Johnson et al. (2007) suggest paying attention to multiple versions of these documentations as they may reveal actions and

pinpoint changes in actions. Moreover, the SAP perspective expands documentary data to include extra-organisational sources with the view that they can play a role in framing activities in organisations (Jarzabkowski, 2008); thereby informing the macro practices in Figure 3-4 above. In this context, as emphasised by Charmaz (2006) and Huff et al. (2010), it is worth including those extra-organisational data that practitioners spend time analysing, since this may provide explanations of their actions on the basis of this larger data set.

3.3.6 Data analysis

So far, I have argued for the suitability of case methodology in this thesis that intends to build theory relative to the research question. I have shown how the SAP lens acted as a sharpening tool for the case design thus far. When it comes to data analysis, however, the case methodology in itself, when enacted within the realm of interpretivism, provides insufficient data analysis guidelines for research which involves theory generation endeavours (Darke et al., 1998, Fernández, 2004, Andrade, 2009, Halaweh, 2012). As a result, it has become imperative for case researchers faced with these challenges to select, justify and integrate from among the established qualitative data analysis strategies into the design of case methodology to accomplish their theorising endeavours (Darke et al., 1998, Halaweh, 2012). Likewise, the SAP perspective is still progressively developing its methodological base, thus providing no defined procedures as to how to analyse and theorise through the staggering volume and variety of data collected (Balogun et al., 2003, Jarzabkowski et al., 2007). Therefore, SAP advocates, in their data analysis practices, have drawn upon what is already known to inform their theorising from the case study data (Jarzabkowski, 2003, Hoon, 2007, Hendry et al., 2010).

The above discussion did in itself justify the need for drawing upon an established procedure for an analysis of the case data in this thesis. To this end, this section of data analysis is organised into four sub-sections. In (3.3.6.1), I demonstrated that tapping into the SAP lens underpinning this thesis meant that theory building endeavours cannot be neatly inductive and, instead, an abduction form of inference is more relevant. Following this, in (3.3.6.2), I argue for the suitability of Grounded Theory (GT) as a method for data analysis in this thesis, rather than a methodology to drive the entire research process. In (3.3.6.3), I opt for the constructivist approach to GT for its compatibility with the interpretivist view taken by me in this thesis. Finally, in (3.3.6.4), I argue that the data analysis herein is not confined to the conventional practice of coding and, instead, is supplemented by the notion of 'writing' as a method of knowing.

3.3.6.1 Abductive form of inference

Conventional readings on theory building from qualitative and interpretive case research are often portrayed to ask researchers to enter the field of inquiry without preconceptions to inductively derive theory from data without having them filtered through prior theoretical ideas (Glaser, 1965, Eisenhardt, 1989). It thus speaks to the view that the trustworthiness of theory yielded from such an inquiry lies in the extent to which researchers draw back from any predetermined views primarily associated with theory testing research (Andrade, 2009). However, this view has been criticised for being rigid as to overlook the inevitable contribution of researchers' preconceptions (however amorphous) to undergird the development of theory in their research (Klag and Langley, 2013). In fact, contemporary views on theory building from such an inquiry have tended to argue that it is neither possible nor desirable to enter into fieldwork without preconceptions having been determined by a literature review (Martin and Turner, 1986, Fernández, 2004, Charmaz, 2006, Mills et al., 2006).

Siggelkow (2007; P. 21) states that it seems inevitable that "*our observations [are] guided and influenced by some initial hunches and frames of reference*" and further intimates that this is to some extent desirable, stating "*an open mind is good; an empty mind is not*". Walsham (1995b) observes that it is possible to access existing knowledge of theory in a particular subject area without being trapped in the view that it represents final truth in the substantive area of study. In this sense, preconceptions seemed to be belted to merely act as a "*sensitising device*" (Klein and Myers, 1999; P. 75) for qualitative and interpretive case researchers to view the world in a certain way. Thus, while contemporary views in theory building acknowledge that preconceptions cannot be wholly abandoned, they ask researchers to avoid premature categorisation by ensuring appropriate use of preconceptions in such a way that they do not derail the emerging theory (Urquhart, 2001, Urquhart and Fernandez, 2006, Hekkala, 2007, Halaweh et al., 2008). At the heart of this argument lies the notion of abduction.

Therefore, concurrent with the development of SAP as a lens underpinning this thesis, the research process here should be envisaged as moving from purely 'inductive' to a form of 'abductive', in that field data and pre-existing SAP theoretical contours are considered in tandem towards theory building in this thesis (Charmaz, 2011, Corley and Gioia, 2011, Klag and Langley, 2013). This abductive form of reasoning might be particularly relevant in examining the aligning of IS executives by tapping on SAP theoretical resources, "*trawling through them, putting them into different relations and arrangements with observations and each other in order to gain some new perspective on data*" (Locke et al., 2004; P. 2). Abduction depends upon some combination of knowing and not knowing, and findings

against existing theories to develop a new theory (Gioia et al., 2012, Gross, 2014). As such, being abductive in this thesis would entitle a balancing act on my side as a researcher to immerse in factual material and data in the fieldwork while being willing to pull from pre-existing SAP theoretical resources. In the context of this thesis, the notion of 3Ps and the multi-level examinations of micro, meso, and macro as put forward in the SAP literature (Jarzabkowski et al., 2007) are mobilized here to solely guide interpretations to make sense of what is observed and ensure that the SAP theoretical contours are not overlooked.

3.3.6.2 Integrating GT method into case design

GT is defined as to "*consist of systematic, yet flexible guidelines for analysing qualitative data to construct theories 'grounded' in the data themselves*" (Charmaz, 2006; P. 2). This generative theory approach fits well with a research question that is of an explorative nature as in this thesis (Martin and Turner, 1986, Orlikowski, 1993, Andrade, 2009, Davis and McDonagh, 2015). Where the purpose is explorative, GT serves as a way to enable theory building that is intimately grounded "in empirical observations of data" (Martin and Turner, 1986; P. 141), that involves actual practices, meanings and interpretations ascribed by practitioners to the phenomena under study (Fernández, 2004, Charmaz, 2006). Intriguingly, GT is comparable to case methodology in that they are both employed for theory building purposes (Rowlands, 2005, Halaweh et al., 2008). Unlike in case methodology, the emphasis within GT is on the systematic set of data analytical procedures which are employed with a view to developing theory relevant to the substantive area under consideration (Charmaz, 2006, Davis and McDonagh, 2015). In this sense, GT overcomes the limitations associated with lack of guidance on theory generation from case studies as alluded to previously. Hence, it is not surprising to see the integration of GT into case design becoming increasingly common among case study researchers (Darke et al., 1998, Fernández, 2004, Andrade, 2009, Müller and Olbrich, 2011, Halaweh, 2012).

The degree of GT usage in the case design varies based on the objective of the research question (Fook, 2002, Kawulich, 2004). As exercised within the IS domain, GT has been used as a methodology to guide the entire research process, or as a method to merely instruct data analysis. Following their review of IS papers published across eight journals, Müller and Olbrich (2011) selected a set of 27 exemplary articles that claimed to have drawn upon GT. They found that 15 out of the 27 papers pursued GT as a coding method for data analysis rather than a methodology to drive the entire research process for generating theory. Similarly, Matavire and Brown (2011) reviewed a set of IS articles, across eight journal outlets through the period 1985-2008 that claimed to have followed a GT approach. They indicated that the application of GT techniques, typically for data analysis purposes, was discernible in 34 out of 76 papers and thus GT as a method represented the most common

approach within IS case research practice. Indeed, there is nothing wrong per se with either practices in IS research. On the one hand, as a method, GT acts to "complement other approaches [...] rather than stand in opposition to them" (Charmaz, 2006; P. 9). As a methodology, on the other hand, GT takes root in its origins as an approach for theory building from evidence existing in the data (Martin and Turner, 1986, Andrade, 2009). However, the criticism levelled at IS researchers who use GT as a method or methodology was that they do not soundly and logically demonstrate and justify their use of GT for either of those purposes (Hekkala, 2007, Halaweh, 2012, O'Connor, 2012).

Against the above backdrop, I argue for the suitability of GT as a 'method' for data analysis into the case design for this thesis based on the following two primary reasons. **First**, in the GT method nothing happens in a vacuum, but ultimately in relation to the context surrounding the phenomena. Therefore, any analysis conducted on practitioner actions through the GT method proceeds under the premise that these actions are contextually situated in time, place, and circumstance (Martin and Turner, 1986, Fook, 2002, Hughes and Jones, 2003, Charmaz, 2006). Corbin and Strauss (1990, p. 419) used the term "determinism" to argue that GT adopters whose focus of study are practitioners must ensure the necessary means to determine how practitioners under investigation actively respond to their relevant context. Such a convocation lends itself well to what the SAP lens endeavours towards by offering a ground for the inclusion of the wider contextual levels, which suffuses practitioners and their activities into data analysis. **Second**, the fundamental contribution of the GT method resides in offering a guide for interpretive theorising as in this thesis. In this sense, as nicely captured by Charmaz (2006; P. 10), through the GT method "*we construct our grounded theories through our involvements and interactions with people [and] perspectives*". In this sense, it serves as a way to analyse data yielded from engagement with practitioners in a natural setting, connecting a multiplicity of perspectives and constructing an understanding of the phenomena within the chosen setting (Hughes and Jones, 2003, Rowlands, 2005, Hekkala, 2007).

3.3.6.3 Constructivist approach on GT coding method

The general principles underpinning the GT method is that the data analysis is undertaken through a coding procedure (Charmaz, 1996, Mills et al., 2006, Hekkala, 2007) which is defined as "*the analytical process through which data are fractured, conceptualised, and integrated to form theory*" (Strauss and Corbin, 1990; P. 3). In this sense, coding within the GT method is an exercise that is closely tied to data while these data are not forced into any pre-existing categories, and no part of it is overlooked due to incompatibility with a pre-determined theoretical model (Urquhart, 2001, Charmaz, 2006, Hekkala, 2007, Charmaz, 2008). Coding in practice, however, can be varied depending on the underlying

epistemological standpoint (positivism vs. interpretivism) held by individual GT theorists while elucidating their different coding guidelines. As a consequence, it became imperative for researchers to demonstrate which stream of GT coding they are adopting in their research (Urquhart, 2001, Matavire and Brown, 2011, Davis and McDonagh, 2015).

The positivist stream in GT is reflected in the works of its original authors, namely, Glaser (1965) and Corbin and Strauss (1990). In this approach, researchers remain distant from research participants, assuming that data exists objectively in the world, and researchers find them and discover theory from them through careful application of and adherence to GT steps (Mills et al., 2006, Davis and McDonagh, 2015). In contrast, the interpretivism standpoint is reflected in the constructivist approach to GT as developed in the work of Charmaz (1996, 2006, 2008). In this stream, constructivist GT fosters the view that neither data nor theories are discovered. Rather, constructivists construct meanings and actions in specific situations from the data, where "*both researchers and research participants interpret [those] meanings and actions*" (Charmaz, 2006; P. 131). Therein lies abductive reasoning, as previously outlined, through which constructivists do more than acknowledging the interpretive work carried out by participants, but also recognizes that the resulting theory is an interpretation of researchers who cannot disavow their prior knowledge and theoretical preconceptions (Mills et al., 2006, Charmaz, 2008). This constructivist approach on GT is prescribed so as to serve audiences in multiple disciplines, including IS, because it combines attention to context, action, and interpretation in its coding procedures, thus producing a dense analysis with explanatory power that is suitable to answer 'how' type questions (Matavire and Brown, 2011).

In this case design, the constructivist approach as reflected in the work of Charmaz (1996, 2006 and 2008) is congruent with this thesis, lying squarely in the interpretive tradition as established in (3.2.3.2). In addition, such analytical guidelines are appealing for the SAP lens that underpins this thesis to the extent that the constructivist approach directs its coding procedures towards the embeddedness of actions and context, thus serving as a toolbox to analyse SAP-based data, paying attention to what practitioners do within their meso and macro organisational practices. Figure 3-5 below shows the coding procedures adopted in this thesis, as outlined by Charmaz (2006).

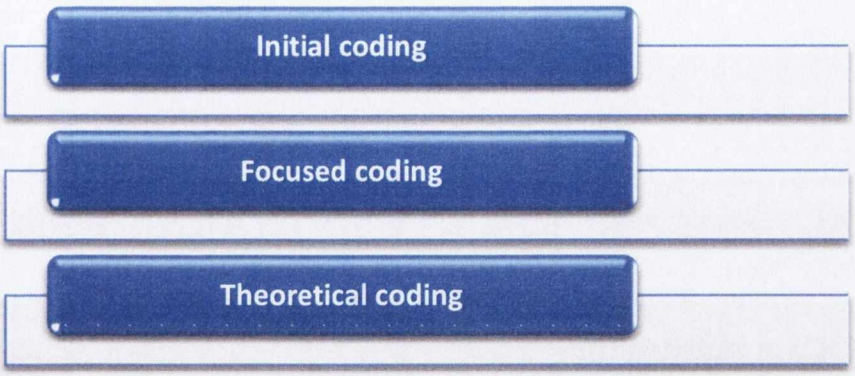


Figure 3-5 Shows Charmaz's (2006) coding guidelines adopted in this thesis

Principally, interpretive researchers work with the conceptualisation of data and not the actual data per se as theories cannot be built around actual incidents or activities as observed in the raw data (Corbin and Strauss, 1990, Carroll and Swatman, 2000, Glaser, 2002). Likewise, the constructivist approach to coding impels interpretivists to make analytical sense of the data by coding analytically instead of descriptively (Charmaz, 1996, Urquhart, 2001, Suddaby, 2006). On this basis, initial coding proceeds with the view that researchers must be open to all possible directions indicated by their reading of the data "*[interpretive researchers must] dig into [...] data to interpret participants' tacit meanings*" (Charmaz, 2006; P. 47) to construct analytical codes in each segment of the data that best capture the researcher's interpretations of actions and events as they situate themselves in the studied setting. In this vein, constructivist GT offers researchers the flexibility to pick up the coding style that is congruent with their research endeavours, e.g. word-by-word, line-by-line or incident-by-incident. The latter is adopted in this thesis for its focus on participant actions as observed in their particular context and incidents. At this coding stage, Charmaz acknowledges that researchers' preconceptions could begin to permeate the analysis, and indeed she applauded an open mind, rather than an empty one, to see what can be learnt while coding. However, she stresses that researchers must be self-critical in ensuring that those preconceptions are working and explicating, rather than covering what is happing in the data.

Focused coding is then pursued with the aim of making decisions about which initial codes make the most analytical sense to categorise the data incisively and completely. Charmaz is of the view that raising codes to category level is part of the development of an analytical framework, as long as researchers make these categories as conceptual as possible while remaining faithful to the data. In this sense, focused codes are more conceptual than incident-by-incident coding, and move towards using the most significant or frequent initial codes to sort, synthesise, integrate, and organise large amounts of data. In focused coding, the preconceptions of researchers are tweaked by moving across data to study and compare practitioner actions and interpretations, in order to form the properties of categories and the

condition under which they are raised. Then, theoretical coding follows these categories closely with a view to specifying the possible relationships between them. These codes are integrative and, as such, weave the fractured story back together coherently and comprehensively in a theoretical direction. In this sense, the theoretical codes render themselves to proceed through all subsequent analytical steps in the research, wherein their meanings are "*embedded in the [telling] narrative*" (Charmaz, 2006; P. 66).

3.3.6.4 Case study writing

Writing and data analysis are often portrayed as mutually exclusive elements in case research. Writing is often envisaged as the final product of the research, in which everything thought over and discovered during analysis is simply summed up and written down (Klag and Langley, 2013). In this regard, the case methodology literature provides a variety of procedures through which research outputs from case studies may be reported (Pettigrew, 1990, Darke et al., 1998, Blonk, 2003, Yin, 2014). However, writing can be viewed as a "*method of knowing*" (Richardson, 1994; P. 973) that is intertwined with conventional data analysis strategies to take us to unforeseen knowledge that *"[we] could not have occupied by [data analysis techniques only]"* (Pierre, 1994; P. 970). Under this linguistic, data analysis is envisaged beyond the mere of coding and sorting of data towards a view that conceptualises data analysis as being supplemented by writing to deliver on a story about the phenomena under investigation that *"[we] come to understand as [we are] writing it, not really before*" (Stake, 1995; P. 124). So the merit of writing as a means rather than as an end product is that case researchers can find a way to obtain contextual understanding about the real setting of the phenomenon being investigated in all its richness and complexity, a process from which the theoretical contribution is expected to emerge (Leavy, 1994, Langley, 1999, Siggelkow, 2007).

For the interpretivist, establishing validating in writing is part of presenting a persuasive written case for readers: "*a purely descriptive case will be a hard sell*" (Siggelkow, 2007; P. 20). To some extent, this suggests that the interpretive account is not limited to its theoretical drivers of inquiry into knowledge, but must also be reflected in its writing orientation (Jones and Borbasi, 2003). Charmaz and Mitchell (1996; P. 299) remind us that interpretivists simultaneously study and write about the situation as encountered and experienced by them and other participants in the field work. Thus, they advocate a style of writing for interpretivists that is evocative of the experiences of participants, while researchers at the same time must be analytical in transcending participant experiences by "*re-envision[ing] it ... bring[ing] fragments of fieldwork time, context, and mood together in a colloquy of the author's several selves - reflecting, witnessing, wondering, accepting - all at once*". Walsham (1995b), with reference to interpretive IS case researchers, argues that their fieldwork

reporting should settle on the elucidation of other participant interpretations within the fieldwork. Thus, the stances that interpretivists assume in their writing entails a delicate balancing act between their voice and enabling participants' accounts to retain a degree of visibility in the final case writing (Sandelowski, 1998, Mills et al., 2006).

Writing in case studies alerts us to the potential consequences of there being a large volume of data inherited through the valuable use of this methodology to investigate phenomena in context (Baxter and Jack, 2008). The issue can be made more difficult when underpinning the case methodology with the SAP lens which requires a type of data collected on multiple levels, as demonstrated previously in (3.3.6). In this regard, Maanen (1988) reminds us that writing is office work and not fieldwork which requires researchers to detach from their immersion into data engagement, but at the same time draw on the result of this engagement. Sandelowski (1998) and Mills et al. (2006) illustrate that researchers whose purpose is to develop theory may organise their writing by using their theoretical codes as emerged from their GT methods. Their view is somehow supported by Siggelkow (2007) who warns case researchers not to lose the reader's interest by presenting case writing that is less relevant to their developed theoretical argument. In this sense, Siggelkow suggests that case researchers, once they have crystallised their theoretical framework, re-visit their written case for refinement and editing of data that is not helpful in the telling of the story. While this view entails an iterative process between the theoretical framework and case writing, Siggelkow is of the view that case writing in itself should be utilised as an additional source for justifying the argument related to the developed framework.

Finally, memo-writing holds pride of place in the view of case writing as a means. Charmaz (1996, 2006) illustrated that memos are the intermediate step between coding and writing drafts of papers. In this sense, memos provide case researchers with a particular way of knowing through thinking of codes and thus writing down their thoughts, capturing connections and comparisons, and distilling all of these analytical conversations in the form of a coherent written piece (Mills et al., 2006, Lempert, 2007, Saldaña, 2009, Klag and Langley, 2013). Through memos, case researchers construct analytic notes to build theoretical ideas around the identified codes (Andrade, 2009). Starting as early as initial coding commences, memos show its concurrence with data analysis coding by keeping case researchers involved in analysis throughout the research process (Charmaz, 2006).

3.3.7 Research design: closing remark

The purpose of this section was to present the case design that is suitable for this thesis. As I hope has been made clear, the SAP lens was used as a sharping tool to deliver greater precision to the overarching case methodology to facilitate the answering of the research

question in a manner that fits with what SAP endeavours towards. The section started, in (3.3.2), with my analysis on the the application of case research in the SA and SAP literature. In this realm, I outlined that the purpose of this analysis was to affirm that my choice of the case methodology was an accepted methodology within SA literature, and emphasised that the choice of this methodology is legitimate to deliver on SAP endeavours based on the methodology's wide prevalence in the SAP literature. Then, in (3.3.3), I outlined the significance of theoretical sampling for the case design in this thesis based on the explorative nature of the research question, and the interpretive and SAP perspective encircled this thesis. Following this, in (3.3.4), I reviewed the number of cases needed for theory building and settled on two cases as optimal for the nature of this research within the timeframe available for doctoral studies.

After that, in (3.3.5), I developed an organising framework to aid data collection in a manner that takes into account the multi-levels nature of the SAP lens that underpins this research. I unveiled the capabilities of interviews and documentations to capture evidence about each level in the organising framework. In (3.3.6), I proceeded to outline the data analysis strategy suitable for this research. I outlined that my approached for theory building is located in the abductive form of inference. Then, in light of insufficient data analysis guidelines for interpretive research with theory generation endeavours and, similarly, in the SAP literature, I outlined the suitability of GT as a method for analysing case data in this research. After this, I opted for the constructivist approach to GT method based on the interpretive assumption underlying this research. Finally, I articulated my approach for case writing in this research. This approach does not consider writing and coding as mutually exclusive. Instead, writing is a method of knowing that supplements coding analysis to enrich our understanding of the phenomena under investigation. Following the presentation of the case design in this section (3.3), the task now is to show how I operationalized this empirical investigation in practice. The following section aims to provide descriptions related to how the empirical inquiry for this thesis, as designed here in (3.3), unfolded in practice.

3.4 Research execution in practice

3.4.1 Purpose & Overview

In the previous section (3.2), I outlined the research strategy underpins this thesis. This involved unpacking SAP guiding principles as well as explaining the logical sequence of decisions made, in relation to ensuring an ontology, epistemology and methodology that fit with the objective of the research question. In (3.3), I moved on to articulate the research design, which consists in a case methodology underpinned by the SAP lens. In this section (3.4), I turn to offer an account of how the application of my case design, involving two cases, unfolded in practice. This particular section (3.4) is organised into eight sub-sections. In (3.4.2), I outline how the theoretical sampling for my both cases, namely, PA1 and PA2 was executed in practice. Following this, in (3.4.3), I sketch out the procedures that I followed to negotiate successful access to both cases. Then, in (3.4.4), I outline the nature of the initial engagement with each site, which yielded the identification of appropriate participants to inform the research question. In (3.4.5), I proceeded to outline how data collection progressed in practice by constructing a diagram to outline the evidence collection from multiple levels across the two cases within the selected time-frame for this research. In (3.4.6), I indicate to the necessity for qualitative software, namely NVivo to manage the volume of data collected in this research. Subsequently, in (3.4.7), I give an account of how the constructivist approach for coding unfolded in practice and how codes intervened with case writing in this thesis. In (3.4.8), I outline the validity procedures adopted in this thesis. Finally, in (3.4.9), I draw this section to close by providing a summary and conclusion.

3.4.2 Theoretical sampling in practice

The selection process for potential cases in this thesis must follow the recommendations for theoretical sampling as outlined previously in (3.3.3). To begin with, I must be attentive to whether my research will benefit more from being situated within public or private contextual configurations. Therefore, I draw out Table 3-6 below based on my analyse on the nature of inquiry in SAP and SA research, as presented in chapter (2), in order to aid the decision regarding where to carry out this research.

	Public	Private	Mix	Total studies
SAP	8 studies (33%)	11 studies (46%)	5 studies (21%)	24 studies
SA	2 studies (2%)	39 studies (45%)	46 studies (53%)	87 studies

Table 3-6 Presents SA and SAP studies divided by context as found in chapter (2)

Table 3-6 above indicates that the SAP literature shows a balance between studies carried out in public or private contexts. This is not surprising, as outlined earlier in (2.3.5), because the main concern of SAP researchers is the set of contextual configurations that make the case site contextually unique for their examinations, regardless of whether the site is public or private. In contrast, and significantly, very few studies have been carried out within the public context in SA research. I should remind the readers that the dominance of mixed-context studies in SA research is due to the style of SA research, which has been less concerned with the contextual configurations under which SA is constructed, as presented in (2.4.6.6). Further, while the predominance of private studies in SA research can be made attributable to the openness and the accessibility of these type of organisations (Perry and Rainey, 1988), I should emphasise that the majority of these private-based examinations were carried out across industries and regions as outlined earlier in (2.4.6.6), thus indicating to further insensibility to specific contextual configurations between one industry and another. Based on these grounds, I would like to argue that a promising line of research for the domain of SA might involve coming to understand how SA is practised in public organisations since the public category represents only 2% of total studies examined in SA research thus far. In addition, from the perspective of the SAP lens that underpins this thesis, public organisations can be fruitful as they are heavily subjected to the macro practices, e.g. governmental regulations, government contracts, resources allocation, guidelines and rules (Jarzabkowski, 2005, Hoon, 2007).

The Irish public context, in particular, offered fertile ground in which to study, for the purpose of this thesis, how aligning occur in the interplay between meso and macro practices. This is because that Public Service organisations (PSOs) in this context were experiencing cuts in expenditure from the Irish government at the time of the study, and so resources were unlikely to be frivolously drawn upon. This indicates that data from such contextual configurations are likely to compose a full picture of how SA is practised in the interplay between meso and macro practices. However, not very many Irish PSOs would be appropriate for this thesis. Thus, following Walsham (2006) and Neuman (2011), potential PSO candidates were selected based on their suitability for the research question. Therefore, relative to my research question and following a review of multiple Irish PSOs, two PSO

cases, namely, PA1 and PA2, under the auspices of the Department of Jobs, Enterprise and Innovation (DJEI) were identified as suitable. A summary of the reasons for nominating these two cases follows:

I. The two PSOs belong to the same macro structure of DJEI, thus fitting suitably with the tall-doing ontology adopted in this research as outlined in (3.2.3.1).
II. Executives in both cases, including IS executives, cannot act by intra-management fiat alone, but must take into consideration government regulations which have come to make formal control over organisational initiatives across PSOs.
III. There is substantial intra / extra-organisational documentation that can inform the meso and macro understanding level as emphasised in the data collection's framework (3.3.6).
IV. Each of the organisations has an individual executive responsible for IS management.
V. Each of the organisations indicates in their strategic documentations to the centrality of IS for their forthcoming strategic initiatives, and are planning for their IS systems to be reviewed as part of the cross-cutting initiatives endorsed by the Irish government. This implies that some forms of SA practices are taking place on both sites.

3.4.3 Negotiating access

Pan and Tan (2011) suggested that the probability of access to organisations tends to be higher if the case researcher is able to obtain an endorsement or referral from an institution that is perceived to be legitimate by practitioners within target organisations. Accordingly, I made available the contacts of the Chief Executive Officers (CEOs) in both organisations to the director of the PhD programme in the business school, Trinity College Dublin in order to capture the attention of and motivate enthusiasm in the organisations to collaborate with an academic institution. This strategy proved to be helpful in generating successful access to PA1 and PA2, and in solving the long-running problem faced by the researcher of attempts made previously to approach multiple PSOs having resulted in access rejections.

3.4.4 Initial engagement

Following emails sent separately by the director of the business school to the CEOs in both PA1 and PA2, I was called for introductory meetings at each site. With regard to PA1, a primary meeting was scheduled with the CEO in his office to brief him on the research objectives and the required resources from the organisations e.g. access to potential participants and to proprietary documentation, and the time required to conclude the research. Following this discussion, it became apparent that the practice of SA falls under the remit of the head of IS with additional inputs from the Assistant Chief Executives (ACEs) and

business functional executives. Thus, the CEO sent a note to those prospective participants (attached in Appendix - 4) as a means of showing his commitment to the research and encouraging the facilitation of the process. The email noted that I would follow up with each individual to arrange a personal meeting and interview.

The initial engagement within PA2 was slightly different. The CEO agreed and committed to the research, but decided that it would be preferable for the IS executive to lead the process. In this regard, the CEO sent a note (attached in Appendix-5) to the IS executive to confer her with responsibility for facilitating access for me across the organisation. Accordingly, the IS executive scheduled a primary meeting with to set out a working plan to carry out the research in the organisation. At the meeting, the IS executive was prepared to provide me with a series of proprietary documentations, some of which had not been published. Subsequently, the prospective participants, namely heads of divisions who have input into the practice of SA were identified, and the IS executive agreed to schedule all subsequent meetings with them. The IS executive decided to be involved in all of these meetings to indicate to those participants her personal interest in facilitating the research process.

3.4.5 Collecting data in practice

Based on the organising framework, as developed in (3.3.6), data collection proceeded to use the combination of semi-structured interviews and internal/external set of documentations to encapsulate the multi-levels nature of this thesis examination, which underpinned by the SAP lens. The collection of evidence unfolded over a specific time-frame. In this regard, the adopted taller-doing ontology, outlined in (3.2.3.1), implies that praxis examinations to be approached so as to unfold according to a vertical hierarchy where the specific macro structure and conditions form the larger envelope of what practitioners can do in their organisations. Accordingly, at the time of the fieldwork, both PA1 and PA2 operated under the administration and measures of the Irish government as structured during the period March 2011 to February 2016. Thus, for ontological purposes, I bounded evidence collections from the multi levels in both cases within this time frame which manifested set of contextual conditions that are highly unlikely to be similar to the precede government structure. Figure 3-6 below was constructed to illustrate how evidence from multiple levels within PA1 and PA2 was collected across the time frame selected for this thesis research.

Macro Documentations: Programme for government and annual reports (2011- 2016), Public sector reform plans and progress reports (2011-2016), Dep of public expenditure 'Public spending codes, Circulars, external service delivery plan and review of ICT projects in PSOs', and PA1's specific acts and regulations (total sources: 22)

Meso Documentations: Expenditure review 2011, organisational strategy (2013-2015), IS strategy (2013-2015), IS systems strategic review (2014), Programme of works (2013-2015), Strategizing PPTs (2013-2015) Project frameworks (total sources: 17)

PA1

Micro Interviews:
11 semi-structured (recorded)
4 semi-structured (noted)
Total sources: 15 interviews from 8 participants.

Time frame

2011 > 2012 > 2013 > 2014 > 2015 > 2016

PA2

Micro Interviews:
6 semi-structured (recorded)
1 semi-structured (noted)
Total sources: 7 interviews from 6 participants.

Meso Documentations: Annual reports (2011-2014), organisational strategy (2013-2015), IS strategy (2013-2015), Divisional strategies (2013-2015), functional strategies (2013-2015), organisational charts and project frameworks (total sources: 23)

Macro Documentations: Programme for government and annual reports (2011-2016), Public sector reform plans and progress reports (2011-2016), Dep of public expenditure "Public spending codes, Circulars, external service delivery plan and review of ICT projects in PSOs", and PA2's specific acts (total sources: 20)

Figure 3-6 Depicts the practice of data collection as carried out by me across both cases within the selected time frame

In commencing the fieldwork within PA1, I spent some time reviewing some of the proprietary documentation e.g. organisational strategy (2013-2015) and programme of work (2013, 2014), which had been made available to me during the initial engagement. Following that, I prepared a set of 'open-end' questions (appendix-6) to be used as to aid memory in the discussion agenda rather than to dominate the agenda. The choice of questions was guided by the 3Ps and multi-levels to stimulate participants to speak broadly on, e.g., strategizing practices, actions of those involved in strategizing, the macro practices that shape strategizing, the emergence of IS initiatives, macro measures that encircled IS development in PSOs and practices and associated practitioners' actions to ensure SA construction in their organisation.

The availability of multiple participants from multiple levels within PA1 meant that the questions were adapted as the work progressed and tailored towards the particular participant being interviewed so that, for instance, discussions with the CEO were dominated by issues on macro government guidelines and policies that shape the work in PA1, whereas discussion with the Assistant Chief Executives and management level executives tended to focus on the details of the meso organisational practices and micro-actions. To initiate interviews, I made direct contact by email with each of the potential participants targeted by the CEO in his introductory email during the initial engagement phase. Individual interviewees were informed about the overall research focus and given an opportunity to schedule a meeting for 60 minutes at his/her convenience. Once the meeting was scheduled, an individual interviewee was given the list of questions at least one week before the meeting with an indication in the email to my inclination to record the interview for analysis purposes. For the most part, interviews lasted for one hour with a few running to one and a half hours. In total, as indicated in Figure 3-6, 15 interviews were held across eight participants. Four of these interviews were not recorded (three of them were follow-ups and in one case the participant declined to be recorded); thus, field notes were taken during the discussion. Altogether these interviews resulted in 148 pages of transcriptions.

The data collection in PA2 proceeded similarly to that in PA1 with slight differences in the way meetings were scheduled and the conducting of interviews. The IS executive took the lead to schedule all meetings with potential participants on behalf of me. Once those meetings were scheduled, I undertook to request participants' emails addresses to make the list of questions available to them at least one week prior to the meeting. In this regard, the list of questions was adapted and tweaked from those of PA1 to fit the organisation-specific working practices as understood during the initial engagement phase. During the course of interviews in PA2, the IS executive participated in all interviews with participants. This participation was useful on two grounds. First, where some participants declined to be

recorded at the start of the interview, the IS executive intervened to assure them on the basis of the confidentiality agreement with me, which stipulates that the identification of participants be concealed. Second, this involvement proved to be helpful insofar as the IS executive contributed to the discussion by means of giving further explanations, illustrating her actions in the context of what was being demonstrated by the main participant. In total, as shown in Figure 3-6, seven interviews were held (of which six were recorded and one was noted down) across six participants. These interviews lasted for one hour with two of them running to one and a half hours. Altogether these interviews resulted in 113 pages of transcriptions.

During the course of interviews in both cases, I noted that interviewees provided a current and retrospective understanding of their actions. These actions were occasionally explained in the context of either the macro of, e.g., the government programme of work, public sector reform measures, or particular acts and regulations; or meso context, e.g., internal project frameworks. Thus, the collections of documentation relevant to both contextual levels became vital in providing a holistic understanding of the contexts within which aligning praxis unfolded. To this end, I avoided interrupting participants' thoughts during the discussion and wrote down the documentation to be requested at the end of interviews. For the most part, participants agreed to make this documentation available, or at least to refer me to the Government Publications Office's website to access documentation relevant to discussions.

3.4.6 Data management: NVivo as an aid

Data in this research were managed using the software programme NVivo. The use of the software was intended to increase the efficiency offered by the software to manage, organise and analyse data without losing access to the source of data or context from which the data had come. To this end, I attended a two-day training workshop to master the technicalities of using this software for qualitative data. It is important, however, to acknowledge that the software is a "*method-free [tool]*" (Bazeley and Jackson, 2013; P. 4); thus it does not prescribe a particular data analysis approach but rather supports a wide range of qualitative analysis approaches. This in itself requires the software to be used according to the researcher's pre-determined research strategy and design. In the context of this thesis, which involves theory building from two cases, I made use of NVivo to treat each case as "*a stand-alone entity*" (Eisenhardt, 1989; P. 540). Thus, all interview transcripts, meso documentations and macro documentations were imported into NVivo and assigned to their relevant case site (see appendix-7). However, particular macro documentations were found during data collection as appeared identical in both cases. Thus, to avoid duplication, those documentations were organised in one shared folder and were assigned as relevant to both

cases. The result of all data sources imported into NVivo were 52 and 60 sources belonging to PA1 and PA2 respectively.

3.4.7 Data analysis in practice

Data analysis in this thesis commenced with the coding procedures of the constructivist approach of the GT method as outlined before in (3.3.6.3). I made use of the coding tool in NVivo to facilitate this coding exercise, which involved, following Charmaz (2006), open coding, focused coding and theoretical coding. To be intimately familiar with each case, following Eisenhardt (1989), Miles and Huberman (1994) and Andrade (2009)'s recommendations, I set up the coding procedures as separate for each case (shown in Figure 3-7 below). This means that I went on a case-by-case approach, where each case was approached in all its richness.

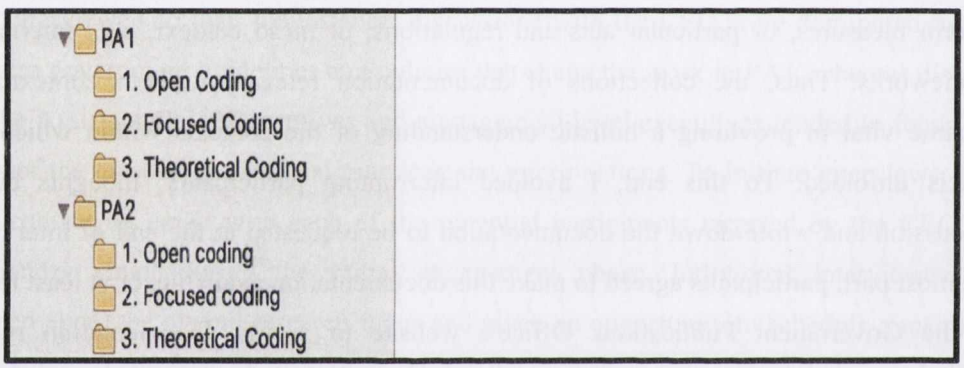


Figure 3-7 Shows how the coding stages as adopted from Charmaz (2006) were sat up separately for each case study in this thesis

3.4.7.1 Open coding

To initiate coding in this thesis, I ran data open coding involving an incident-by-incident perusal of the interview transcripts, while seeing actions in each segment of data. The task was to generate as many codes as possible that best described what was being said in the transcripts, thus remaining open to all possible theoretical directions indicated by the data. Then, I commenced open coding on the meso documentations – the stage where I did seek out segments of data that could be associated with existing codes or a new code. After that, the macro documentations were read carefully, and codes were only generated for the segments of data that were relevant to the research question. Codes at this stage were influenced by my own preconceptions from the SAP literature. Being abductive in this thesis meant that I merely invoked the SAP world view of 3Ps and the multi-levels nature of micro, meso and macro to explicate what was happening in the data by using them as initials for each code, if applicable and necessary. It is important, however, to note that I did attempt to be self-critical in using these constructs; thus there were many instances where a segment of

data was coded with no use of those constructs. In such cases, open codes were constructed based on my own interpretations of the meaning which that segment of data evoked. Alternatively, codes were directly taken from the participant's own words by using the 'code in-vivo' feature in the software. In total, a list (1143) open codes emerged from this coding exercise belonging to PA1 and PA2 simultaneously (refer to Appendix-8).

3.4.7.2 Focused coding

Having completed the open coding, I proceeded to raise open codes to the level of category as part of the focused coding stage. Primarily, on many occasions, I found that codes assigned at the open coding stage were not static. Thus they were re-interpreted and re-worded during the focused coding process to attain refinement. Of course, not all open codes would make an analytical sense relative to my research question, thus their adequacy had to be determined. In this vein, I undertook to investigate the extent to which activities associated with the enactment of SA could be grouped into broader sets of practices categories at their relevant levels of macro, meso and micro. Practices categories containing similar occurrences and incidents were then grouped together into higher conceptual-level categories. This meant that in order to share membership of a higher level category, the lower level practices categories had to share certain characteristics with each other. This course of action yielded insight into the contexts under which the enactment of SA was carried out. The whole set of procedures, although was not a linear process, ultimately resulted in the identification of eight high conceptual-level categories (focused codes) for PA1 and similarly for PA2 (refer to Appendix-9).

3.4.7.3 Theoretical coding

The phase of theoretical coding marked the end of the coding exercise. The procedure aimed at constructing cohesive codes pertaining to "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?". In practical terms, for each individual case, I wrote down my analytical interpretations of focused coding in a form of short-memos (Appendix-10), captured the relationship that existed between them and looked for similarities and differences among them to assist in the naming and conceptualization of new theoretical coding families that would subsequently tell an analytical and coherence story about the aligning of IS executives. During these actions, different theoretical codes were tried for best fit with the meanings contained in the data. Upon the arrival at a set of provisional theoretical codes for PA1, I undertook to compare them to those of PA2. This comparison took place analytically by comparing these tentative codes to each other, comparing incidents they contained in both cases, and thus arriving at a set of four theoretical codes that were, on the one hand, firmly

grounded in the original empirical evidences for each case, and, on the other hand, theoretically accommodating the range of meanings embedded in each case site. The four theoretical codes yielded from this exercise are: strategizing practices, releasing resources practices, appraising practices and IS management practices. In this vein, while Figure 3-8 below provides a visual presentation from the NVivo software on the theoretical codes emerged from this stage of analysis, it also indicates to the number of data sources that informed and supported the development of each of the theoretical codes.

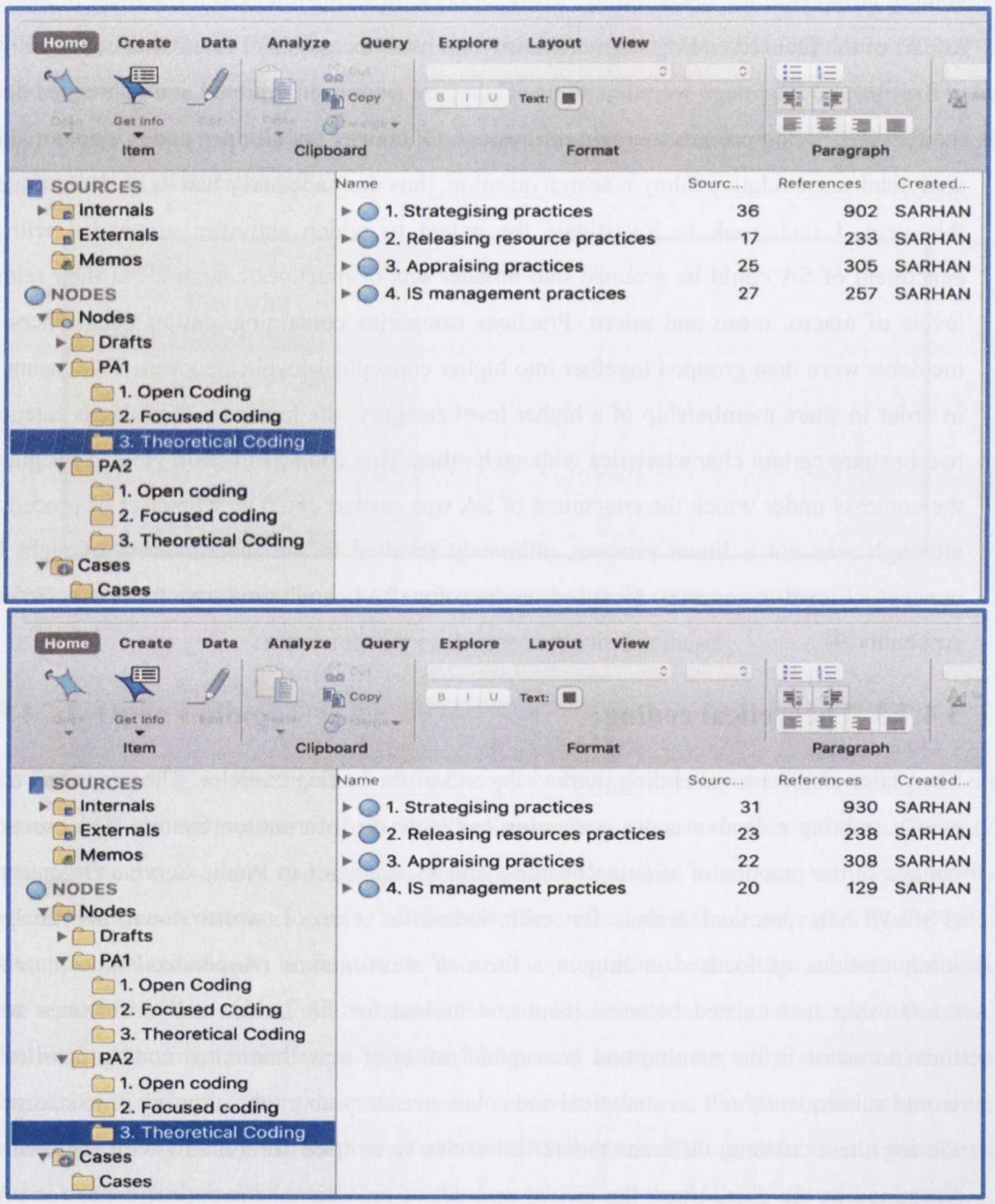


Figure 3-8 Shows the theoretical codes from each case and the number of sources which inform each code

3.4.7.4 Case study writing in practice

Adopting the view that case writing is part of the analysis, as outlined in (3.3.6.4), I commenced the case writing following the completion of the coding exercise. The case writing, which is organised to take place in chapter (4), describes in practice "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?". In this vein, instead of attempting to act as an objective describer of what actually occurred in both cases, I adopted an interpretive writing style to constitute a coherent story based on my interpretation of participants' interpretations on what actually occurred in practice. To avoid the pitfall of what to present from the lengthy and complex writing process, I organised data presentation from each case around the theoretical codes namely, strategizing practices, releasing resources practices, appraising practices and IS management practices. Indeed, having the codes as part of the explanations, is one of the advantages of the GT method's close ties to the data, to produce confidence in the findings as presented in the case narrative, which, in turn, undergird subsequent analysis towards theory development (Urquhart, 2001).

3.4.8 Quality in research

Judging the quality of research work resides to a significant extent in the epistemological assumption underlying the research (Maxwell, 1992, Lincoln, 1995, Creswell and Miller, 2000). Where the interpretive assumption is adopted as in this thesis, the conventional validity criteria of construct validity and reliability are not suitable to evaluate the interpretive research as they assume an objective reality and are therefore better placed to evaluate positivist research (Hammersley, 2007, Farquhar, 2012). Hence, Walsham (1995b) demonstrated that interpretive researchers establish credibility in their research by giving a detailed account of the research fieldwork, data analysis procedures and how the theory emerged during the research process. Likewise, Eisenhardt (1989), holds the view that theory building cases should be evaluated on empirical grounds, for which the researcher must display enough evidence, e.g. information on the sample, data collection and analysis such that the reader can judge the fit between this evidence and the emergent theory. Indeed, these elements were the concern of this section (3.4) with an attempt from me to show as far as possible that the data collection and its analysis merit the theoretical framework which emerged at the end of this research process.

3.4.9 Research execution in practice: closing remark

The aim of this section was to present the manner in which the research design, as presented in (3.3), was executed in practice. The section started by outlining how the theoretical sampling was exercised in this thesis. I illustrated that my choice of two cases from Irish

PSOs, namely PA1 and PA2, was grounded, on the one hand, in my analysis of the SA literature, which showed that less research had been carried out within the public context. Thus, I argued that a promising research study might involve examining the enactment of SA in the public context. On the other hand, both cases were nominated purposefully based on their conformity with the criteria for case selection developed in this thesis. After that, the discussion went on to articulate the manner in which access to both organisations was procured and how I engaged initially with each organisation to identify potential participants suitable for the focus of the research question.

The discussion then proceeded to outline data collection in practice. In this vein, I emphasised that, for consistency with the taller-doing ontology, the selected time frame needed to be in line with the macro structure of the Irish government as formed during March 2011 to February 2016. Following this, I constructed a diagram showing the technicalities of collecting evidence from multiple levels across the two cases within the time frame selected for this research. Based on the diagram, I proceeded to sketch out how interviews and documentation (meso and macro) were gathered in practice from both cases. This data collection yielded a large volume of data that could only be rendered manageable through the use of qualitative software, namely, NVivo. Subsequently, I provided an account of how the constructivist approach to the GT method unfolded in practice. I elucidated the coding procedures and supplemented this with a number of visual representations from the NVivo tool, which was used as an aid for the coding exercise. This was followed by an explanation of how the case writing would proceed in the following chapter (4); with emphasis on the role of theoretical codes to organise the writing, and the interpretive account to ordinate the writing style.

3.5 Concluding chapter (3)

This chapter has provided a detailed account of the research methodology that is appropriate for the conducting of this research. In (3.2), I started with unpacking the guiding principles for SAP based inquiry. I emphasised that if a substantive inquiry into my research question was to be generated, I needed to be mindful of requirements related to the SAP programme of empirical research. Following this, I argued that this understanding of the SAP program of research would certainly require compatible decision-making related to the choices of ontology (taller-doing), epistemology (interpretive) and methodology (case study) that fit with the research question. In (3.3), I went on to construct a case design, involving two cases, by using the SAP lens as a sharpening tool across all elements in the research design. I emphasised the importance of theoretical sampling for potential cases in this thesis. I then reviewed the number of case(s) appropriate for this research, and decided on two cases as optimal for the objective of the research question. After this, I went on to describe the multi-levels data collection strategy that is imperative for this research, which is underpinned by the SAP lens. Subsequently, I outlined the grounds for the integration between GT as a method and case methodology, and illustrated the suitability of the constructivist approach to GT to commence coding procedures in this research. I drew the section to a close by emphasising the manner in which case writing is approached in this research.

In (3.4), the focus has been on the manner in which the research designed, as outlined in (3.3), was implemented by in practice. In this vein, the theoretical sampling led to the identification of two cases, namely PA1 and PA2, from the Irish PSOs. I then sketched out the manner in which access to both sites was secured and how the initial engagement with each site led to the identification of participants that were suitable for the research focus. After that, a full account was given of how data collection and analysis from both cases proceeded. The section drew to a close by highlighting the significance of such an account to inform the quality of research work done from an interpretive research standpoint. The task in the subsequent chapter (4) is to present the fruit of this methodology chapter. Thus, the next chapter proceeds to present, in the form of cases writing, some of the worldliness from PA1 and PA2 on "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?".

Chapter 4

CASE WRITING

4.1 Introduction

Chapter 2 showed that adopting the SAP lens implies that macro and meso organisational practices shape what practitioners can do within organisations. Thus, I argued that the greatest potential for contributing to the domain of SA lies in exploring the doing of SA, or better aligning praxis, as enacted by practitioners in their situated practices. In this manner, and following the SLR on SA literature through the SAP lens, I prioritised the examination of the aligning praxis of IS executives, in particular, and undertook to seek out an answer for the explorative research question of "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?". Chapter 3 was constructed to serve the objective of this question by casting the research strategy and design to capture the aligning praxis of IS executives as occurred in the interplay between meso and macro practices. The chapter was underpinned by the ontological view of taller-doing implicated in being interpretive to capturing aligning praxis as it presented itself in the real-life setting of the case and surrounding situation. In order to manage the inquiry in such a focused manner, I drew on SAP guiding principles for empirical inquiry, empirical examination of SAP studies selected for the narrative review, and then mobilised these as a sharpening tool to undergird the case design for this thesis. The suitable case design decided upon involved two cases from Irish PSOs, approached through qualitative data collected from multiple levels and analysed, in the first instance, through the constructivist GT method.

Hereinafter, this chapter (4) undertakes to weave the fractured data collected and coded from multiple levels back together in an analytical story about the enactment of aligning praxis in an interplay between meso and macro practices which, in turn, serve to undergird the development of theory relevant to the research question. The chapter is fuelled by the notion of 'writing as a method of discovery', as advocated previously in 3.3.6.4. Therefore, the central tenet in this chapter is to present contextualised, rich, and interpretive case writing for each of the two cases selected in this thesis, namely, PA1 and PA2. Overall, the chapter is organised into four main sections. In 4.2, I undertake to present the macro practices under which PA1 and PA2 were embedded, and which were responsible for forming the larger envelope of what practitioners can do relative to SA in PA1 and PA2. Following this, the case writing is presented: PA1 (4.3) and PA2 (4.4). I undertook in both sections to outline the manner in which aligning praxis are organised and enacted in meso practices and how these

practices were influenced by the macro practices presented in 4.2. Finally, 4.5 concludes the chapter and offers a link to the next (5), that is, the theoretical product emanated from meticulous attention to coding, case writing and memo-writing.

4.2 The Macro practices

4.2.1 Purpose & Overview

The purpose of this section is to present the macro practices within which PA1 and PA2 are embedded. To deliver on these endeavours, the ontology of Taller-doing, outlined in 3.2.3.1, is adopted as a framework to organise discussions in this section. In this sense, the Irish government, as structured during the period from March 2011 to February 2016, and its policies and procedures on all PSOs, formed the larger boundary of what practitioners in PA1 and PA2 can do relative to SA from the taller-doing ontological perspective. Therefore, for ontological consistency purpose, it is this government structure, timeframe, and surrounding conditions that concern the macro practices envisaged in this thesis examination. To this end, since both cases are situated under the same macro structure, timeframe and condition, discussions in this section are informed by documentary evidence that appeared, during data collection in practice (3.4.5), as identical in both cases.

Overall, this section (4.2) is organised into the following four sub-sections. Firstly, section (4.2.2) briefly introduces the contextual setting within which the Irish government, during the execution of this thesis, exercised its executive power of the state over its five-year term. The section acts as if to locate the selected cases, namely PA1 and PA2, as a sub-organ in the Department of Jobs, Enterprise and Innovation (DJEI) within the structured government at the time of this study. Then, in 4.2.3, I alluded to the preceding economic crisis that shaped how PSOs were administered under the series of Programmes for Government (PfG) to deal with economic difficulties. Therein lies, as discussed in 4.2.4, the reform agenda on PSOs as a pivotal theme in PfG towards national recovery. In this particular section, based on my interpretation of a series of reform plans, I categorised this reform agenda into six themes so as to embrace the portfolio of actions undertaken by the government in this realm. Finally, in 4.2.5, I offer closing remarks to draw this section of macro practice to a close, and offer a link to the next two sections in this chapter.

4.2.2 Setting up the research contextual setting

The execution of this thesis research occurred in the Republic of Ireland, which is regarded as a parliamentary democratic nation. The National Parliament of Ireland, known in the Irish language as 'Oireachtas', consists of the President and two Houses: a House of Representatives, 'Dáil Éireann', and a Senate 'Seanad Éireann' (Barrett and Burke, 2011). The main parliamentary functions of the Parliament are: first, to make and pass laws (termed *Acts*) for the state, as outlined hereby in the Irish Constitution: "no other legislative authority has power to make laws for the State" (Bunreacht na heireann, 2012; P . 38); second, as

defined in the Constitution, the Parliament is authorised to establish functional or vocational councils, determining in the establishing act its rights, powers and duties, and its relation to the Parliament and government.

The Irish Government is formed of the house of Dáil Éireann, whose members are directly elected by citizens of the Republic of Ireland. The process of forming the government begins with a nomination for a member to become Taoiseach. Usually, the Taoiseach is the member who has gained the support of the majority of Dáil Éireann members. Members of the various government departments (Ministers) are nominated by the Taoiseach and then subject to a Dáil Éireann vote to approve the government. Following that, the President makes formal the appointment of the Taoiseach and Ministers. Typically, the government, according to the Irish Constitution, consists of a minimum of seven ministers who meet and act as a collective authority (Barrett and Burke, 2011). The government structure, during the period of 9th March 2011 – 26th February 2016, under which this research was carried out, consisted of 16 Departments, all financed by appropriations from the Exchequer Account. The full list of departments in existence during this research is shown in Figure 4-1 below:

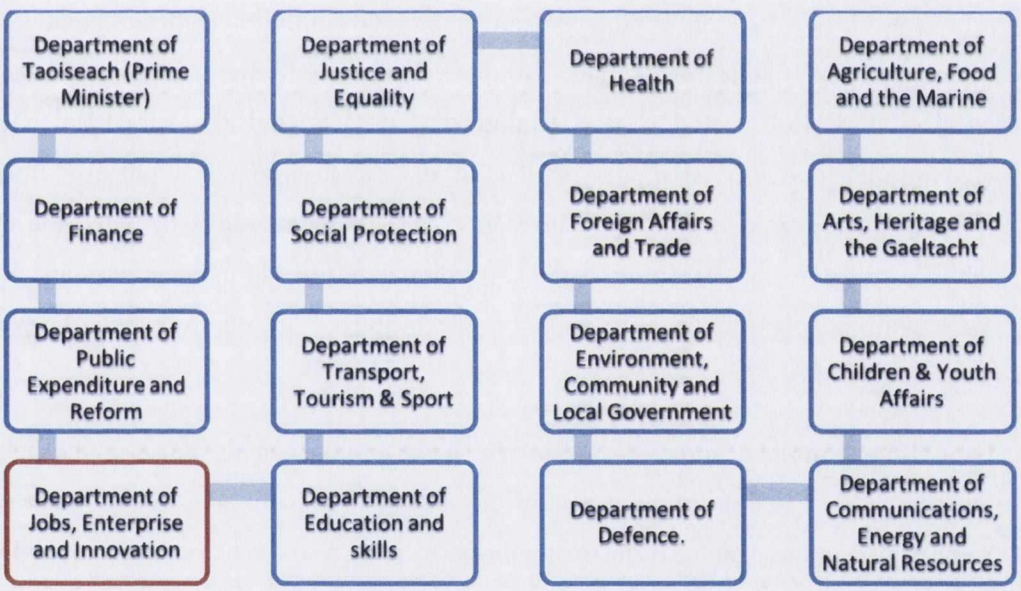


Figure 4-1 Illustrated the government structure during the period 9 March 2011 - 26 February 2016 - Source: (CSO, 2014)

The macro structure for the selected cases in this thesis, namely PA1 and PA2, is firmly situated within the above government structure as both operate under the aegis of the Department of Jobs, Enterprise and Innovation (DJEI) as highlighted in Figure 4-1. Both cases are therefore Public Service organisations (PSOs) according to the Register of Public Sector Bodies in Ireland, which defines PSOs as all bodies that are directly or indirectly controlled by a government department, and mainly financed by the government rather than through their own enterprise (CSO, 2014). Given the inextricable organisational link between

PA1 and PA2 to DJEI, however, neither case is isolated from the wider government's policies, procedures and measures placed across all Irish PSOs.

4.2.3 The management of PSOs

On March 9th 2011, the government was formed to exercise executive power of the state over the following five years (Bunreacht na heireann, 2012). Upon taking power, the department of An Taoiseach launched the first Programme for Government (PfG) to highlight the administration's commitments during its term (PfG, 2011-2016). This particular PfG was very much focused on dealing with an Irish economy that was emerging from recession. That is to say that the legacy of the preceding economic crisis played a significant role in shaping the first and subsequent PfGs for the government (Appendix-11 offers a background on the economic crisis to provide some meaning behind the government actions in managing PSOs). The major inheritance from the preceding economic crisis was the economic adjustment programme of €67.5 billion which had been agreed in December 2010 between the preceding government, the European Commission and the International Monetary Fund (IMF) in order to correct the Irish PSOs' finances which had experienced devastating effect and deficits. In return for this deal, the adjustment programme secured commitments from the government to implement fiscal adjustments and introduce various reforms, including PSOs reforms (Whelan, 2013). In line with these requirements, the National Recovery Plan (NRP, 2010) was formulated by the Irish government of the day to provide a blueprint for onerous austerity measures to put PSO finances in order. These measures included the cutting of public sector pay, the slashing of capital spending and a rise in income taxes and VAT rates (Dellepiane and Hardiman, 2011), all of which suggest an environment of severe fiscal restraint for PSOs.

The setting described above is one in which the options facing those at the helm of the government's PfGs, during the period of this research, for correcting public finances did not depend only on the scale of fiscal restraint on PSOs but also on the requirement to adhere to a broader reform agenda as part of the adjustment programme. In this sense, while it is a series of special provisions undertaken for the rejuvenation of the economy, nonetheless, the PSO reform agenda has been a recurring theme and envisaged across the PfGs as key elements towards national recovery (PfG, 2012, PfG, 2013, PfG, 2014, PfG, 2015). To this end, in 2011, a new Department of Public Expenditure and Reform (DPER) was created under the Ministers and Secretaries (Amendment) Act (MSA-Act, 2011), to lead on the reform agenda and enable the efficient and effective provision of PSOs. The new department is authorised by the MSA-Act (2011) to exercise supervision and control over all PSOs. This includes carrying out expenditure reviews, approving expenses incurred in PSO administration, and formulating and developing policies and procedural frameworks to be incorporated into

PSOs' intra-organisational practices. The establishment of the DPER goes some way towards illustrating the importance of the reform agenda for the PfGs at a time when there was a need to simultaneously bring PSOs finances on a sustainable path while introducing various reform measures at the level of PSOs to allow them to do 'better with less' (Howlin, 2012).

4.2.4 Introducing the reform agenda into PSOs

The establishment of the DPER to monitor the implementation of the reform programme means that the Irish government took the execution of PSO reform as a central component in its PfGs to produce savings and increase productivity at PSO level. The main strands of the overall PSO reform agenda, as established and published by the DPER back in 2011, and consistently raised in subsequent progress reports on the Public Sector Reform Plan (PSRP) thereafter (2012, 2014, 2015), were twofold: bringing down the 'expenditure' of delivering public services to an affordable level and deploying a number of 'reform initiatives', supported by a set of cross-cutting policies and procedures to be incorporated into the intra practices of PSOs. In this section, I undertook to categorise those measures and initiatives into six sub-sections based on my interpretation of the series of PSRPs. This goes some way to embracing the portfolio of actions undertaken at macro level, and which subsequently exerted influences over what practitioners can do relative to SA enactment within meso practices of PSOs, particularly PA1 and PA2.

4.2.4.1 Fiscal consolidation

The reduction of PSOs expenditure was achieved using many different actions performed by the DPER. For instance, during the course of PSRP (2011 to 2015), the decrease in public spending was driven primarily by reducing the number of employees from 320,000 in 2008 to 289,600 at present (PSRP, 2015). This was done through the introduction of Employment Control Frameworks (ECF) that set out staffing ceilings for each Department along with its associated agencies, preventing them from replacing any lost staff while the ECF are in place (CER, 2012-2014). The basis for this measure was to reduce the gross pay bill for public servants. This has resulted in a saving of over €2.5 billion (or 15%) since 2008 (PSRP, 2011). In addition, fiscal consolidation under PSRP proceeded to align spending on PSOs with government priorities. In this realm, the release of resources to PSOs began the transition away from the traditional system of awarding block grants to PSOs and moved instead towards a new framework based on releasing resources in return for the delivery of specified outcomes aligned with government priorities as identified in their PfGs. To this end, PSOs were required to openly compete for budget resources by putting forward their spending proposals and specifying what they would deliver in return for such allocations to help deliver the PFGs. At the heart of this federal resource control lies the request placed on all

PSOs to engage in strategizing for their organisations to align themselves with government priorities, and ultimately request funding to deliver on their objectives to meet outstanding government commitments (PfG, 2012, PfG, 2013).

4.2.4.2 Contributing to national recovery

The interdependencies between the performance of PSOs and that of the economy were emphasised as central to PSRP. The government held the view that PSOs have a central role to play in underpinning economic growth by striving to provide a framework for public service provision that enables economic growth (PSRP, 2014-2016). In this vein, PSOs were advised to drive their service activities towards sectors identified in PfGs as being central to national recovery. For instance, the government stipulated that Ireland's economic recovery must be export-led. Thus, PSOs must strive to take action to support national businesses that engage in export activities to achieve optimal growth in this area of the economy (PfG, 2011, PfG, 2012, PfG, 2014). This support indeed yielded the economic value of an increased employment rate in the export activities as reported in PfG (2015). In another instance, the Small and Medium-sized Enterprise (SME) sector was identified as a key contributor to the domestic economy. In this regard, PSOs were advised to develop service initiatives to, for instance, reduce the administrative burden on SMEs to ensure that they could achieve growth and profitability (PfG, 2013, PfG, 2014). As such, PSOs would need to intensify their activities and service initiatives in relation to those sectors deemed by the Irish government as contributors to national recovery.

4.2.4.3 Leveraging IS

In the context of fiscal and resource constraints, the reform agenda emphasised the need for PSOs to embrace IS to deliver improved services. PSOs were therefore advised to examine their own services, particularly frontline services, moving these services, or elements of them, to online channels (PSRP, 2011, PSRP, 2012, PSRP, 2014-2016). The reform in this sense lies in identifying outmoded or outdated processes in PSOs' working practices, embracing IS and applying the efficiency dividend from IS to expand and enhance services delivery. Nevertheless, PSOs were not left to their own devices regarding the deployment of IS initiatives, particularly while the Irish economy faced considerable fiscal challenges. The DPER, in 2012, launched the Public Spending Code (PSC) and required all PSOs in receipt of public funding to comply, as appropriate, with the relevant requirements of this code (PfG, 2011, PSC, 2012). The PSC was intended to act as a value for money (VFM) framework to embed a practice of evaluation and appraisal into IS project initiation practices across all PSOs (PSRP, 2012). The PSC set out to articulate what is required from PSOs' practitioners, e.g. developing a business case, obtaining appropriate management level approval on the

business case, and ongoing monitoring and post-implementation review to ensure the establishment of VFM measures across the lifecycle of IS initiatives. Furthermore, PSOs will submit, as part of PSC, a request for approval of any capital expenditure on a proposed IS initiative to the DPER which will then subject the proposal to vigorous VFM appraisals in advance of the request being granted and any money spent (PSC, 2012).

4.2.4.4 National procurement reform

Under their reform agenda, the DPER undertook to introduce reforms on how commonly acquired goods and services were to be procured by PSOs, following the recognition that a significant proportion of overall spending on public procurement lacked VFM. To this end, in 2011, the supervision and control of all purchases made by PSOs were conferred to the DPER. Circular 06/12, issued by the DPER in July 2012, and followed by another Circular, 16/13, in September 2013, to mandatorily require all PSOs to avail themselves of national contracts put in place by the National Procurement Service (NPS) with a view to securing better VFM in public procurement by leveraging the public service's buying power through aggregated arrangements. In 2014, the DPER announced the creation of the Office of Government Procurement (OGP), the remit of which was to take full responsibility for procurement policy and procedures in PSOs and source goods and services on their behalf. Today, OGP controls up to 63% of total estimated PSO spending in areas including, but not limited to, Information Communication Technology (ICT) Consumables, Stationery and Office Supplies, Utilities and Motor Vehicles (PSRP, 2014-2016, PSRP, 2012). The implication of this particular procurement reform for all PSOs is the continuous implementation of the centralised procurement frameworks and contracts put in place by OGP for all procurement practices within their organisations.

4.2.4.5 Service delivery reform

The DPER was of the view that the delivery of services in PSOs should be continually assessed to ensure that services are delivered in the most efficient, productive and cost-effective manner possible. Thus, among their initiatives, in reforming service delivery channels in PSOs, DPER sought better outcomes for service-users though external service delivery (ESD) models, which involve full/partial contracting out of functions carried out by PSOs to a private sector provider. DPER anticipated that the value of ESDs would be twofold: Firstly, they would offer to PSOs greater potential for efficiency savings arising from competition for service provision; secondly, PSOs would be able to avail to the wider set of skills, expertise and technology possessed by the external provider. In PSRP (2011), the DPER committed itself to drive greater use of ESD within peripheral services at PSOs, where appropriate. This ESD was further incentivized, in PSRP (2012), to argue that PSOs be

subject to all their new services, including IS initiatives, for suitability evaluation with ESD before considering the delivery of the service internally. The implication of this ESD for PSOs in not of a tentative nature as those bodies remain responsible for the management of the relationship with the private service provider during service delivery (ESD, 2014, PSRP, 2014-2016). In addition, the significant of ESDs to the reform agenda would mean that PSOs need to provide an appraisal of the costs and benefits on new and current initiatives including IS, as well as providing a detailed evidence-based evaluation to the DPER should their proposed initiatives not be delivered using ESD (PSRP, 2015).

4.2.4.6 Shared services, where feasible

Under the reform agenda, the DPER set out to introduce a shared services initiative for common corporate services, i.e., HR, Finance and IS, which were previously administered separately by each PSO (PSRP, 2011). The implementation of shared services was anticipated to allow PSOs to focus their resources on core activities, while their corporate services would be delivered through standardised and shared operations, leading, it was hoped, to administrative efficiency through transactional consolidation. The use of shared services was expanded and accelerated after the government agreed to give a mandate on shared services (PSRP, 2012). The Reform and Delivery Office within the DPER was tasked with progressing and phasing up shared service deployment among PSOs. Against this background, PSOs were requested to carry out a scoping exercise to assess the feasibility of shared services and prioritise this agenda in their corporate service areas (PSRP, 2014-2016).

4.2.5 Macro level practices: closing remark

This section has offered a background on the macro practices under which PA1 and PA2 are embedded. The section began with an outline of how the Irish government, as structured during the period of 9th March 2011 – 26th February 2016, was formed to exercise its power. I have made it abundantly clear that, for consistency with my ontological choice of Tall-doing as outlined in chapter 3, the execution of this thesis is bounded within the timeframe of the existence of this government structure at a time when it was forced to undertake new policies and procedures were to deal with emerging economic challenges. I then proceeded to situate both cases, namely, PA1 and PA2 within this government structure as they both operate under the aegis of DPER. Thus, by definition, both cases are PSOs and, therefore, exposed to the wider government agenda for the rejuvenation of the economy.

The discussion then proceeded to outline the recurring theme in PfGs, that is of PSO reform agenda. With the primary concern being how best to accomplish service efficiency in PSOs, the reform agenda set out to introduce a set of cross-cutting policies and procedures to be incorporated into the meso level practices of PSOs. I undertook to review each element of the

reform agenda and what is required of PSO practitioners to perform in compliance with those cross-cutting initiatives. Practitioners in PSOs were requested to engage in strategizing for their organisations to align themselves with priorities in PfGs, and ultimately being able to request funding to deliver on strategic objectives. Therein lie the imperatives to strategize in the manner that intensifies their organisational activities and initiatives towards meeting the outstanding commitments set out in PfGs. In relation to IS initiatives, in particular, the reform agenda emphasised the importance of leveraging IS initiatives to maintain service delivery while ECF and fiscal measures were in place. I have indicated that the scarcity of resources entailed the government to circulate the PSC to act as a VFM framework for the deployment of IS initiatives in PSOs. In this way, practitioners in PSOs were predisposed to implement a set of intra-organisational practices in their analysis for new IS initiatives before they could proceed with approval from the DPER. Finally, the discussion went on to indicate that, for efficiency purposes, IS initiatives in PSOs are bounded by a set of measures, such as ESD, shared services and the National Procurement Framework, which govern how IS initiatives in PSOs are deployed and procured.

The task now in the next two sections is to present an interpretive case writing for PA1 (4.3) and PA2 (4.4) respectively. Each section is designed to uncover some of the real-life worlds of how the macro practices, as presented in this section, implicated in the meso practices of the respective case organisation under which aligning praxis were enacted. In this sense, each section would weave the fractured data collected from multiple-levels back together coherently and comprehensively towards an analytical and interpretive story on "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)".

4.3 The Meso practices of PA1

4.3.1 Purpose and Overview

Following on from the previous section, I turn in this section (4.3) to present how the interviewed IS executive within PA1 engaged in the practice of aligning business and IS strategies. In line with the SAP lens underpinning this thesis, the IS executive (including other practitioners) are placed at the centre of this case writing, with the view that SA is something that practitioners do rather than something organisations achieve. These doings or, better, aligning do not take place in a vacuum but are instead organised and guided in designated meso practices in PA1 that encapsulate organisational norms, procedures and routines on how to do alignment. In addition, as a PSO, the macro practices, presented in 4.2, implicated in what is happing relative to the aligning enactment at these meso practices in PA1. To reiterate, for consistency, the case writing here is bounded by the timeframe selected for this thesis, but this becomes more important when it comes to taking the SAP as a lens that necessitates praxis to be narrated with the focus on "*specific actions taken by specific people in specific times and places*" (Feldman and Orlikowski, 2011; P. 1245).

Overall, this section (4.3) is organised into four sub-sections. In 4.3.2, I present the legislative mandate of PA1 along with the various relevant acts and regulations. The aim is to give an account of those PA1 macro specific practices in order to be viewed in combination with those previously presented in 4.2. After that, in 4.3.3, I locate the IS executive among the wider practitioners within PA1 who, while located at different organisational levels, are held responsible for shaping strategizing - the chief domain under which aligning thereafter was enacted. Next, in 4.3.4, I draw on the four theoretical codes emerging from the analysis, presented in 3.4.7.3, and render them here as meso practices that organise data around how aligning was enacted in the interplay between meso and macro practices in PA1. Finally, in 4.3.5, I draw to a close this case writing on PA1 and offer a link to the second writing exercise that focuses on PA2.

4.3.2 Organisational set-up

In 1989, PA1 was established as a national statutory body to operate under the aegis of the DJEI, and was conferred with overarching responsibility for '[s]ecuring the safety, health and welfare of persons at work' (PA1-Act, 1989, p. 7). It thus directed many of its activities towards regulating workplaces across national sectors by monitoring and enforcing compliance with occupational health and safety laws (CER, 2011; BH Field note, 2014). However, the primary legislative remit PA1-Act 1989 was repealed in 2005. The new PA1-Act 2005 became the main bit of legislation for PA1 that provided further details on the

organisational duties - more than were previously stipulated in the Act of 1989 (PA1-Act, 2005). In 2008, a new public safety dimension was added to PA1 after an amendment to the PA1-Act 2005 was introduced in the Chemical Act asking to 'perform the [additional] functions conferred on the [PA1] by the Chemicals Act 2008' (Chemical-Act, 2008, p. 35). Consequently, PA1 became responsible for implementing EU legislation related to the manufacture, import, export, supply, use and transport of chemicals, which included responsibility for people who use chemicals at work, but also included those who use chemicals at home (Chemical-Act, 2008; PA1-Strategy, 2013-2015; PRR, 2014). A further amendment to the Chemicals Act 2008 and Act 2005 was put forward in the Chemicals Act 2010 which provides further clarification on PA1's inspection and enforcement duties in the area of chemicals.

Together with the duties outlined above in the acts, the Minster of DJEI, in exercising the powers conferred by section 58 of PA1-Act 2005, makes regulations in respect of any matters related to health, safety and welfare of persons at work for which PA1 is responsible for implementing. Many of these regulations intended to apply EU directives at the national level. In 2013, for instance, PA1 operationalized biological agent and construction regulations, each of which was introduced by the Minster to confer PA1 with the power to exercise its duties where appropriate. Succinctly, these regulations and acts altogether shape, bound and define what practitioners in PA1 have to do in order to maintain the statutory footing of their organisation.

4.3.3 Organisation of Practitioners

With the view that strategizing is one of the main activities undertaken within organisations to guide and shape streams of subsequent decisions towards favourable targets (Mintzberg and Waters, 1985, Kaplan and Norton, 2004, Ronda-Pupo and Guerras-Martin, 2012), it would be reasonable here to acknowledge the collective actions of those practitioners involved in this major activity in PA1, since strategizing in itself acted as if an envelope for the enactment of aligning in PA1..To this end, Figure 4-2 below is constructed with the view to providing a visual representation of how those practitioners involved in strategizing (peripherally or actively) are organised to act out their role in PA1.

Given the inextricable organisational link between PA1 and DJEI, the PA1-Act 2005 conferred the Minster with the power to exercise one of his/her duties, that is, the overseeing and approval of PA1's strategy in the context of directions and priorities given to practitioners in PA1 who must 'comply with any directions ... that the Minister may from time to time give to [PA1]' (PA1-Act, 2005, Section 34). This sheds light on the responsibility of an extra-organisational practitioner who has no allocated hierarchical role

within the organisation but who influences the work of strategizing through his/her formal role in endorsing and approving the strategic direction of PA1 (PA1-Strategy, 2013-2015; PfG, 2011-2016).

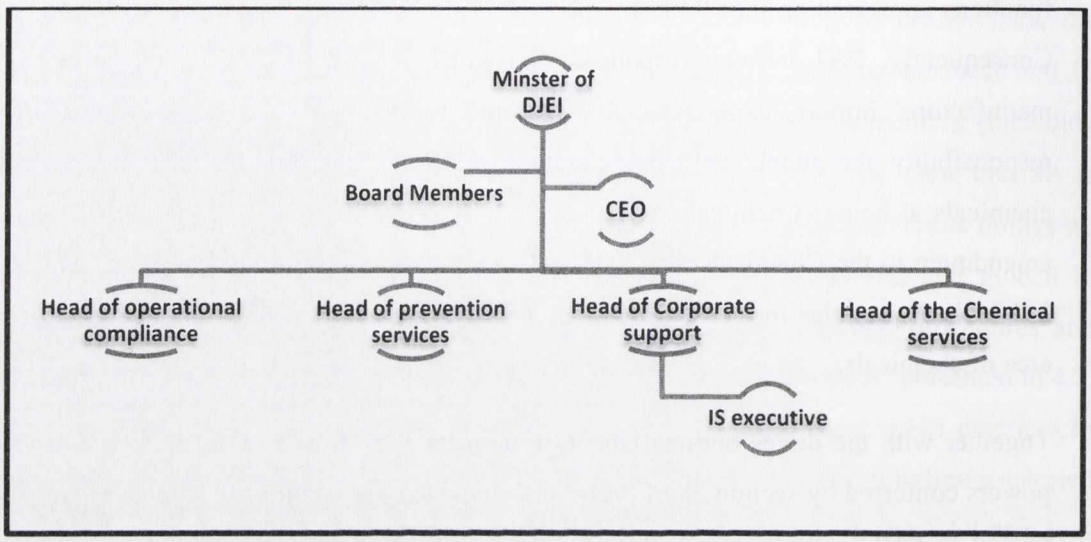


Figure 4-2 Shows practitioners' arrangement in PA1

The PA1-Act 2005 continues to confer additional power to the Minster through authorising him/her to appoint a board of twelve non-executive members from among those with interests in health and safety in the workplace to oversee the work in PA1. This board has four sub-committees, namely, Legislation and Guidance, Finance, Audit and Strategic Review Group (SRG). Although the board members do not hand down the day-to-day activities within PA1, the involvement of the SRG committee in PA1's strategizing is instrumental in terms of determining the priorities and directions for practitioners within PA1 based on those priorities of both the government and Minster (PA1-strategy, 2013-2015; PMH, 2014). This involvement may go some way towards rendering possible and or excluding certain initiatives during strategizing in accordance with whether those initiatives fit with ministerial and governmental priorities. As such, this would unveil a group of extra-organisational practitioners who act between the macro and meso levels by constantly transmitting the priorities resonated at macro level into PA1's strategic direction.

PA1 is headed up by the Chief Executive Officer (CEO) who is appointed by the Minster to manage and control the administration and business of PA1 (PA1-Act, 2005). Hierarchically, below the CEO are four Assistant Chief Executives (ACEs) who represent the four functional areas within PA1, namely, Operational Compliance, Chemical Services, Prevention Services, and Corporate Services. Their arrangement in PA1 is twofold: first, collectively with the CEO, they represent the 'strategizing group' which is tasked with developing and monitoring the implementation of PA1's strategy in line with legislative responsibilities and directions, as set out by the Minster and SRG (PA1-strategy, 2013-2015). Second, on their own they act

as permanent members of the 'Project Committee', which is responsible for overseeing and approving all capital expenditure within the organisation (GDS, 2014). Below the ACE level, the management group practitioners perform their duties; within which the IS executive resides at this level. In this vein, the IS executive operates under the head of the corporate services division and acts as the head of the IS unit within the organisation (IS strategy, 2013-2015). According to the staffing structure and roles of PA1, the IS executive is a legitimate participant in organisational strategizing while holding conditional membership of the Project Committee to collectively engage with ACEs in analysis related to IS-related capital expenditure (GDS, 2014).

4.3.4 Localised practices for aligning enactment

In this section, I drew on the theoretical codes emerging from the constructivist GT method as presented in 3.4.7.3, namely, strategizing, releasing resources, appraising and IS management, and render them here as meso practices that encapsulate how the exemplar IS executive in PA1 engaged in the practice of aligning business and IS strategies. The value of this approach, as outlined in 3.3.6.4, is to organise data from multi-level sources towards a coherent, analytical and interpretive story on the enactment of alignment in the interplay between meso and macro practices. The writing in this section was aided by my own memos that captured some analytical interpretations on codes.

4.3.4.1 Strategizing practices

The theoretical code of strategizing practices serves as a purpose of accommodating the wider strategizing practices at all levels within PA1 under which the aligning praxis were enacted. These are interpretively grouped into three practices: crafting organisational strategy, forming IS strategy, and executing organisational strategy. The task in this section is to present the interpretive narration of each practice one after another with the prime emphasis on what was happing relative to the enactment of SA both within these meso strategizing activities and as an influence from the macro practices.

4.3.4.1.1 Crafting organisational strategy

The engagement into strategizing for PA1 is mandated by the legislative mandate which dictates pursuing a three-year strategy for the organisation (Act, 2005, section. 43; PA1-Strategy, 2013-2015). In addition, the government, under its reform agenda, placed a request to all PSOs to set out their three year high-level organisational objectives with a strong emphasis on alignment with government priorities (PfG, 2012). In response to these, in January 2012 the strategizing group kicked off strategizing for 2013-2015 and agreed to tender for a consultancy company to run a series of workshops within the organisation. The

contracting in of consultants was deemed necessary since they can exercise their objective power to shape strategizing by challenging ideas, 'ask[ing] questions and start[ing] a debate' (PRR, 2014) among strategizing group practitioners. Such a decision does not amount to a conflict with the legislative mandate since this permits the involvement of consultants in strategizing insofar as it states that 'when preparing the strategy statement, the [PA1] may consult such persons or bodies of persons that it considers appropriate' (PA1-Act, 2005, p. 49). Having said that, the series of strategizing practices for PA1 were phased into three parts, namely, drafting strategy, building support, and finalising strategy.

4.3.4.1.1.1 Drafting strategy

Neither the management level executive, nor the IS executive were involved in drafting the organisational strategy. This preparatory work was confined to the strategizing group to develop a contextual understanding for the management executives. One member of the strategizing group vindicated this decision on their part of excluding management executives by illustrating that: 'You must have some ideas to give them to engage them. You cannot just say, "What do you think?" You must say, "Well this is what we are doing". You must give them a context' (PMO, 2014). Thus, the strategizing group proceeded in accordance with government priorities which were distilled with the SRG prior to the kick off of strategizing. In considering those government priorities, however, a fundamental and inescapable factor was that previous organisational strategies already existed, meaning that the group had to begin strategizing from a 'brownfield site' (PRR, 2014) as opposed to a 'greenfield site' (PMO, 2014). This indicates a level of continuity between PA1 strategies created by the legislative mandate of the organisation that maintains much of what PA1 has to do, regardless of what priorities were put forward by the government and Minster from time-to-time.

Nevertheless, the strategizing group envisaged those priorities as parameters during strategizing, and thus deemed the establishment of a connection between the legislative mandate and government priorities as vital (SGW-PPT, 2012). The aim was to show how the delivery of mandates could contribute to certain government priorities by tweaking the non-discretionary activities of PA1, arising from mandates and previous strategies, and align these with priorities as set by the current government. The agricultural sector, as an example, was identified as an important growth area for national recovery by the government (PfG, 2012). This demanded that the group tweak its focus to reduce the fatality rate within the sector and prioritise agriculture ahead of other sectors. This shift was summed up by one member of the strategizing group as follows: '[i]n our last strategy, construction was a major element. In this strategy, construction is less significant, agriculture is more significant ... we have to do an external view of the economy' (PMO, 2014).

In responding to government measures that were unprecedented in terms of ECF and budget reduction, the strategizing group engaged in the analysis of the impact of such measures over the lifespan of the PA1 strategy. Based on a comprehensive expenditure review carried out by the DPER across all PSOs, PA1 was assigned a target of gradually reducing staffing by 20% by the end of 2014 (CER, 2011). Similarly, the budget available to PA1 has been subject to incremental reductions from €24 million in 2008 to €17 million in 2014, with further contraction a prospect in 2015 (PJM, 2014). To overcome these obstacles over the organisational strategy's lifespan, the strategizing group decided to implement a risk-based approach to all its inspections and enforcement activities across sectors to ensure the delivery of mandates whilst making the best use of available resources and budget (CER, 2011; SGW-PPT, 2012). Such an approach was deemed to be cognizant of government measures to drive efficiency in the realm of fiscal consolidation and constraints on resources (PA1-Strategy, 2013-2015).

Yet, to support its case, the group sought to distill their strategizing into things like vision, mission, and strategic priorities as a means of communicating its interpretations of mandates and government priorities to the next stage of strategizing at management level. Indeed, the strategizing group was in favour of an engagement session between it and management executives in order to 'get meaningful comments back ... more buy in, [and] commitment' (PRR, 2014) from those people who would be working on executing this strategy (PMO, 2014). Evidently, given that the prime focus was on developing contextual understanding, IS initiatives were not discussed by any means during the practice of drafting organisational strategy; thus suggesting that there was no space for aligning enactment at this stage of strategizing.

4.3.4.1.1.2 Building up support

Run and structured by the consultancy company, the IS executive, other management executives and strategizing group jointly engaged in a series of workshops to develop aligned contextual understandings under which the forthcoming PA1 strategy would operate (MSW-PPT, 2012). At the outset, the strategizing group set the scene for the management executives and invoked the legislative mandates as a means to show how these can provide stability and continuity on strategizing despite changes in the external environment. Then the group gave prominence to some priorities set forth in the PfGs (e.g. reducing the administrative burden associated with health and safety to business) which required PA1 to position itself as a contributor to such an economic-enhancing message. After that, the strategizing group offered space for the management executives to engage in a debate on vision, mission, and strategic priorities which had been earlier pre-formulated during the drafting phase. While the overall management proposals within the realm involved certain changes to language towards

more refined strategic priorities, the strategizing group posited that each strategic priority is associated with a number of objectives, for which the management executives need to ensure the alignment of their units' program of works with those objectives to deliver on organisational strategic priorities.

The strategizing group then proceeded to introduce the reform agenda on PSOs, along with the implications to be taken into account over the lifespan of forthcoming strategy (MSW-PPT, 2012). In the context of ECF measures, for instance, the group highlighted its earlier decision to implement a risk-based sectoral approach on all inspections and enforcement activities in conjunction with sectors identified in PfGs as vital for economic recovery. This decision somehow yielded an IS initiative solution that was put forward for discussion during the workshop. The proposer of this IS initiative remarked on its potential to drive efficiencies for a risk-based approach, while lamenting the grounds of the proposition by saying: 'we are losing staff so we actually have to do things differently' (PRR, 2014). Whereas the solution was welcomed as being aligned to the strategy aspect, however, the strategizing group exploited this opportunity to affirm the importance of developing a business-case analysis for this IS initiative in coordination with the IS executive for governance purposes and, more importantly, to ensure effectiveness in delivering on goals and achieving VFM (MSW-PPT, 2012). This drama clearly indicated the manner through which the IS executive drew back from proposing IS initiatives to the business and allowed the business itself to put forward its IS need.

To gain more support for the forthcoming strategy, strategizing in PA1 further included an in-house consultation workshop for the wider staff in the organisation. The purpose of this event was to invite comment on the draft strategy that had emerged from strategizing at higher levels. Following that, the draft strategy was posted on the PA1 website for public consultation. In this vein, executives and managers from six government departments and public bodies offered feedback on or an endorsement of the drafted strategy, e.g. affirming the focus on the high fatality rate in the agriculture sector which had emerged during the strategizing group workshop (public consultation submissions, 2012).

4.3.4.1.1.3 Finalising strategy

The strategizing group held further workshops to review the input that had emerged from the management executive workshops and the consultation process (staff and public). The draft strategy was reformulated to incorporate all inputs and submitted to the SRG which, in turn, had the ability to create a feedback loop to the organisation as additional suggestions were proposed, i.e. requiring explicatory reference to the role of mandates and regulations to contribute to national recovery (SGW-PPT, 2012; PRR, 2014). Later on in the process, the SRG was involved in reviewing the finalised strategy document before it was sent to the

Minster for approval in accordance with the legislative mandate which spells out that 'strategy [in PA1] is deemed to be adopted when it is approved by the Minister' (PA1-Act, 2005, Section. 48). At the launch of PA1's organisational strategy for 2013-2015, the five strategic priorities, which cascaded into the broader mandates and government priorities, were as follows:

1. Enable enterprises to comply with their legal obligations.
2. Achieve a high standard of compliance with safety, health and chemical laws.
3. Support the Minister in the development of a well-functioning, robust and proportionate regulatory framework.
4. Engage and work with people and organisations nationally and internationally to achieve our vision.
5. Be a high performing organisation delivering value to the Irish taxpayer.

Source: PA1-strategy (2013-2015)

4.3.4.1.2 Forming IS strategy

The engagement into IS strategizing is not mandated by the legislative remit of PA1. In addition, neither is there an organisational requirement within PA1 to engage practitioners across the business units in formal IS strategizing practice, nor a requirement to prepare and submit IS strategy documents for any approval. Thus, to a considerable extent, it is the practitioners within the IS unit who were inclined towards IS strategizing in order to set out how they intended to convert PA1's strategy into planned and prioritised IS initiatives that would subsequently support businesses to achieve the objectives associated with strategic priorities (IS strategy, 2013-2015). While this practice appeared pertinent to exclusive relationships with PA1's strategy, nevertheless the government policies and measures placed on all corporate service areas (including IS) across PSOs were implicated in IS strategizing within PA1. To this end, this section presents the manner through which IS strategizing was undertaken which involved a number of practices that were interpretively grouped into: pursuing business imperatives, planning out IS infrastructure and exercising prudence.

4.3.4.1.2.1 Pursuing business imperatives

To a certain extent, the IS executive would not wish to analyse PA1 strategy documents to strategize as to how IS can contribute to business objectives. The PA1 strategy document was perceived as a good principle to be used but it is broad, overarching and does not quantify the minutiae of individual business unit objectives. This does not mean that the IS executive entirely dismissed pursuing PA1 strategy. Instead, the main argument was centred around establishing SA by aligning IS with the business imperatives which would emerge from the day-to-day information loops all over the organisation that might not be codified in the PA1

strategy document. This action was illustrated by one of the management executive who stated that the IS unit, in compiling IS strategy, is not setting out in a 'vacuum and not getting the information from anywhere. [They] are getting it from all over the organisation' (PAA, 2014).

Thus, IS strategizing, as lead by the IS executive, is not a kind of formal episode within the IS unit that involves IS practitioners sitting down and having a whole series of meetings on IS strategizing. Rather, it is an organic process that involves information collection across the organisation. For instance, the IS executive drew on the quarterly management meeting to review the delivery of IS services and get a sense of what were seen as priorities or issues that should be addressed when compiling IS strategy (PMO, 2014; PRO, 2014; PAA,2014). Likewise, IS practitioners contributed to the production of the intended IS strategy by means of reflecting back on issues or ideas emerging from day-to-day interactions with organisational practitioners. While IS strategizing to some extent soaks up issues and priorities across the business in this way, the remit of IS strategizing in PA1 was confiscated to consider strategizing for IS applications in the business areas on the ground in which practitioners would need to take the lead in identifying and driving IS application initiatives relative to their business imperatives; this is something beyond the scope of IS strategizing as enacted inwardly among IS practitioners.

4.3.4.1.2.2 Planning out IS infrastructure

Following from the above, pursuing business imperatives in IS strategizing does not entail the IS executive strategizing for IS application initiatives embedded within business activities. Rather, the IS executive, in compiling IS strategy, was confined to the setting out of a 'technical proposal' (PAA, 2014) around the performance of IS infrastructure based on the manifold daily information amalgamated across the organisation as well as strategic imperatives gained during participation in organisational strategizing. To this end, IS executive prioritised IS infrastructural initiatives for upgrades, reviews or maintenance to ensure the availability of the necessary groundwork to provide business units with IS support to meet their respective needs over the course of PA1's strategy. For instance, the enforcement database (GeoSmart) holds all inspections and enforcement activities, and records details of reported accidents across national sectors. Where strategizing practitioners had already outlined the shift towards the risk-based approach, it could therefore be expected to see a committee from the IS executive in the technical proposal to review this database to ensure flexibility and suitability in deploying the prospective IS application, proposed during strategizing, that might require access to the database to feed decisions and analysis as related to the risk-based approach (IS strategy, 2013-2015; GDS, 2014).

In short, it is sufficient to indicate here that IS strategizing or, better, the technical proposal did not reflect an overreaching assessment on all IS across the organisation. Rather, it was confined to give full consideration to the wider IS infrastructural works needed. Thus, leaving the extent to which IS application initiatives were needed in alignment with business imperatives on the shoulders of business practitioners, that is, to their level of willingness to engage with other organisational practices, as opposed to IS strategizing practice, which would be the framework to accommodate all their prospective IS application initiatives.

4.3.4.1.2.3 Exercising prudence

The government measures were not taken for granted during the practices of IS strategizing. Instead, the IS executive undertook to ensure compliance with the reform measures while ensuring an efficient model for running IS within PA1. To this end, the IS executive carried out a review on those IS initiatives (application and infrastructural) managed and run by the IS unit. The conclusion was that the mixed service provision (in-source and ESD) to meet the PA1's IS needs would be more cost effective in the meantime (IS strategy, 2013-2015). Nonetheless, it was committed to IS strategizing in which the ESD model would be fostered and continually assessed, on the one hand, to tone with government measures that implied continual assessment on in-house services to ensure the maintenance of efficacy (PFG, 2011, 2012). On the other hand, further deployment of ESD would minimise the amount of time spent on day-to-day operations, thus opening a vista for the IS executive to engage more heavily in strategically planning, analysing and reviewing IS systems in line with changes in strategic business imperatives from time-to-time (IS strategy, 2013-2015). Once again, the IS executive review in this realm did not cover those IS applications embedded in the business areas, but the fact is that those IS applications were already incorporated into the ESD model due to the lack of IS skill levels from within their internal resources.

4.3.4.1.3 Executing organisation strategy

The engagement in annual planning for a programme of work (PoW) relating to the delivery of organisational strategy is mandated by the legislative mandate which states: "[PA1] shall prepare ... a work programme relating to the discharge of its function including – a) having regard to the strategy statement, the objectives of [PA1] for that year and its strategy for achieving those objectives" (PA1-Act, 2005, Section 44). This regulation brought about the preparation of three PoWs under PA1's strategy for 2013 to 2015, monitored periodically by the board members and approved by the Minster in accordance with the PA1-Act 2005. The PoW is the annual practice for practitioners in individual units to develop their strategies to define what "they are going to do within their units that kind of helps the overall strategy" (PMD, 2014). This involved the high-level planning out actions and initiatives at the unit

level to deliver on the PA1 strategy. During the management strategizing workshops, to reiterate, the strategizing group requested all management executives to ensure the alignment of their PoWs with the five strategic priorities of PA1 (MSW-PPT, 2012). However, the minutiae of IS related PoW, in particular, would unveil different practices in the way that IS initiatives were planned and organised into the organisational PoW. The two practices which were directly associated with the owner of the IS initiatives are: formulating business-owned IS initiatives and IS-owned initiatives.

4.3.4.1.3.1 Formulating business-owned IS initiatives

In delivering the mandated frontline services, the PoW would typically feature a series of actions and initiatives that business units intend to deploy for a particular sector or across sectors, whilst bearing in mind the government priorities as well as the five strategic priorities of the organisation. Where a particular IS initiative was required to be introduced or maintained to support business activities, the underlying assumption was that the business executives would decide on these with no involvement from the side of the IS executive in planning out those IS initiatives. Thus, the extent to which they are aligned with the business's PoW and strategic priorities of PA1 were mainly placed on the shoulders of the business executive. For instance, the Education unit within PA1 developed in 2008 an online tool (e-learning) to support its actions in the education sector by providing free online courses to increase health and safety awareness. This online tool was planned by the Education executive for an upgrade, within the PoW of its unit to incorporate new models to target further sectors, e.g. national SMEs, in line with government priorities in reducing the administrative burden on SMEs (PoW, 2013). A similar instance comes from the BeSmart IS application that emerged as a delivery mechanism for the service initiative of Taking Care of Business (TCB) to provide a free online tool for SMEs in four sectors, mainly retail, hospitality, services and manufacturing, in order to help them prepare written risk and safety assessments to freely comply with health and safety law. The planning of upgrading and extending this IS tool to other sectors in line with government priorities, i.e. construction (PoW, 2013) and agriculture (PoW, 2015) was assigned under the cross-sectoral PoW by the head of the operational compliance division with no inputs from the IS executive in this area.

4.3.4.1.3.2 Formulating IS-owned initiatives

For centrally-managed IS (application and infrastructural), the IS executive took the lead to plan out IS-PoW in alignment with business strategic imperatives. Unlike the practice of IS strategizing, the IS executive, in compiling the IS-PoW, engaged business executives in a review of their current IS services to seek out their inputs to be "embedded into the [IS] programme of work" (PAA, 2014). The ground for this was the need to identify their immediate business imperatives for that particular year to ensure the readiness of IS services

to underpin their business objectives in a timely fashion. In this sense, by annually engaging business executives, it could be argued that the IS-PoW acted as if a framework to accommodate changes in initial assumptions made on IS infrastructures during the practice IS strategizing. On account of the new circumstances, one executive noted that the annual engagement of business executives in the compiling of IS-PoW is pivotal to 'see how things were going and what was coming up' (PAA, 2013) which would require readiness on the part of the IS executive to readjust what was inherent in the IS strategy document in order to 'take account of any new strategy statements that may be developed by the [PA1] ... [and reflect them in IS-PoW on timely basis]' (IS strategy, 2013-2015). Additionally, IS-POW was also the framework for implementing the new IS application initiative, namely, mobile technology solutions which emerged during a management strategizing workshop and subsequently received appropriate management level approval. In this vein, as it was decided to manage this initiative and run it centrally within the IS unit, the IS executive undertook to assess (IS-PoW, 2013), pilot (IS-PoW, 2014) and implement (IS-Pow, 2015) the mobile technology solution in support of the strategy of risk-based inspection activities.

4.3.4.2 Releasing resources practices

The theoretical code of releasing resources affords the practices under which the finance for IS initiatives unfolded. These practices are interpretively grouped into two, namely budgetary practices for decentralized IS initiatives and budget levelling. In this section, I undertook to interpretively present what was happening within those meso practices relative to how aligning praxis were put into action, whilst interrogating the macro practices that implicated each of them.

4.3.4.2.1 Budgetary practices for decentralized IS initiatives

The DJEI was the 'pay master' (PJM, 2014) for the budgetary allocation for practitioners in PA1 to run their organisations; which was divided largely into two categories, namely payroll and non-payroll. However, the fact was that the budget amount, as received from the DJEI, did not provide guidelines on how the budget was to be released for IS initiatives across the organisation. Thus, the determinant of IS-related budgets was a matter to be decided internally among the strategizing group within PA1. To this end, the strategizing group decided to annually dedicate from the non-payroll allocation a comprehensive budget that would allow management executives to execute initiatives implicated in 'the programme of work or the strategy required [in their units]' (PJM, 2014), and put aside a discretionary budget for use at the discretion of the CEO to fund new organisational initiatives (including new IS initiatives). As such, this broad budget design was actually an envelope for three

practices under which IS-related budgets across the PA1 unfolded, namely, committing to PoW, deficient in compliance and funding new IS initiatives.

4.3.4.2.1.1 Committing to PoW

Following the receipt of the budget for PA1, individual ACE met with management executives in their area and requested that they formulate a spending proposal based on their specific PoWs which had already been approved by the board and Minster. As such, the IS executive directed his spending proposal to the micro of IS initiatives contained within IS-PoW; which included only those IS applications and infrastructure managed centrally within the IS unit. In this sense, the focus of the IS executive has been to ensure the funding of those IS applications in which the organisation had invested and shown commitment to over many years, and 'put a huge reliance and dependency [on them]' (PJM, 2014), thus they should be sustained and upgraded, and 'not have them all falling asunder' (PAA, 2013) in line with business strategic imperatives. In addition, the other dimension of the IS spending proposal was that the IS executive put aside a proportion for supporting the baseline commitment in relation to the IS infrastructure, i.e. software licenses, platform maintenance, contractual commitments and servers, with an end to keeping 'the show on the road' (PAA, 2014). While those baseline commitments were pretty continuous from one year to the next, the IS executive would have already ensured the business executive inputs on the suitability of such IS infrastructure to their business needs during the compiling of IS-PoW.

Therefore, technically, the IS executive did not have to concern himself with those IS initiatives embedded in the business areas contained within business PoWs and which eventually formed part of the business budget. At the heart of this approach lies the view of ensuring SA insofar as business executives would not continue to support the IS products if they were deemed not to be aligned with their business strategic imperatives at any stage. One executive backed this approach which blends a centralised budget on IS infrastructure and major systems and decentralised budget on systems owned and embedded in the business area activities, affirming that:

'*they are the [business] people on the frontline who are best placed to manage it and feedback with the provider. So if we were insisting that it has to be in [IS] budget and has to report to [IS unit], then we are only providing an extra layer there that doesn't add any value*' (PAA, 2013)

4.3.4.2.1.2 Deficient in compliance

Following a series of spending proposals prepared within the organisation, each ACE was responsible for coordinating the spending proposals of their relative units into a single spending proposal for the division. Further discussions were held among the strategizing

group to refine the spending proposal for the whole organisation before it proceeded for approval from the audit committee within the board as part of its responsibility to monitor the financial affairs of the PA1 (PA1-Act, 2005; PJM, 2014). However, for the IS executive, in particular, to embark on the expenditure of his spending proposal, the CMOD division within DPER should be advised as part of the government measures to oversee IS initiatives across all PSOs (Circular 2/11, 2011). To this end, the IS executive prepared what was formally called in Circular 2/11 (ibid.) a 'Start-of-Year submission', based on the internally decided and approved IS spending proposal. Ironically, it might be due to lack of guidance from the government; those IS initiatives budgeted from the business allocation were not formed as part of the CMOD submission made annually by the IS executive. One possible explanation is that such IS initiatives budgeted from the business areas were internally envisaged as the budgetary funds of individual business units, as opposed to the IS initiatives fund.

4.3.4.2.1.3 Funding new IS initiatives

How new IS initiatives were funded in PA1 was the prime cause for the emergence of hybrid budgeting practices on IS initiatives across the organisation, as noted in what precedes above. In this vein, some proportion of the discretionary budget, which was made available for use at the discretion of the CEO, was devoted year on year to the development of new IS initiatives or upgrading the capability of existing IS systems, regardless of whether the initiatives were to be managed by the IS unit or business units. This practice was justified on the basis of the need to 'find a new budget' with which to build a 'new platform' (PMO, 2014) to improve and enhance service delivery to the client and increase internal efficiency in line with strategy. This approach took the form of one-off spending on IS initiatives until it later became operational, forming part of the budget of 'whoever is leading [and managing] the project' (PJM, 2014) from the business or IS units. So effectively, in principle, any IS initiative for which the business executive or IS executive takes executive responsibility generally falls within his/her budget. For instance, the GeoSmart system, when first built, was financed through the discretionary budget. The operational maintenance of the system then became part of the budget of the IS unit that managed the system. Now, the system was planned for a significant upgrade in line with strategy, for which the CEO agreed to the release of €400,000 from the discretionary budget to be available to the IS executive to commence upgrading GeoSmart (PMO, 2014). In another instance, the e-learning project was first funded from the discretionary budget, and then the IS executive undertook to dedicate resources from the education budget to fund the "*support charges ... upgrades and technical [capability]*" (PJH, 2014) needed for their e-learning project in line with strategic imperatives.

4.3.4.2.2 Budget levelling

The spending proposal, as approved within PA1, the audit committee and the CMOD, might not be operationalized as it was initially intended to be, due to new IS projects emerging during the year or unexpected overspend on certain initiatives. Where tensions existed between what was planned and what emerged, the IS executive would 'have to look ... [for] a supplementary budget' (PJM, 2014), was a situation to be addressed through the practice of a quarterly budget review. In this vein, the strategizing group carried out a detailed budget review on a quarterly basis together with all budget holders to identify areas in which they were likely to underspend and potentially overspend to see whether there was a need to transfer funds between certain areas for the sake of getting PA1 finances 'in order for the end of the financial year' (PJM, 2014). For the interviewed IS executive, this budget transfer led to the receiving of an additional financial envelope to accommodate the new emerging IS initiatives in the finance and HR units. Therein, the IS executive had to run with those projects for business imperative purposes and report on them in the subsequent year's submission to CMOD. The justification offered for such a break of line was that 'the Department is reasonably agreeable, as long as you had a good reason for doing it' (PAA, 2014).

4.3.4.3 Appraising practices

The theoretical code of appraising practices embraced those under which IS initiatives were subjected to rigid analysis and review to explore concordance with respect to compatibility with PA1's strategic imperatives. These appraising works were carried out under two prime practices, namely, the IS business case analysis and project committee. In this section, I attempt to unpack the enactment of aligning within these practices whilst hunting for the macro practices entangled in each.

4.3.4.3.1 IS business case (BC) analysis

It is stipulated in the PSC published by government that each capital expenditure project (including IS) should have a detailed business case (BC) analysis (PfG, 2011; PSC, 2011). This request was intended to embed a practice of evaluation and appraisal across PSOs to establish VFM on all organisational initiatives (PSRP, 2011). With regard to IS-BC in particular, PSOs were requested to ensure that their proposed IS-BC complied with government policies on IS projects (i.e. ESD model or shared services) and supported their organisational strategic priorities as well (PSC, 2011). At the level of PA1, the necessity to develop IS-BC for each individual IS initiative that required capital investment had already been in place prior to the government's request. But with the strong emphasis from the government on this issue, it was appropriate for the strategizing group, during management

strategizing workshops, to reaffirm and remind management executives to engage more effectively in BCs to, firstly, align with government endeavours from BCs (MSW-PPT, 2012), and secondly, facilitate objective decision-making on competing BCs seeking a proportion of the discretionary budget assigned for all new projects and initiatives across the organisation. One member of the strategizing grouped remarked on the instrumental value of IS-BCs which facilitate an impartial decision when devoting a proportion of the discretionary budget among many other organisational initiatives to support the strategy; summarising that IS-BC acts as 'a way to determine priorities for competing resources' (PMO, 2014). The practice of IS-BC in PA1 involved a number of practices that were interpretively grouped into: business-owned IS initiatives, scoping out with the IS executive, pursuing strategy and imperatives and exercising compliance.

4.3.4.3.1.1 Business-owned IS initiatives

Noticeably, practitioners from the business units were the owner and initiator for IS-BCs as put forward under the PA1 strategy for 2013-2015. For instance, following the introduction of the mobile technology solution during the management strategizing workshops, practitioners from the compliance division put this IS initiative into BC to move the case forward (MTS-BC, 2012; PoW, 2013). In another instance, the HR executive initiated, through a BC, the replacement of an HR system in operation at the time that had lost the tender's support (PBR, 2014). In both examples it appeared that the IS executive, although having witnessed the embryonic stage of those IS initiatives, drew back from taking proactive actions to put forward those IS initiatives in BCs on behalf of the business executive. One articulated the perceived benefits of doing so - that is, a better fit with the need of business on the ground - as follows:

'*for all sorts of reasons, the business has to ... own it ... because they are the guys who are going to use it ... if [IS executive] input[s] a system that meets 40 per cent of the needs. If we had their involvement maybe it would meet 80 per cent of the needs*' (PAA, 2013).

4.3.4.3.1.2 Pursuing strategy and imperatives

Fundamentally, for permissible release from the discretionary budget, business executives were requested, among other things in the IS-BC template, to demonstrate the alignment of their proposed IS initiatives with either PA1's strategy or their business's PoW to the extent that 'if you are a business unit ... proposing to do something here and it cannot be linked to any of our strategic goals, then you shouldn't be doing it' (PRR, 2013). Competing IS-BCs within the organisation were assessed on this basis and it was the responsibility of business executives to establish how their proposed IS-BC would help in delivering on strategy and PoW. For instance, the BC for the mobile technology was put forward as being aligned with PoW in delivering efficient and effective inspections (MTS-BC, 2012; PoW, 2013). The

planning out for the upgrade to the BeSmart system in 2014, for instance, was put forward as contributing to the first strategic priority within PA1 (PoW, 2014).

Not all IS-BCs could be proposed to be in direct alignment with strategy or PoW. The fact remains that IS-BC might evolve as aligned with the day-to-day business imperatives. For example, the current finance system was deemed not to be suitable for the current and future requirements of the organisation after the introduction of the ECF measures by government; thus, as summed up by an executive, 'the reason to [replace the] finance system has nothing to do with strategy, it is all to do with necessity' (PJM, 2014). Indeed, the existing system was built on the assumption that the organisation would expand and employ more people. The result was a system that was overly complex for the organisation's size, and which became resource intensive. In this sense, it has also been the responsibility of the finance executive to develop an IS-BC to specify the problems with and challenges in the current working practice yielded from the old system.

4.3.4.3.1.3 Scoping out with the IS executive

To transcend any miscalculation of what IS could deliver for the business, business executives were requested to secure formal inputs from the IS executive on any BC that involved a component of IS (PBR, 2014). Therefore, of concern to the IS executive was that the enthusiasm of business executives with regard to their proposed IS-BC should not lead to the exaggeration of the real benefits implicated in the initiatives. As such, the IS executive examined the proposal against the reality and engaged back and forth with the business executive to clear up any ambiguities around the benefits of the proposed IS-BC (PJH, 2014; PBR, 2014). One executive has valued this iterate sort of engagement between herself and the IS executive in a sense that was a form of 'building in lots of checks and balances ... what are the pros and the cons' (PJH, 2014) on the proposed IS-BC and clearing up any ambiguity around how practically and 'closely [the proposed IS-BC] aligned to the business strategy' (PAA, 2014).

Then, a second-order examination would involve the IS executive to conduct a scoping out of the cost versus the benefits of the proposed IS-BC. The mobile technology initiative, for instance, was scoped out by the IS executive in terms of the cost of this solution over the lifetime of the project, i.e. an increased annual mobile data bill and costs associated with increasing the number of devices needed in the field, versus the efficiency benefits anticipated from the enhanced inspection activities (MTS-BC, 2012). The rigour with which the IS executive should have examined the proposed IS-BC and provided a reliable input can be seen in the following statement from one executive who pointed that: '[IS executive] should fight very hard not to have a project going that [he does not] believe delivers the benefits that is worth the cost. So [he must] be strong on that' (PAA, 2014).

4.3.4.3.1.4 Exercising compliance

In the final analysis, the proposed IS-BC needed to be subjected to government policies that impacted on all IS initiative PSOs. Here, the IS executive examined, in the first instance, the suitability of the ESD model for the proposed initiatives. For instance, the suitability of ESD for the mobile technology solution was identified as not cost being effective and inappropriate for the pilot phase of the project (MTS-BC, 2013). Conversely, the adoption of ESD for the new financial system was deemed appropriate since the ECF measures had left PA1 with no human resources available to manage the system within the unit. The full contracting out of the management of the financial system was summed up by a management executive as thus: 'we have been very particular with the new financial services provider to say to them that they are responsible for the finance management system, they are responsible for its maintenance, its support ... anything to do with it' (PJM, 2014). In another instance, however, the loss of tender support on the current HR system provided favourable conditions for the IS executive to seek out the availing of shared services for the new HR system (PBR, 2013; PoW, 2015). One executive illustrated that the circumstances under which the shared services were favoured over ESD by stating:

'*[w]e would ideally see ourselves in a shared service arrangement within the public sector [the perceived benefits of utilizing shared services included both] savings in terms of effort [and] reassurances in terms of continuity of the system [which may not have resulted from ESD management of the system, as the executive further explains:] we could go and get some other sort of system from another company but there is no guarantee they won't get in trouble in five years' time and stop developing it*' (PAA, 2014).

4.3.4.3.2 Project committee

The development of IS-BC was not an end in itself, but rather as a means for business stakeholders across the organisation, organised in the project committee, to treat the proposed initiative as an investment that must be exposed to measures beyond the benefits described by its business owner. One member of the committee clarified that a completed IS-BC would allow them to go into the minutiae of demonstrating the real value that is delivering, by analysing 'what will [the proposed IS-BC] deliver? How will it help deliver [PA1] programme of work? How will it help deliver [PA1] strategy? ... [h]ow spending that money will improve the service' (PMH, 2014). This form of practice is in line with the PSC put forward by the government which implies that the individual IS-BC is to receive appropriate internal approval within the organisation to ensure that the VFM measures were established and confirm that the expenditure was warranted, and the initiatives would deliver a return on

investment (PSC, 2011). The project committee practice in PA1 encompassed the two practices of gaining collective inputs and refraining from centralization.

4.3.4.3.2.1 Gaining collective inputs

Where an IS-BC, in particular, was put forward by business executives, the project committee would consist of ACEs plus the IS executive to jointly discuss in a fine-grained sort of way the proposed IS initiatives. In the first instance, members of the committee would, along with the IS executive, conduct an in-depth examination of the extent to which the proposed IS-BC was aligned with the business imperatives and strategies. Indeed, such a cooperative examination acted as another layer to obtain wider business perspectives on the alignment of the proposed initiative (PRR, 2014). Following this, an appraisal of VMF and assessment of alternative options (ESD or shared services) formed a further part of the examination of IS-BC. In this sense, the IS executive would assure committee members or *"rais[e] a red flag"* (PAA, 2013) on the proposed initiative, depending on whether or not he believed it was worthwhile pursuing such a plan on the basis of the cost versus benefits analysis carried out by him during IS-BC development.

4.3.4.3.2.2 Refraining from centralisation

Critical to the committee members was the prioritisation of the proposed IS-BC with respect to those IS projects currently underway and whether the proposed IS-BC was to be managed by the IS unit or by the business unit; all of which were finalised with close consultation with the IS executive. Where the proposed IS-BC had the potential to fall under the management of an IS unit, the IS executive: firstly, provided to committee members an overview of all IS projects currently underway and allowed prioritisation to emerge from the business itself rather than imposing any influence (PMO, 2014). Secondly, he determined the capabilities of the IS unit, i.e. staff with the necessary expertise or alignment with the current IS infrastructure and platform, and to affirm the possibility of running with the project with no extra resources to be additionally deployed. Conversely, if the proposed IS initiative clashed with the unit's capabilities, IS executive would refrain from insisting on managing the project, which was already deemed as aligned with the business and anticipated to deliver value, since in practical terms 'when you want to deliver stuff it makes sense, you know, to let other business run with it' (PAA, 2014) rather than the IS executive insisting on controlling every single initiative while the IS unit is not capable of delivering on the project.

4.3.4.4 IS management practices

The theoretical code of IS management practices encapsulated activities that administrated and implemented IS initiatives in concordance with PA1's strategic imperatives. These endeavours were carried out under two practices, namely, reviewing workshops and IS

initiative management style. In this section, I attended to unpacking how the aligning praxis were enacted with these practices encircled by the macro practices of government policies and procedures on all IS initiatives evolved at the level of PSOs.

4.3.4.4.1 Reviewing workshops

Fundamentally, the legislative mandate of PA1 authorises the involvement of a consultant as long as practitioners within PA1 considered it 'necessary or expedient for the performance' (PA1-Act, 2005) of their organisational functions. In this regard, the strategizing group recognised that there was a range of fragmented IS initiatives across the organisation that needed to be implemented, with no holistic view existing to exercise appropriate prioritisation decisions in the light of resource constraints currently in place. The challenge was compounded by the existence of multiple management on IS initiatives between business and IS units. Against this backdrop, the strategizing group decided to carry out an organisation-wide assessment and review of all IS initiatives, commencing in Autumn 2013, for prioritisation of decision-making purposes relative to PA1 strategy and business imperatives (PBH, 2014). It was decided that this review should be carried out in the form of a series of workshops facilitated by a consultant company that would substantially involve end users from the business units (PBH, 2014; PMM, 2014). The practice of IS reviewing workshops was comprised of two activities, namely, peripheral involvement, and appraising and strategizing.

4.3.4.4.1.1 Peripheral involvement

The workshops were run in twelve episodes distributed over eight IS initiatives within the organisation, where each IS initiative was specified to be discussed in separate workshop(s). A representative practitioner from each business unit was nominated to participate in the workshop related to their IS initiative and had responsibility for pulling together other practitioners across the organisation who were stakeholders in the IS initiative under discussion. A representative practitioner from the IS unit, as opposed to the IS executive himself, was present at all of these workshops. During the workshops, the representative business practitioners reviewed the espoused strategy of PA1 and their future systems' requirements in this area. It was the role of the consultant company to define what would be technically feasible. This series of workshops drew to a close with the production of an analytical report, prepared by the consultant company, to set out the required efforts and resources needed to implement each individual IS initiative (PMO, 2014; PMM, 2014).

4.3.4.4.1.2 Appraising and strategizing

The fact of the matter was that appraising and strategizing those IS initiatives in alignment with PA1 strategy and business imperatives entailed direction from the project committee.

Thus, the IS executive provided the project committee with the consultant's report, with one executive summing up the need for their approval as follows: 'I suppose you absorb projects, they are all good ideas; but ... we need to be strategic as well, that is where we need the guidance feedback from the Executive Team' (PAA, 2013). Following this, the project committee sought to strategize those IS initiatives in a manner that would consider the recommendations of the consultant's report on a prioritised basis as resources would allow (RWS, 2014). During this strategizing, members of the project committee delved into individual IS initiatives, labelling their feasibility – 'we decided on a yes, maybe and no' (PMO, 2014) - which was contingent upon PA1 strategy, business imperatives, anticipated benefits and estimated cost. As a consequence of this prioritisation, a strategy for the GeoSmart system, for instance, was developed which would allow the continuity of the system's use for the next five years, with further reassessment to be carried out in 2017 to ensure the alignment of the system with emerging processes and requirements. In another instance, it was agreed that substantial investment into mobile technology was to go through another cycle of BC practice, thus resulting in the initiative being deferred for the following year, 2015. The basis for the request for another BC was that the user's requirements, on the one hand, had not been sufficiently met during the pilot phases, i.e. accessing GeoSmart from the field through mobile technology and, on the other hand, that enhanced inspection processes should be acknowledged as being a prerequisite before proceeding with further investment in this initiative (GDS, 2014; PAA, 2014).

4.3.4.4.2 IS initiatives management style

Following approval from the project committee, only initiatives - emerging through either IS-BC or reviewing workshops - that were speculated 'to cost over two hundred thousand over its lifetime' (PJM, 2014) were requested for submission in the first instance to the PA1's board and then to the DPER for approval before practitioners within PA1 could embark on the proposed IS initiatives (PSC, 2011). In addition, under the reform agenda, availing of the national procurement framework for approved IS initiatives was a mandatory requirement in line with Circular 6/12 (2012) and Circular 16/13 (2013). Compliance with these practices was mandatory for all IS initiatives evolving within PA1 regardless of whether those initiatives were to be managed by the IS unit or business units.

Doubtlessly to say that the IS executive took the lead to ensure that 'all the various boxes are ticked' (PJM, 2014) in relation to seeking approval for IS initiatives and tendering through the national procurement framework, specifically for those run and managed by the IS unit. However, where the IS initiatives were owned by business executives, the IS executive therefore provided limited support to business units, only to the extent that it allowed them to

manage their IS initiatives in compliance with government policies. The support took the form of the freeing up of an IS practitioner who provided varying levels of support depending on the level of engagement needed by the business units. In this sense, IS executive support for SA in the business areas, implied but not plainly expressed, was geared towards ensuring 'the right level of involvement' (PAA, 2014) among those IS initiatives that were already deemed to be aligned to the business strategic imperatives.

For instance, the tendering for an upgrade for the e-learning portal was effectively led by the education executive who interacted with the IS practitioner as they had expertise and experience in the procurement of IS, and therefore did not 'require an awful lot of assistance' (PAA, 2014) from the IS unit. Conversely, the inclusion of a construction package into BeSmart required the IS executive to increase his support by way of freeing up an IS practitioner to 'liaise with the developers' (PMD, 2014), assist the construction unit in defining their requirements, frame the required system specifications, and ultimately 'negotiate[e] contracts' (PMO, 2014) with the developers were selected though the national procurement framework. In another instance, the IS executive set up a project team involving representatives from the HR unit and a practitioner from the IS unit to lead the transition of the HR system to the central shared-service model (PBR, 2014; POW, 2014). A further example is the new IS Finance system which, it was decided, should follow the ESD model (POW, 2015). In this area, the selection of a vendor through the national framework was carried out by the Finance unit practitioners where the IS executive confined his support to one of technical support, again by way of freeing up an IS practitioner to engage with practitioners in the Finance unit during the specification of the system and the transition of data to the new system.

4.3.5 The meso practices of PA1: closing remarks

This section has offered interpretive case writing which ventured into the worldliness of aligning enactment as it presented itself in the situated practices of PA1. The section started with sketching on the specific macro practices of PA1 which were manifested in a set of Acts and regulations that define and shape the scope of work of that practitioners can do within PA1. I outlined that these macro specific practices should be viewed in combination with those macro ones presented in 4.2 when it comes to explain the enactment of aligning within PA1. Then, I proceed on the premise that strategizing is one of the major activities within PA1 that unfold the enactment of aligning. Thus, I opted to give an account of the actions of those involved in PA1 strategizing (peripherally or actively) and how they were organised to perform their roles within the organisation. The discussion disclosed herewith how the exemplar IS executive was organised to perform his role among those practitioners from multiple levels. Following this, I argued that organising data from multiple levels could be

addressed by using the theoretical codes, which were rendered as practices that encapsulate the enactment of aligning in the interplay between meso and macro practices. I showed that the rub of SA enactment took place in strategizing, releasing resources, appraising, and IS management practices. These practices enabled, constrained, shaped, organised and guided the enactment of aligning within PA1, however, it was apparent that the macro practices implicated what was happening relative to SA within those practices.

4.4 The meso practices of PA2

4.4.1 Purpose and Overview

In this section (4.4), I turn to present how the interviewed IS executive within PA2 engaged in the practice of aligning business and IS strategies. Similar to what was done in the previous section (4.3), the IS executive (including other practitioners) is placed at the centre of this case writing for PA2, with the view that its aligning praxis are situated, that is, organised in designated meso practices and shaped by practices that reverberate at macro level. Overall, this section (4.4) is organised into the following four sub-sections. First, in 4.4.2, I will undertake to present the legislative mandates of PA2, along with the various relevant acts. The aim is to give an account of those PA2 macro specific practices in order to be viewed in combination with those previously presented in 4.2. After that, in 4.4.3, I provide a description of the organisation of practitioners relative to PA2. The aim is to locate the IS executive among the wider practitioners within PA2 who, while located at different organisational levels, hold responsibility for shaping strategizing which was the chief domain under which aligning was thereafter enacted. In 4.4.4, I draw on the four theoretical codes emerging from the analysis, presented in 3.4.7.3, and render them here as meso practices that organise data around how aligning were enacted in the interplay between meso and macro practices within PA2. Finally, in 4.4.5, I will draw the case writing for PA2 to a close and offer a link to the conclusion section of this chapter (4).

4.4.2 Organisational set-up

PA2 was established as a national statutory body to operate under the aegis of the DJEI (PA2-Act, 1996, Section 3). In its establishing Act, PA2 is conferred with responsibilities on: firstly, standards content development relative to the national economy. Thus as outlined in the act, 'no person shall establish, accept, adopt, publish or place on the market ... any document ... to be an Irish standard specification' (PA2-Act, 1996, Section 7, o. 8). Secondly, in situations where the standardisation outputs at national, EU and international levels exist, PA2 is eligible to certify any commodity, process and practice confirming to those standards (PA2-Act, 1996, S-6; 2015). In 1998, PA2's remit was expanded beyond standardisation and certifications only after the Metrology Act 1996 was amended by the Industrial Development Act 1998. The outcomes of this amendment were the inclusion of the Metrology 1996 Act along with its statutory National Metrology Service body into PA2's operation (Metrology Act, 1998, Section 49). In the shadow of this transfer, PA2 became legally responsible to The Packaged Goods (Quantity Control) 1980 Act which was construed and cited in the Metrology Act 1996 as one act (Metrology Act, 1996, Section 3). Thus, PA2 in its entirety encompasses four statutory functions which include standards, certifications,

legal metrology services (LMS) and national metrology laboratory (NML). They represent the frontline services for PA2 with much of their activities regulated by the three acts noted above.

4.4.3 Organisation of Practitioners

Being provoked by the SAP lens that sheds light on the plurality of practitioners involved in strategizing from multiple organisational levels, Figure 4-3 below was constructed to embrace SAP's view on practitioners involved (peripherally or actively) in strategizing within PA2, since strategizing is one of the major activities in the organisation that enfold the enactment of aligning within PA2. As depicted in Figure 4-3 below, the Minster of DJEI, empowered by PA2-Act (1996), acted as an external practitioner who has no allocated hierarchical role within the organisation but who influences the work of strategizing through his/her formal role in endorsing and approving the strategic direction of PA2 (PA2-Strategy, 2013-2015; PfG, 2011-2016).

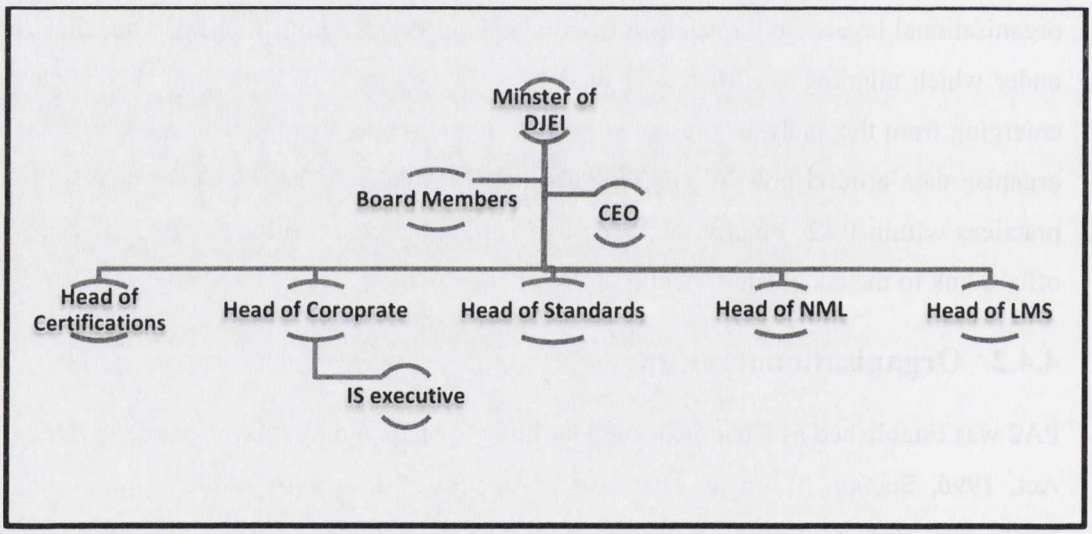


Figure 4-3 Presents practitioners' arrangements relative to PA2

The PA2-Act 1996 authorises the Minster to appoint the Board members as non-executive practitioners from among those with interests in what PA2 is doing. Although they do not engage in the day-to-day practices of PA2, their involvement in meso strategizing is instrumental. They are permitted to determine policies and strategic directions for PA2 by means of 'taking into account guidelines issued from time to time by the government' (PA2-Act, 1996, Section 6.4). In this sense, they do represent a group of extra-organisational practitioners who act between macro and meso levels by constantly transmitting government priorities into PA2 strategic direction. This power may go somewhat to render and/or exclude some initiatives during meso strategizing to the extent those initiatives fit with the macro government priorities.

PA2 is headed by the Chief Executive Officer (CEO) who is a member of, and appointed by, the board (PA2-Act, 1996, Section 38). Hierarchically, below the CEO are the five head of divisions who represent Certifications, Corporate Services, Standards, National Metrology Services (NML) and Legal Metrology Services (LMS). Their arrangement within PA2 is twofold: firstly, collectively with the CEO they represent the 'strategizing group' responsible for the operational implementation of the strategy, policies and procedures in PA2 (AR, 2013, 2014). Secondly, on their own, along with the Finance executive, they act as permanent members to the CAPEX Projects Oversight Committee (CPOC) which is a formally-established committee in PA2 with responsibility for reviewing business cases, prioritising capital expenditure, and ensuring the creation of resources to projects is aligned with business strategy (CAPEX Framework; 2010). Below the heads of divisions, the management group executives perform their duties. Specifically, the IS executive is located at management level and organised under the aegis of the head of corporate services division. According to the IS unit's staffing structure, the IS executive acts as the head of the IS unit and is conferred with responsibility for the overall management of IS across the organisation. In addition, the IS executive holds a conditional membership at CPOC to engage with them in the analysis for IS-related capital expenditures.

4.4.4 Localised practices for aligning enactment

In this section, similar to that on PA1, I drew on the theoretical codes emerging from the constructivist GT method as presented in 3.4.7.3, namely, strategizing, releasing resources, appraising and IS management, and rendered them here as a meso practices that encapsulate how the interviewed IS executive in PA2 engaged in the practice of aligning business and IS strategies. The value of this approach, as outlined in 3.3.6.4, is to organise data from multi-level sources towards a coherent, analytical and interpretive story on the enactment of aligning in the interplay between meso and macro practices. The authoring in this section was also aided by my own short memos that captured some analytical interpretations on codes

4.4.4.1 Strategizing practices

Strategizing practices at all levels within PA2 – under which aligning praxis were enacted - was accommodated within the theoretical code of strategizing practice. These are interpretively grouped into three activities, namely, crafting organisation strategy, forming IS strategy, and executing strategies. Here, I attempt to unveil the interpretive accounts of practitioners, plus my own, regarding what was happing within those practices relative to the enactment of aligning, while being mindful of the macro practices implicated during strategizing within PA2.

4.4.4.1.1 Crafting organisation strategy

The engagement into strategizing for the organisation is not mandated within PA2. Rather, the strategizing group was merely required to incorporate the high-level future PoWs for each of the four functional divisions as part of the mandated submission of the annual report to the Minister: 'The [PA2] shall submit ... an annual report of its activities after the end of the financial year to which it refers and a general programme of future work' (PA2-Act, 1996, Section 8). However, the engagement in organisational strategizing for 2013-2015 was a response to the government's request, under the reform agenda, for all PSOs to set out their three-year high level objectives with a strong emphasis on alignment with government priorities (PA2-AR, 2011; PfG, 2012, 2013). In addition, at that point in time, the strategizing group deemed organisation strategizing as necessary to integrate diverse divisional activities and PoWs into high-level organisational direction. One member of the strategizing group lamented the fractured strategizing works undertaken individually by each organisation division as presented in the series of annual reports submitted to the Minister, stating that: 'the main thing behind the high-level strategy was to integrate the organisation ... we were operating in silos. So certification will have their strategy. Standards will have their strategy, and then metrology will have theirs' (PPB, 2014). On these grounds, in late 2011, the CEO kicked off strategizing for 2013-2015 by making arrangements for a series of strategizing workshops to be run internally by the organisation; these were phased into three practices, namely, drafting strategy, showing support, and finalising strategy.

4.4.4.1.1.1 Drafting strategy

The involvement of management level executives, including the IS executive, in drafting the organisation strategy was deemed to be practically irrelevant, with a member of the strategizing group vindicating their decision on the grounds that they need to achieve consensus among themselves since organisational strategizing 'can't encapsulate everybody's view ... you have to try and strike a balance' (PSB, 2015). Thus, the group proceeded on its own to strategize in a manner that secures the delivery of PA2 mandates under unprecedented government measures in terms of ECF and budget reduction. One of the critical problems was that PA2 was subjected to incremental reductions in staffing from 203 in 2008 down to 141 by the end of 2014, alongside a simultaneous reduction of 30% in the budget by 2014 (PA2-AR, 2013, 2014). To overcome these challenges, first, the strategizing group decided to avoid any cut in resources related to frontline services (Certifications, NML, and LMS divisions) to form strategic grounds for them to preserve the delivery of mandates over the lifespan of the organisational strategy. There was a heightened recognition among the group members that it was in the context of delivering on mandates that were changing as opposed to the mandates themselves which were static and needed to be permanently maintained to

cover PA2's legal responsibilities (CSBP, 2013; PPH, 2014; PBH, 2014; PPT, 2014). Secondly, the strategizing group decided to foster the application of the ISO 9001 quality management system standard to underpin management systems in those functions that were strongly affected by the government measures. For instance, corporate services areas were targeted with ISO 9001 to create process enhancement in their working practices with a clear focus on measurable objectives to preserve their services despite a reduction in personal numbers and a loss of specialist expertise (CSBP, 2013; AR, 2014).

The group then proceeded to strategize with a focus on the '[a]lignment to the programme for Government' (AR, 2011) with one group member capturing this nicely: strategizing was not merely about 'focusing on what we are doing [as defined in mandates] but also what we should be doing as well' (PSB, 2015). In this vein, the group undertook to consult government publications, i.e. PfGs, to intensify organisational functions to focus on areas of priority to the government (PPH, 2014). For instance, as a certifying body, the group decided to promote ISO 9001 across PSOs to tackle inefficiency faced by the sector as part of general government priorities for fiscal consolidation. The group then sought to distill their strategizing into a vision and mission that were premised upon the organisational mandates. And ultimately, the group came up with the notion of four strategic pillars reflecting government priorities on one hand and, on the other, integrating the PA2 functional divisions into high level objectives for which executives within those divisions were required to formulate initiatives and place their 'activities under those pillars' (PPB, 2014).

At this stage, the strategizing group favoured kicking off divisional strategizing practices in parallel with their own strategizing activities, with the view of seeing the extent to which management executives within those divisions would show their contributions to the provisional strategic pillars before finalisation of the strategy. This overlap between both practices was made possible due to the overlapping membership of the strategizing group members in both practices; as one member outlines:

'*If you are part of both processes you are aware of what direction each is taking. So you are not doing something that is at odds with the other one, it is possible to do them in parallel. So as a 'member of strategizing group', I was sitting around the table involved in strategy development but also I was sitting around the other table developing the [divisional] business plan*' (PSB, 2015).

Evidently, given that the prime focus was on protecting frontline services under government measures, IS initiatives did not form part of the strategizing at this level, thus suggesting no space for aligning enactment at this strategizing level.

4.4.4.1.1.2 Showing support

A clear distinction was made between the early stages of drafting the strategy, in which the strategizing group followed a formulaic process of overall organisational strategy, and the subsequent strategizing at the divisional level which aimed to seek out divisional supports to those already established strategic pillars. The value of engaging management executives in strategizing practices was anticipated to go somewhat towards getting them to buy into the overall PA2 strategy. One member of the strategizing group commented that '[management executives] might not see themselves directly in the [organisational strategy] but through [engaging in divisional strategizing practices] they should be able to link themselves' (PPB, 2014). Ironically, because of their frontline positions within PA2 and their close relationship with mandates, strategizing at this level was driven by functional divisions whose executives were asked to formulate and present their initiatives and actions to support the overall strategy. Subsequently, executives in the corporate service division were requested to strategize and then present their support for functional divisions in attaining their goals and objectives.

At the outset, the functional divisions conducted intra-divisional strategizing on an individual basis, limiting the strategizing roles to the head of the division and the business executives operating under the relative division. Thus, neither the IS executive nor outside participants took part during the series of intra-functional division strategizing. To this end, functional executives proceeded with strategizing by drawing upon their relative mandates in order to introduce some stability on their strategizing by way of identifying the requirements that entail legal deliverables regardless of government measures. One business executive noted that 'the work of enforcement [relative to his functional division] does not change from year to year. The only thing that changes are the people or the instruments, but the philosophy and the approach is the same' (PPT, 2014). This goes somewhat to indicate that the content of what each individual function division should do is prescribed in their relative legislative mandate and that must remain undiminished despite economic conditions (AR, 2012; LMSBP, 2013).

Following this, executives within each functional division sought to tweak their divisional activities to contribute to the strategic pillars. Devising these contributions typically took into account government priorities by analysing 'each of [the divisions'] activities and placed them on a grid of importance to the economy' (PSB, 2015). For instance, in contributing to the strategic pillar of open-market infrastructure, the standards executive decided to direct standardisation activities to consider assisting national business to enable them in achieving an internationally-recognized standard in their management, operation and products to compete in EU and international markets (SSP, 2013-2015). This assistance was in line with

government endeavours towards economic prosperity through export-led growth as identified in the programme (PfG, 2011, 2012, 2013). In another instance, practitioners within the LMS division decided to contribute to the strategic pillar of open-market infrastructure by embedding the risk-based approach into their inspection and enforcement activities on sectors, thus contributing to the national recovery, albeit with the minimal resource available (PA2-AR, 2013; LMSBP, 2013-2015).

During intra-functional strategizing, IS initiatives may be identified in support of particular functional actions associated with a specific strategic pillar. For instance, in support of the strategic pillars of business-excellence, the standards division proposed launching a dedicated web-portal to facilitate SME access to international standards and allow them to participate in standard development in a manner that reduced their administrative burden as part of government priorities in this area (AR, 2012, 2013; SBP, 2013-2015). Similarly, during the strategizing practices, executives within the LMS division identified during their strategizing the necessity to upgrade their inspection databases, namely TRAMS to include a strategic reporting tool in support of the annual refinement of risk-based inspections to identify priority sectors (LMSBP, 2013-2015; AR, 2013; PPT, 2014). Indeed, it is sufficient to indicate that the manner through which those IS initiatives were identified reflect their business-driven nature as they emerged within intra-functional strategizing rather than being imposed by the interviewed IS executive.

Subsequently, executives within functional divisions were engaged in a series of cross-functional workshops attended by designated members of the board, strategizing group, and corporate services executives including the IS executive (Strategy, 2013-2015; PPB, 2014; PBH, 2014). The central tenet of those cross-functional workshops was, on the one hand, to present the extent to which those executives in functional divisions were able to contribute to the overall strategy for PA2. On the other, those workshops provided resources for the IS executive (including other corporate services executives) to plan out actions and initiatives tailored to actual functional business imperatives over the lifespan of their 2013-2015 strategies. Thus, for the IS executive and other corporate executives, the focus was not centred around how to contribute to the strategic pillars. Instead, it was on how to strategically provide functional divisions during 2013-2015 with corporate services to enable them to achieve their strategic goals against the strategic pillars. One of the corporate service executives remarked that 'the difficulty for ... the corporate services functions, are the stuff [they] are doing doesn't directly relate to that [strategic pillars] ... [there] is more an underpinning of creating the environment that let all ... operations functions deliver on their objectives' (PPB, 2014).

Eventually, corporate services executives agreed to engage individually in strategizing for their units with each executive then taking part in a designated workshop for corporate services to present strategies to the same attendees. As such, the IS executive commenced IS strategizing by means of showing an 'understanding about the operation and what their priorities were ... and then being able to make sure that [IS strategy] is supported' (PBH, 2014). Finally, the entire divisional strategizing workshops drew to a close by means of documenting those series of strategies relative to each individual division and unit, and they were collectively passed to the strategizing group for approval and to finalise the overall PA2 strategy based on divisional strategizing outputs.

4.4.4.1.1.3 Finalising strategy

Although there was a salient feeling that PA2's strategy was finalised upon the receipt of divisional strategizing outputs, concern was expressed that the group overlooked divisional strategizing. This concern was expressed at management level with one executive labelling the strategizing group as the 'owner' of PA2's strategizing and criticised that 'the whole thing didn't stop while [they] waited for people to keep thinking about it' (PBH, 2014). This issue was acknowledged in the sense that there was a prominent ownership issue of PA2 strategy at management level, with one member of the strategizing group admitting and recognizing that management executives ended up with 'no hand, act or part in the strategy, and they don't understand it and they don't know where they see themselves in it' (PPB, 2014). As consequence of this issue, a resourcing gap existed between PA2's strategy and the series of operational plans to deliver on it because those operational plans prepared by management executives who were unaware, due to their exclusion from the phase of drafting organisational strategy, of prospective resourcing constraints coming over the lifespan of their strategies for 2013-2015 (LMSBP, 2013; PPB, 2014).

Following on, the strategizing group proceeded to put forward the organisational strategy document of PA2 for public consultation. The response to this document was very limited (PPB, 2014). Next, the group sought approval from the board members and the Minster who both acted as a "rubber stamp" (PBH, 2014) on PA2's strategy by way of ensuring that the overall strategic goals were in alignment with government priorities. At the launch of PA2's strategy for 2013-2015, the four strategic pillars that flow into the broader government priorities were as follows:

1- Open market infrastructure
2- Business excellence
3- Knowledge economy
4- Sustainability

Source: PA2-Strategy (2013-2015)

4.4.4.1.2 Forming IS strategy

Engagement with IS strategizing was neither mandated by the legislative mandate, nor was it a requirement from the government to do so. To a significant extent, as noted above, it was purely an organisational practice that was enacted under divisional strategizing practices to ensure that functional divisions' activities and goals for 2013-2015 were 'supported by a comprehensive, secure, integrated and efficient business and management information system' (IS strategy, 2013-2015). Therefore, the practice of IS strategizing could not be carried out in isolation from functional division strategies, as presented in their strategizing workshops, and government policies and procedures implicated in all corporate service areas (including IS) as well. The practice of IS strategizing for 2013-2015 involved three practices that were interpretively grouped into pursuing business strategies, planning out IS infrastructure, and exercising prudence. These are discussed in the following three sections.

4.4.4.1.2.1 Pursuing business strategies

The central tenet of IS strategizing was more an underpinning of creating the IS environment to enable functional divisions to deliver on objectives. While functional division executives did, during their strategizing, identify and represent IS initiatives associated with their objectives, the IS executive sidestepped those during IS strategizing on the grounds that the 'drive has to come from the business [executives]' (PBH, 2014), rather than being initiated by the IS executive. In this sense, what was important for the IS executive during IS strategizing was to become familiar with the future operational requirements for functional divisions as outlined during their strategizing workshops, which in turn may require specific IS platforms to facilitate their prospective operations over the lifespan of their strategies. For instance, it was part of the standards division strategy to get its future "[IS systems] to work internationally" (PMW, 2014), thus facilitating the interactions with experts and other standards bodies at national, EU, and international level to write standards documents relative to their areas of expertise. This required the IS executive to prepare for dealing with this prospective IS initiative by means of 'piggyback[ing] on and using IS systems [of those standards bodies] for a certain cost' (PJT, 2014) rather than developing new systems that might not fit with their IS platforms which could impede interactions among them.

Conversely, piggybacking on the IS systems of commercial certification bodies was not an option for the IS executive in preparing for prospective IS initiatives in the certification division. This was due to the competition between those bodies in certification activities and the unavailability of unique suppliers of IS systems in this area (PBH, 2014; PSB, 2015) Thus, the major point for the IS executive at this stage of IS strategizing was the need to recognize the variance of future operational requirements between functional divisions when deploying imminent IS initiatives. One executive remarked on the manner in which the IS

executive dealt with such a variance at operational ends – "we are a standards' body. We should be looking at common ways of doing things. But in the middle of all that, we are unique in what we do" (PBH, 2014).

4.4.4.1.2.2 Planning out IS infrastructure

Principally, the planning out of intended IS infrastructural works were undertaken without consultation with functional executives and it was primarily driven by the IS executive who acted as 'the owner of IS infrastructure' (PBH, 2015). The basis for this was that infrastructural works could be proceeded with irrespective of functional executive input as 'there is a level of technical knowledge that would not be had by the business owners' (PPB, 2014). Nevertheless, this did not mean overlooking the existing strategic imperatives of functional divisions as presented in their strategizing workshops. Instead, the IS executive had to work on 'understand[ing] [division strategies] and know where they are going' (PBH, 2014). Thus, being able to plan out and prioritise an intended IS infrastructural plan works in alignment with existing priorities in order to ensure that the development of 'the hardware, software and network infrastructures across [PA2]" (IS strategy, 2013-2015) were readily available for functional divisions to fulfil their objectives over the lifespan of their strategies.

4.4.4.1.2.3 Exercising prudence

The practice of IS strategizing, as carried out by the IS executive, proceeded with overlooking government measures while being caution as to the implication these would have on 'chang[ing] the delivery model' (PPB, 2014) of planned and intended IS initiatives across the organisation. The basis for missing out those measures was twofold. First, IS applications within PA2 were largely delivered through ESD, prior to the government request, as part of the procedures and practices yielded from the IS unit subscription to ISO 9000. Second, omitting the government measures from the agenda during IS strategizing was claimed to be due to the uncertainty of directions from the government on how IS was going to be deployed in PSOs, with one member of the strategizing group summed up this issues as follows:

"*they get the shared services set up and operational for government departments; then they will look at extending it to state agencies. The problem with that is state agencies are going an outsourced route. So we are already going through one change, which is using external service providers, and now they are sort of saying maybe in five years' time they are going to ask us to change that model again, and move into a shared services model*" (PPB, 2014).

Virtually, on the above grounds, the IS executive opted to build on current IS tools and practices within the organisation to reflect on the future need of functional divisions from 2013-2015, and make sure to 'keep an eye' (PBH, 2015) on the development of these

measures as they would affect the delivery of IS strategy over the course of its life as opposed to the IS strategizing itself.

4.4.4.1.3 Executing strategies

In its endeavours to 'get more down into the nuts [and bolts]' (PSB, 2015) of delivering on strategies across the organisation, the strategizing group requested individual executives to annually develop an operational plan against the particular strategy. This plan was to include targets per quarter, tasks and deliverables over the course of the year. One member of the strategizing group affirmed the link between the operational plan and individual business strategy: 'the operational plan has to support the business plan and the operational plan that falls out of the business plan' (PBH, 2015). Thus, this request led to the preparation of three IS operational plans under IS strategy for 2013-2015, and was monitored periodically by the strategizing group and approved (along with other operational plans) by the board as part of its responsibility for overseeing PA2's entire operations (AR, 2013; AN, 2014). Indeed, the minutiae of IS operational plans would unveil two practices through which IS initiatives across PA2 were planned and organised, namely, reviewing IS infrastructure and balancing upcoming initiatives.

4.4.4.1.3.1 Reviewing IS infrastructure

In a routinized manner, the interviewed IS executive prepared IS operational plans by annually engaging in a series of one-to-one meetings with the head of divisions and business executives to ensure that their key requirements from IS infrastructure for the next year were incorporated in the operational plan (PPT, 2014; PBH, 2014; PSB, 2015). The meeting took the form of a very high-level review of the performance of existing IS infrastructure such as networks, servers and data-storage to confirm the maintenance or upgrade requirements relative to business strategic imperatives (IS-OP, 2013). While IS infrastructural initiatives were initially planned out during IS strategizing, the focus of the IS executive has been to review the initial assumptions inherent in the documented IS strategy on an annual basis to ensure timely infrastructural needs that fit the business purpose to deliver on objectives for that particular year.

4.4.4.1.3.2 Balancing upcoming initiatives

In compiling the IS operational plan, the IS executive encountered the issue of simultaneously developing a serviceable IS operational plan that encapsulated those infrastructural initiatives needed, plus new initiatives related to IS applications embedded in the business activities. In this vein, the IS executive engaged business executives in the prioritisation of IS initiatives over the lifespan of their particular strategy according to their yearly priorities. For instance, the IS executive, in agreement with the head of the NML

division, developed a strategic approach to the series of upgrades required on the TRAMS system, through which the upgrades were to be spilt over three IS operational plans from 2013-2015 (IS operational plan, 2013; PPH, 2014). Likewise, practitioners within the finance unit and certifications division identified to the IS executive certain IS applications, namely Integra and Goldmine/annual billing respectively as 'critical to [their] operations' (PBH, 2014) and which thus must be continuously maintained over the lifespan of their strategies and in turn IS operational plans. In another instance, NML practitioners prioritised their IS initiatives for the division and ensured that the IS executive devised these prioritisations annually in IS operational plans; one NML executive remarked that for their IS initiatives to be practicality implemented, they need to be 'planned ... for the next couple of years [into IS operational plans]' (PPH, 2014).

Eventually, the IS executive ended up with a list of ranking systems on all IS initiatives, i.e. infrastructural works and new application initiatives. This list reflected an overreaching assessment on all IS initiatives across the organisation based on the criticality of each initiative to the business priorities on a yearly basis as agreed with business executives. The IS executive then presented the IS operational plan for the strategizing group who represented functional divisions, to confirm the compliance of the IS operational plan with the required priorities for the coming year. One member of the strategizing group remarked on the importance of the IS operational plan in particular 'when [IS executive] comes out with ... an operational plan ... that would be presented to the senior management group as well, because it impacts on effectively all of them' (PPB, 2014).

4.4.4.2 Releasing resources practices

The theoretical code of releasing resource practices served the purpose of including the wider practices under which the finance for IS initiatives was generated. These practices are interpretively grouped into two prime practices, namely, budgetary practices for centralised IS initiatives and commitment to the IS operational plan. In this section, I will attempt to emphasise what is happening within those practices relative to aligning praxis, whilst interrogating the macro practices of each of them.

4.4.4.2.1 Budgetary practices for centralised IS initiatives

The finite amount made available by DJEI for practitioners within PA2 to run their organisations was silent on specifying certain guidelines for budgeting IS initiatives within those organisations. Thus, the determinant of IS budget was a matter to be decided upon internally among the strategizing group within PA2. To this end, the group decided to annually dedicate a centralised IS budget for all IS initiatives across the organisation to

provide IS executives with a certain level of 'control and ... more standardised approach to IS management' (PPT, 2014). The basis for this was due to the diverse activities performed by functional divisions which entailed variance on the IS skills and training needed to be distributed among them; thus centralised IS resources and budget were cost effective, particularly in the light of resource constraints and fiscal consolidation placed on the entire organisation. For instance, the NML division was inherited to PA2 and they used to locally budget the IS applications from the proportion of budget made for them. However, with the 'stripped resources' (PBH, 2014) placed on them, the case of moving their IS applications under IS budget was raised in 2014 after it was realised that the number of software and hardware along with their associated costs needed to be controlled under the IS budget. On this basis, the IS executive targeted them for the first time during the IS operational plan development for 2014, thus being prepared for their prospective movement into the IS budget in 2015.

4.4.4.2.2 Committing to IS operational plan

Budget holders within PA2 were requested by the board to develop a spending proposal for their budget and seek out their approval on spending as allocated by DJEI (AR, 2011, 2012, 2013). To this end, the strategizing group requested that management executives develop their spending proposals based on the parameters they had already sketched out for each unit and division during their organisational strategizing. For IS initiatives specifically, due to financial and resources constraint, the strategizing group had launched a limited capital expenditure programme on IS initiatives with a view to maintaining frontline service protection over the lifespan of PA2's strategy. One executive lamented the strategizing group's imbalanced spending cut across the organisation as 'spending at all levels [were cut] but in particular IS got special attention' (PBH, 2014). The consequence for this was that the IS executive confined IS budgeting to those initiatives prioritised during the IS operational plan, thus ensuring that functional objectives for at least the next year were underpinned by IS initiatives identified as essential for their operations to deliver on objectives (BH, 2014; PPT, 2014). Following this, the proposed IS spending was subjected to approval from the strategizing group, and then on to the board to finalise the overall budget of PA2 which would include the IS spend.

4.4.4.2.3 Deft compliance

The IS executive, in particular, had to seek approval from the CMOD division within the DPER who acted as 'a third party outside of the organisation [who] remove the authority' (PPB, 2014) of the IS executive to embark on IS spending as approved by both the strategizing group and board. In effect, the IS executive prepared what was formally called in

Circular 2/11 (2011) as a 'Start-of-Year submission' based on internally-approved IS spending. However, the minutiae of the CMOD submission would unveil that the IS executive prepared the submission with a view to keeping it broad and general to incorporate prospectively, emerging IS initiatives to support strategies during the year. So, if the IS executive tendered through the national framework for emerging initiatives during the year, it could be matched to 'a broad heading that will cover [the new initiative]' (PBH, 2014). The basis for this was the critical nature of the role of IS that

'*underpins a lot of the strategy of an organisation ... one to meet the changing requirements of the business, and two to meet a substantial reduction in staff numbers. So ... that is more down to the way [the IS executive] makes the presentation to [CMOD] and keeps it broad and allows for the scope*' (PPB, 2014).

This was not an act of fraudulency, rather it is because of this technique that the IS executive was able to digest new IS needs or emerging circumstances associated with the running of IS initiatives in day-to-day practice.

4.4.4.3 Appraising practices

The theoretical code of appraising practices afforded the wider practice to which IS initiatives were subjected to rigid analysis and review from multiple perspectives of business stakeholders across the organisation. These works were carried out under two practices, namely, the IS business-case analysis and project committee. In this section, I undertook to unveil the enactment of aligning praxis within these practices while consulting the macro practices implicated upon each of them.

4.4.4.3.1 IS business case (BC) analysis

It is part of the PSC published by the government that each capital expenditure project (including IS) must have a detailed BC analysis (PfG, 2011; PSC, 2011). This request was well intended to embed a practice of evaluation and appraisal across PSOs for VFM purposes (PfG, 2011; PSRP, 2011). With regard to IS-BC in particular, PSOs were advised to ensure that their proposed IS-BC complied with government policies on IS projects (i.e. ESD model or shared services), supported their organisational strategic priorities and fitted within the IS budget submission as approved by CMOD (PSC, 2011). At the level of PA2, practitioners engage in BC as part of the organisational framework for project initiation, namely the CAPEX Project Management Framework which was in place prior to the government request (PBH, 2014). The framework requests that practitioners engage in BC analysis for any project - including IS that is speculated to cost 'over ten thousand' (PBH, 2014). Furthermore, with regard to IS-BC in particular, the necessity to develop a BC for each

individual IS initiative was part of the IS unit's subscription to ISO 9001 for its process and practices; which requires that the IS executive continually declare to auditors the documented procedures and practices followed by practitioners in PA2 with regard to good IS project initiation practices (IS strategy, 2013-2014; PMW, 2014). The practice of IS-BC within PA2 involved a number of practices that were interpretively grouped into business-owned IS initiatives, pursuing strategy and imperatives, scoping out with the IS executive, and exercising compliance.

4.4.4.3.1.1 Business-owned IS initiatives

Fundamentally, executives from functional divisions had to be the owner and initiator for IS-BCs in line with the CAPEX framework which stated that each IS-BC is 'prepared by the project sponsor/business' (CAPEX, 2014). For instance, executives from the LMS division initiated, through IS-BC, the necessary upgrade for their TRAMS system in line with endeavours towards effective risk-based inspections and enforcement approaches. In another instance, executives in the standards division put forward their request for an upgrade to the web page dedicated to SMEs enhancing standards writing development. In both cases, it appeared that the IS executive drew back from imposing IS initiatives on the business, although she was aware of their strategies during engagement with the strategizing workshops and allowed the business executives to formulate their needs, becoming the drivers of their own IS-BC. One management executive emphasised the importance of business ownership on IS initiatives, vindicating why the IS executive did not take a proactive role on IS applications embedded in business activities:

"*the system has to be owned and driven by the end user department; not by IS. In particular, where there is a business process improvement. There is no point in IS telling the business what to do. The business has to know what they want, be behind it and go for it and support it themselves*" (PBH, 2014).

4.4.4.3.1.2 Pursuing strategy and imperatives

For the possible release from the centralised budget and resources for all IS initiatives across the organisation, the drive for each IS-BC should result directly from the divisional strategies in the first instance and is aligned with the overall PA2 strategy (CAPEX, 2014). To this end, it was the responsibility of executives in functional divisions to demonstrate, among other things in the IS-BC, the extent to which their proposed IS initiative is relative to particular strategy. One head of division remarked that he had to 'be fairly ruthless' at filtering IS initiatives within his own division with a view to merely focusing on 'what is the key to the strategy' (PPH, 2014). For instance, the upgrade to the SME web page was put forward in IS-BC by the standards executives as to contribute to the second strategic pillars of supporting business-excellence as declared in the PA2 strategy (SBP, 2013-2015). In another instance,

the TRAMS upgrade was justified in the BC, on the one hand, as aligned with the LMS division's strategy for risk-based inspection; while on the other, the upgrade was put forward as being necessary to deliver efficiency in its endeavours by allowing inspectors to place their test data directly into TRAMS through a web portal. At that moment it was a very manual and time-consuming process for inspectors to send the data to a specific LMS practitioner who then, in turn, had to manually upload it to the TRAMS database (LMSBP, 2013-2015; AR, 2013; PTT, 2014).

4.4.4.3.1.3 Scoping out with the IS executive

To avoid any miscalculation on what IS could deliver to functional divisions, functional executives were required to submit their IS-BCs to the IS executive for formal inputs. In this context, the IS executive examined the proposal cooperatively with functional executives to flesh out plausible business benefits from the proposed IS-BC. One executive in the certification division remarked that although they identified potential areas of improvement from the delivery of their proposed IS-BC, the IS executive's inputs would specify 'what type of improvement could be achieved in those areas' (PSB, 2015). Of concern to the IS executive was that functional executives be advised practically and not enthusiastically on the real benefits of their proposed IS-BC. After this, the IS executive proceeded on her own to scope out the proposed IS-BC to 'get some sort of a feel of how much it is going to cost' (PPT, 2014) by cross-checking the market to obtain the estimated cost of the project to be included in the IS-BC template.

4.4.4.3.1.4 Exercising compliance

In the final analysis, an individual IS-BC was subjected to government policies that impacted on all IS initiatives in PSOs. Here, the IS executive identified the availing of shared services for IS-BC related to the corporate services area as infeasible in the absence of information from the government. The view held by the IS executive and strategizing group members was that shared services was set up and operational for government departments, but was yet to reach public agencies. This did, in itself, cause the IS executive to postpone upgrading the HR system due to a reluctance from the ESD providers who were flattered to accept a new upgrading contract of the HR system (HRBP, 2013-2015). One executive highlighted the issue from the perspective of ESD providers: 'shared services is coming along and then you are going to cancel the contract so we have no interest in your tender' (PPB, 2014). Conversely, the IS executive identified that the adoption of ESD for the IS-BC initiatives across the organisation was something to do with necessity in order to cope with the strategizing group's decision to devote more resources for functional divisions; thus forcibly leading IS-BC initiatives to be considered through ESD. This decision did not amount to a conflict with the CAPEX framework that requests that the IS executives primarily evaluate

the suitability of ESD in the first instance before considering other options (CAPEX, 2014). Having said that, given that the IS unit was subscribed to ISO 9000 for its procedures and practices (CSBP, 2013-2015; IS strategy, 2013-2015; PPB, 2014), one executive outlined that the adoption of ESD across all IS initiatives in PA2 was more sensible and cost-effective regardless of government measures and the strategizing group's decision on the basis:

"*it was part of ongoing good practice across all IT departments; which is that there is no point building up a group of developers and all of that in-house when there are developers on tap in the software house that you can use as you need them*" (PBH, 2014).

On the above grounds, it was not surprising to see that the IS applications register for 2014 in PA2 showed an overwhelming adoption of ESD across IS initiatives within the organisation. This means that as a consequence the IS executive would preferably seek out an ESD option on all proposed IS-BC based on cost-and-benefits analysis before considering alternatives (IS project – summary report, 2014). For instance, the IS executive indicated in the TRAMS IS-BC that the rolling out of a series of upgrades through ESD is more cost effective and offers flexibility in adjusting the service in line with future requirements by the business. One member of the strategizing group noted how the ESD can meet the changing requirements of the business over other alternative options: "if I have an external service provider [ESD] doing something, well we can get on to them straight away if we are unsatisfied with the service. The same criteria [can't be] appl[ied] to a shared services environment" (PPB, 2014).

4.4.4.3.2 Project committee

According to the PSC as established and published by the DPER, an individual BC is required to receive appropriate internal approval within the organisation to ensure that the VFM measures were established, and confirm that the expenditure is warranted and the initiatives will deliver a return on investment (PfG, 2011; PSC, 2011). At the level of PA2, the appropriate management approval on all BCs across the organisation is exercised by the Capital and Projects Oversight Committee (CPOC), which formed the central part of the CAPEX framework for project initiation practices within PA2. For IS-BC in particular, the CPOC has the responsibility to carry out a life-cycle analysis of the proposed IS-BC, which involved monitoring the project and conducting post-implementation reviews to see if the predicted business objectives have been delivered (CAPEX, 2014). Thus, following the IS executive's engagement with functional executives to shape their proposed IS-BCs, an individual IS-BC was required to be submitted by the business owner to the CPOC committee for evaluation and appraisal. However, in the interregnum between proceeding with the initiative and not proceeding, the decisive activity rested on the strategizing group that released the budget for all initiatives over €10,000 across the organisation. To this end, their

decision was partly informed by the IS-BC itself, but largely on the analysis and recommendations that emerged collectively by CPOC members (PPH, 2014). In this domain, the committee practice within PA2 involved the two practices of gaining collective inputs and affirming centralisation.

4.4.4.3.2.1 Gaining collective inputs

The IS executive was certainly of the view of abandoning the decision on the extent to which any proposed IS-BC is aligned to divisional or organisational strategies. For instance, when a particular functional executive claimed that they do not carry out 'any rigid analysis of projects [relative to strategies]' (PJT, 2014) within their functional division during IS-BC development, the IS executive noted that the burden of ensuring 'true alignment' (PBH, 2014) is made at a cross-section of management represented in CPOC, and not by the IS executive herself. This is because the CPOC members have an overall knowledge of organisational strategy and available resources and on this basis, as one executive noted, 'the alignment of [IS-BC] and what the business needs, comes into play' (PBH, 2014). Of interest to the IS executive was to obtain wider business perspectives on the alignment of the proposed IS-BC in the light of resource constraints, where the strategizing group had already confined spending money on those projects deemed necessary and likely to 'give a return on the investment' (PPT, 2014). Following this, CPOC proceeded to apprise VFM on the proposed IS-BC by way of examining the scoping out of the project in terms of cost and resources against the predicted business benefits (CAPEX, 2014). In this vein, the IS executive engaged with CPOC members to dispel any doubts they may have regarding alternative options and risk associated with the delivery of the project (PPT, 2014; PBH, 2014).

4.4.4.3.2.2 Affirming centralization

As centralised IS resources and management, CPOC members engaged the IS executive in the prioritisation of the proposed IS-BC, thus seeking IS executive input to allocate resources and time for the proposal while other IS initiatives were underway. In this vein, the IS executive provided CPOC members with an overall top-level run of the different IS works going on across the organisation along with the priorities of these works as identified with functional executives (PBH, 2014). On this basis, it was the role of CPOC members to take an overview of the proposed IS-BC against those IS works in progress within the organisation, to agree priorities among those IS initiatives relative to budget available and functional imperatives and strategies for that year (CAPEX, 2014; PPB, 2014).

4.4.4.4 IS management practices

The theoretical code of IS management practices was put forward to embrace administration practices, controlling and implementing IS initiatives in accordance with strategic imperatives. These works were carried out under the major practice of IS initiative management style. The task in this section is to present the interpretive narration of this practice and unveil the enactment of aligning, while also acknowledging the implications of macro practices on IS management within PA2.

4.4.4.4.1 IS initiatives management style

Following receipt of appropriate approval from the CPOC, only individual IS-BC initiatives that were speculated to go over 'ten thousand' (PBH, 2014) were requested to be submitted in the first instance to the board and then to CMOD for approval before the IS executive could embark on the proposed IS-BC initiatives (PSC, 2011). In addition, under the reform agenda, availing of the national procurement framework for approved IS initiatives was a mandatory requirement for all IS initiatives across PA2 in line with Circular 6/12 (2012) and Circular 16/13 (2013). The management of IS was organised centrally within the IS unit in PA2 which could be attributed to two purposes. On one level, the functional divisions within PA2 were characterised as being varied at their operational ends. Thus, engendering the need to streamline IS infrastructure and develop a more standardised approach for IS and project management across the PA2 through centralised IS management (PPB, 2014). On another level, shifting the load of IS management centrally to the IS unit was the result of resource constraints placed on functional divisions where they were faced with a lack of resources to manage their IS initiatives locally themselves (PBH, 2014; PPH, 2014). On these two grounds, the IS executive undertook full responsibility for IS management across the organisation by carrying out regular monthly cross-checking with the head of divisions to ensure that IS services were being delivered in timely alignment with business needs. One executive illustrated that this cross-check was carried out to identify whether the IS services were "in line with what [functional executives] want [IS] to do ... and if [IS services were] behind, what [could be done to] get back, what [were] the issues" (PBH, 2014).

With centralised IS management, it was not surprising to indicate that it fell under the remit of an IS executive to comply with government measures for approved IS initiatives by way of tendering through the national procurement framework. In this sense, the IS executive went out to tender through the national framework and selected the appropriate service provider for the desired IS initiative. The TRAMS systems upgrade within LMS, for instance, involved the IS executive to interfere to translate the division requirement and negotiate a contract with the ESD provider. In this sense, what the IS executive was doing was to acclimate intra-

divisional requirements with IS through 'external monitoring' (PPB, 2014) exercised by DPER which confined the tender of IS through the options available in the national procurement framework. The IS executive continued to be responsible for the management of IS services with ESD providers through the project's lifetime. However, the management of these types of initiatives delivered through ESD was not without its own risk. The issue was that unlike internally-owned IS practitioners who understood the organisation and the corporate memory side of it, ESD providers were a transient sort of practitioner who might leave at the end of their contract, thus causing a loss of corporate-management memory (SDBP, 2014). Against this issue, the IS executive showed an appetite to manage ESD practice through documenting all procedures in order to minimise such risk at one level. But on other, these documented procedures were also driven by the IS unit's subscription to ISO 9000 that required the IS executive to declare all IS-related procedure documentations.

4.4.5 The meso practices of PA2: closing remarks

This section has offered some degree of reality and immediate evidence on the situated enactment of aligning in the reality of PA2. The section started by compiling the specific macro practices of PA2 as manifested in a collection of three Acts that shape and define the working scope of what practitioners can do. I outlined that these macro specific practices, along with those presented in 4.2, are not mutually exclusive practices when investigating and explaining the enactment of aligning within PA2. Following this, I proceeded on the premise that I should not be reluctant to embrace practitioners (internal and external to PA2) whose relationship pertains to the work of strategizing within the organisation which, in turn, unfolds the aligning enactment within PA2. The discussion involved how the interviewed IS executive was organised to perform her aligning praxis among practitioners from multiple levels. Next, I showed how the four theoretical codes, namely strategizing, releasing resources, appraising and IS management practices acted as a carrier and organiser or alternatively a constrainer for the enactment of aligning within PA2. In addition, I have demonstrated how these theoretical codes were capable of nurturing understanding as related to the enactment of alignment in the interplay between the meso and macro practices of PA2.

4.5 Concluding chapter (4)

This chapter (4) has provided a detailed and interpretive case writing for both PA1 and PA2; with a particular focus on the enactment of aligning in both cases. In 4.2, I articulated how the taller-doing ontology was used to structure the macro practices within which PA1 and PA2 are firmly situated. The adoption of this ontology meant that the Irish government, as structured during the period March 2011 to February 2016, and its measures on all PSOs formed the timeframe, structure and conditions appropriate for this research. I then proceeded to outline how the government, its organs and sub-organs are typically developed within the Irish democratic system. This aim was to indicate that both cases consisted of PSOs as they both reside under the aegis of the DJEI. Next this, I undertook to explain how the government went about the management of PSOs which was shaped by the legacy of the preceding economic crisis. This section acted to sketch the meaning behind the government's strict actions in managing PSOs, which leads the emerging PSO reform agenda as a response to these economic difficulties. Following this, I undertook to elucidate the reform agenda and categorise them based on my interpretation of the portfolio of actions, measures and cross-cutting procedures to be incorporated into the intra-practices of PSOs. I articulated these one-by-one as they subsequently exerted influence over the shaping of the enactment of aligning at the meso level of PSOs, particularly PA1 and PA2.

After this, I presented my case writing for each separately, in 4.3 and 4.4, which consisted of my own interpretations along with those of the practitioners regarding the enactment of aligning in their organisations. In this vein, each case benefited from the theoretical codes, or better practice, to organise the data and interpretations into a concise and coherent manner about the enactment of aligning within each case in the situated practices. The fact remains that this chapter (4) has transformed the fractured data (interviews transcripts, and documentation) from multiple levels, which was derived from the worldly experience of practitioners in PA1 and PA2 and their situated practices, into a coherent and contextualised story about the enactment of aligning in the selected organisation. These case stories are next synthesised through the act of theorising from which the theory of this thesis emerged to answer "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?" The task now in the subsequent chapter (5) is to present this theory with a view to placing it in the context in which it lives.

Chapter 5

THEORIZING AND THEORY PRODUCT

5.1 Introduction

Prior to this investigation, an SLR underpinned by the SAP lens on the extant SA literature, as presented in chapter 2, yielded the exploratory research question of "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?" The objective of the research question has been a probing of the notion of SA by lifting the lid on the actual works of IS executives associated with SA enactment; an area that has hitherto been overlooked by the bulk of SA scholars. Under this objective, I have affirmed that these works as enacted by IS executives are situated, and thus have been referred to as aligning praxis; thereby implying that macro practices, not only meso, suffuse IS executives and their aligning praxis.

Driven by the above objective, I undertook in chapter 3 to attune a research strategy and design to facilitate gaining a fine-grained picture on the world of aligning praxis as present itself in the lived experience and setting of IS executives. I outlined the adopted ontology of taller-doing which necessitates that praxis to be explained as to occur in the interplay between meso and macro practices. I then advocated an interpretive epistemology based on examinations of the consulted literature within this thesis, consistency with the ontological decision and, more importantly, the objective of the research question that requires close engagement with practitioners in their own context. These decisions on ontology and epistemology engendered the case methodology as suitable to capture the aligning praxis in the real-world setting. Therein, I mobilise SAP theoretical contours as a sharpening tool for the case methodology, and settle on a two case design to be theoretically sampled relative to the research question. Following this, I developed an organised framework for data collection which observes the requirement of the SAP lens for data to be collected from multiple levels. It was decided that these data were best approached through the constructivist GT method supplemented by the notion of case-writing. This design has yielded the selection of PA1 and PA2 - theoretically sampled from Irish PSOs - to undergird the development of theory in order to answer the type of exploratory research question posed by this thesis.

I then proceeded in chapter 4 with unpacking the worldliness of how IS executives engaged in the practice of aligning business and IS strategies under their respective situated meso and macro practices. The hallmark of this chapter was to weave the fractured data collected and

coded from multiple levels back together in a coherent story on the aligning praxis within PA1 and PA2. For ontological purposes, the discussions presented by the chapter mirror the timeframe selected for this thesis, that is, the period from March 2011 to February 2016. This was followed by an outlining of the macro practices under which PA1 and PA2 reside, which form the larger envelope of what practitioners can do relative to SA in their organisations. Therein, I undertook to present the reform agenda on PSOs as put forward by the Irish government during the timeframe selected. I offered some concise discussions on the portfolio of actions under the reform agenda, and I extracted those actions that would specifically implicate the evolvement of IS initiatives at the level of PSOs. The chapter then proceeded to provide the case writing for each case studied in this thesis. Each case benefited from the theoretical codes which I rendered as meso practices that encapsulate the interface between align praxis interspersed with macro practices. The chapter has presented contextualised and vividly detailed writings on how aligning praxis was enacted in the interplay between meso and macro practices.

This current chapter (5) will present the fruit of analysis undertaken in this thesis. It will synthesise the contextualised understanding yielded from both case writings, coding procedures and memo-writing toward the development of a theoretical framework that would have meaning beyond the immediate evidence which undergirds its development. To this end, the chapter herein is organised into four key sections. In 5.2, I argue for the notion of 'theorising' as an overreaching framework to guide the presentation of the emergent theoretical framework of this thesis. In this sense, I sketch out the thought process that preceded the development of the emergent theory before presenting the theory itself or embedding its product into the extant literature of SA. In 5.3, I present my theoretical framework which is of a multi-level nature resonating within the SAP lens adopted by the thesis. Section 5.4 presents my commitment to the notion of theorising by embedding the theoretical framework into the extant literature of SA. Section 5.5 will draw this chapter to a close and offer a link to the final chapter which consists of research contributions, implications and limitations.

5.2 The act of theorising

Leaning toward the advocacy of theory as an end product, one may observe the lack of consensus on what exactly constitutes theory, which is something that is unlikely for everyone to agree on (Weick, 1989, Sutton and Staw, 1995, Hassan, 2014). Weick (1995; P. 384) notes that the concept of theory belongs to the family of words that includes "*guess, speculation, supposition, conjecture, proposition, hypothesis, conception, explanation, model*". He observed that "*if everything from a 'guess' to a general falsifiable explanation*

has a tinge of theory to it, then it becomes more difficult to separate what theory is from what isn't". This is no surprise since the epistemological perspectives which determine the different meanings of theory cannot be relegated to the background. Such differences are played out in theory-building efforts, which lead to a variety of theory product forms and give rise to disagreements in terms of making a judgment of whether something is a theory or not when only the products itself is examined (DiMaggio, 1995, Weick, 1995, Charmaz, 2006, Welch et al., 2010, Hassan, 2014).

Against the above background, one can understand why Sutton and Staw (1995) took a reverse approach and, instead, chose to explain what theory is not, arguing that reference to prior works, mere empirical data, and lists of constructs and diagrams cannot be used in lieu of theory. Weick (1995) applauded this approach, viewing those items listed above as products that have vestiges of theory but are not themselves theories. Therefore, to solve the dilemma of what constitutes theory, Weick (1995; P. 389) advocated placing theory products in the "*context of what came before and what comes next*". At the heart of this context lies the activity of what could be termed as "*the process of theorising*" (Weick, 1995; P. 389) or "*conceptual leaping*" (Klag and Langley, 2013; P. 151), which concerns the thought process undertaken before considering the final theory products and the subsequent discourse in the particular field that the researcher is immersed in (Holmström, 2005, Swedberg, 2014). Therein lies the practical activity of the uncovering of new viewpoints on the phenomena being studied, constructing abstract understanding about and within it, and providing a theory product within which the researchers conceive of the phenomena (Alasuutari, 1996, Charmaz, 2006). The task then is accomplished, in concert with Weick's idea, by embedding the theoretical contribution within the body of knowledge (Holmström, 2005). In this sense, the existence of different theory products, along with the multidimensional judgments on their goodness, is overcome by the act of theorising, which entails placing the theory products in the context in which they live (DiMaggio, 1995, Swedberg, 2014). In the following passage, I proceed to present and disclose my theorising activities undertaken in this thesis and summarise this into four major points.

First, I commenced the act of theorising early in the research process following the decision of defining myself as an abductive inquirer underpinned by the SAP theoretical resources, as outlined in 3.3.6.1. With no need to reiterate, theorising relies heavily on abduction as an essential element of the theory-building effort (Locke et al., 2004, Hassan, 2014). For researchers to conceive of theory as a different viewpoint for the phenomena being studied, Alasuutari (1996) argued that researchers need to be theoretically informed prior to entering the field for the gathering and analysing of data. They should thus be able to toy with different perspectives on the phenomena being studied and break away from the confines of

mundane reality. Similarly, Klag and Langley (2013) hold the view that the conceptual leaping from data to theory relies on the researchers' unique toolbox – one that recognises abduction as a sources of ideas for the theory-building effort.

Second, the practice of theorising takes in the research question, strategy and design premises – thus the functioning of the end theory product is supposed to make these underlying premises visible (Weick, 1989, Alasuutari, 1996, Welch et al., 2010). In the context of this thesis, the notion of particularised understanding as opposed to generalised explanation was a matter of necessity during my theorising activities. To succinctly spell this out, chapter (2) revealed one of the primary issues in SA literature, as identified in (2.4.6.6) – the overemphasis on SA as a universalistic phenomenon as opposed a contextually dependent phenomenon; thus leading me to the formulation of a research question inspired by SAP lens, that is to seek out a contextualized understanding on the enactment of SA. Chapter (3), through the compatible decisions made in research paradigms, acted as a boundary system for a particularised understanding – that is, the gist objective rests on the interpretations of the studied phenomenon of SA within its specific contextualised cases setting. Chapter (4) provided case writings on the enactment of aligning as it occurred in its situated meso and macro practices, thus indicating to an insight that has been obtainable from particularistic practices which is not suitable for generalisability. This decision towards theory of particularization does not amount to conflict with the nature of theory product typically emerging from interpretive case-based inquiry, as in this thesis. Walsham (1995b; P. 79), in his response to generalisability criticism for interpretive IS case research, notes that generalisations in this realm should be seen as "*explanations of particular phenomena derived from empirical interpretive research in specific IS setting, which may be valuable in the future in other organisations and context[s]*". This view is supported by Gregor (2006; P. 624) in his review of the nature of theorising in IS research. In this vein, he outlined that the type of theoretical products developed from an interpretive case research can be well labelled as "*theory for understanding*" with an emphasis on bringing about an altered understanding of the phenomena under study as opposed to making testable predictions about the future.

Third, to a certain extent, theorising for particularization does not mean presenting data descriptions in lieu of theory (Weick, 1995). Returning to Sutton and Staw (1995)'s revised approach, they emphasised that empirical data provide support for the theory-building effort, but they should not be construed as theory themselves. Indeed, the treatment of data during theorising entails abstracting data into sets of concepts and explanations so they have meaning beyond the specific context of their development (Klag and Langley, 2013). The task, specifically for the interpretivist, involves "*the imaginative dimension*" (Locke et al., 2004; P. 1) wherein researchers engage with data and strive to imagine and articulate new

meaning out of it. One tool for my own imagination was the use of memo-writing, outlined in (3.3.6.4), which is advocated by Klag and Langley (2013) as to play a pivotal role in delivering insight beyond the data themselves. Substantially, the interplay between data and the researcher's own imagination was nicely illustrated by Mintzberg (1979; P. 584) who stated that "*data do not generate the theory - only researchers do that - any more than the theory can be proved true in terms of the data*".

Fourth, in theorising endeavours, the theory product which emerges from the process is not an end in itself. Rather, theorising tends to enfold the literature in the substantive area under investigation by placing the emergent theory product in the context of prior works (Whetten, 1989, Corley and Gioia, 2011). Without tying the emergent product to existing literature, Whetten (1989) described the discussion of the implications as empirical rather than theoretical as long as the product does not prescribe any value-added contributions to relevant extant literature. As Shalley (2012; P. 262) put it: "*when new [theoretical products] are situated well within the context of what already exists this can lead to a clearer illumination of what is new theoretically*". Eisenhardt (1989), Charmaz (2006) and Truex et al. (2006) are just a few authors who illustrate that theory building research is closely tied with the literature of a particular domain to identify research questions; thus they strongly emphasise the notion of locating theory product within the extant relevant literature (SA quest in the context of this thesis) in order to demonstrate the extent to which the theory product can advance knowledge, provide directions and move the field's thinking forward. In this vein, distilling the theory product in the form of a diagram can be a powerful path toward presenting and communicating the theorising products with the extant relevant literature (Klag and Langley, 2013, Swedberg, 2014). While Sutton and Staw (1995) listed diagrams as among products which are not theory by themselves, which is understandable, they emphasised that it rests squarely on the shoulder of researchers to spell out verbal explanations of all elements in the diagram.

5.3 The Theoretical framework

To recap, chapter (2) has conveyed the message that a meaningful understanding on SA that comprises of aligning as enacted by practitioners rather than the achievement of alignment at organisational level has offered fertile grounds for the SAP lens to be adopted by this thesis in order to penetrate the in-vivo experience of "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?" Chapter 3 is premised upon a research strategy, design and exaction to recognise and capture the aligning praxis as enacted by IS executives in their situated meso and macro practices. Then, chapter 4 proceeded to unpack some of the realities and worldliness of

aligning enactment as they took place in each case's situated practice. At the beginning of this chapter (5), I disclosed my own theorising process which, along with meticulous activities on data analysis, formed the backdrop for the development of a multi-level theoretical framework to answer my research question.

In this section, I proceed with presenting the theoretical framework that has emerged from this thesis research. This theoretical framework, for convenience, is visualised within Figure 5-1 as presented below. The framework consists of three levels. First, at macro level, highly codified and regularised practices are produced externally and are hierarchically superior to the organisational context through the enactment of acts, regulations, and guidelines responsible for shaping SA endeavours within organisations. Second, at the meso level, practitioners constitute practices in order to organise their aligning praxis through codified and structured organisational procedures and routines. Third, at micro level, the aligning praxis of IS executives is enacted socially within their meso organisational practices, engendering practices reverberated at macro level. As such, this multi-level framework would imply two pivotal points. First, the nature of the theory embedded in the framework is not to identify principles for generalisability across different contexts. Although laudable, it is beyond the scope of this thesis insofar as the multi-level theory endeavours towards a "*more integrated understanding of phenomena that unfold across levels in organisations*" (Kozlowski and Klein, 2000; P. 7). Second, following the SAP lens, the framework incorporates the assumption that the aligning praxis of IS executives does not take place in a vacuum, and is thus manifested in the framework as situated in meso and macro practices.

The approach adopted in this section to describe the framework is straightforward. Firstly, I undertake to examine each component from each level in turn, thus facilitating comprehension squarely from the component and what it contains relative to the enactment of SA. Within each component, I will display a conspicuous theoretical statement about the component as it manifests itself within the level and backs up this statement with immediate evidence from PA1 and PA2. This would speak to what Siggelkow (2007; P. 23) has argued: the case researcher must be mindful of the imperatives that case-based "*theory should stand on its own feet. One needs to convince the reader that the conceptual argument is plausible and use the case[s] as additional (but not sole) justification for one's argument*". Secondly, as depicted in the framework, there are five arrows that mediate interactions between levels and interactions between practices at meso level. In this vein, I have undertaken to explain their meanings within the theoretical discussion of each component. Third, following theoretical discussions on each component at each level separately, I offered a distinct section at the end to tie up and combine discussions from the multiple levels into a holistic view to answer the research question.

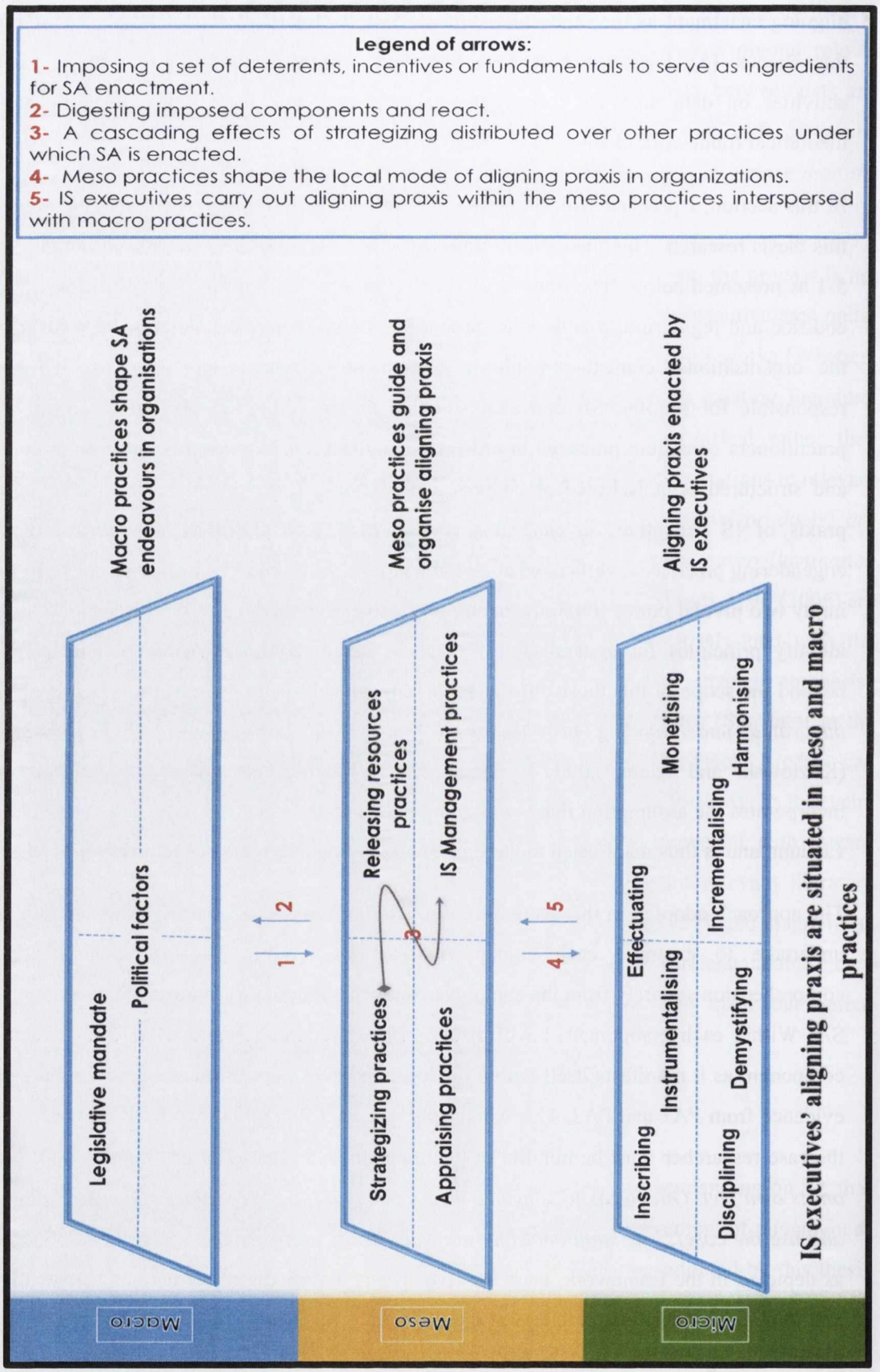


Figure 5-1 Present the theoretical framework on "How Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)"

5.3.1 Macro practices shape SA endeavours

In principle, ontologically, the macro level is populated with a nexus of practices that are arrayed in a hierarchical structure and likely to shape what is happening within the four meso practices embodied in Figure 5-1 (Kozlowski and Klein, 2000, Schatzki, 2005). However, there seems to be a particular set of macro practices that are meaningful for SA endeavours as they are enacted within the four meso practices identified. To provide an authentic conceptualization of the macro practices that underlie meaningful interaction with meso practices as related to the enactment of SA, I thus undertook to build a repertoire chain of evidence through the coding procedures to distill the relevant macro practices by their '*bond strength*' (Simon, 1996; P. 201) and '*concrete connections*' (Schatzki, 2005; P. 479) with meso level practices – that is, where the evidence suggests the primacy of designated macro practices that exert influences on SA attempts as they take place within the four meso practices identified.

The aggregate evidence from PA1 and PA2 revealed that 'legislative mandate and political factors' provide a plausible explanation for the macro practices implicated in shaping SA endeavours as these have occurred in the four meso practices. Arrow 1, in Figure 5-1, indicates the uneven, but permanent, instances where legislative mandate and political factors descend into the meso level practices to render influences on SA enactment. This, of course, entailed IS executives (including other intra-organisational practitioners) carving a specific space in which to evoke the multiplicity of regulations and obligations into their meso practices during all affairs associated with SA endeavours. To account for their effects, the concepts constituting these macro practices, namely legislative mandate and political factors, and how they shape SA attempts in meso practices are discussed in turn below. In so doing, it becomes apparent that those macro practices do not seem to have the same leverage on SA enactment at PSOs level.

5.3.1.1 Legislative mandate

Rather than being viewed as static legislation to merely prescribe purpose, spheres of operation and legal responsibilities for PSOs that function in the national public sector context (Rainey et al., 1976, Perry and Rainey, 1988), it is safe to say here that the legislative mandate is better conceptualised as a macro practice that lies behind a facet of the apparent influences involved in the actions associated with SA attempts at the level of PSOs. Though it has not penetrated deeply into the enactment of SA, the evidence suggests that through 'mandating certain operational activities, formalising a particular case for strategizing and delineating strategy execution', the legislative mandate has some potency on SA efforts specifically during the meso practices of strategizing. Thus, arrow 1 hints that we must not

altogether lose sight of features within legislative mandates that militate against or, alternatively, foster the full flow of SA enactment within the pace of meso strategizing practices at PSOs level. For ease of presentation, the three instances wherein the legislative mandate impacts upon SA endeavours during strategizing practices are now discussed below.

First, virtually, the focus within the legislative mandate is largely concerned with the operational ends of PSOs, e.g. mandating certain activities and setting out general duties. This in itself did provide the impetus for practitioners during their organisational strategizing to show a leaning towards strategizing, in the first instance, to fulfil their mandated operational ends; thereby effectively marginalising SA enactment or any other strategizing elements for functions (including IS) not associated with the delivery of mandated operational activities. Strategizing group within PA1 regarded their legislative mandate as central to what they do; with one emphasising the deferral of SA enactment during organisational strategizing on the grounds that '[IS] isn't what we do [as defined in the mandate] or why we do it, it is how we do it' (PA1, PMO). Likewise, strategizing group within PA2 prioritised strategizing for their mandated activities because it is 'very much rooted in why [they] were put in place' (PA2, PSB), whilst it was beyond the scope of organisational strategizing, as one executive commented, to figure out how well to diffuse and 'use the resources [including IS]' (PA2, PBH) in alignment with strategies.

Second, one of the main thrusts in the legislative mandate was to either explicitly formalise organisational strategizing (PA1) or implicitly reinforce it through the requirement to formulate the future PoWs for mandated activities across the organisation (PA2). Hence, by analogy, selling them as a mandatory activity for organisations while leaving the extent to which SA is practised at the autonomy of intra-organisational practitioners. Therefore, Figure 5-1 via arrow 1 incorporates the possibility that the legislative mandate, through enforcing a particular case for strategizing and not aligning, provided that strategizing is observed and approved by certain designated extra-practitioners whose authority stems from the mandate, allows strategizing group to put off the overt act of SA during their organisational strategizing for the sake of giving greater focus to strategize in line with what has been defined in their respective legislative mandate.

Third, while the legislative mandate has up now seemed to restrain SA endeavours during organisational strategizing, arrow 1 this time refers to the last instance wherein the legislative mandate implicitly promotes the occurrence of SA during practices associated with execution of strategies. Despite creating different organisational paradigms about which strategy to execute, it was apparent in both cases that the legislative mandate underlies IS executives' endeavours towards constructing SA during their engagement in the practice of executing their respective strategies. In the PA1 setting, the legislative mandate revolved around

executing the organisational strategy, hence the IS executives interviewed triggered SA development by showing an appetite to plan out IS-PoW in the manner intended to execute the organisational strategy. One executive pointed to the role of the accumulated series of PoWs within the organisation in delivering the mandated execution of the organisational strategy by illustrating that 'the way [they] do [their] work is that [PA1] sets out [...] a three yearly basis and calls it strategy [...] and each of the units [including IS] would try to see what are they going to do within their unit that kind of helps the overall strategy along' (PA1, PMD).

Somewhat similar within the PA2 setting, the legislative mandate was, loosely-speaking, about the execution of organisational strategy and instead necessitates reporting on the mandated organisation activities. This in itself engenders the importance of ensuring that business strategies are executed to be mandatorily reported to extra-organisational practitioners as prescribed in legislative mandate. While this might suggest, at first glance, that the legislative mandate does seem the slightest bit to foster SA, it does indeed bring to the surface the vital importance of executing IS strategy to mediate SA construction. In this context, the IS executive sought SA through ensuring the execution of IS strategy on the grounds that IS strategy was formed to support business executives to execute their strategies. One member of the strategizing group alluded to the importance of executing corporate service strategies (including IS strategy) to lay the groundwork necessary for business executives to execute and achieve the mandated operational goals embodied in their strategies, stating that IS strategy, along with other corporate service strategies, acted as an underpin, 'creating the environment that lets all [business] functions deliver on their objectives [...] without having to worry too much about whether the infrastructure is there to support them' (PA2, PPB).

5.3.1.2 Political factors

Political factors are manifestations of macro practices that are formed externally and are hierarchically-superior to the organisational context of PSOs. In democratic governments, they may manifest themselves in a different manner for PSOs, i.e. political factors that involve the official ruling party or coalition in government seeking particular priorities for the state and its attempt to establish a sphere of autonomy in control of PSO's specific working practices through new regulatory shifts, national frameworks, procedures and guidelines (Wamsley and Zald, 1973, Rainey et al., 1976, Burstein and Linton, 2002, Pandey and Wright, 2006). The evidence suggests, via arrow 1, that we should not treat these political factors as a given beyond the scope of understanding SA endeavours in PSOs. Rather, they were found to be central in shaping the manner through which IS initiatives evolved within meso practices, thereby entailing any prospective SA enactment in PSOs to find ways to

consider and closely follow such political factors. Although the impact of political factors on SA attempts can be differentiated and named within the following two instances, they are not identifiably linked with each meso practice and as practices, *'they do not have boundaries as such'* (Nicolini, 2013; P. 180). Therefore, they are theorised here to have regimes of influence on the evolvement of IS initiatives, while IS executives (including other intra-organisational practitioners) used them as building blocks for triggering SA development within and across their meso organisational practices. It is equally important to emphasise the temporal scope of political factors whereby practitioners are assimilated into an enduring macro practice that is contingent on what government strives to achieve from time to time during its term.

First, as previously documented in chapter (4), certain designated extra-organisational practitioners are formally granted the authority to hammer government priorities into the meso level of PSOs. Their authority stems from the legislative mandate to monitor, ensure and approve that the strategizing group have given a detailed account to reconcile with government priorities during their organisational strategizing. Intriguingly, it is not suggested here that such government priorities are deeply inherent in SA endeavours at the level of PSOs. Rather, arrow 1 points to the instance in which there are likely to be some strategizing imperatives that are particular to government priorities, which in turn create the possibility to render new IS initiatives as aligned with the respective organisational strategy of PSOs. This situation can be illustrated in the following two vignettes drawn from PA1 and PA2 to unveil the instance wherein business executives put forward a particular IS initiative that is implicated in delivering an aspect of organisational strategy, while mainly serving to conform to the delivery of a segment of government priorities as explicated in their series of PfGs.

In the case of PA1, the initiation of an upgrade to a particular IS application that offers a free online risk assessment was part of the organisational strategy to 'make it easier for employers to comply with their obligations' (PA1, PRR). But the prioritisation of sectors targeted in the upgrade, such as construction in 2013 (PoW, 2013) and agriculture in 2015 (PoW, 2015), were driven by the identification of these sectors as priorities for the government in its PfG to reduce injures in those sectors which assumed increased economic importance (PfG, 2013; PfG, 2015). The following statement from one member of strategizing group refers to the shift of strategic focus from construction to agriculture in harmony with government priorities which had its own consequence on the prioritisation of those sectors targeted in the upgrade: 'in our last strategy construction was a major element. In this strategy construction is less significant, agriculture is more significant [...] we have to do an external view of the economy' (PA1, PMO). Somewhat similar to the PA2 setting, standards executives commenced seeking further development for their online SMEs' tool, e.g. manage participants' inputs into standard development. Whilst this was in part in concordance with

the organisational strategy to assist SMEs to 'take full advantage of standards and participation in standardization across all sectors' (PA2 strategy, 2013-2015), nonetheless the continual development in this particular IS application was attributed to government priorities and endeavours to support SME sectors that were assumed to play a pivotal role in the future of the economy (AR,2013; PfG, 2013; AR,2014; PfG,2014; AR,2015; PfG, 2015).

Second, as narrated previously in chapter (4), in the pursuit of bringing the finance of PSOs to order following the preceding economic crisis, the Irish government placed constraints on resources and adopted a cost-concerned, VFM and efficiency-oriented approach on all organisational initiatives that had evolved at the level of PSOs. IS initiatives were not exempt and, instead, the government placed more constraints through the development of a set of cross-cutting policies and procedures on the introduction (PSC, 2012), analysis (PSDP, 2014), approval (PSRP, 2012) and procurement (Circular 06/12 and Circular 16/13, 2011) of IS initiatives evolved in PSOs. The multiplicity of these governmental measures for the interviewed IS executives in PA1 and PA2 resulted in further constraints on the meso procedures and a greater tendency to formalise and control the evolved IS initiatives. Thus, arrow 1 refers to the instance wherein political factors manifest through instituting the fundamentals for any IS initiatives proclaimed to be aligned; that is, requiring IS executives to ensure concordance with government policies and procedures during the pace of SA development within and across meso organisational practices.

The following vignette from the PA1 is illustrative of how the government measures in terms of rolling out shared services in corporate service areas were played out by the IS executive during his consideration for prospective IS initiatives to support HR business imperatives. Referring to the issue of losing vendor support in the previous HR system, one executive justified IS executive endeavours in considering the availing of shared services for its new HR system, stating that 'we would ideally see [our new HR system] in a shared service arrangement within the public sector, which would give us savings in terms of effort; but reassurances in terms of continuity of the system' (PA1, PAA). In a similar fashion, within the PA2 setting, practitioners vividly demonstrated the need to take into account that the government compels that all 'new services across [PSOs] [need to] be first tested regarding suitability for [ESD]' (DPER, 2012). On this ground, one member of the strategizing group rationalized the IS executive's leaning towards ESD for any IS initiatives evolving across the organisation because the reform office in government 'is focused on outsourcing and [has an established procedure] to enable agencies implement outsourcing [for their prospective IS initiatives]' (PA2, PPB).

5.3.2 Meso practices guide aligning praxis

Fundamentally, meso is a Greek word meaning 'in between' (House et al., 1995). It is thus a level that becomes a connecting or interpretive one that has far-reaching influences on how the other two levels, namely macro practices and micro praxis, are to be synthesised and understood (Li, 2012). As such, the meso level provides a rich slice of organisational life within which the phenomena under study exist in an interface between coexisting levels (Kozlowski et al., 2013). In this thesis, the meso level has been theorised within two dimensions.

First, it is the level that enfolds the set of practices that deserve to be abstracted from the unfolding of particular organisation-specific operating procedures and routines (Whittington, 2007). Practices at this level thus pertain to the '*accepted ways of doing things ... that are shared between actors and routinized over time*' (Vaara and Whittington, 2012; P. 287). Under this description, meso practices render themselves as to shape local modes of acting by guiding and organising activities, that is, practitioners typically draw upon these in the accomplishment of their endeavours (Whittington, 2006a). In the pursuit of identifying the meso practices associated with SA enactment in this thesis, the coding procedures were the vehicle for this course of action. As previously outlined in 3.4.7, careful attention was paid to how practitioners made sense of the activities in which they were engaged, triggering SA development. As the coding progressed, the analysis proceeded to investigate the extent to which particular activities associated with particular instances could be grouped into broader sets of practice categories. Thus, the resulting practice categories were the carrier for SA activities as undertaken by practitioners. As depicted in Figure 5-1, the aggregate evidence from PA1 and PA2 yielded the four meso practices of strategizing, releasing resources, appraising, and IS management. These practices refer to the shared and accepted organisational operating procedures in PA1 and PA2 that serve as the infrastructure through which IS executives' aligning praxis are constructed, guided and organised.

Second, as depicted in Figure 5-1, the meso levels is set so as to mediate interactions between macro and micro levels, as well as holding interactions between the practices involved at meso level. These interactions across levels and within the meso levels are depicted in the framework via three arrows. Arrow 2 indicates to the embedded nature of these meso practices, that is, what goes inside these practices relative to SA enactment is an assimilation of the macro practices as outlined in 5.3.1. Arrow 3 points to the cascading effects of strategizing practices distributed over the other three meso practices under which the aligning praxis is enacted. Arrow 4 sympathises with the manner through which these four meso practices shape the local mode of alignment by including and excluding, legitimating and de-legitimating, enabling or constraining IS executives in enacting aligning praxis during their

engagement in these meso practices. Taking both dimensions together, I shall now take each meso practice in turn in order to facilitate the comprehension of how each practice guides and organises the aligning praxis of IS executives. Herein, I will attempt to tell the legend of the three arrows and the interactions interspersed with each of them.

5.3.2.1 Strategizing practices:

In the terminology of SAP, strategizing involves all the various intra-organisational works required for making and executing strategy (Whittington, 2006a). As the evidence from this thesis suggests, this work is often carried out through discrete ad hoc meetings, in this instance it occurred at multiple organisational levels, involved various instances and episodes, and potentially encompassed peripheral strategizing for organisational functions. SAP literature, however, seems to regard that this strategizing works by shifting fluidly through all phases; thereby blurring boundaries between strategy-making, its execution and peripheral strategizing. This was most apparent in the words of Whittington (1996b; P. 732) who sees the work of strategizing as encapsulating '*all the meeting, the talking, the form-filling and the number-crunching by which strategy actually gets formulated and implemented [but also] the perspiration [works that involve] the routines of budgeting and planning as they unwind over the year, the sitting in expenditure*'. This is not a criticism for such a widely-spoken view in SAP literature, per se. Instead, blindly adopting this view in this thesis may deemphasise the full picture of how the different strategizing practices shape the manner through which aligning praxis of IS executives are enacted across different practices associated with the works of strategizing. To this end, grounded on the evidence from PA1 and PA2, three strategizing practices - namely, organisational strategizing, IS strategizing, and strategy execution - were found to empower IS executives or alternatively did not rigidly constrain them from triggering SA development within their respective organisations. These meso strategizing practices and how they induce effects on IS executives, as well as how they provide constitutive aligning praxis, are discussed below.

5.3.2.1.1 Organisational strategizing

Virtually the nature of organisation strategizing in PSOs requires that the strategizing group agrees on who will be involved and how strategizing will proceed across organisational levels (Rainey, 2014). Their authority of inclusion and exclusion for other practitioners stems from their hierarchical power which has its basis in their respective legislative mandate. With the necessity, as arrow 2 suggests, to align with the requirements imposed by the macro practices, it was apparent in both cases that the strategizing group suspended IS executives from early engagement in organisational strategizing as relating to the handling of new strategic directions dictated by macro practice. In this vein, arrow 4 refers to the instance

wherein IS executives were prevented from engaging in strategizing at this stage which was more favourable for those executives in control of the mandated operational end activities who faced an unavoidable need to reflect on any shift in response to macro practices. The following two vignettes drawn from PA1 and PA2 are illustrative for the limited experience of IS executive engagement in organisational strategizing at its early stage centred around the concoction of strategic directions in accordance with macro practices; thereby signalling to boundaries circumscribing the enactment of aligning praxis by IS executives.

The strategizing group in PA1 illustrated that assimilating the macro practices is a preparatory work to laying the ground work for the clarity of organisation strategy from which IS executive's input is sought as part of subsequent strategizing practices. One strategizing member indicated the impracticality of including IS executives and concurrently planning out for IS contributions during the early strategizing works, commenting that 'you must have some ideas to give [IS executive and other corporate executives] to engage them [...] you must say "well this is what we are doing". You must give them a context' (PA1, PMO). Likewise, strategizing group in PA2 insisted that gaining their consensus concerning organisational strategy in alignment with the requirements imposed by macro practice is the ground for the exclusion of those executives (including the IS executive) who have nothing to do with getting around strategizing endeavours at this stage. Member of the strategizing group emphasised that their early strategizing work is orientated to develop their consensus to 'align [their] overall strategic goals to ensure that they were in line with [...] what were general government goals' (PA2, PPH); attributing the exclusion of IS executives to the fact that strategizing at this stage 'can't encapsulate everybody's view [which can be captured in subsequent engagement strategizing sessions]' (PA2, PSB).

Intriguingly, the identification of IS initiative opportunities in alignment with new strategic directions did not face sharp constraints during subsequent organisational strategizing practices that encompassed IS executives. Although they were fairly limited, it was apparent in both cases that some IS initiatives had evolved though they were not scrutinised, having been championed by business executives rather than the IS executives; these initiatives were in alignment with particular new business strategic endeavours. This evidence in particular is elucidative on how the practice of organisational strategizing, at particular stages, can be constitutive of aligning praxis although not enacted by IS executives. In the PA1 setting, for instance, strategizing group highlighted the efficacy shift in inspection activities towards a risk-based approach in response to government-imposed ECF measures. This in itself acted as a potential trigger for new IS initiatives in the business area impacted by these measures, with one executive committing on this business-based IS initiative emerged during strategizing by saying 'we would be very clear that the business itself needs to be the driver'

(PA1, PAA). A similar dynamic was documented in the PA2 setting where some IS initiatives were identified and presented during functional strategizing as part of the organisational strategizing. One executive described how business executives are predisposed to take full ownership of their prospective IS initiatives gleaned from their strategies and needs, stating:

'*the culture here, whereby the system has to be owned and driven by the end user department; not by [IS unit}. In particular, where there is a business process improvement. There is no point in [IS executive] telling the business what to do. The business has to know what they want, be behind it and go for it and support it themselves'* (PA2, PBH).

5.3.2.1.2 IS strategizing

At the level of PSOs, strategizing for the sub-organisation level is intrinsically related to the autonomy of strategizing group who confer legitimacy upon sub-organisation level strategizing and codify the manner through which strategizing at this level should be enacted. With the desirability to ensure that sub-organisational strategies do not steer away from overall organisational objectives, the practice of IS strategizing, in particular, was somehow configured, in both cases, to be inseparable from the locally-acting organisational strategy. With some nuanced accounts on the timing and impetus for practicing IS strategizing, arrow 4 refers to the occasion where IS executives in both cases were delegitimized to strategize for IS applications on the business side and, instead, induced to use IS strategizing as an instrument to develop SA via ensuring appropriate IS infrastructure components in support of organisational strategy. It is in these confines arrow 2 implies that the practice of IS strategizing was not isolated from the macro of political factors wielding immense authority in the management of IS infrastructure initiatives evolving from PSOs, thereby resulting in the readiness to adjust various IS infrastructure components to align them with the macro requirements. The following two vignettes drawn from PA1 and PA2 provide illustrations on how IS executives' aligning praxis were organised in the practice of IS strategizing through the interplay between meso and macro confines.

In the PA1 setting, the strategizing group did not place rigid catalysts for executives at sub-organisation level to engage in separate strategizing practices for their functions. Where IS strategizing was pursued, it was internally decided among IS practitioners to plan out how the IS function would 'propose to implement and maintain all [IS] services in accordance with the [PA1's] overall strategy' (IS strategy, 2013-2015). With such function-focused works, it was spontaneous for one executive to vindicate the IS executive from not strategizing for IS applications and, rather, focusing on IS infrastructure during the compilation of IS strategy on the grounds that the IS executive would only be 'responsible for [his] area [of IS

infrastructure]' (PA1, PJM). In this context, the macro practice of political factors embodied in the national procurement framework was mimicking the practice of IS strategizing as a mandatory element to govern those IS infrastructure components envisaged as being aligned with organisational strategy. In the words of one member of the strategizing group, IS executive during IS strategizing, as public servants, is not in the position to turn away from designated measures placed by the government over IS infrastructural initiatives, articulating that 'delivering value for money [...] that is a government priority. But what does it actually mean in terms of [IS]? Well part of what it means is actually [procuring] to get the best value' (PA1, PRR).

In the PA2 setting, strategizing at sub-organisation level was conferred with more legitimacy since the strategizing group decided it should be enacted and approved as part of the organisational strategizing. Hence, IS strategizing here is an inherent practice that occurs within organisational strategizing, and the very notion of IS strategizing triggers SA development by figuring out the manner through which the development of 'hardware, software and network infrastructures across [PA2] [...] is aligned to the [PA2's] Strategy' (IS strategy, 2013-2015). As such, IS strategizing carries with it a stated acknowledgement of confining SA to infrastructural grounds, thereby obstructing the IS executive from strategizing for IS applications on the business side. One executive vividly demonstrated that '[the IS executive] would generally not be taking the lead on [and strategizing for] business applications [...] but where [the IS executive] would see infrastructure [requirements] that would be driven by [the IS executive] as the owner of the [IS] infrastructure'. Further, observing the national framework for procuring IS infrastructure components envisaged as aligned to strategy acted for IS executive as if, the executive noted that '[I]t is not even a guideline [...] but it is like a mandate saying "You do [have to] participate in those frameworks' (PA2, PBH).

5.3.2.1.3 Executing strategies

It could be argued, via arrow 2, that there is a state of regularities in executing strategies in PSOs created by specific macro practices as outlined in 5.3.11 which transcend the apparent differences among PA1 and PA2 on which strategy should be executed. Therefore, it is possible here to focus on commonality without downplaying the difference that could be imputed to variations in meso practice at the organisational level. To a large extent, arrow 4, backed with evidence, suggests that IS executives were emboldened to engage more actively in executing strategy practice - an effort that is aimed at nothing less than promoting SA development despite the different organisational paradigms on which strategy to execute, namely organisational strategy (PA1) or IS strategy (PA2). With some nuanced accounts on

their organisational arrangements for IS, the following two vignettes drawn from PA1 and PA2 are elucidative of how executing strategy practices provide organised settings for the aligning praxis of IS executives and can even be constitutive of aligning across the organisation.

In PA1 setting, the strategizing group asserted their commitments to the organisational strategy that is mandated for execution rather than those of sub-organisation level, thus placing the consequences on the IS executive to plan out IS-PoW that comprise IS initiatives to give support to the execution of organisational strategy. Therein lies IS-ownership portfolio practice in PA1 to render SA construction across the organisation. Here, the IS executive was delegitimized to plan out IS-PoW for those IS applications owned by business executives and was instead confined to seek out SA development on those IS initiatives (infrastructural and application) run and managed by the IS function. One executive advocated that the IS-ownership portfolio and its consequences trigger SA development on the grounds that IS initiatives should be planned and form part of the PoW of those who own them and are closest to understanding the business needs and strategies to which the prospective IS initiatives were deemed relevant, stating that 'if the business unit isn't interested enough to push it in their [PoW] [then this indicate that they] have no interest in it' (PA1, PAA).

In a slightly different manner for SA enactment in strategizing execution within the PA2 setting, executives were predisposed to develop operational plans against their particular and approved sub-organisational strategies because these operational plans were accentuated as the carrier for endeavours to execute organisational strategy: 'in realizing the strategy [executives will] prepare annual operational plans to maintain focus and consistency with the [PA2's] strategic objectives' (PA2-strategy, 2013-2015). Nevertheless, the federated arrangement of IS in PA2 rendered the IS-operational plan in particular to accommodate the execution of IS strategy as well as IS aspects that evolve within business strategies. This yields SA enactment during the preparation of the IS-operational plan, somewhat paradoxically, with full autonomy over the IS executive to plan out IS infrastructural initiatives drawn from the IS strategy together with a relatively high level of devolution of responsibility to business executives to plan out and ensure the inclusion of their IS application initiatives relative to their strategies into the IS-operational plan. The following statements from two executives in the same episode explicated how the IS executive's aligning praxis was organised in the practice of executing strategies in the midst of centralized IS arrangements, with the first executive alluding that 'there are some initiatives [...] that are more to do with infrastructure that [the IS executive] would be ensuring that the [PA2's] [IS] infrastructure is fit for purpose' (PA2, PPB), and the second executive picking

up on the conversation, commenting that 'new projects, new work, new enhancements; [IS executive] would tease it out [in deliberation with business executives]' (PA2, PBH).

5.3.2.2 Releasing resources practices:

The release of resources refers in particular to the distribution of aggregated financial resources from the parent department to its peripheral PSOs (Green, 2007, Rainey, 2014). Whereas, budgeting in terms of the more detailed parameters of how precisely these resources are to be used, practitioners across PSOs operate autonomously in deciding the budget for organisational initiatives (including IS initiatives). Virtually, we should not overlook the argument that budgeting practices within PSOs are political in nature and that to understand how the budget is decided for each function would require consideration of the relative power of functional executives (Pfeffer and Salancik, 1974, Hills and Mahoney, 1978, Wiedner et al., 2016). However, for this study of SA, the aim is to focus on how SA was enacted within budgeting practices which is dependent upon organisational procedures for releasing budgets to IS initiatives as opposed to the political interplay among executives to secure budgets for their functions per se. As such, the evidence from PA1 and PA2 points out that the practice of budgeting for IS initiatives is inherently a carrier for SA endeavours. As depicted by arrow 3, IS executives in both cases were predisposed in their localized budgeting practices to overtly link IS budget with their particular strategies execution programme – an attempt that is inclined to trigger SA development by means of resourcing those IS initiatives identified as being aligned to strategies during the practice of planning out strategy execution. In this sense, arrow 4 would sympathise with the manner through which aligning praxis of IS executives during the practice of releasing resources was guided towards particular endeavours intended to put strategies into actions.

Equally important to emphasise, as arrow 2 implies, that IS-related budgets in PSOs are specifically scrutinised by some level of external government control before IS executives can embark on their IS budget. Intriguingly, while the evidence from both cases did not suggest any hindrance from this macro approving procedure on SA enactment, this could be made attributable to the fact that this procedure did not descend into the details of the internally-designed IS budget, and thus appeared less impactful on SA than it really is. This can be distilled from the voice of practitioners who indicated the removal of their authority to embark on IS budgeting, which may not provide stability as to the extent to which budgeting those IS initiatives envisaged as being aligned can be approved and delivered. The following two vignettes drawn from PA1 and PA2 elucidate the interplay between a locally-enacted IS budget within the macro approving procedures and how IS executives' aligning praxis were guided in this setting.

In the PA1 setting, releasing the budget for organisational initiatives was promulgated as a means of ensuring the execution of the organisational strategy. Thus, executives prepared their spending proposal against the stated commitments within their relative PoWs to ensure the resourcing of initiatives declared to be of priority to the organisational strategy. Therein lies the reinforcement of the IS-ownership portfolio, that is, the IS executive triggered SA development through making conscious efforts to ensure resourcing IS-PoW that comprise IS infrastructure and applications run by IS function, whereas the proportion of the total spending proposal for each business function was required to encompass their business initiatives alongside their IS-owned initiatives. One executive applauded that the IS executive was delegitimized from resourcing IS initiatives evolved from the business side, seeing SA through business executives' willingness to maintain the IS initiatives resourced from their local budget insofar as they were likely enough to support the strategic endeavours in their PoWs. The executive stated that they are 'the people on the frontline who are best placed to manage [and resource their IS initiatives in alignment with their strategies]' (PA1, PAA).

Ironically, it is in this context of ownership-based parameters, or better decentralisation, that the macro procedure appeared less significant to hinder SA in PA1. IS initiatives are resourced from the business side and are deemed to be a business budget rather than an IS one, thus falling out from the IS executive's formal submission for IS budget approval. One executive sub-consciously commented that the macro procedures were unlikely to render constraints because the government department 'has a definite overseeing [on IS budget] but getting down the detail of [IS] expenditure [across the organisation], that doesn't really happen in practice' (PA1, PAA). The crux of the matter in the PA1 decentralised approach now is that it can be destabilising for IS initiatives across the organisation towards the end of the financial year. Budget holders (including the IS executive) must engage in budget levelling among themselves, as narrated in chapter (4), to seek out 'supplementary budget' (PA1, PJM) to advance their initiatives (including IS initiatives) as set out in their relative PoWs.

In PA2, it was decided to release budgeting determinations for organisational initiatives on the parameters that eventually allow executives to execute operational plans against their sub-organisational level strategies. This approach heartened the IS executive to ensure the resourcing of the IS-operational plan that encompasses all IS initiatives across the organisation for that particular year, provided that these IS initiatives were already prioritised with business executives. In this sense, it is safe to say that SA was triggered through the centralised IS budget with devolution of responsibility to business executives in the mapping out of their priorities for IS application initiatives within the organisation-wide IS budget parameters; at the same time, the IS executive was legitimized with full autonomy to leave

aside a proportion to ensure the resourcing of IS infrastructural initiatives envisaged as being aligned with strategies. One business executive demonstrated the practicality for IS initiatives to be executed entailed the need for them to be engaged with the federated arrangement for IS services within the organisation to ensure their inclusion into the IS budget program, pointing out that if they have IS initiatives that 'require resourcing ... [they] will kind of filter it here first [within their business function] ... [and ensure that] it is planned [into IS budget] for the next couple of years' (PA2, PPH).

With the nature of centralized IS budget and its consequences on IS initiatives put forward by business executives across the organisation, it was hardly surprising to note that business executives in PA2 lamented the 'removal of authority for the organisation [to autonomously embark on IS budget]' and commenting that the macro procedure is held responsible for the 'delay [in the] implementation process [for their business IS initiatives]' (PA2, PPB). Nonetheless, the program of gradually deploying and resourcing IS initiatives across the organisation soften the impact of this macro procedure on SA development, and the net result of this strategy is abbreviated in the words of one executive who moderated the macro procedures, saying 'far over the last five years; bar one little hiccup; they have just approved it' (PA2, PBH).

5.3.2.3 Appraising practices:

Faced with spiralling resource and budget constraints, practitioners in PSOs found themselves as if compelled to scrutinise their capital spending on IS initiatives among wider competing organisational initiatives. Indeed, overtly analysing and prioritising the financial aspects of prospective IS initiatives, along with the non-financial inherent in the pursuit of what is relevant to strategies, has been of immense importance to the reform agenda on PSOs that takes for granted that any prospective IS initiative 'complies with Government policy [and] supports the business priorities [of the PSO]' (PSC, 2012). In this vein, arrow 2 points out to the extent to which the appraising practices in PA1 and PA2 go some way to simulate the reform agenda by incorporating practices, i.e. business case analysis and project committee to establish and assess the alignment of any prospective IS initiatives with the objectives set out in their strategies. In this sense, arrow 3 indicates the manner in which these appraising practices act as if to reconcile with strategies those IS initiatives that unwind at any time during the year, thereby denoting that they are intrinsically carriers for thoughtful SA enactment.

Virtually, the hallmark of appraisal practices is that the business owners of IS initiatives act within a context composed of rules on how to engage with these practices. Such rules, according to Nicolini (2013; P. 47), '*govern individual actions by making certain kinds of*

conduct possible while precluding others ... [although they might not be] explicitly or discursively formulated; [t]hey can be procedural (how the practice is performed), or moral (what are the appropriate and permissible forms of enactment)'. Thus, the rules in the cases studied were in the form of reinforcing joint ventures on SA enactment between business and IS executives. Business owners are required to enact ownership of their prospective IS initiatives, while securing the technical inputs of IS executives that would otherwise lessen the potential for triggering SA development implicated in the proposed IS initiatives. In this sense, arrow 4 refers to the instance where appraising practices define particular conduct for IS executives, that is, their aligning praxis confined to the technicality of the proposed initiatives, as opposed to the compatibility of the proposed initiatives to strategies. The following vignettes, drawn from PA1 and PA2, are illustrative of how the aligning praxis of IS executives were organised under the rules implicated within appraising practices, and how these can be constitutive of alignment across the organisation as well.

In the setting of PA1, appraisal practices for any particular IS initiative that requires capital investment are neatly nested within the basic principles of the organisation, necessitating that any prospective IS initiative be supported by its owners (business or IS executives) who must undertake responsibility for its development and be willing to devote a proportion of local resources and budget to sustain the IS initiative over its lifecycle. Therein lies the rub of SA enactment, with the devolution of SA establishment on the shoulder of the owner to develop a business case for their particular IS initiative, ascribe it with either organisational strategy or their particular PoW, and determine that the IS initiative is capable of securing a proportion of the discretionary budget assigned for organisational initiatives, thereafter pursuing local functional resources and budget. With this procedure oriented towards ownership-based, appraisal practices in PA1 might suggest, at first glance, that SA enactment is at best far-fetched for the IS executive except for those IS infrastructural initiatives it owns.

However, there are simple levels of intervention for IS executive in business-owned IS initiatives made possible through the requirement to secure IS executive inputs during appraisal practices. While the focal content of these inputs might not in fact be related to the extent to which the proposed IS initiatives are aligned with organisational strategy or business PoWs, it is intriguing to conceptualise IS executive inputs as the baseline for triggering SA development. That is because appraisal practices are highly unlikely to proceed, overlooking the IS executive input; that is, technical in nature to ensure simultaneous internal efficiency measures and alignment with government requirements. The words of one business executive are illustrative in how she drew upon the rules implicated in appraisal practices to secure the IS executive's technical inputs while manoeuvring her limited IS knowledge to fill the business case analysis, stating that 'there is no point in

proposing an initiative ... if you are not going to be able to get [IS executive] to give you that help ... I would depend on [IS executive] to do that because I wouldn't have enough knowledge to do it' (PA1, PBR). Likewise, the pressing task in the project committee was that of engaging the IS executive to collaboratively make an informed decision on the proposed IS initiatives relative to strategy, available resources and IS executive input to avoid lapsing into 'unacceptable risks' (PA1, PAA).

In PA2 setting, appraisal practices for IS initiatives that require capital investment are tightly linked with the organisational framework for project initiation that predetermines any organisational initiatives (including IS initiatives) to be driven by their owners (business or IS executives) who must provide 'the business benefits ... indicate which of strategic priorities, if any, this project directly contributes to ... [and] indicate how it contributes and its importance in supporting that strategy ... and [operational] plan' (PA2, CAPEX). In this respect, SA construction is inherently enacted by owners rolling out their prospective IS initiatives while undertaking full ownership and ascribing the IS initiatives to their particular strategy or operational plan.

Virtually, securing IS executive inputs and commitments during appraisal practices can be pivotal to the engendering of SA development implicated in proposed IS initiatives. It was no mystery to understand the centrality of these inputs, given that IS services, budget and resources are centralised. Thus the analysis and prioritisation of IS initiatives during appraisal are contingent upon on parameters that take into account IS executive inputs in terms of available resources, internal efficiency measures and uniformity with government requirements. One executive, for instance, seemed to follow the rules which is to be expected from those engaged in appraisal practice, that is of securing IS executive inputs to give better shape to their proposed IS-business cases, saying 'that's where the expertise lies in the organisation. So we identify areas that we could see improvement in, but really [IS executive] then would come to say what type of improvement could be achieved in those areas' (PA2, PSB). Similarly, since all IS initiatives are federated into a centralised budget, the central tenet of the project committee being to use IS executive inputs - e.g. 'money ..., people ..., time ... [and] risk assessment' (PA2, PBH) or 'alternatives to deliver' (PA2, PPT) - to jointly appraise and prioritise IS business cases towards a tolerable and unobjectionable portfolio among business stakeholders across the organisation. These, of course, being tailored to agreed strategic priorities relevant to their collection of strategies.

5.3.2.4 IS Management practices

Simply appraising IS initiatives cannot adequately trigger SA development within organisations. The essence of delivering on SA endeavours lies behind the management of

the execution of IS initiatives so that the triggering of SA development arises from the manifestation of attempts to move from the desired towards executed SA endeavours. However, as arrow 2 suggests, in fiscal and resource constrained situations, it was ordinary for practitioners in PSOs to acclimate their management practices for IS initiatives in meaningful parallel with controls and measures reverberating at the macro practices of political factors. It is in this respect that evidence from PA1 and PA2 suggests that the facets of managing the execution of appraised IS initiatives went through progressive programming, rather than one-off expenditure, thus getting away with the finite resources applied to IS initiatives. In this vein, as depicted by arrow 3, SA was rendered on the grounds of ensuring that the gradual deployment of IS initiatives conformed in a timely manner to the strategic priorities enabled by resource parameters, and in congruence with what the government itself pledged to manage the deployment of IS initiatives evolving from the PSO context through the national framework for IS tendering and procurement. As such, the aligning praxis of IS executives, as arrow 4 implies, were organised in the form of management that was skewed on the side of executing IS initiatives through the interplay between the acclimated IS management practices and the macro ones implicated in tendering and procuring IS initiatives.

In the PA1 setting, the ownership portfolio of IS initiatives across the organisation might, to some extent, emphasise the rather chaotic nature of resourcing those initiatives from the accounts of different functions. While this approach has considerable intuitive appeal to drive SA development, strategizing group seemed to lose control over those IS initiatives running across the organisation and meanwhile resources were being tightened. It is this condition that aroused the management of the execution of such widespread IS initiatives through structured programming workshops, aiming to shift resources for those IS initiative priorities to organisational strategy and identifying candidates for tentative postponement relative to strategic endeavours and available recourse at the time. Henceforth the IS executive undertook to manage the gradual deployment of IS application initiatives assigned to his function in accordance with the 'list of projects' (PA1, PMO) arising from these workshops and their deployment strategies setting out 'recommendations on a prioritised basis as resources allow' (GDS, 2014). As a matter of course in PSOs, the IS executive had no other options other than coming 'in line with the government requirement' (PA1, PAA) in his endeavours to manage the gradual deployment of IS initiatives which fell under his remit, while ensuring that the gradual deployment of business-owned IS initiatives remained compliant.

Likewise, in the PA2 setting, the programming of IS initiatives across the organisation was enacted by the IS executive through a discrete project activities approach. This management

approach was a matter of necessity in the centralised IS resource context to determine the allocation of limited resources to all IS initiatives evolving across the organisation. While this centralization might indicate to bargaining to release resources for IS initiatives across the organisation, the IS executive encountered the need to engage business executives in the development of a logical incremental plan for IS initiatives relative to their respective strategy; thus setting out a firm and consistent path for the business to achieve its IS initiatives incrementally as the resources allow. In the following statement, one business executive delineated their strategic deployment of IS initiative which is incremental in nature as the resources allow for it to be spread out over a three-years program in agreement with the IS executive, saying:

'[*it is] a very strategic approach and [they] have a number of key steps ... [in step one] [they] would like to see trams [IS system] become a very much more system, where the data is live real time data supported by an internet interface ... the second stage will probably begin next year. At the moment [they] have just been discussing what it is [they] would like ... the third stage will then be acquired procuring the hardware and getting it working in the field*' (PA2, PPT).

And in this, the IS executive had to 'come back to the procurement guidelines' (PA2, PBH) that venture into the deployment of IS initiatives across PSOs to preclude from the lack of VFM measures in their deployment.

5.3.3 Micro aligning praxis

The previous sections will have hopefully left the reader with some reflections on the macro practices that shape SA endeavours, as well as the meso ones that guide and organise aligning praxis. Here, in this section I turn to the conceptualization of the praxis itself – that is, the activity of alignment as carried out by IS executives. According to Vaara and Whittington (2012; P. 288), '*the human actor is never a discrete individual detached from context, but rather a social being whose possibilities are defined by the practices in which he or she is immersed*'. Consequently, the micro-aligning praxis in Figure 5-1 is conceptualised as the local and situated intra-organisational works enacted by IS executives through their aligning endeavours, i.e. producing, maintaining, adopting and supporting IS initiatives to support strategy during their engagement into practices that form part of their meso organisational procedures and routines. Thus, as depicted by arrow 5, the aligning praxis connotes not only to IS executive activities, but the relationship between those activities and the practices in which they occur provides a means for understanding these aligning praxis.

In the pursuit of identifying the aligning praxis as enacted by IS executives, the coding procedures combined an intimate insight into micro-level activities from each case study with

a continuous regard for the particular meso practice that informs and empowers such activities. As the analysis proceeded, these micro-level activity codes formed an integral part during the course of writing-up individual cases. Following this, I undertook to study, interpret, write memos and examine these activities as presented in each of the case narratives and across cases (appendix-12 provides examples on how aligning praxis were distilled, interpreted and studied from the case writing of PA1 and PA2). The fruit of this process yielded the existence of nine praxes - namely, Inscribing, Instrumentalizing, Effectuating, Monetizing, Disciplining, Demystifying, Incrementalizing and Harmonizing - which were central to how IS executives from PA1 and PA2 engaged in the practice of aligning business and IS strategies within their organisational practices. In what follows, the theoretical and empirical foundation for these praxes are discussed. Although they are operationalized and conceptualised distinctly, the reader must be informed that these praxes do not operate independently from one another, but instead coexist, interact and overlap as they are enacted by IS executives within organisational practices.

5.3.3.1 Inscribing

The incident that weaves organisational strategizing into assimilating macro practices with its inherent legitimacy conferring participation for designated practitioners exposes what seems, at first glance, to be a stumbling block for IS executives to trigger SA development. However, if closely scrutinised, the evidence suggests that IS executives familiarised themselves with midpoint participation during the pace of organisational strategizing and leveraged the tentative chance for **inscribing** novelties around strategy from the periphery in which they were engaged. The praxis of inscribing is operationalized to include this set of activities to understand, interpret and develop conversant with strategy that help to, firstly, set up favourable parameters for tailoring IS infrastructure initiatives in accordance with strategic priorities; secondly, create sense for those IS initiatives injected by business executives during strategizing to be, obviously upon the request of business owners, facilitated through organisational trajectory practice for project initiation. Thus, although it might have appeared that inscribing praxis was carried out in a context strongly tainted by limited participation from IS executives, the range of activities involved in inscribing praxis were highly unlikely not to bear fruit in subsequent practices. As such, inscribing praxis render its significance on the ground that it goes beyond its symbolic practice domain to reinforce aligning praxis within subsequent practices.

In PA1 setting, the praxis of inscribing pertains to IS executive endeavours towards what Whittington (1996b; P. 732) in SAP literature calls the '*getting of ideas ... [and] the grasping of situations*' to construe organisational strategy from the scene to decide upon IS infrastructural management in concordance with that overall strategy. The following verbal

statement from one executive revealed how the IS executive converged with organisational strategy through participation in strategizing within which inscribing was enacted, saying 'the day to day stuff, tends to pull [IS executive] away and [IS executive is] very hard to get the distance for strategy'. The executive further observed that

'*the strategic sort of stuff would be around [participation into strategizing] where management is coming together [so IS executive is encountered with opportunity] to talk to the managers to see how things were going and what was coming up ... so that is how [IS executive] would sort of get into the strategy of [PA1]*' (PA1, PAA).

Likewise, in the PA2 setting, the praxis of inscribing was concerned with the IS executive's attempt to understand the strategies of different functions within the organisation and learn about the nature of future working practice and operational end requirements, both of which may require that IS infrastructure be adjusted to meet each functional peculiarity. One executive outlined the attempt in which acting to inscribe novelties around business strategies was a pivotal element during organisational strategizing, saying that the IS executive 'wouldn't have any role in directing what the standards strategy is [for instance]. However, [IS executive's] role would be to understand it and know where they are going' (PA2. PBH).

5.3.3.2 Instrumentalising

The juxtaposition of IS strategizing practice with the locally-enacted organisational strategy did not consist of blindly strategizing for IS initiatives across the organisation. As documented above, despite the discrepancy in organising IS services in both cases as well as the timing of IS strategizing, the principles implicated in such strategizing entailed IS executives to plan for IS infrastructure and sidestep new IS application initiatives raised during organisational strategizing to be driven by their business owners. To this end, the evidence suggests that IS executives made provision for a flourishing IS infrastructure in concordance with business strategic priorities as mobilised by business executives during organisational strategizing. Therefore, the praxis of **instrumentalizing** has come to be used to refer to the set of IS executive activities during IS strategizing to figure out the development, upgrade, review and maintenance related to IS infrastructure in the larger framework of pursuing organisational strategic priorities and meeting statutory measures set by the government. While the instrumentalizing praxis can often be tiresome, repetitive, and lacking inputs from business executives, nonetheless the genesis of instrumentalizing in this instance was to mirror the developments and changes that followed from business strategizing endeavours and the governmental cross-cutting measures to be considered in compiling IS strategy for infrastructural initiatives.

The PA1 IS executive put into action the praxis of instrumentalizing when he committed to carry out a review of the enforcement database based on what he could glean from organisational strategizing as a strategic move towards risk-based enforcement activities. One executive applauded such an endeavour from an IS executive in his own rather new IS initiative that depends on the enforcement database, saying 'we will have to do enhancements to GeoSmart [database] ... to create enhanced mobile capability for field inspectors' (PA1, PMO). In another instance, the IS executive was instrumentalizing when assessing IS infrastructure across the organisation to ensure that it is commensurate with meeting government measures while maintaining internal performance and efficiency requirements.

Somewhat similar in PA2, the IS executive actualized instrumentalizing praxis when she took the initiative during IS strategizing to incorporate SharePoint, a platform for document management. The onus was on the IS executive to strategically put in place a technical infrastructure capable not only of resolving document management issues spotted by business executives, but also encompass usability for future IS applications evolving in the organisation. One executive placed the burden of ensuring that the PA2's IS infrastructure is fit for purpose on the IS executive, and made reference to instrumentalizing praxis when he observed that the movement towards the SharePoint platform was strategically woven to reconcile and accommodate prospective business IS applications since one of the 'share point implication ... [is that] a lot of [prospective] business process applications [would need to be] developed on that base [platform]' (PA2, PPB). In another instance, the IS executive was instrumentalizing by investigating conformity with government measures and in this meeting business imperative requirements. Again, instrumentalizing lies in between the development of concordance between internal development on IS infrastructure and external requirements, with one executive emphasising the duality inherent in instrumentalizing IS infrastructure, noting that 'it's more about keeping an eye on what's out there and then seeing would that be useful for [their] organisation' (PA2, PBH).

5.3.3.3 Effectuating

In the lexicon of SAP perspective, strategizing has inspirational aspects within strategy, but also the perspiration part - that is, the "*nitty-gritty*" (Whittington, 1996b; P. 732) of planning by which strategy is implemented. In this research, activities related to getting into 'the minutiae' (PA1, PMD) and 'the nuts [and bolts]' (PA2, PSB) of planning actions and initiatives tailored to stated strategic priorities were related to the endeavours of strategy execution. Therein lies IS executives' **effectuating** praxis pertaining to the set of activities to identify, assemble, design and prioritise a portfolio of IS initiatives (infrastructural and applications) compatible with business strategic priorities to support strategy execution. Yet, it was symbolically easy to render effectuating praxis as varied since IS executives leap at

particular strategies, as previously documented. Nonetheless, the activities involved in the praxis of effectuating transcended the circumstances under which IS executives engaged in different execution strategies – that is to say that the effectuating praxis was found to pursue business priorities as verbally asserted by business executives regardless of the different organisational paradigms on which the decision to execute strategy was based from one case to another.

Endeavours towards executing organisational strategy in PA1 seems to enable the IS executive to navigate between business executives across the organisation in order to purposefully sense what would be imperative to their strategic moves to be embedded into the IS-PoW. Thus, when meeting with business executives on an annual basis, the IS executive's priority was to ensure that business executives have access to the appropriate IS infrastructure and integrate the development needed for existing and new IS applications. While this approach provided the IS executive with a blueprint on wider IS initiatives, the decision trajectory for effectuating praxis lies in giving scope to negotiation and prioritisation with business executives to agree on doable IS-PoW based on their priorities for that particular year as well as parameters from the previous year as to what finance would be made available. One executive pointed to the enactment of effectuating praxis in the instance where the IS executive engaged business executives to agree on IS-PoW, observing that effectuating would be 'based on [IS executive's] talking to people and getting a sense of what they see as the priorities or the issues that should be addressed [into IS-Pow]'. The executive also demonstrated how the IS executive enacted effectuating to curtail non-committal IS-PoW by only running with IS initiatives that encapsulate the three key aspects of 'the resources and time and ... sufficient priority [enunciated by business executives on annual basis]' (PA1, PAA).

A similar scenario was documented in the PA2 setting where the centralised IS service was the mechanism of action to praxis effectuation. In this vein, the IS executive was developing an IS-operational plan consisted of preparing an optimal IS initiative portfolio (infrastructural and applications) across the organisation resonating with actual business imperatives as well as potential parameters for the IS budget to be made available for all IS initiatives evolved that year. Thus, meeting with business executives was not a serendipity in effectuating praxis but was instead well-intended to annually design an agreed and prioritised IS initiative to provide a more precise and realistic scope for IS initiative deployment across the organisation against potentially available resources. The following two vignettes drawn from two executives in different episodes were relevant in providing the full picture of effectuating praxis. The first executive questioned the practicality of blindly executing IS strategy that might not reflect the evolved changes in business priorities from one year to another, stating

that the IS executive has an '[IS] strategic plan already there up until this year [2015] ... [but that does not devalue the need to pursue] the case of reviewing [IS strategy during the preparation of IS-operational plan] [to ensure] it is more or less still in line with what the business [priorities] and the overall [PA2] strategic plan is' (PA2, PBH). In this, the second executive contributed to demonstrate the endeavours from the IS executive to annually engage business executives in the prioritisation of their IS initiatives relative to their unfolding priorities from year on year, observing that the IS executive enacted effectuating during compiling IS-operational plan based on negotiating 'what is your priorities for this year [as a business executive] and ... what is the relevance to what it is you are doing' (PA2, PBH).

5.3.3.4 Monetising

A ubiquitous fixture for actualising organisational initiatives could to some extent be said to be patterns that result from seeking the resources to support the deployment of such initiatives. With respect to IS initiatives specifically, the interviewed IS executives came to know in advance through their effectuating praxis, albeit not accurately, what resources were likely to be needed to plead for the prioritised and agreed IS application initiatives in conjunction with the monies devoted to IS infrastructural initiatives. Therefore, the praxis of **monetising** refers to the commitment from IS executives to cash-pledge, acquire and mobilise the resources needed to deliver on those IS initiatives (infrastructural and applications) deemed compatible with business strategic priorities and imperatives during the praxis of effectuating. As previously documented, resources are secured from patrons through intra and extra-organisational practices where IS executives formulated an IS budget within their organisational practices and prepared a speculative but justified case for these resources for approval from the CMOD.

The monetising praxis in PA1 can be recursive. The IS executive did not have to start with a blank slate when it came to formulating a budget for IS initiatives (particularly infrastructural ones), other than redistributing and attaching the budget to those IS initiatives identified as being compatible with the business's strategic priorities from time to time. In the words of one executive, the IS executive undertook the budgeting of IS infrastructural initiatives with some level of readiness to adjust their resourcing continuously in accordance with evolved business imperatives. The executive stated that the IS executive monetised through the means of looking at 'baseline commitments [that is] contractual commitments [for] certain software licenses ... platform maintenance, hardware, servers [with preparedness to shift resources and] adjust the level of service' (PA1, PMO) according to the IS executive's understanding of business imperatives. Although these infrastructural initiatives were important, the IS executive had to be careful that they were not too radical or excessive as to clash with the IS

applications initiatives identified as strategically important in order to retain a considerable proportion of the IS budget. In this sense, one executive pointed that the monetising praxis had to avoid lapsing into insufficient resourcing systems central to organisational operation:

'*we are dealing with situations where ... we have invested a lot in GeoSmart ... which [is] our field management system. So they need to be maintained, they need to be upgraded, they need to be sort of supported. So there is costs associated with that [but] we are committed to the project*' (PA1, PJM).

A similar dynamic was documented in the PA2 setting. The praxis of monetising can be labelled as responsive and toned within the centralised organisation for the IS budget where 'there are no other [IS] resources in the organisation except through [IS function] and no money can be spent on [IS] without coming [through IS budget]' (PA2, PBH). In this vein, the IS executive put the praxis of monetising into action by drawing upon those IS initiatives arising during effectuating praxis and using them as catalysts for forming the IS budget. This was an indispensable part of a centralized IS budget that inevitably engenders such an approach to secure resources for those IS initiatives already prioritised across the organisation relative to their strategic moves. Yet, infrastructure initiatives, in the words of one executive, 'can be [budgeted] and put into place without full consultation with the business [executives]' (PA2, PBH). Therefore, the IS executive, as the owner of IS infrastructure, manifested the monetising praxis by means of pursuing the immediacy needed to renew, upgrade, replace or deploy IS infrastructures in compliant business strategies and imperatives in order to maintain the necessary platform on which IS applications are built.

5.3.3.5 Disciplining

As previously alluded to, the underlying rules implicated in the development of IS initiatives were configured to be business-led initiatives. The major impetus for such an arrangement was that the first step towards triggering SA development lies in the introduction of IS initiatives championed by business executives based on their assessments for strategic moves and imperatives. Equally important, despite the different forms of IS organisation identified in PA1 and PA2, business executives were strongly predisposed to rely on the consultation of IS executives whenever they put forward a business case for proposed IS initiatives. On this premise, the praxis of **disciplining** refers to how IS executives sift, flesh out, and scope out the business case, and in this take into consideration compliance with government measures. According to Foucault (1977; P. 167), the notion of discipline comes from the meticulous organisation of actions, and in so doing, the practitioner induces effects, '*prescribes movements ... [and] imposes exercises*'. Hence, disciplining in this thesis means that IS

executives aimed to produce intended effects whose objective was to trigger SA development through ensuring an accurate and rigorous business case was in place.

Interestingly, the evidence from PA1 suggests that the disciplining praxis was toned with the decentralised nature of the organisation's IS service. On the one hand, the IS executive relied on a mosaic of disciplinarian activities that endeavours to delve into the 'woolly on benefits [and] risks [embroiled in the business case]' (PA1, PAA) to guide the expectations of business executives from IS initiatives and ensure the formulation of measurable goals and benefits. The key priority for the disciplinarian IS executive was then to induce effects on the proposed case by 'building in lots of checks and balances' (PA1, PJH) to establish internal efficiency, e.g. cost effective and analysing alternatives, and external compatibility with government measures. On the other hand, the nature of decentralisation was offset by a relatively low level in scrutinising the suitability of proposed IS initiatives to existing IS infrastructure during the disciplining praxis. Meanwhile, the reinforcement of ESD by the government could be behind the unwillingness to challenge infrastructural suitability, IS executives implicitly refrained from introducing insistence effects on infrastructure compatibility because of the intrinsic inferiority in IS resources to run with the proposed IS initiatives. One executive applauded such a praxis for not hindering the SA development implicated in the business cases, saying 'If you look at it in the proper theoretical model then [IS executive] should [run with all IS initiatives] ... [but] we might be still waiting [IS executive to] do it ... sometimes when you want to deliver stuff it makes sense to let other business run with it [externally]' (PA1, PAA).

Within the PA2 setting, the centralization of IS resources created a favourable condition for the disciplining praxis to be implicated in all IS business cases evolving within the organisation. The disciplinarian IS executive put into action the set of activities that engender engaging back and forth with business practitioners, 'thrash[ing]out' (PA2, PPH) and 'flesh[ing] out' (PA2, PBH) the business cases in place. A lasting understanding of variance within business operational ends was difficult for the disciplinarian IS executive to realise without working closely with a presenter from the business area to '*get the requirements cleared up*' (PA2, PBH). Thus, the IS executive had to induce the appointment of presenter practitioner from the business area to deal with any divergence in business executives' managerial knowledge of IS and their expectations of potential within IS business cases. Further, the sense of centralization rendered intrinsic the assessment on the minutiae of business cases, not because of any stumbling block but rather due to the need to scope out the business case against the 'centrally-controlled and managed [IS resources]' (PA2, PBH). Hence, the disciplinarian IS executive induced effects by means of tweaking business cases to reconcile with the actual situation of federated IS resources – that is:

'[IS] resources were very very thin on the ground. So it really didn't make sense to be trying to develop something in-house and try to retain people to support it ... [while] there are developers on tap in the software house that you can use as you need them' (PA2, PBH).

To this end, the adoption of ESD from the disciplinarian IS executive was a necessity in the business case, one to meet the internal IS resource situation, and the other to establish compliance with the less obvious aspect of government measures assumed by disciplinarian IS executive as to foster ESD instead of shared services as earlier documented.

5.3.3.6 Demystifying

To overtly establish the relevance of IS business cases to business strategies as well as organisational strategy, the owners of IS business cases were required to lodge them for scrutiny by the project committee. These are state-of-the-art practices that involved, as previously noted, team-based assessment, appraisal, evaluating alternatives, prioritising wider organisational initiatives against strategic priorities, and so on. In this vein, the praxis of **demystifying** pertains to how IS executives engage with committee members to ratify the choices made, determine the IS function's capabilities to deliver, provide a blueprint for IS initiatives underway, and outline potential risk infringing upon organisational resources related to the implementation of the proposed IS business case in place. Thus, in the pursuit of demystifying, IS executives sought SA development through opening a channel of information to committee members which assisted them in investigating IS business cases in a meaningful way; thereby selling SA on the grounds of abandoning it to committee members to decide on the extent to which any proposed IS business cases are aligned with strategy and, even more so, enabling the prioritisation of IS business cases relative to strategic priorities emerge from the perspective of business stakeholders.

In the case of PA1, the prudent IS executive put the praxis of demystifying into action by the means of equipping committee members with technical advice, quantitative cost, and the risk and benefits analysis to aid investigation. The key priority for the IS executive was to specifically advocate or deny the concordance of the proposed IS business case with IS functional capabilities and resources. While the IS executive would have had a fair idea, following the disciplining praxis, on the suitability or inadequacy of running the proposed IS business case centrally within the IS function, he was keen to demystify for committee members the real picture of the project. Informal lobbying occurred among committee members to give the IS executive a sense of their keenness as to whether or not the proposed IS business case should be managed by the IS function or its business counterpart. If the context was supportive for the project to be run centrally within the IS function, then IS executive endeavours to seek support from the project committee to assuage or 'drop' other

IS initiatives into place, and thus redistribute IS resource-based prioritisation emerged from committee members. If it was decided that the IS business case be run and managed by business executives, the IS executive demystified by means of 'rais[ing] a red flag [or green flag]' (PA1, PAA) to endeavours proposed by the IS business case that is not based on organisational resources.

In the midst of all IS initiatives run centrally within the IS function, the focal tenet of the demystifying praxis in PA2 centred around IS executive attempts towards coaching committee members on 'all the different [IS] work that is going on across the organisation and what the priorities are [as identified with business executives] and the budget [at hand]' (PA2, PBH). The IS executive uncovers and facilitates an understanding to committee members to alleviate concerns related to the IS business case through engagement rooted in 'cost benefit [analysis]' (PA2, PPH) and 'overall risk assessment [implicated in the case]' (PA2, PBH). Yet, IS executive subtlety refrained from further engagement into whether or not the IS business case in place should go ahead. The major imputes for this approach was that committee members need to be more autonomous in their analysis on IS-business case relevant to strategic priorities based on what was demystified by IS executive. One executive accounted for the boundaries that the IS executive set around her own demystifying praxis, saying that the '[IS executive] asked that the burden of making these decisions [on IS-business cases] be brought to the business as opposed to the [IS executive]' (PA2, PBH). This was deemed by the IS executive as another layer of filtering although a complete IS-business case had been put together.

5.3.3.7 Incrementalising

As hinted at before, fiscal consolidation and resource-constrained situations exerted influences on IS initiatives in PSOs. In this realm, it was not sensible for responsible practitioners to completely abandon IS initiatives by not consigning or committing to release the necessary resources to deliver on all IS initiatives simultaneously. Given this inconvertibility, the evidence suggests that IS executives adopted an **Incrementalising** praxis that pertains to the phasing out, sectioning, and programming of IS initiatives which annually resonated within budget parameters as well as the strategic priorities of business executives for that particular year. According to Das and Teng (1999) and Moon et al. (2003), incremental activities are adopted to ensure that strategic endeavours are factored into smaller manageable increments for implementation which is always amendable, adjustable or can be redirected to other ventures. Hence, IS executives triggered SA development through the incremental delivery of IS initiatives that is adjustable to, as well as compatible with, the strategic priorities agreed with business executives on an annual basis insofar as the budget parameters allow. It is equally important to emphasise that incrementalising praxis does not

present itself as a discrete isolated praxis. Rather, it was enacted by IS executives at different degrees through overlapping with other SA praxis associated with effectuating and monetising IS initiatives.

In the enactment of incrementalising praxis, the interviewed IS executive in PA1 sought SA development through prioritising IS initiatives during the effectuating and monetising praxis. These prioritisation activities were inherently a carrier for incrementalising by means of deciding on appropriate and interactive incremental deployment of IS initiatives in line with strategic priorities as declared by business executives to decide upon what resources to deploy when and for what IS initiatives. In this sense, commitment to organisational strategy or IS strategy was kept broadly formative and subject to an on-going adjustment in priorities as reflected by business executives from time to time. One executive vividly demonstrated that the IS executive was 'not getting as much as [he] should get [to run with all IS initiatives simultaneously' and manifested the incrementalising praxis carried out by that executive in the following statement: 'that is [IS executive] looking into the crystal ball and saying: this is what we are going to do this year [based on business priorities], and this is all the budget we have and this is all we can do' (PAA, 2014).

Within the PA2 setting, the vehicle for delivering on IS initiatives across the organisation through centralized IS services inevitably engenders incrementalising praxis as a toolkit to assuage IS demands within the IS '[budgetary] confines' (PA2, PPT) to be made available for all IS initiatives. Therefore, conscious incrementalising praxis meant that the IS executive unwind IS initiatives incrementally through annual prioritisation activities with business executives during the effectuating and monetising praxis in order to settle on the IS initiative deployment portfolio that satisfies organisational business strategic priorities within the IS budget parameters for that particular year. One executive accounted for the fiscal context that, to some extent, gave rise to the enactment of incrementalising by outlining that the IS executive 'had to take that sort of approach [incrementalising], break down [evolved IS initiatives] into an agreed number of projects per year' (PA2, PBH).

5.3.3.8 Harmonising

As previously mentioned, one of the major thrusts of the reform agenda was to rectify the inefficiency practices spotted in public procurement at PSO level. For IS initiatives, specifically, this was enacted through the mandatory requirements on all responsible practitioners to avail of national contracts put in place by NPS whenever they acquire and procure IS capital goods and services. In line with these confines, IS executives encountered no other options other than leveraging these obliged options in all their affairs related to the tendering for IS initiatives, both 'infrastructural and applications'. Hence, the praxis of

harmonising pertains to IS executives' activities to acclimate, tweak, equilibrate internal IS demands and requirements to conform with available IS procurement options. While this might indicate external boundary options, the evidence suggests that SA was intrinsically embedded in harmonising where IS executives set out to leverage available options to deliver on those IS initiatives designed, identified and agreed as of strategic priority to business executives.

Harmonising was toned in the PA1 setting to be compatible with the decentralised nature of IS initiatives within the organisation. The range of activities involved is quite pragmatic. At one level, for business-owned IS initiatives, the IS executive activated harmonising through assisting business executives in defining their requirements, framing system specifications and liaising with tenderers and 'software developer[s]' (PA1, PPE) available through NPS procurement framework to seek out the delivery of IS initiatives in line with requirements. One the other hand, for IS initiatives to be run and managed centrally within the IS function, harmonising was activated by studying the business requirements along with existing IS capabilities and then harmonising that with the available IS solution in the national framework. The case in point here is that HR systems that were identified as continually 'causing difficulties for [IS team to keep the system running]' (PA1, PBR) after the external developer ceased providing further support. To this end, in the pursuit of harmonising, the key priority for the IS executive was to assess concordance between HR business requirements and existing IS resources which eventually led to the availing of shared services as the 'big saver' (PA1, PAA) for IS resources, all the while meeting the business requirements of the HR function.

In a similar fashion in the PA2 setting, the meshing between the differences of business end requirements and the manner in which IS initiatives meet these requirements were combined by practical application for the harmonising praxis. In this sense, the praxis of harmonising pertains to IS executive endeavours towards using the appropriate means to identify, assemble and translate business requirements into technical specifications to be negotiated with tenderers in NPS. It also includes knowing how to set up the arena through which the management of contracts with tenderers is performed in line with changes in business requirements. As such, the range of activities here goes beyond mere delivery on IS initiatives, but also encompassing future activities such as end-user feedback, IS service cross-checking and includes the appropriate means to harmonise these inputs into the management of contracts with service providers. One executive referred to the IS executive's harmonising praxis which took the form of consistent engagement between business executives and tenderers to advance the IS system upgrade necessary, interpreting harmonising praxis as follows:

'*it is a case of the analyst in the service provider will come out, get an understanding of what the changes are [as identified by the business executive] ... have a look at the system and see what the net effect of that would be ... come back with a proposal on how we might implement it ... document that ... come up with a quote ... [e]ventually [once approved by project committee] a schedule and a project plan to implement [will be developed jointly between IS executive and service providers]*' (PA2, PBH).

5.3.4 Holistic enactment

In this final section, I will attempt to bring together aspects of the foregoing discussions to provide a holistic view on the aligning praxis of IS executives as occurring in the interplay between the meso and macro practices. In attempting to synthesise these three levels, the theoretical framework would appear to hold some promise to what Whittington (2006b; P. 1903) in SAP literature has elucidated as '*understanding what is going on deep inside organisations requires close attention to what is happening outside*'. This should not be interpreted as saying that micro praxis occurs in a macro context. Instead, it serves to recognise that the phenomena of SA and its related praxis are the intrinsic part of that wider context. As depicted in Figure 5-1, it appeared that the interviewed IS executives put into action a set of eight micro-aligning praxis during their engagement in the practice of aligning business and IS strategies within their respective Irish PSO.

To start with, the hallmark of the composition of organisational strategizing is convergence with what is dictated by the macro practices of both legislative mandate and political factors. Strategizing group are exposed in order to develop their interpretations of these macro practices, thus yielding their primordial formulation of organisational strategic directions. The practice of organisational strategizing proceeded initially to narrow down participation from outliers not associated with the mandated operational activities of the organisation where these activities in particular need to be tweaked to a convergent point with macro practices. It is in this context there appeared to be no instrumental value for IS executives to decide on new organisational directions, but instead lie imperatives for them to know and inscribe novelties around new strategic directions, making these relevant to reflect upon in relation to forthcoming IS initiatives. Thus, the praxis of inscribing required IS executives to combine distinct information and actions about the organisational strategy, and mobilise this knowledge to reinforce overlapping the aligning praxis of instrumentalizing, effectuating, monetising, incrementalising and harmonising IS infrastructural initiatives compatible with existing and ongoing assessments of organisational strategic priorities.

The organisational strategy was simply an envelope approach that fostered other strategizing activities across the business, such as sub-organisational level strategizing and execution

strategies. The task for the interviewed IS executives was to monitor achievement of strategic priorities (as already inscribed) in their subsequent engagement with strategizing activities following organisational strategizing. As such, the practice of IS strategizing was juxtaposed with that of the organisation to engender the instrumentalizing of IS infrastructural initiatives in line with strategic priorities and statutory government measures in the IS infrastructural realm. Frequently, new strategic priorities and macro measures emerged over the lifecycle of organisational strategy which were either accomplished in the annual IS-PoW to execute organisation-wide strategy (PA1) or the annual operational plans around IS strategy (PA2). In both cases, the ultimate goal was to reflect on emerging circumstances to effectuate a portfolio of IS initiatives, this time infrastructural and applications, through pursuing the strategic priorities verbally-expressed by business executives along with written measures enacted through circulars and regulations.

Some form of improvisation might not be evident in subsequent practices. Strategizing practices place cascading effects to confine resourcing to a portfolio of IS initiatives based on the extent that they were identified as concordant with strategic priorities during the effectuating praxis. IS executives interviewed report that they secure resources from patrons through intra- and extra-organisational practices to overtly link the IS budget to those sets of IS initiatives. Monetizing praxis is not static, although it can be recursive. Thus, IS executives annually re-distribute their IS budget among IS infrastructural and application initiatives in line with evolving strategic priorities as enunciated annually by business executives. In this realm, budget parameters are not sufficient to monetise all IS initiatives simultaneously. The incrementalising praxis comes into play to ensure that the gradual release of IS initiatives pertain to the identified priority of business executives. In this vein, IS executives put into action conscious incrementalising by engaging with business executives to agree on an IS initiative deployment portfolio within the larger framework of the business' strategic priorities and available IS budget parameters.

The need to finance IS initiatives with capital expenditure might unfold over the year to align with what may often be an existing or emerging strategic imperatives. From the perspective of patrons, information from the various sources must be mapped into a well-crafted IS business case to enable feasible analysis and prioritisations on the given case in order to reconcile it with the organisational strategy, appraising it against business level strategy and considering the budget as well. IS business cases are predisposed to be business-led and championed by business owners based on their identifications of strategic imperatives. IS executives, as discipliner rather than imposer, for any given IS business cases work out how to input technical information, e.g. internal efficiency measures and external compatibility with government measures which are seldom provided by business owners – an effort by IS

executives aimed at nothing less than triggering SA development through ensuring that a rigorous IS business case is in place. The valuation of any given IS business case is accomplished through the wider perspective of business stakeholders across the organisation to project the prospective distributions of returns from among other competing organisational initiatives. IS executives join this venture to demystify compelling technical results which assist business stakeholders in investigating IS business cases in a meaningful way. The intent behind this demystifying praxis was to allow the prioritisation on the given case to emerge from the business side which may assuage demands for other IS initiatives underway relative to the existing knowledge of stakeholders regarding organisational strategic priorities.

Now, the management practice for appraised IS initiatives was somehow a result of the advent of conditions at macro level that were not necessarily foreseeable and can be easily planned for by IS executives. This itself sets favourable context for harmonising internal IS demands and requirements to confirm with available IS options and measures set out at the macro level practice. Harmonising may overlap with disciplining praxis to induce the effects on any given IS business case to tweak or adjust the given case to either avail of national framework e.g. shared services or alternatively come in line with other government measures, e.g. ESD. Harmonizing may occur in conjunction with the demystifying praxis whenever alternative options are sought by stakeholders. Last but not least, harmonising is nested with other aligning praxis as they collectively occur within meso practices to digest IS internal demands, see patterns or measures set by government, and then feed this back on all IS affairs across organisational practices.

5.4 Embedding the framework in the extant SA quest

In this section, as summarized in Table 5-1 below, I will attempt to seal the act of theorising by embedding the theoretical framework, as depicted in Figure 5-1, into the context of prior works in the extant literature of SA. As such, this section acts as if to elaborate on the major contributions of this thesis in terms of their relevance to the extant research of SA. To this end, I shall present ten points that will facilitate comprehension of the framework's components within the main debates in the extant literature of SA.

Component from the framework		literature-enfolded	Authors
Macro	Legislative mandate and Political factors	Alignment contingency	Sabherwal et al (2001) and Weiss et al (2007)
		Situatedness of SA examination	Ciborra (1997), Bruce (1998), Cumps et al (2206), Weiss et al (2007) and Tallon (2007).
		Alignment and environment	Avila et al (2009)
Meso	organisational strategizing	IS executive's participation in strategic planning	Stephens and Mitra (1995) and Gartlan and Shanks (2007)
		Synthesizing argument on intended and actual strategy in use.	Zviran (1990), Luftman (2003), Chan et al (2006), Pelletier and Raymond (2014), etc.
		Synergies between strategies at multiple-levels	Oh and Pinsonneault (2007), Tallon and Pinsonneault (2011), Coltman et al (2015), Al-Surmi et al (2016).
	IS strategizing	Dynamic nature of IS strategizing	Galliers (2004, 2007, 2011) and Teubner (2013)
	Releasing resources	Resourcing aspect on alignment	Bruce (1998), Chan et al (2006) and Bush et al (2009)
	Appraising	Alignment as an investment	Peppard and Ward (2005) and Peppard et al (2007)
	IS management	Management of alignment	Peppard (2007), Ward (2012)
Micro	Aligning praxis	Aligning agenda	Wilson et al (2013) and Karpovsky and Galliers (2015)

Table 5-1 Shows a snapshot of major debates within the extant SA literature that enfold each component in the theoretical framework.

First, the macro practices of legislative mandate and political factors with their consequences on SA enactment could expose what seems to be a context specificity for the two cases selected in this thesis. To recap, these cases were theoretically sampled from Irish PSOs, as outlined in 3.4.2, on their fertile grounds to inform the research question and contribute to the immature examinations of SA in public context which represents only 2% out of 87 studies considered for the SLR. However, and despite the suitability of the case settings and the

specificity of their macro practices, the concept of SA being contingent upon macro practices that are hierarchically-superior to the immediate organisational context existed in prior works, and thus has broader relevance to macro practices depicted in the theoretical framework. Sabherwal et al. (2001) used a punctuated equilibrium model of the environment on three cases varied in size, industry and region. They concluded that organisations differed in their endeavours to fine-tune SA patterns to accommodate changes in their respective macro environments. Weiss et al. (2007) accounted for the embedded nature of organisations, i.e. market engagement of the firm that induces effects varied across organisations. These effects caused each organisation in their study to seek different SA profiles consisting of variance levels of IS deployment, each is also unique to the organisational particularity of strategy and market assessment. Studies as such, while not explicitly grounded in practice, bear similarities to macro practices in the framework. In this sense, the framework has incorporated instances to show how macro practices were interpreted by strategizing practitioners as to marginalise SA during organisational strategizing while fostering it during strategy execution, thus remaining conceptually close to the existing notion that there are macro-specific practices inducing effects on SA endeavours with which SA scholars must contend.

The **second** point elaborates further on what precedes, concerning the context specificity of the cases. Given the fact that both cases were theoretically sampled from one sector 'public' rather than multiple sectors as examined by mainstream SA research, the framework lends itself as if answering commonplace calls for situating the study of SA. Advocates argue that SA must be viewed distinctly within given organisational and extra-organisational practices (Cumps et al., 2006, Weiss et al., 2007, Tallon, 2007). Ciborra (1997; P. 73-74) critiqued mainstream SA research as having missed out on the domain of situated deployment of SA; observing that "*the "worldliness" of objects is not rejected through sanitization of the relevant context and situation, but gets appreciated in action*". Similarly, Bruce (1998; P. 19) hinted about the situated deployment of IS in organisations that independently deal with market pressures to exploit opportunities and penetrate new market segments to compete with unique products or services; and thus put forward the widely quoted remark that "*there is no one-size-fits-all solution to achieving [SA]*". The framework in this thesis incarnated the situatedness of SA and showed instances where the birth of IS initiatives, while aligned to strategy, was engendered by practitioner interpretations of macro political factors. In this sense, the framework contributed to the extant stream of works to affirm that the deployment of IS initiatives in both cases is situated and might not be comparable across other contexts that could expose PSOs to different political factors.

Third, the framework provides theoretical insight about the interdependency of effects between practices. This intuitive conceptualisation is supportable in the SAP community that tended to highlight that "*the effects of a practice will vary according to the presence or absence of other practices*" (Jarzabkowski et al., 2016a; P. 251). The framework bears a resemblance to this conceptualization addressed in placing arrows 1 and 2 to account for the interdependency effects spotted between practices at meso and macro levels. In detail, the birth, defining, approving and mobilising resources for IS initiatives in alignment with strategy relied upon the four meso practices within organisations. These meso practices were found to mobilise aspects of the macro political factors to assimilate boundaries encircled by the introduction and resourcing of IS initiatives evolved at PSO level. The fact remains that the work of Avila et al. (2009), in the extant literature of SA, provides some embryonic elements that are reminiscent of how the interdependency of effects between practices was conceptualised within the framework. They develop a framework, based on the literature review and a coarse synthesis of SA models, to demonstrate that a complete enactment of SA would need to be viewed within the larger framework of aligning IS with strategy and, more importantly, aligning with features from the macro field, e.g. new law, technology or forces imposed by designated extra-organisational practitioners which become increasingly responsible for shaping and governing IS in organisations. In this sense the framework, in supporting Avila et al. (2009), draws attention to the interdependency of effects between meso and macro practices that shape the ingredients of SA construction within organisations.

Fourth, the framework is similar to mainstream SA research that maintains organisational strategy (or better strategizing) as fundamental to SA enactment, but treats this practice differently in two key respects: in highlighting the nature of IS executive involvement and how SA unfolds in the interplay between intended organisational strategy and the actual strategy in use.

To start with, the extant SA literature asserts the imperatives for IS executives to participate in organisational strategizing to mesh IS and organisational strategies right from the start (Lederer and Mendelow, 1989, Croteau and Bergeron, 2001, Chan et al., 2006). The enduring theme in this stream is that SA development is far-fetched for those IS executives precluded from engaging in early formulation episodes (Luftman et al., 1999, Rathnam et al., 2005, Ali and Qing, 2009, Wang et al., 2011). The framework, however, seemed to quarrel with this dominant perspective adopted by the bulk of SA scholars. What may contribute to the confusion is the fact that 'IS executives' (unlike other practitioners associated with mandated activities of organisations) were typically labelled as 'outliers' when organisational strategizing was undertaken to seek new strategic directions in alignment with macro practices. Instead, the findings advocated that IS executives were being interpreted as

'competent-practitioners', meaning their understanding of organisational strategy although engaging in subsequent strategizing practices to trigger SA development within organisations. This observation, nonetheless, pertains to the dearth of works in the extant SA literature which highlights the lack of legitimacy for IS executives to join formulation episodes as related to organisational strategy (Stephens and Mitra, 1995, Gartlan and Shanks, 2007). While these works purport to question the state of SA in such circumstances, the framework here rests mainly on their results that suggest the limited experience of IS executives, all the while emphasising that such experiences have been sources for SA enactment in how IS executives cope with this circumstances and inscribe novelty around organisational strategy.

In the current literature of SA, the conceptualisation of organisational strategy is static wherein SA endeavours do not account for the shift in IS requirements in line with changes occurring in organisational strategy over its lifecycle. The extant literature seems to provide evidence of the maturation of organisational strategy and confines SA to what the organisation has intended to achieve within its strategy document (Zviran, 1990, Tan, 1995, Luftman, 2003, Luftman and Kempaiah, 2007). Paradoxically, this conceptualization mismatch with other evidence suggest that organisational strategies are exposed to changes, shifts and evolve in line with macro influences, e.g. competitor moves or regulations changes; thus displaying the necessity for a corresponding shift in SA endeavours (Sabherwal et al., 2001, Chan et al., 2006, Pelletier and Raymond, 2014). The theoretical framework of this thesis synthesises both arguments to present SA as to unfold within intended organisational strategy in parallel with its annual execution program(s) undertaken to digest changes in priorities and circumstances which may differ from initial intended suppositions in organisational strategy. The framework has shown instances where organisational strategy was kept broadly formative and subject to an on-going adjustment in priorities declared verbally by business practitioners, thereby entailing that SA endeavours continuously mirror these priorities as they unfold on an annual basis. The framework in this particular sense bears many of the hallmarks of mainstream thinking on SA as a continuously-adjusted process, not a short-term program with a beginning and end date (Burn, 1993, Maes et al., 2000, Benbya and McKelvey, 2006, Baker et al., 2011).

The **Fifth** point pertains to what precedes: the extant literature has conveniently confined SA research to a single strategy of organisation, that is, where SA unfolds upon the deployment of IS initiatives based on the acquisition and understanding of overall organisational objectives (King, 1978, Henderson and Sifonis, 1988, Brown and Magill, 1994, Croteau et al., 2001, Hirschheim and Sabherwal, 2001, Avison et al., 2004, Tan and Gallupe, 2006). As the main exception, Fonstad and Subramani (2009) and Reynolds and Yetton (2015) executed

their works in multi-business organisations (MBO); thus showing how SA was triggered at multiple locations within an MBO, including at organisational level strategy and within business unit strategies. In addition, Oh and Pinsonneault (2007) and Tallon and Pinsonneault (2011) found, from a resource viewpoint, that the pursuit of SA requires that IS be deeply embedded in key business activities that can be disaggregated in multiple strategic foci at different strategy levels. Somewhat similar, Al-Surmi et al. (2016) showed what they labelled as triadic SA between organisational , marketing and IS strategies. The thesis framework builds upon these works and extends existing knowledge by unpacking the synergies between organisational strategy, business strategy and programming the execution of strategies through which SA unfolds. The findings outlined in this thesis have shown instances where IS initiatives are appraised on the grounds of their simultaneous alignment with organisational strategy, business unit strategies, and strategy execution programs. This points to the departure from the classical view expressed in the extant SA literature towards what Coltman et al. (2015; P. 4) have recently called a new "*understanding of the multidimensional nature of [SA] in contemporary organisations with more complex structural forms*".

Sixth, the extant SA literature envisages IS strategy as being constituted directly in relation to objectives set forth within the organisational strategy. The focus of IS strategy here is on developing SA through designing IS initiatives portfolio based on existing assumptions about organisational strategy (Chan et al., 1997, Cumps et al., 2006, Kearns and Sabherwal, 2007). The question arising from this view asks whether the premise of IS strategy still holds in changing circumstances on either the organisational strategy side or IS strategy itself (Teubner, 2013). As alluded to previously, Galliers (2004, 2007, 2011) challenged the triggering of SA development under this existent conceptualization of IS strategy in the extant SA literature. The framework herein addresses some of the challenges put forward by Galliers to argue that IS strategy in practice, as codified in its planned document, is seldom completely implemented and is instead revisited, renewed and alert continually to digest evolving business priorities and government measures. Irrespective of the degree of amendments to IS strategy and whether these same formed part of the organisational strategy execution program (PA1) or IS strategy execution program (PA2), the evidence points to the dynamic nature of IS strategizing that is always evolving to simultaneously reflect changes occurring in business priorities and political factors.

Much more striking, and in this the framework provides some nuanced accounts of Galliers's view, is that IS strategizing proceeded to plan solely for IS infrastructure, with devolution of responsibilities to business executives to direct the needs of IS applications outside the scope of IS strategizing. In this sense, other orgnizationial practices (ie. execution), rather than IS

strategizing itself, were the resources available to IS and business executives to strategize IS applications in alignment with strategic priorities. It is in this context that the framework may sit in juxtaposition with scholarly interests regarding the notion of business and IS executives working together to agree on an IS initiative portfolio relative to business priorities. This then ensures that SA is addressed (Lederer and Mendelow, 1989, Chan et al., 1997, Teo and Ang, 1999), but argues that such engagement could take place in other organisational practices and not solely in IS strategizing activities.

Seventh, I would be privileged in my thinking now if I could draw upon Whittington (1996b) phraseology to argue that the extant SA literature offered us insights about the inspirational part of SA – IS initiatives should pursue objectives as set forth in organisational strategy and find ways for this governance in organisational and IS strategies. But the extant literature lacks sufficient evidence on the perspiration part – that is, the set of decisions concerning the resources and budget needed to take these actions, which is extensively documented in strategies. Again, there have been very few exceptions to this, although authors made no attempts to give sufficient explanations on how SA is enacted during resourcing decisions. Bruce (1998) demonstrated that SA is highly unlikely to be accomplished if the resourcing component was overlooked during SA development. Somewhat similar, Chan et al. (2006) sketched the centrality of resourcing practices to lift the lid on a new IS initiative to deal with emerging changes occurring during organisational strategy. Likewise, Bush et al. (2009) argued that without proper resourcing practices, organisations cannot make the necessary investment on IS initiatives that would subsequently meet strategic objectives. These works would have been more interesting had they shifted away from the impact of resourcing on SA-performance relationship towards how it was enacted during resourcing practice.

Nonetheless, the framework of this thesis builds upon these works and extends existing knowledge by revealing that resourcing practices are not solely impactful on SA, but instead act as if to create further loops for SA activities. The findings suggest that planned IS initiatives relative to strategies are seldom to be implemented in one-off expenditures due to scarce resources. Thus, IS and business executives address SA through prioritising IS initiatives relative to existing business priorities and resource parameters to be made available by patrons. Moreover, planned IS initiatives can be disrupted as business priorities are changing and new IS investments might evolve; thus displaying imperatives for a corresponding shift in resourcing IS initiatives. Here, SA ends up in another loop where IS and business executives work on the reconfiguration, alteration or redistribution of resources to IS initiatives to digest changes in business priorities. As such, the framework suggests that resourcing practices create loops for continual SA enactment, and it is in this context I wish to extend the framework to the widely-established view of SA as an on-going process

(Sabherwal et al., 2001, Weiss and Anderson, 2004, Chen et al., 2008, Silvius et al., 2009). This thereby argues that resourcing practices are the carrier for continuously adjusted SA that might differ from initial assumptions ingrained in planned IS initiatives relative to strategy.

Eighth, it might be a basic observation to argue that the extant SA research resorts to the view that a consensus reached in organisational and IS strategies, or better strategizing, are the silver bullet and blueprints for the IS initiative portfolio needed for SA to exist (Pyburn, 1983, Zviran, 1990, Kearns and Lederer, 2003, Luftman et al., 2009, Preston and Karahanna, 2009b, Aversano et al., 2012). This widely held view speaks to what Peppard et al. (2007; P. 2) described as a naive assumption that simplifies IS investment to "*once we get it in [strategies], the benefits will flow*". In this context, IS investment literature already tells us that organisations, when investing in IS initiatives, do not rely on the benefits described in strategies or business cases and instead apply other measures, e.g. VFM, return on investment (ROI) and a series of appraisal considerations beyond the scope of organisational and IS strategizing and their associated documentations (Peppard and Ward, 2005). Indeed, scholars indicated that the competencies necessary to appraise IS investments are not located solely within the IS function, but in fact transcend the functional boundaries organisations to engage business stakeholders in establishing, developing and nurturing IS investments (Martins and Kambil, 1999, Peppard and Ward, 2004, Peppard et al., 2007).

The thesis framework expands and extends the perspective of SA as off-the-shelf as managed during strategizing and arranged into documentation. The theoretical framework contends that practitioners are predisposed to enact ownership on their planned/emerging IS initiatives, ascribe the proposal to their existing/emerging strategies, putting forward a rigid business case, and yet SA is ultimately determined by the degree to which stakeholders appraise this as a valid investment to contribute to the strategic objectives that manifest at business and organisational level strategies. In this sense, the framework opens a new vista in the extant SA literature by revealing a set of appraising practices that reconcile IS initiatives with strategy. But, more importantly, these appraisal activities provide another SA rub by promoting all IS initiatives as inherent investments that must be subject to further measure beyond benefits might be overstated in strategies.

Ninth, the extant literature provides meaningful insights on how to strategize for SA. Yet, executing SA requires more than strategizing or articulation within strategies. In the course of putting SA into action, IS practitioners are tasked with accessing the right technology artefacts for the realisation of the expected benefits described in strategies, or better appraised by stakeholders (Mohdzain and Ward, 2007). Of course, such a task is approached from management rather than strategizing practice that has to do with the manifestation of attempts to move from planned towards executed SA. In this scenario, the extant literature of SA

might be challenged in the intersection between strategizing for and executing SA by focusing exclusively on planning while overlooking subsequent IS management practices to deliver on initiatives (Wilson et al., 2013). Evidence from IS investment literature tells us again that even when SA is planned, various facets of management practices should be considered.

For instance, Peppard (2007) noted that managing the delivery of IS involves ingredients that might not be possessed internally by organisations. He actually views the delivery of IS investment as a knowledge-based practice that involves the activities of marshalling, harnessing and exploiting knowledge deployed by systems architects, developers, outsourced providers and vendors. In this sense, Peppard indicates a set of management considerations that strategizing practices are highly unlikely to accommodate when planning for IS initiatives. Somewhat similar, Ward (2012) criticised IS strategy research for its leaning toward planning strategies rather than focusing on the management of implementing those strategies, and pointing to the extending role of external IS products and service suppliers who have taken over decisions affecting the purchasing, delivery and implementation of strategized IS initiatives. In this context, the framework in this thesis builds upon these perspectives, sheds light on management practices and extends existing knowledge by showing how SA was enacted in the interplay between supplying IS artifacts and meeting the IS requirements implicated in the appraised case. In this sense, the framework argues that while strategizing is undeniably important for SA, discriminating management practices, i.e. acclimating inter-IS requirements as strategized and appraised with available artefacts options, are largely relevant practices to constitute SA. Such a conceptualization of the relationship between strategizing and management practices emphasises that SA is subjected to continual adjustment - not just in terms of changes occurring within strategies but also those brought about by implementation partners (Ward, 2012).

Tenth, the framework has exposed eight aligning praxis employed by IS executives: inscribing, instrumentalizing, effectuating, monetising, disciplining, demystifying, incrementalising and harmonising. In this sense, the framework contributes to the nascent works on aligning rather than the outcomes of achieving alignment at organisational level. Wilson et al. (2013) have already investigated aligning IS solutions with strategic imperatives that centre around efficiency and operational excellence for passenger check-in at one of UK's international airports. They revealed a set of aligning praxis, e.g. decoupling, reframing and repacking, put into action by practitioners as they engaged in effectuating the IS project as strategized. Somewhat similarly, Karpovsky and Galliers (2015) distilled aligning activities implicated in 37 organisational processes focused studies, revealing a set of aligning activities: reconfiguring, developing, strengthening, signalling, evaluating,

negotiating, learning, and decision-making. While these sets of activities emerged from the literature analysis rather than empirically, nonetheless, the intended focus was to serve as a catalyst for a shift in focus from what to align towards how to align. In this sense, the framework is distinctive in revealing and explicating further relevant aligning praxis from empirical evidence, thus building onto what has been inferred from existing literature as put forward by Karpovsky and Galliers (2015). The framework here advances the preceding findings by offering a multi-level understanding of SA, that is, offering a compelling logic of aligning praxis and exposing the meso and macro practices under which they were enacted.

5.5 Concluding chapter (5)

This chapter has presented the theory of "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?" Following an introduction to this chapter, section 5.2 argued for the notion of theorising as an appropriate means for presenting the theoretical framework within the thesis. To this end, I disclosed and communicated my own thought process prior to the development of the theoretical framework which is informed by a SAP lens. Next, I proceeded to show how this thought process or, better, theorising, led to the consideration of particularised theory rather than a generalised explanation as being relevant to the nature of the research question and interpretive epistemological standpoints. Then, I moved to outline how data were played out during the engagement on theorising for particularisation through my own imagination on evidence at hand underpinned by analytical memo-writing. Following this, in 5.3, I presented my theory in the form of the multi-level theoretical framework. I assert that the aligning praxis of IS executives – namely, Inscribing, Instrumentalizing, Effectuating, Monetising, Disciplining, Demystifying, Incrementalizing and Harmonising – are situated and do not take place in a vacuum; rather, they were enacted in an interplay between coexisting levels of meso and macro practice. In 5.4, I attempted to embed the theoretical framework to the extant literature of SA as part of my endeavours in the notion of theorising. In the next chapter, 6, I will reveal the contributions of this thesis and its implications and limitations in order to draw it to a close, but certainly not to end the research journey in the coming future.

Chapter 6

CONCLUSION

6.1 Theoretical contributions

This thesis was concerned with the principle research question of "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?". Rather than looking at SA-performance relationships at organisational level, however, the thesis penetrated the 'black-box' of SA activities at the level of practitioners; an area that has hitherto been overlooked by the bulk of SA scholars (Simonsen, 1999, Maes et al., 2000, Campbell, 2005, Wilson et al., 2013, Sarhan and McDonagh, 2014a). As the findings emerged from this thesis were tied back to the extant literature of SA within the domain of IS strategy (cf. section 5.4), the theoretical contributions of this research are now highlighted and organised into the following five points.

First, the emergent framework in Figure 5-1 could stand as a theoretical contribution that accentuates the *practice turn* in SA research (Sarhan and McDonagh, 2014a), or equivalently the 'aligning agenda' (Coltman et al., 2015, Karpovsky and Galliers, 2015) from a symbol of outcomes under the dichotomy of aligned vs misaligned organisations towards a finer-grinned picture gleaned from everyday practices of practitioners because these are "*the primary building blocks of social reality*" (Feldman and Orlikowski, 2011; p. 1241). Overcoming this dichotomy, which falls short of analysing why SA is only selectively beneficial for some organisations while others are disadvantaged (Tallon, 2007), by focusing on the activities that are constitutive of SA became an explicit objective for those tempted to pursue the aligning agenda (Wilson et al., 2013). Accordingly, the framework in this thesis contributes to this nascent body of research on aligning agenda and exposes eight aligning activities, i.e. inscribing, instrumentalising, effectuating, monetising, disciplining, demystifying, incrementalising and harmonising, that were central to how IS executives engage in the practice of aligning business and IS strategies. The framework, hence, has directly addressed questions that have been posed frequently in the SA literature probing 'how to align' (Chan and Reich, 2011) and provided insights into the worldliness of SA enactment, herewith building on the set of aligning activities inferred from existing SA research as put forward by Karpovsky and Galliers (2015) and demonstrated in 5.4.

However, this thesis does not artlessly remain at activity level but explicates the situatedness of aligning activities, better referred as *aligning praxis*, into meso organisational practices while taking cognizance of macro practices. This is inherently in line with suggestions for SAP-based research to avoid the superficiality and vapidity of what is done towards capturing the practical sense of how these praxes are actually completed; something that required me to unpack the enabling and constraining effects of practices in the multi-level theoretical framework (Contu and Willmott, 2003, Wilson and Jarzabkowski, 2004, Whittington, 2006a, Corradi et al., 2010, Jarzabkowski et al., 2016b). By doing so, the framework makes a subtle contribution by addressing calls for a multi-level understanding of SA enactment (Coltman et al., 2015) and uncovering the situated enactment of SA relevant to the context and situation (Ciborra, 1997, Simonsen, 1999).

Second, the thesis puts forward a theoretical contribution to the body of SA literature by advancing the current focus on meticulous strategizing, that is, the mere contributions of strategizing practices to SA enactment (Wilson et al., 2013). In this vein, the contribution of this thesis lies in unearthing other organisational practices, i.e. releasing resources, appraisal and IS management practices that organise aligning praxis, thereby offering a broader explanation of the praxis and how their performance are shaped by the ensemble of organisational practices in which they are performed. One caveat to mention here is that these practices - i.e. strategizing, releasing resources, appraisal and IS management - are not significantly new as they could possibly have been inferred from the extant literature of SA, as embedded and discussed in 5.4. The novelty of their use lies in their positioning within the exploratory framework which could be interpreted on two interconnected levels.

On the one hand, the framework argues for nuanced changes to the extant literature of SA that has been reluctant to treat SA beyond strategizing. Although not dismissing its importance, the framework envisages strategizing as elastic with some cascading effects implicated in shaping what is happening relative to SA enactment in other organisational practices. On the other hand, no timely order of these practices is suggested in the framework which instead indicates that it might be a specific practice that has become necessary for SA enactment more than others that seemed to depend upon a couple of factors pertaining to the evolvement of strategic priorities or emerging IS initiatives. But that does not mean that there are one or a handful that are necessary for the enactment of SA while the remainder are left to 'if necessary' practices. Therein the framework throws spotlight on the combination of all four practices that seem to be advantageous for the holistic enactment of SA. To date there is a dearth of theoretical development which addresses what practices beyond strategizing provide constitutive aligning enactment. As such, the thesis serves as a catalyst for a new

point of departure that stimulates future research to study strategizing as an enveloping practice that encapsulates a set of other meso practices relevant to aligning enactment.

Third, mainstream thinking readily studies SA as uniform in nature, and can thus be quite neglectful of exploring subtleties concerning the embedded nature of organisations in a set of societal, sectoral, political and economic practices that induce different ingredients for SA enactment varied across organisations (Avgerou, 2000, Palmer and Markus, 2000, Silva and Hirschheim, 2007). This may be an omission. In an attempt to remedy this lacuna, advocates like Baets (1996), Cumps et al. (2006), Chan and Reich (2007b), Wilson et al. (2013) and Pelletier and Raymond (2014) have requested an institutionalised view in SA research (vs broad brush) that has the potential to result in better granularity in SA findings, and a deeper understanding of SA enactment within each firm type, size and industry.

Guided by the taller-doing ontology with its consequences on selecting two Irish PSOs situated under the same macro structure, timeframe and condition, the findings in this thesis quarrelled with the common myth of the 'one size fits all solution' (Bruce, 1998) - a cornerstone of the extant SA literature (Cumps et al., 2006, Weiss et al., 2007). The thesis would rather strengthen the case for the institutionalised view on SA by presenting a set macro practice, i.e. legislative mandate and political factors that manifest connections and relations that are intrinsically interwoven with meso practices during SA endeavours in Irish PSOs. That is, those macro practices were found to provide scripts, rules and resources which tell IS executives how to go about enacting SA within their organisation. This empirical testimony on the institutionalised nature of SA enactment is not an affront to existing works, but rather a platform for future SA research to "*recognise that [SA] does not mean the same thing to all firms*" (Tallon, 2007; P. 255). The freshness of this intimate insight on SA as institutionalised in organisations with a continuous regard for macro practices is that our aligning findings and their actual use are closely linked to the repertoire of institutional level practices in such a way to emphasise the embedded nature of organisations, and herewith the granularity of SA findings are promoted so as practitioners in the field are equipped with concrete actions relevant to their own reality.

Fourth, taking the aligning view would deliver insights that could be useful in understanding the alignment dimensions treated in the extant literature as mutually exclusive, that is, the social dimension geared towards the cognition state in which executives understand and commit to strategies concerning SA; while, conversely, the intellectual dimension is concerned with the methodologies and tools used in the formulation of high-quality strategy contents (Reich and Benbasat, 2000, Sledgianowski, 2009). Paradoxically, conventional reading predicates SA development from the combination of both dimensions - the social dimension is an important antecedent of intellectual alignment (Grant, 2003, Schwarz et al.,

2010, Schlosser et al., 2015), but offers no elaboration on how the two dimensions are related nomologically or whether each constitutes a second-order construct for SA (Preston and Karahanna, 2009b). In addition, the contents of these dimensions, which encompass a set of organisational practices for SA enactment, have been questioned on their idealistic nature and many prerequisites that may be, to some degree, unobtainable in real-life of organisations as demonstrated in the SLR on SA literature in 2.4.6.2.

Hence, this thesis contributes to the often requested combination of both dimensions, but is attuned to specify that this combination is tolerated at the spectrum of practitioners' aligning activities for the sake of an integrated understanding on "*how organisational actors mobilize tools and how tools can assemble actors to [enact SA]*" (Karpovsky and Galliers, 2015; P. 10). The entitlement of taking on the aligning view in this thesis has allowed a transcendence of the static view of SA dimensions as 'antecedent' and, instead, interpolating the 'inter-relatedness" between both dimensions for SA enactment. For instance, the combination of the intellectual tool of BC analysis, and how this tool mediates social interactions between executives within the appraising practices are expressed. Hence, the thesis corroborates that the interpenetrated loops between both dimensions are shown to be blended and complementary in how practitioners put their tools into practice and the activities that occur in relation to the usage of same.

Fifth, the IS academic community has built a solid stream of discourses dedicated to improving the quality of literature in the field (Webster and Watson, 2002, Rowe, 2012, Schryen, 2012, Rowe, 2014, Schryen, 2015). Each of these papers presents uniquely valuable contributions that should have been desirable for discussion here, but these contributions can be aggregated to emphasise that IS researchers should move beyond synthesising the prior agenda when undertaking a literature review. Instead, they need to focus on theoretical concepts and develop a coherent story, uncover theoretical and methodological biases, and strive to expose knowledge gaps in what has been researched. By doing so, IS researchers would set a firm ground on which to justify an alternative theoretical underpinning towards mapping out fruitful future research directions; which is not an option but is, rather, central to any literature review exercise. Other streams of discourse in the field, considering the quality of the literature review, brought in, adopted, tailored or at least applauded the standardized methodology for SLR which was developed within the health sciences to suit the nature of inquiry in IS research (Levy and Ellis, 2006, Okoli and Schabram, 2010, Chiasson, 2015, Oates, 2015, Okoli, 2015, Watson, 2015).

Taking the above together, one implication of such quality-oriented literature reviews is the possibility that the SLR conducted on SA, as presented in chapter 2, could be considered as to provide a subordinate theoretical contribution. The rationale for this is twofold. 1. The SLR

in this thesis provided an analysis on the extant concepts within SA research - e.g. models, dimensions, and shared knowledge between executives - interpreted these through the mechanism of the 3Ps in the SAP literature, and then represented them in their new shapes as opportunities for future research directions. Therefore, the contribution lies, as championed by Rowe (2012) and Schryen (2015), in introducing new interpretations and offering new explanations to the phenomena of SA from the perspective of SAP. 2. The SLR executed on SA could be rendered as a contribution since it goes beyond its immediate remit to form part of this thesis. In this context, Okoli (2015) lamented the low standards of doctoral theses literature reviews that are not held to the same standards as scholarly journal papers. Thus, he advocated, at a minimum, the adoption of SLR to produce a rigorous review to satisfy the degree's requirements but, more importantly, states that adopters of SLR would reap the benefits towards delivering a piece of literature held to journal standards, published as a standalone review in future research endeavours beyond PhDs. Accordingly, the SLR in this thesis is likely to have its own premise to form part of my future discourses within the field of SA.

6.2 Practical contributions

This thesis is in sympathy with the aligning agenda that sets out to bring practitioners and their aligning activities to the centre of the research focus (Galliers et al., 2012, Wilson et al., 2013). This practitioner-based agenda can be viewed broadly, as suggested by SAP, to include practitioners at multiple organisational levels. While engaging in such endeavours, it was deemed more effective in this thesis to approach this agenda by informing IS executives, who ranked SA as their major IS management concern. Drawing on the emergent findings, this thesis outlines two practical contributions for practising IS executives who engage in SA endeavours within their organisations.

First, the framework in Figure 5-1 should not be perceived as a prescriptive tool about a 'best practice solution' for SA affairs in organisations, but as a diagnostic device (Weick, 1995) for practising IS executives in the field. In this sense, the framework acts as a *decision aide* to assist IS executives in locating the appropriate aligning praxis in the local meso practices of organisations. For instance, IS executives who engage in a context of ownership-based parameters, or improved decentralization of IS initiatives, could decide to instrumentalise during IS strategizing. In so doing, IS executives reinforce the promising signs for SA development on IS initiatives embedded in business activities as to be sought-after by business executives according to the imperatives gleaned from business strategies and needs (Luftman and Kempaiah, 2008). The basic premise of a framework as such is that there is certainly a sense of *bricolage* (Jarzabkowski and Wilson, 2006) at play by which practicing

IS executives need to utilise those praxis knowledge artefacts embedded in the framework and fashion them to further their SA ends based on real-time judgments and situational demands in their organisations. Quite literally, the framework postulated the *bricolage* involved in everyday aligning and embedded evidence that points to the complex nature under which aligning praxis were enacted, thus drawing the attention of practising IS executives to the sheer number of ingredients that should be considered during SA enactment. For instance, the fact that the cases outlined in this thesis were drawn from Irish PSOs is likely to pose a very different set of macro practices upon the aligning praxis to be executed in the private sector or even in non-Irish public sector contexts. That is, a different set of stakeholders, changing and evolving government policies and deregulation will contribute to a specific bounding of aligning praxis (Wilson and Jarzabkowski, 2004).

Second, the present thesis is firmly in the continuous view of SA (Luftman and Brier, 1999, Hirschheim and Sabherwal, 2001, Benbya and McKelvey, 2006), but is attuned to treat this away from the trajectory of high-level organisational events that need to be recurrently and sequentially moulded within a period of adjustments. Although these organisational events would provide the means for enacting SA, they could turn out to be rather thorny efforts for IS executives. Hirschheim and Sabherwal (2001), for instance, reported some problematic trajectories, e.g. business and IS executives' paradoxical decisions involved in changing organisational and IS strategies in a unified fashion. Somewhat similarly, Chen et al. (2008) argued that SA is elusive for rapidly growing organisations, particularly when organisational strategies are changing to seek an advantageous position, while IS executives fail to follow the dynamic pace of changing strategies and reflect these in their IS strategies in a timely manner.

So to speak, the evidence from this thesis would allow practising IS executives to reduce the adverse effects of unsynchronised events to trigger SA development brought about by challenges in recognising each organisational change in advance. Thus, the thesis directs attention to the series of aligning praxis involved in continuously re-evaluating and re-adjusting SA to digest emerging needs and circumstances, along with changes in business priorities that may differ from initial intended suppositions in strategy documents. IS executives may wish to guard against radically changing IS strategy because of the advent of new circumstances, which is commonplace in organisational-life as this thesis suggests. But this does not absolve IS executives from carrying out conscious praxis, i.e. effectuating, monetising, and incrementalising by repeatedly engaging business executives to verbally agree on the IS initiatives portfolio resonating with actual business imperatives (sometimes the shift of existing, or introduction of new, business strategic priorities). As such, the contribution here lies in extending the conceptualisation of continuous alignment from

obscured events at the level of organisations towards an aligning focus which involves a "*stream of goal-oriented activity over time*" (Jarzabkowski, 2005; P. 40) enacted by IS executives to monitor the changes on an ongoing basis.

6.3 Methodological contribution

The thesis makes a methodological contribution to the extant literature of SA by demonstrating that applying a SAP lens to probing SA can help to foster the evolving aligning agenda within the field. SAP offers gestalt methodological recommendations that capture micro-actions in context and so furnish holistic explanations on how SA is enacted by practitioners within their everyday practices. In this context, chapter 3 provided some methodological insights, presenting a practical guideline for the use of a case methodology underpinned by a SAP lens for inquiry into the aligning agenda. Therefore, the methodological contribution of this thesis lies in offering a systematic approach, along with the necessary tools and frameworks to guide the conduct of the inquiry to ensure that the collection and analyses of evidence related to aligning are tied in with the endeavours of the SAP lens, which in turn strengthens the rigor and accuracy of research execution in practice.

6.4 Theoretical implications

First, the aligning view on SA would enable it to escape the charge of reductionism. In the extant literature, SA is mostly envisaged and studied as planned, intended and codified in strategy documents; these yielded an escalated organisational performance following the achievement of alignment. These types of studies for their own part provide little value beyond 'what to align' (Ciborra, 1997). An alternative to these approaches would be studies on 'how to align' that are conducted for the sake of the micro-end of the spectrum, examining practitioners' alignment within their localised practices, and thus investigating the black box of SA at the level overlooked by the bulk of SA scholars thus far (Simonsen, 1999, Peppard et al., 2014, Karpovsky and Galliers, 2015). A major implication in this endeavours is to depart from the extant view that customarily regards SA as yielding from high-quality strategy contents, towards a focus on practitioners and their labour that are constitutive to SA. Here, aligning scholars should be reminded that unveiling SA activities would entail a departure from the positivist world-view underlying many extant SA studies. The thesis suggests at least one alternative to interpretivism for its capacity to capture actions and recognise context. This suggestion is in line with SAP scholars who have taken an interpretivist view for close involvement with practitioners in their own context (Balogun et al., 2003, Johnson et al., 2007, Tsoukas, 2010).

The **second** point pertains to what precedes concerning the aligning agenda. A key implication for aligning scholars, if they adopt the SAP lens advocated in this thesis, is to build robust links in the relationships between aligning and the meso and macro practices surrounding them. In this vein, I must acknowledge that there are methodological challenges in conducting aligning-based research (Sarhan and McDonagh, 2014a). While a thorough discussion on methodological scaffolding for SAP-based inquiry was presented in chapter 3, I would like here to extract two highly distinctive challenges. First, the issue of defining what aspect of macro practice is relevant and appropriate to the explanation of SA as being enacted in organisations. While this could be a juggling act, there is a vibrant range of theoretical perspectives in the richer store of practice theory (Schatzki, 2001a and 2005), with an equally rich set of theoretical toolkits available in multi-level theory and research in organisational studies (Simon, 1996, Kozlowski and Klein, 2000); both can aid the determinant of relevant macro practices for a particular examination of the aligning agenda.

Next, there is the issue of the interrelated nature of practice; it can be hard to confine studies to a particular practice, i.e. strategizing, releasing resources and appraising, since other data overlap and get in the way (Wilson and Jarzabkowski, 2004). This nexus nature of practice, while producing challenges, might provide one explanation as to why this thesis has pushed boundaries within the extant SA literature from mere meticulous strategizing towards other interrelated organisational practices under which aligning praxis are enacted. The fact remains that these two challenges have hitherto been discussed in the SAP literature (Balogun et al., 2003, Jarzabkowski et al., 2007, Huff et al., 2010), and those of us pursuing aligning agenda may need to treat these challenges as catalysts in order to begin setting out a feasible methodological approach to taking the aligning agenda forward. The methodological approach designed in this thesis, while empirically operationalizable and doable, might not be the best solution and there are certainly other potential means for executing the aligning agenda.

Third, one of the keywords in the extant SA literature is the notion of 'performance'. As previously demonstrated, the extant literature is overwhelmed by studies that envisage SA as having an impact on organisational level performance. However, this is about as far as it goes. To move forward with our aligning agenda, we may need to rethink the notion of performance to make it fully compatible with those at the fore in examining similar agendas of strategizing who have re-conceptualised that "*not only strategy but also performance should be seen as something people do, rather than something that organisations have*" (Gurrard et al., 2013; P. 574). As such, it could be argued that conventional readings of SA fall short in broadening the notion of performance beyond organisational level, thus neglecting the dramaturgical sense of practitioner performance (Whittington, 2007, Feldman

and Orlikowski, 2011). Inspired by Whittington (2007) reconceptualisation on the notion of performance, I make the claim that aligning scholars could recast the notion of performance at micro level and appreciate the act of aligning praxis as an achievement in itself. The central tenet here is the skilled performance of practitioners in the carrying out of aligning praxis and their competence in playing their part in the practice-in-use.

6.5 Practical implications

This thesis was concerned with an exploratory examination of "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?". This was informed by two Irish PSOs and the analysis was conducted based on analysing action in context, and thus contributing to the extant SA literature by producing an understanding of aligning as enacted by IS executives in their situated practices. This suggests that the findings emerging from this thesis do not provide a prescriptive SA model for immediate application by practitioners, but rather the thesis speculates that some practical implications can be drawn out for practical considerations. For Rynes et al. (1999; P. 872), academic practical implications would become part of practitioner knowledge and would not necessarily introduce immediate changes to their practices, stating: "*even when practitioners do not use research "instrumentally," they may use it "conceptually" for general enlightenment and for influencing future actions in less direct or specific way*". On this basis, I shall point to three practical implications emerging from this thesis.

First, the thesis suggests that IS executives can actively engage in aligning even though they are precluded from participating in organisational strategizing. More specifically, and unlike mainstream SA research that stresses the importance of IS executives joining organisational strategizing to trigger SA development, the thesis highlights that the IS executives interviewed did not lament their exclusion and instead have taken advantage of this circumstance if they find a way to inscribe novelties around new/emerging strategic priorities, and timely integration of IS initiatives into the fabric of strategy execution. In this sense, in the pursuit of SA, organisations might wish to perpetuate the view that it is not necessary to address IS initiatives within organisational strategizing and therefore there is no instrumental value for IS executives in being invited. However, this does not relieve the responsibility on strategizing groups to mitigate this issue by ensuring that other ensembles of organisational practices are available to IS executives in order to acquire strategic priorities on a regular basis, ensuring that SA is continually addressed to reflect evolvement, changes or shifts in strategic priorities.

Second, on a less positive note for IS executives, the evidence from this thesis suggests that there is less incentive for them to propose IS application initiatives in alignment with different business functional strategies, and that is regardless of the type of IS organisational structure in place. Indeed, this thesis highlights how crucial it is that business ownership be involved in all implementation, maintenance, or upgrades required on IS applications embedded within business activities. In this sense, business executives must own and drive the necessary works required on their IS applications relative to new, emerging or shifting strategic priorities. Simultaneously for IS executives, the task is to provide sufficient supports to enable business executives to retain this ownership. This implication does not run counter to the wider evidence of the extant SA literature implying that neither centralisation nor decentralization of IS in organisations will by itself ensure SA. Rather, it is the hybrid organisations of IS, underpinned by ownership, that would enhance SA in organisations where business executives are responsible for supporting their own IS applications, while IS infrastructure is managed centrally by IS executives (Luftman and Kempaiah, 2007, Luftman and Kempaiah, 2008, Luftman and Ben-Zvi, 2010b).

Third, the thesis highlights some practical implications on how to address SA in organisations when IS initiatives compete for a scarcity of resources and budget. Therein lies a major challenge for IS executives to prioritise IS initiatives compatible with actual business imperatives, and more importantly fitting in with potential IS budget parameters to be made available for that year. Notably, upon a closer look at the prioritisation matter, as has appeared in the series of surveys of IS executive management issues, it would be surprising to report now that the prioritisation of IS initiatives has dropped out of IS executives' top ten personal worries, after having remained relatively high for many years (Luftman and McLean, 2004, Luftman, 2005, Kappelman et al., 2016). The explanation offered by the thesis for this reduction is, to some extent, that IS executives apparently did abandon prioritisation decisions to business stakeholders to launch collaborative aligning activities. A decision like this, for the IS executives interviewed, was not a form of improvisation, rather it has been intended to use business stakeholder inputs during prioritisations as levers for SA development.

6.6 Limitations of the study

The findings should be interpreted in the context of some limitations, although I undertook meticulous and diligent activities in planning, designing and executing this research with all attempts to meet the SAP guiding principles for research, as laid out in 3.2.2, while ensuring that a rigorous methodological approach is in place. In this section, I shall draw attention to three limitations associated with this thesis.

First, this thesis is exposed to the customary drawbacks associated with conducting an interpretive and theory building case-based inquiry, as has been hitherto discussed in the literature (Eisenhardt, 1989, Lee, 1989, Patton and Appelbaum, 2003, Gibbert et al., 2008, Andrade, 2009, Tsang, 2014). For a combination of rational reasons, discussed in chapter 3, two cases were deemed to be the optimal design to address the research question. In this sense, the prime challenge for such a design is the notion of 'generalisability' where the volume of muddled debates in the literature exists to criticize cases findings as not being generalizable by means of inferring from specific instances in the case setting to a general statement applicable to other settings (Tsang, 2014). The criticisms revolved around the subjectivity inherent in the conduct of interpretive cases which produce findings that cannot be generalised across settings (Patton and Appelbaum, 2003).

Under the above prevailing view, I shall affirm that the findings of this thesis are less likely to be generalisable to other settings. However, I would like here to resort to the view that generalisability is not fundamentally relevant to interpretive and theory building cases (Walsham, 1995b, Eisenhardt and GraeBner, 2007, Siggelkow, 2007). In this sense, the thesis seemed to make trade-offs on striving for generalisability towards unveiling findings that offer theoretical insight on aligning in practice (Weick, 1999). One effect of this trade-off has been to cast requirements to establish the transferability, rather than generalisability, of findings. This was dealt with in chapter 4 by presenting contextualised, vividly detailed and thorough narratives on how aligning was enacted by IS executives in the interplay between meso and macro practices; thus, enabling readers to make decisions about the applicability of the findings to other settings or similar contexts (Maxwell, 1992, Lincoln, 1995, Creswell and Miller, 2000).

Second, I would like to draw some attention to the limitation of the SAP lens underpinning this thesis. It might be not wise to fault the theoretical side of the SAP field which is fuelled by practice theories to turn an interest to the everyday real life world of what practitioners do. For all its merits, however, SAP fails to make clear just what constitutes methodological rigour to reflect its theoretical perspective. One caveat to mention here is that vehement advocates for the ethnographic approach in SAP proved to be unobtainable in this thesis. But more importantly, as demonstrated in 3.3.3, is that the case methodology seemed to gain acceptance over ethnography, although perhaps reluctantly, by the SAP community. In this realm, case researchers are left to work out how to mobilize SAP theoretical dialogues to develop innovative design in terms of seeking out different forms of data collection and interpretation that accommodate SAP theoretical contours (Balogun et al., 2003, Golsorkhi et al., 2010, Johnson et al., 2010b). Therein lies the criticism for being subjective again in adapting the case design to suit SAP-based inquiry.

Therefore, I would like to acknowledge that failure to manage this adaption in such a disciplinary and focused manner could have served as a drag for the empirical research program of this thesis. This is not boldness on my part to dismiss the limitation of subjective adaption of the case design in this thesis. Rather, while these limitations are in place, it was deemed more appropriate in chapter 3 to make efforts to distil the methodological scaffolding from the SAP theoretical discussion, compile the empirical recommendations put forward by designated SAP scholars, analyse the SAP empirical studies selected for the narrative literature review, culminating in these being mobilised to undergird the case design for this thesis. Thus, the tension between subjectivity and case adaption was relatively reduced in several ways. For instance, the tension was encountered by the development of an organising framework to guide data collection where this framework tweaked the extant methods for data collection in the case methodology to inform the multi-level inquiry nature of this thesis. In another instance, the tension was tackled by employing an established and rigorous data analysis of constructive GT as it stands, and showed its promising features for an analysis that spans levels that suit this thesis, given its underpinning by the SAP lens. These go somewhat towards saying that the tools employed in the case design for this thesis are not new. Rather, they are blended in new ways, connected with new ideas, and deployed within the research context.

Third, another limitation of this thesis resides on some general contingencies relevant to the macro practices with which both cases are embedded. To recall, for compatibility with the ontology of taller-doing as outlined in 3.2.3.1, both cases had to be theoretically sampled from the same macro structure. The methodological advantages for this, as outlined by Seidl and Whittington (2014), is the analytical efficiency in terms of meriting a good deal to unravel how macro practices in the same structure and condition form the larger envelope of what people can do within organisations. That is, this hierarchical perspective grants to the local praxis a greater significance. However, during my fieldwork (March 2011 to February 2016), the Irish government at the time, in its response to the preceding economic conditions, put forward a set of cross-cutting practices to be instantly implicated into meso practices at PSO level. This means that the similarity of meso practices in both cases is, to some extent, because both cases are exposed to similar macro practices over the period of study. In this sense, the limitation lies in whether those sets of meso practices under which the aligning praxis was enacted would remain part of organisational routines to perform alignment upon the potential deregulation of those 'contingency' macro practices. However, other readings are possible. While I have insinuated that the notion of generalisability is not at the core of this thesis, if plausible, it might be appropriate here to emphasise the importance of considering the timing and location under which those macro practices were created to appreciate the contributions of this thesis.

6.7 Recommendations for future studies

Yet, within the above-mentioned limitations, this thesis offers multiple starting points for further research. I shall elaborate on eight research directions to be viewed in combination with those yielded from the SLR on SA, as reported previously in 2.4.6.7.

First, given the timeframe available to execute this research, this doctoral thesis precludes a firm conclusion regarding the extent to which the theoretical framework, as depicted in Figure 5-1, would change within a different research scope, probably with a view to longitudinal or longer-term analysis on continuity and change (cf. Pettigrew, 1985a). In addition, some inherent shortcomings related to the ontological framework of taller-doing with its consequences in the "*ubiquitous use of the single-snapshot*" (Avital, 2000; P. 666) data collection strategy could not be circumvented by the study design (in chapter 3) that necessitates data from multiple levels within a specific macro structure, timeframe and condition. Nevertheless, this would present a new research question that logically flows from the limitation of this thesis concerning: How do the aligning praxis of IS executives evolve at various times because of changes? This kind of research that focuses on how practitioners diverge in their practices over time just as individuals who keep learning (Barnes, 2001) and specialists who continually reinvent, or alternatively reproduce, their own practices in response to contingent change events (Cetina, 2001) has the potential to provide additional insights on continuous SA enactment which endures as a critical managerial issue for practicing IS executives (Luftman and Brier, 1999, Luftman et al., 2006). The rationale for this suggestion lies in the fact that the selected cases were re-allocated to different government departments following the conclusion of this research. Thus, the extent to which the identified aligning praxis remain anchoring within their organisational practices would concretize the need for real-time, longitudinal, case-based research that ought to explore how and why aligning unfolds and grapples with changes over time (Pettigrew, 1990, Pettigrew et al., 2001, Paroutis and Pettigrew, 2007).

Second, the rudimentary premise, or equivalently the limitation, of an interpretive case-based theory would be the lack of ability to afford empirical generalisability in the statistical sense as outlined previously in 6.6. However, such a theory, as in this thesis, should neither be reduced to its existence in a single setting and time as it is capable of providing a basis for theoretical generalisability (Eisenhardt, 1989, Walsham, 1995b) from which empirical generalisations in terms of testable propositions in different settings may follow (Pettigrew, 1985b). In the context of this thesis, for instance, the concept that SA enactment being contingent upon macro practices, as found in this thesis, was enfolded (in section 5.4) into the contingency perspective within the extant SA research. Thus, the resulting macro practices

have, to some degree, the characteristics to be theoretically generalisable and not idiosyncratic to the specific cases in this thesis because others, though not grounded in practice, had similar findings in a very different context.

What follows now is the implication for future research to move beyond the fate of the Irish PSO setting, wherein the theoretical framework in Figure 5-1 was developed, towards other Irish contextual configurations, e.g. a different type of organisation, size and industry to predict whether the macro practices developed in this thesis play a similar role in shaping aligning enactment in other settings, and if there are additional macro practices that complement the identified macro practices repertoire. We knew from prior research that enacting SA is infused with ingredients from the macro context, e.g. environmental (Sabherwal et al., 2001) or market pressure (Bruce, 1998, Weiss et al., 2007), but what is still missing are studies that continue the noble endeavours of this thesis by investigating the contents or, better, practices of the macro context that bear connections and relations with SA enactment. Such a research avenue that involves moving from theoretical to empirical statements about the present theory in this thesis happens to be closely related to the empirical testing inquiry (Lee and Baskerville, 2003, Eisenhardt and GraeBner, 2007) in order to corroborate, narrow or extend the scope conditions of the theoretical framework by providing an empirical statement that describes the macro practices observed at the end of the experiment in the new setting and compares them with predictions derived from the theoretical framework of this thesis.

Third, from the sample frame selected for the SLR of SA literature as executed in chapter 2, the lack of focus at macro level is evident in the SAP-based typology used to map the extant SA research (cf. Table 2-4). The outcomes of the SLR suggest that there is a dearth of works that investigate how practitioners 'internal individual, aggregate internal/external to organisations' engage in the practice of SA during, for instance, corporate mergers and acquisitions (M&A). This SLR outcome resonates with the view put forward by Hedman and Sarker (2015; P. 117 & 120) who, in their recent editorial paper for the special issue of 'Information System Integration in Mergers' published in EJIS, lamented the dearth of IS works in M&A by stating that "*it is remarkable that we have not engaged in more research on [M&A]*", and further pointing to the "*need for deeper understanding and empirical examination for alignment between IS strategy and the M&A strategy*". In this vein, the present thesis suggests that the Irish PSOs would be a fruitful setting in which to pursue the aligning agenda in the context of M&A.

At the time of the fieldwork, the Irish government in its fiscal consolidation endeavours recognised that some saving is to be obtained through the rationalisation and reorganisation of PSOs (PSRP, 2011, 2014 & 2015). The view was that the number of PSOs is not

commensurate with the current fiscal downturn at the time, thus a review of their functions in line with service needs and resource constraints became necessary. The outcome of this review, as featured in the State Agency Rationalisation Programme published by DPER in 2014, was the identification of 48 PSOs to be rationalised into new entities or merged into existing ones. Hence, exploratory research questions that undertake purposeful sampling procedures on PSOs listed under the rationalisation program may well furnish insight on aligning enactment in M&A. Hence, the natural research question would be pertaining to: How do IS executives leverage SA endeavours to reconcile asymmetries of IS assets between acquirer and target PSOs? The methodological vehicle for an explorative inquiry as such doubtless requires researchers to catch reality in flight and immerse themselves in factual material and data in the fieldwork drawing on, for example, longitudinal comparative analysis to penetrate into the zone of aligning as they unfold in the real setting (Pettigrew, 1990).

Fourth, this thesis on Irish PSOs unveiled the issue of multiple, but associative, strategies that undergird SA development; that is, where existing or emerging IS initiatives appraised against business level and organisational strategies simultaneously. Findings as such would suggest that the aligning works involved amongst these strategies merit further research to explore how these patterns of association create loops for SA enactment. Currently, the extant SA literature confined SA to single strategy; thus falling short of exploiting synergies between multiple strategies for the study of SA (Coltman et al., 2015). In this vein, this thesis draws attention to the gainfulness for future research to place business executives at the centre of the research focus because they are at the fore in dealing with the synergies between strategies when they champion and enact ownership on new IS initiatives; all of which is commonplace in organisational-life as found by this thesis. This future agenda might appear, at first glance, to be pursued by other research communities rather than the IS community wherein the identified business executive is most relevant to their own ends. However, the suggestion here dwells on the broader aim of enacting SA on all IS initiatives emerging in the organisation (Chan and Huff, 1992, Segars et al., 1994, Avison et al., 2004) and argues for elongating the conceptualisation of this enactment through the routine and everyday practices of business executives. One avenue for future direction, therefore, is to revisit the cases selected in this thesis to place the range of business executives at the centre of the research focus to address questions like: How do Financial executives, HR executives or Assistant Chief Executives surface SA enactment in IS initiatives embedded in their business activities?

Fifth, following from the above, the extant literature has already envisaged SA as the practice of aggregate practitioners, namely, business and IS executives (Luftman et al., 1999, Moody, 2003, Johnson and Lederer, 2007). The assumption is that business and IS executives should

invoke the social dimension of alignment by working together in enabling a smoother process of mutual understanding about the role of IS in their organisations, thus SA is promoted (Reich and Benbasat, 1996, Campbell and Peppard, 2009, Karpovsky and Galliers, 2015). However, this is about as far as it goes. The social dimension of alignment faces the paradox of emphasising the imperatives of interactions between executives to develop SA in organisations while leaving the activities associated with strengthening this dimension unaddressed. The future avenue suggested in this thesis to fill this lacuna is to pose a question concerning: How is aligning practised in the series of meetings attended by Senior Executives in Public Service Organisations? This would firmly place senior executives and their aligning activities subordinate to the social dimension at the centre, thus instilling insight gleaned from their involvement in an episode, i.e. meetings. In this sense, and irrespective of the pleas of any useful methodological vehicle to such an inquiry, theoretically sound and practically useful research on aligning-in-episode can be guided by the works of Hendry and Seidl (2003) and Jarzabkowski and Seidl (2008) in SAP research; these researchers developed a focal lens through which to enquire into the episode.

Sixth, similar areas that merit further research would consider examining the role of the project committee as a practice that brings executives together to carry out alignment in the organisation. This thesis has focused on appraising practices that encapsulate the project committee at the level of organisational procedure, but has been silent about, for example, how practitioners organise discussions on SA during participation in a project committee; or how informal interactions around the committee act to make a prearrangement to give support for an IS initiative. Future research, where feasible, may employ an ethnographic approach to study the project committee by drawing on extended participant observations to gain deeper access to what happens, noting the smallest and seemingly insignificant goings-on, experiencing the accomplishments of aligning praxis and not merely talk about such praxis (Rasche and Chia, 2009).

Seventh, as previously demonstrated, the aligning view adopted in this thesis would unite the mutually exclusive social and intellectual dimensions of alignment. In this vein, the thesis findings unveiled an ornamental intellectual tool 'business case analysis' and framework 'project-initiation-framework' that mediates the social interactions between executives, leading to a great deal of discussion around SA. So far, the extant research has generated an array of similar SA tools, methodologies and approaches, but provides no insights on how these tools are used in practice or of their consequences (Karpovsky and Galliers, 2015). This thesis, having touched the surface of the practical use of tools beyond their design properties, would therefore make an implication for future research to shift attention towards what happens when practitioners use SA tools, rather than simply assuming their usage. This

indicates the need to shift the focus onto tools and frameworks that are closely connected to how SA unfolds in practice, and examining them ethnographically (Kaplan and Jarzabkowski, 2006), through unstructured interviews (Jarratt and Stiles, 2010), or case study (Moisander and Stenfors, 2009) according to the manner by which SAP treats SWOT and PEST as practices to mediate interactions between practitioners during strategizing (Whittington, 2006a, Jarzabkowski and Spee, 2009). Therefore, the primary research questions would be: How are alignment tools institutionalised according to the particularities of their use in context? How are alignment tools adopted and adapted in the view of continued SA enactment? What causes SA tools to be perceived as more effective when dealing with SA in organisations?

Eighth, where sampling procedures yielded an interesting single case design, researchers are exposed to fruitful opportunities in uncovering the contextual and hidden characteristics of '*alignment-in-the-making*' (Karpovsky and Galliers, 2015; P. 3). With full acknowledgement of the limitations associated with a single design, however, the contribution of such a design for SA research is worth pursuing. Mintzberg (1979; P. 583) fittingly asked what is wrong with samples of one, observing that *'[t]oo many of the results have been significant only in the statistical sense of the word. In our work, we have always found that simpler, more direct methodologies have yielded more useful results*'. Johnson et al. (2003; P. 17) added, from the SAP perspective, that such fine-grained studies would need to span levels by investigating '*the level of individual interaction, the organisational level and the level of the organisation's context*'. These imply that the merits of a single design for future SA research lie in unravelling the deeply embedded nature of SA enactment within organisations. Contextualist advocates within the extant SA literature have already called for the research of the contextual, detailed, 'deep' and unique practices of alignment; thereby indicating the need for a firm ground upon which to start pursuing a single design that would yield a richer and contextual understanding of SA enactment.

6.8 Concluding remarks

This last chapter has presented the main conclusions of the thesis, discussed contributions to the extant SA literature, demonstrated the theoretical and practical implications, acknowledged limitations and, lastly, provided a starting point for future research on SA. Overall, this thesis has attempted to uncover some of the real-life worlds of aligning, through the SAP lens, in two Irish PSOs that were theoretically sampled for their suitability to answer the research question of "How do Information System (IS) executives engage in the practice of aligning business and IS strategies in Public Service Organisations (PSOs)?". Qualitative data from both sites were collected using an organising framework to inform the multi-level

nature of this thesis examination. The analysis then consisted of executing a constructivist approach of GT, supplementing this conventional analysis with interpretive writing on both cases, rather than mere descriptive reporting, to study and write about the situations as experienced by myself and participating practitioners from the studied cases. The analysis findings, informed by some memo-writing, yielded a theoretical framework that is multi-levels in nature to unearth a set of situated aligning praxis enacted by IS executives in the interplay between meso and macro practices. The framework was presented through the notion of 'theorising' that required me to present my own thought process that undergird the framework development and then embed that framework into the extant literature of SA. Whereas this thesis is grounded upon some limitations, it does put forward some contributions, implications and recommendation for future research on SA quest within IS strategy domain.

APPENDICES

Appendix (1):

Shows SAP studies as divided by its relevant publication sources

Journals, Book publications and Conferences	Number of studies
Cambridge University Press	9
Journal of Management Studies	8
organisation Studies	6
Long Range Planning	6
Human Relations	4
Strategic Management Journal	3
SAGE publications	2
Strategic organisation	2
M@n@gment	2
International Journal of Management Reviews	1
International Journal of Business Communication	1
Academy of Management Journal	1
Academy of Management Proceedings	1
Journal of Business Administration	1
Journal of Family Business Strategy	1
The Academy of Management Annals	1
Strategic Change	1
British Journal of Management	1
Administration and Society	1
organisation	1
The Journal of Applied Behavioral Science	1
International Small Business Journal	1
AIM Research Working Paper Series	1
	56 studies

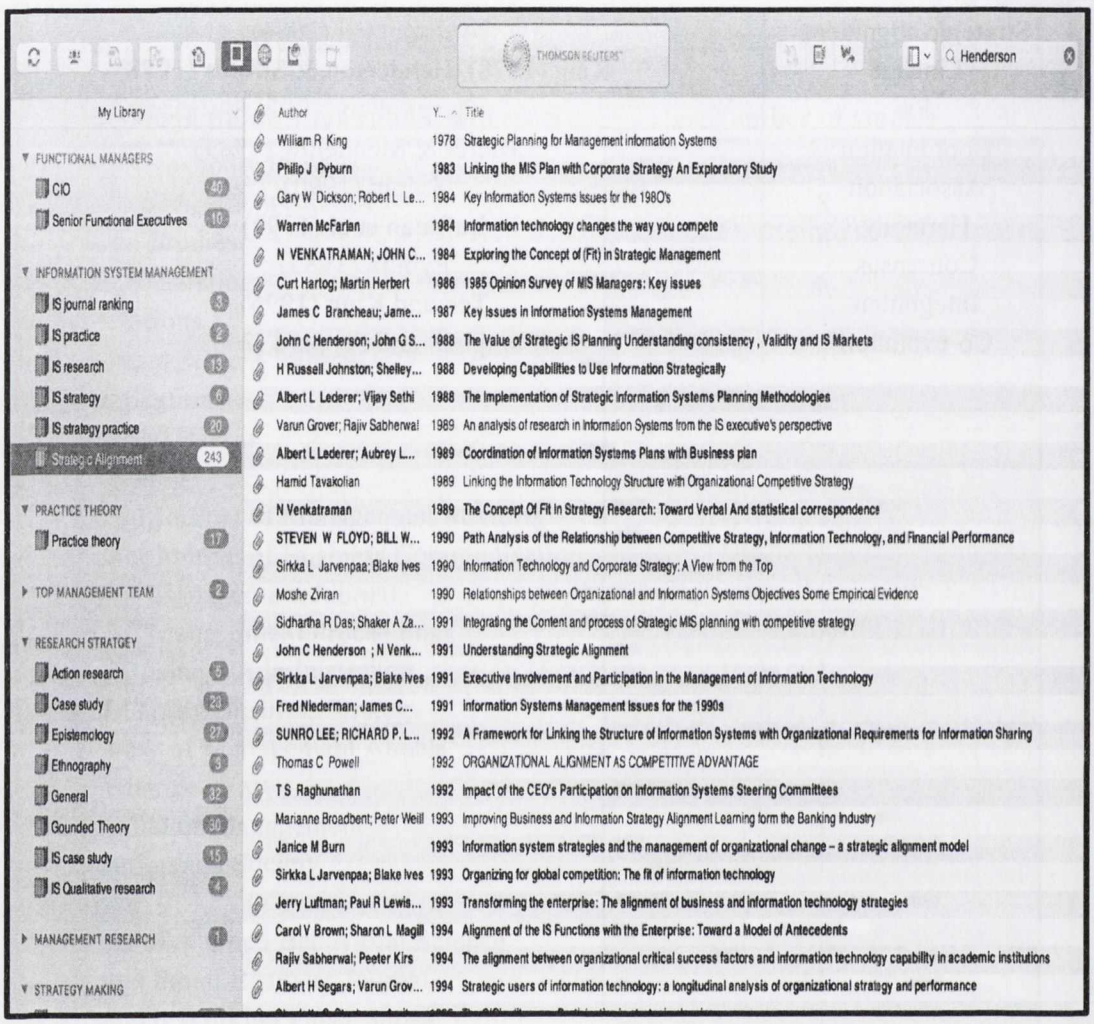
Appendix (2):

Shows the list of keywords 'synonymous to SA' used for SLR

SA synonymous	Author(s)
Strategic alignment	Avison et al (2004)
Linkage	King (1978), Henderson & Sifonis (1988)
Fit	Tavakolian (1989)
Coordination	Lederer & Mendelow (1989)
Association	Zviran (1990)
Harmony	Luftman et al (1999)
Consensus	Pyburn (1983)
Integration	Teo and King (1996)
Co-evolution	Campbell and Peppard (2009)

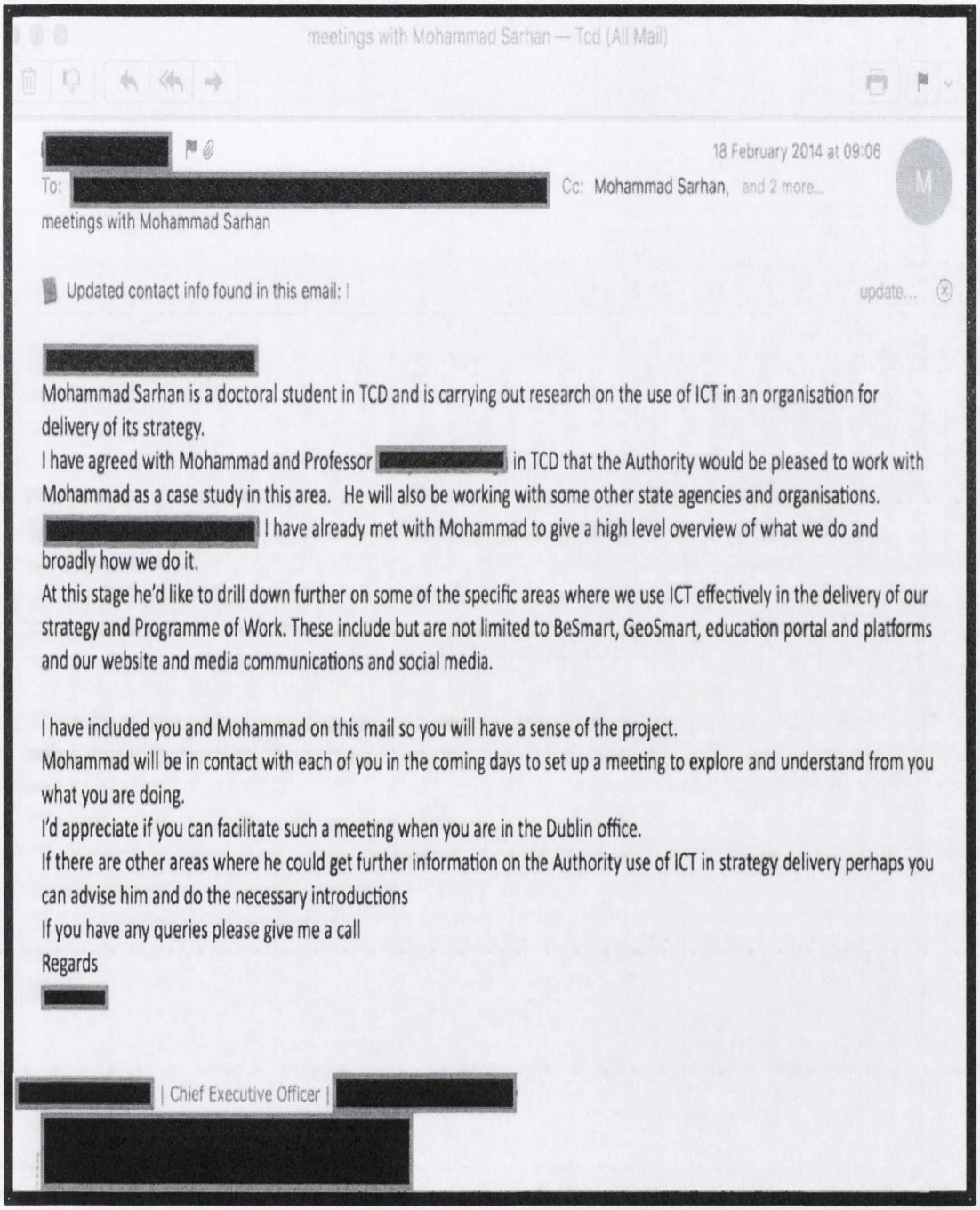
Appendix (3):

Shows a screenshot of my EndNote library that contained 243 studies (October 2011 – 30th August 2016) emerged from the search strategy adopted in 2.4.3



Appendix (4):

Appendix (4) shows the note sent by the CEO in PA1 to encourage the facilitation of this research. Names in the email were concealed for confidentiality purposes



meetings with Mohammad Sarhan — Tcd (All Mail)

[redacted] 18 February 2014 at 09:06

To: [redacted] Cc: Mohammad Sarhan, and 2 more...

meetings with Mohammad Sarhan

Updated contact info found in this email: | update...

[redacted]

Mohammad Sarhan is a doctoral student in TCD and is carrying out research on the use of ICT in an organisation for delivery of its strategy.

I have agreed with Mohammad and Professor [redacted] in TCD that the Authority would be pleased to work with Mohammad as a case study in this area. He will also be working with some other state agencies and organisations.

[redacted] I have already met with Mohammad to give a high level overview of what we do and broadly how we do it.

At this stage he'd like to drill down further on some of the specific areas where we use ICT effectively in the delivery of our strategy and Programme of Work. These include but are not limited to BeSmart, GeoSmart, education portal and platforms and our website and media communications and social media.

I have included you and Mohammad on this mail so you will have a sense of the project.

Mohammad will be in contact with each of you in the coming days to set up a meeting to explore and understand from you what you are doing.

I'd appreciate if you can facilitate such a meeting when you are in the Dublin office.

If there are other areas where he could get further information on the Authority use of ICT in strategy delivery perhaps you can advise him and do the necessary introductions

If you have any queries please give me a call

Regards

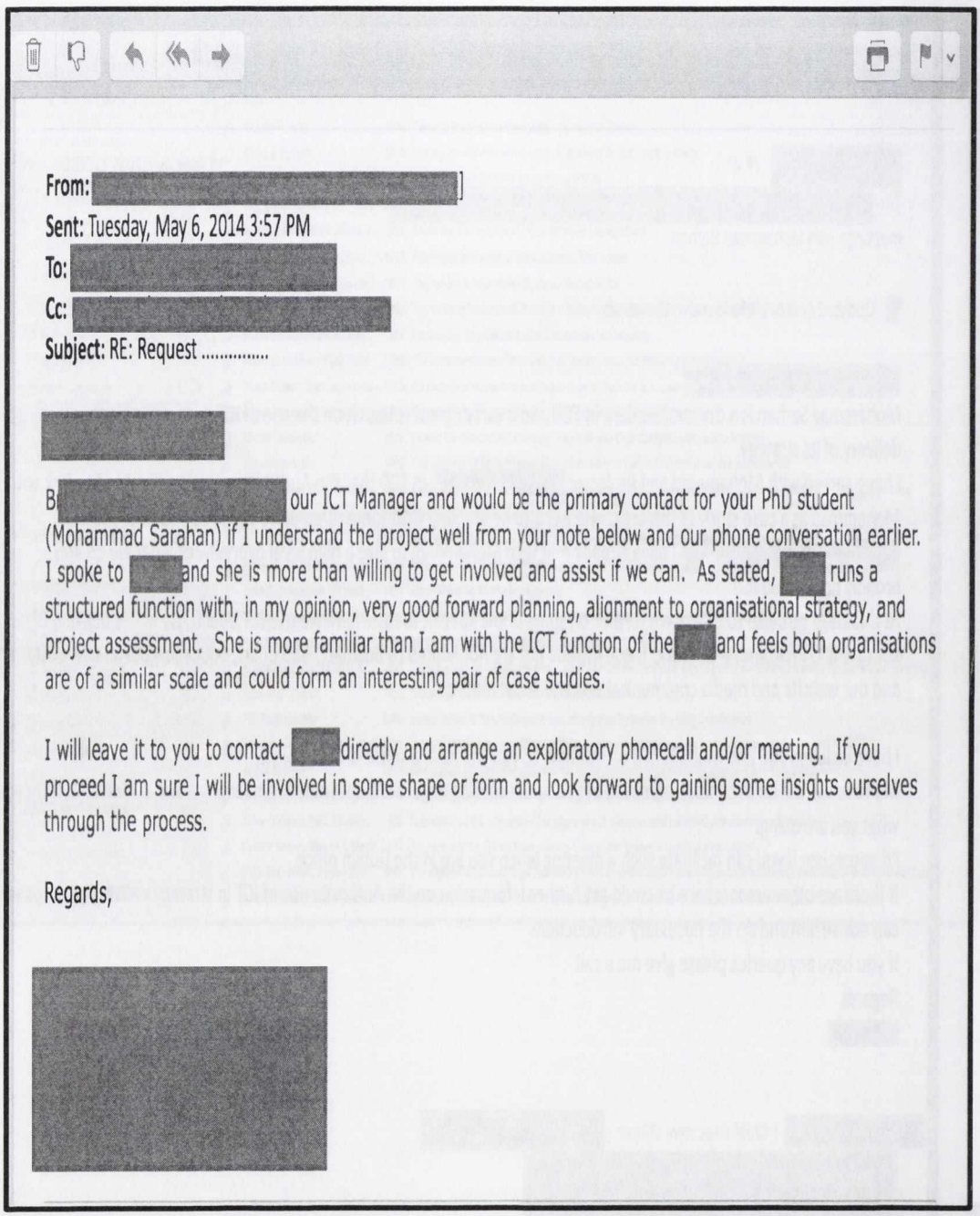
[redacted]

[redacted] | Chief Executive Officer | [redacted]

[redacted]

Appendix (5):

Appendix (5) shows the CEO's positive response to engage PA2 as the second case for this thesis examination, and offer contact details for me to proceed.



From: [redacted]
Sent: Tuesday, May 6, 2014 3:57 PM
To: [redacted]
Cc: [redacted]
Subject: RE: Request .....

[redacted]

B[redacted] our ICT Manager and would be the primary contact for your PhD student (Mohammad Sarahan) if I understand the project well from your note below and our phone conversation earlier. I spoke to [redacted] and she is more than willing to get involved and assist if we can. As stated, [redacted] runs a structured function with, in my opinion, very good forward planning, alignment to organisational strategy, and project assessment. She is more familiar than I am with the ICT function of the [redacted] and feels both organisations are of a similar scale and could form an interesting pair of case studies.

I will leave it to you to contact [redacted] directly and arrange an exploratory phonecall and/or meeting. If you proceed I am sure I will be involved in some shape or form and look forward to gaining some insights ourselves through the process.

Regards,

[redacted]

Appendix (6):

Appendix (6) shows the list of 'open-end' questions that were used as a discussion agenda with participants in PA1 and PA2. These questions were organised to encapsulate the multi-levels nature of inquiry in this thesis examination. As the interviews are semi-structured, the list below was tweaked and adapted to reflect progression in the research as well as the type of participant involved in the interview.

Macro practices:

- Are there any particular standards, guidelines or procedures from the government that you pursue to do strategy in the organisation?
- What implications would the legislative mandate(s) and minister's regulations have on strategy development in your organisation?
- What implications do the following have on strategy development:
  - The government programme of works
  - Public sector reform agenda
  - Budget and resources constrains
  - The strategy from DJIE
- Are there, if any, set of guidelines, measures, procedures or regulations that shape any strategic endeavours as relate to IS development in the organisation?
- Are there, if any, government frameworks or techniques that help in planning for IS initiatives in organisation?

Meso practices:

- What are the practices, processes and key activities for doing strategy in the organisation and what is the nature of your engagement and other executives involvement as well?
- Are there requirements to do strategy at sub-organisational level? If so,
- Does your organisation put forward guidelines or recommendations on how sub-organisational level do strategy?
- Prior joining organisational strategy development, what would you do within your own function (intra-functional works) to ensure that the various needs (including IS initiatives) are addressed relative to your business strategic priorities?
- How do you use your participation into organisational strategy development to incorporate your business strategic priorities?
- Would IS initiatives form any part of strategy discussion during organisational strategy development?
- Are there, if any, guidelines, frameworks or procedures set by your organisations around the introduction of IS project? In other words, what are the requirements that each practitioner needs to follow when proposing new IS initiatives within their functional area?
- Are there, if any, organisational practices or routines to ensure the alignment of IS initiatives with strategic priorities? In other words,
- How IS initiatives is approved within your organisation? How to ensure that the proposal complies with strategic priorities? How the consensus is reached when it comes down to decide upon IS initiatives relative to strategic priorities, and How resources and budget are granted for new IS initiatives?

- How the government measures, frameworks, and regulations implicated in existing or emerging IS initiatives, e.g. ESD model and shared services.
- What are the organisational practices for resources and budget allocations?
- What is the nature of budgeting for the existing or emerging IS initiatives? and how IS budget is shaped by internal and external measures?

Micro praxis:

- What are the key activities you perform to carry out an evaluation on emerging IS initiatives relative to your business strategy or organisational strategy?
- Would you engage IS executive in shaping or refining your new IS initiatives?
- What sort of interactions would you have with IS executive in relation to existing or new IS initiatives?
- How future IS initiatives within your business function are arranged and discussed with IS executive?
- Are there, if any, routinized activities from IS executive to ensure that your IS initiatives are not falling behind you existing and future business needs?