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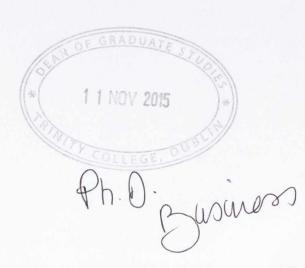
# Applying a Practice Lens to Strategic Information Systems Planning: A Senior Management Perspective

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Thesis submitted for the degree of Doctor of Philosophy

The School of Business
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2015



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### **Summary**

This study examines the practice of strategic information systems (SISP) planning by senior managers. The research topic was initially formed by the researcher's keen interest in the strategy and information systems (IS) fields. Upon reviewing the extant literature in the SISP domain, it became apparent that the literature was lacking in empirical investigations that shed light upon the 'doing' of SISP by its principal practitioners of senior managers. This led the researcher to a review of the strategy as practice (SAP) domain, with its inherent proclivity towards the activity that encompasses strategising. The SAP perspective's ability to uncover the realised praxis that comprises the work of strategising proved a compelling tool.

The researcher's interpretivist standpoint was intrinsically linked to the framing of the research question posed and the choice of methodology. Subsequently, it was decided that a case study design incorporating a SAP perspective was the optimal approach for undertaking a study into the topic of enquiry. A focus upon the 3Ps of practice, praxis and practitioner, a multi-level approach composed of macro, meso, and micro levels, strategic episodes, and the wider social context form the research design's defining features. It represents a novel research approach within the SISP domain, with recent core journal articles heralding the IS strategy-SAP joint agenda. Two cases were deemed optimal for an exploratory, qualitative investigation of this nature. The public service domain was selected as an appropriate research context due to the increased likelihood of the researcher being able to obtain the necessary comprehensive access to materials located in the public realm, coupled with enduring calls for more IS research to feature public service organisations (PSOs).

The study's findings are ensconced in the generated conceptual framework. The framework is a representation of the practice of SISP by senior managers. The four core themes to have emerged from data analysis are encapsulated into a multi-level design. It was deemed crucial to capture the fluidity of activity between levels, inclusive of the mediating role of senior managers therein. Ultimately, the study's exploration into an identified shortcoming of the SISP literature, its relevancy to practice aided by the adoption of a pervasive SAP perspective, and the production of a novel conceptual framework represent significant contributions to knowledge.

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# List of Abbreviations

SISP	Strategic Information Systems Planning
SAP	Strategy as Practice
IS	Information Systems
PSO	Public Service Organisation
CIO	Chief Information Officer
TMT	Top Management Team
DPER	Department of Public Expenditure and Reform
HSE	Health Service Executive
CMOD	Centre for Management and Organisation Development
НМА	Heads of Medicines Agencies
EMA	European Medicines Agency

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# **Chapter 1 - Introduction**

### 1.1 Study Background

The current study explores the practice of strategic information systems planning (SISP) by senior managers (defined for the current as the CEO and their heads of functions). A strategy as practice (SAP) perspective was employed during the conduct of the research. Core tenets of the SAP domain assisted in the collection and analysis of data, inclusive of; Whittington's (2006; 2002) 3Ps of practice, praxis, and practitioner; Jarzabkowski and Spee's (2009) delineation of macro, meso, and micro levels of activity; outcomes from SAP-based studies; the social dimension of strategising, and; strategic episodes (Hendry and Seidl, 2003). Two public service organisations (PSOs) form the context in which the study was undertaken.

The study originates from the researcher's keen interest in the fields of strategy and information systems (IS). Following an initial review of literature pertaining to senior managers and IS, the researcher refined his focus to the 'doing' or practice of IS strategy. This led the researcher to a review of the SAP domain, with its inherent proclivity towards the activity that encompasses strategising. The SAP perspective's ability to uncover the realised praxis that comprises the work of strategising proved a compelling tool. The researcher was left with a rudimentary question: if IS strategic planning is designated to the ranks of senior management, then how does this diverse group of practitioners actually practice it? It spurred the researcher to return to the field of IS, and more specifically the SISP literature (Chen et al., 2010). Its focus upon the planning stage of IS strategising correlated with the researcher's drive to uncover how the formulation of IS strategies is actually done or 'practiced'. A review of the SISP literature revealed that an evident gap exists in relation to research that explicitly focuses upon how senior managers practice this activity (Peppard et al., 2014). Whilst a myriad of ancillary topics are investigated pertaining to facets of senior managers' involvement in SISP, studies that explicitly focus upon what may be deemed the core of the research domain, i.e. the practice of SISP by senior manager practitioners, are lacking.

The current chapter provides an introduction to the wider study. It elucidates the value of undertaking this particular research project. The research question posed and the

methodological approach employed are deconstructed and detailed. The contribution the study makes to its research domain of SISP is discussed. The section concludes with an overview of the seven chapters that form the structure of the thesis.

### 1.2 Value of the Study

The research is investigating the practice of SISP by senior managers. It has been executed in a public service context, thus answering enduring calls for studies into IS strategising behaviour (Boynton and Zmud 1987; Earl 1993; Teubner 2013) within organisations located in the public service domain (Rocheleau, 2007; Rubin, 1986). An effective IS strategy is recognised as contributing to improved firm performance (Leidner et al., 2011; Ravichandran and Lertwongsatien, 2005), and as a key enabler of business strategy (Preston and Karahanna, 2006). IS strategy has been a significant concern in practice, dominating management agendas in recent decades (Teubner, 2013) and becoming integral to business positioning and processes (Stace et al., 2012). It was discovered that 87% of business leaders believe IS to be critical to their business (Chen et al., 2010). IS strategy has ranked within the top five IS concerns for management (Luftman and Ben-Zvi, 2011), proving a significant challenge for management (Mirchandani and Lederer, 2014).

Despite its much-espoused importance, little empirical investigation has been conducted into the 'doing' of the planning phase of IS strategising by senior managers. The inherent suitability of the SAP approach is advocated throughout this thesis as a viable means to uncover the very essence of the practice of SISP. Through such a lens, with its inherent focus upon; practice, praxis, and practitioners; activity at macro, meso, and micro levels; outcomes from SAP-based studies; the social dimension of strategising, and; strategic episodes, SISP was empirically explored in novel ways. This recognition stretches beyond the researcher's own assumptions and is indeed mirrored in the most recent academic publications. A 2014 special edition of the Journal of Strategic Information Systems (JSIS) has been devoted to research into IS strategy adopting a SAP lens (Whittington 2014). In addition, Teubner's (2007; 2013) work highlights how the growing chasm between SISP research and practice can be narrowed through a return to practice. The benefits to such an approach are two-fold; the topics favoured by practitioners can become more closely aligned with those featured in academia, and the results and findings of such research will become more useable and relevant to practitioners.

### 1.3 The Research Question

The study aims to answer the following research question:

How is Strategic Information Systems Planning Practiced by Senior Managers?

The research question locates the study within the SISP domain, which resides within the wider field of IS. It is the conventional view that the research question ultimately guides decisions about research design and research methods (Bryman, 2007). However, the question itself is often the product of the researcher's own paradigmatic predilections, with questions often framed in such a way as to fit with the researcher's preferred research approach (Bryman, 2007). From an epistemological standpoint, the research question is exploratory in nature, i.e. it aims to explore how senior managers practice SISP. The researcher's review of the SISP literature revealed that there exists little empirical enquiry into the 'doing' of this particular phenomenon. The researcher examined the practice of SISP from the perspective of the actors involved (senior managers), out of which subjective interpretations were made in order to inductively generate novel theory. The interpretive paradigm is concerned with how to understand the meanings attached to organisational life (Saunders et al., 2009). Ontologically, it is the researcher's belief that reality needs to be socially constructed, i.e. an objective reality external to the individual awaiting discovery does not exist. Instead, reality needs to be interpreted.

Deconstructing the research question, the two core streams of literature deemed most appropriate to support its answering are the SAP and SISP literature sets that form the basis of Chapter 2 and Chapter 3 respectively. Within both of these research domains, the role of senior managers and the public service context are explored. SISP resides under the remit of senior managers, with their support of, and involvement in IS initiatives cited as being crucial to their success (Ragu-Nathan et al., 2004; Thong et al., 1996; Young and Jordan, 2008). The public service context is acknowledged as being under-explored from an IS perspective (Rocheleau, 2006; Rubin, 1986), and is a suitable fit for a practice-based study on account of the increased possibility of gaining the requisite comprehensive access to study the topic of investigation.

### 1.4 The Research Approach

The research question grounds the study within the wider field of IS. The researcher's philosophical standpoint aligns with the interpretive paradigm. Subsequently, the choice of research approach took precedence. As stated, it is a widely held tenet of

social research that the research question proves pivotal in this regard (Bryman, 2007; Denzin and Lincoln, 2005; Senn, 1998). Therefore, an approach was required that could:

- Provide a holistic approach to answering a 'how'-type question
- Allow for an exploratory study seeking to build theory
- Embrace an investigation into a social activity, i.e. the practice of SISP by senior managers

Consequently, a case study design adopting a SAP perspective was decided upon as most appropriate. Such a research approach answers explicit calls from within the IS literature for more pluralistic perspectives (Orlikowski and Baroudi, 1991; Galliers, 1993; Mingers, 2001). It also reflects the growing use of qualitative research methods within the field of IS (Carroll and Swatman, 2000; Chen and Hirschheim, 2004; Darke et al., 1998) and the tendency for such qualitative research to employ a multi-method design (Denzin and Lincoln, 2005). It became apparent that SAP offered a critical dimension that comfortably aligned with the wider study: the ability to capture a greater level of detail as to the innards of SISP. Specifically, it engenders a focus upon: those involved (the practitioners), the norms practitioners draw upon in order to engage in SISP (prevalent practices that emanate from either internal or external to the organisation), and the detailed, micro activities that form realised praxis within a specific organisational context that engages in SISP.

The SAP lens not only affords the opportunity to contextualise SISP within its macro environment, but also the ability to mine the mundane, every-day actions of which it is comprised. Combined with the robust set of investigatory tools bestowed by an adherence to a case study design, the researcher is satisfied with the adopted research approach.

### 1.5 The Research Contribution

The research's primary contribution is the generated conceptual framework located in Chapter 6. It provides a theoretical representation of how SISP is practiced by senior managers. In addition, the study furnishes a further five contributions to the SISP research domain:

- The development of a levels perspective on SISP
- A wedding of the SISP and SAP domains
- A novel review of the SISP literature
- A holistic view on the role of senior managers during SISP

- A contextualisation of the practice of SISP to the under-researched public service domain

Chapter 7 also illuminates a comprehensive categorisation of avenues for further academic enquiry. They are delineated into areas worthy of additional exploration as they relate to the generated conceptual framework.

In summary, the study makes a substantial contribution to its core research discipline of SISP. The six primary contributions provide a substantial body of valuable outcomes from the study. The wealth of identified topics that merit further empirical investigation represents a rich resource to fuel future research endeavours.

### 1.6 Thesis Structure

The thesis is composed of seven chapters (See Figure 1.1 for a macro-level view of the thesis and the primary question each chapter sets out to answer). A brief overview of each chapter follows:

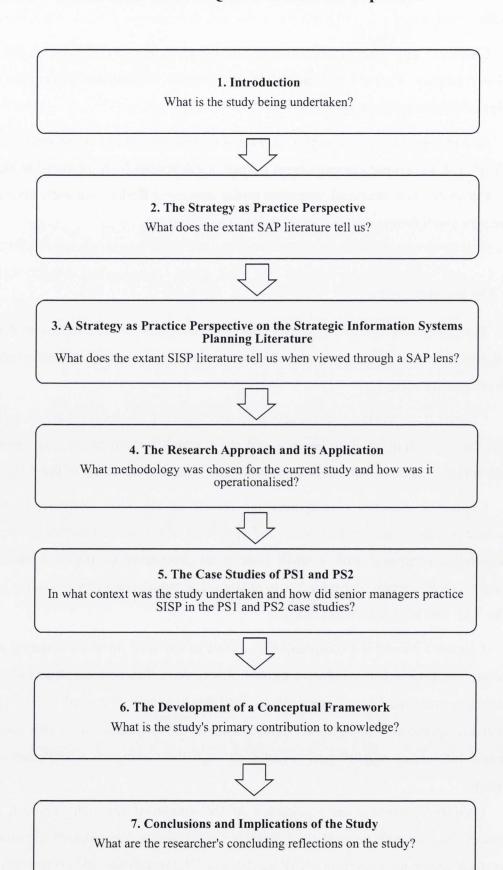
Chapter 1 provides an introduction to the study. It covers the background to the study, the research question to be answered, the research's contribution, a synopsis of the methodological approach employed, and additional introductory facets of the study.

Chapter 2 presents a comprehensive review of the SAP literature. In addition, literature pertaining to the theoretical underpinnings of the wider practice perspective is incorporated, combined with a small number of practice-based papers located within related research domains. Chapter 2 is foundational in nature due to the pervasive presence of the SAP lens across the wider study.

Chapter 3's remit is a comprehensive review of the SISP literature featuring a unique attribute: the review was conducted through a SAP lens. The core constructs of the SAP perspective were used as a framework to distil the literature. It proved to be a rigorous, systematic approach offering novel perspectives on the literature set. A rich resource of avenues for further enquiry was revealed through the casting of a SAP lens over the domain.

Chapter 4 provides an elucidation of the employed research approach. In this instance, the approach deemed most suitable for answering the research question was a case study design incorporating a SAP perspective. The researcher held no inherent

Figure 1.1 - Thesis Structure: A Question-based Perspective



methodological biases prior to the commencement of the study, and hence this decision was guided by the researcher's philosophical beliefs, the research question, and reviews of both the SAP and SISP literature sets. The chapter proceeds to detail the protocol that guided the study, moving beyond theory to reveal its real-world application. Subsequently, the case study design, the use of a SAP perspective, the structuring of the investigation, the analytical strategy employed inclusive of the adopted coding technique, and the study's ethical considerations are outlined.

Chapter 5 explores how senior managers practiced SISP in the two employed case studies. The chapter opens with a contextualising piece that situates both case sites within their macro-level environment. This positioning section segregates PS1 and PS2's macro-level into three distinct contexts in the form of the European, public service, and healthcare environments. The ensuing sections explore each case site under the four core themes uncovered during the data analysis phase of casework.

Chapter 6's purpose is to detail the conceptual framework that was developed to answer the study's research question. The framework represents the practice of SISP by senior managers. It was the researcher's goal to establish clear linkages between the case studies located in Chapter 5 and Chapter 6's emergent theory. Each of the framework's constructs are introduced and detailed before it is compared to the extant SISP literature.

Chapter 7 draws the thesis to a close, providing the research's contribution to knowledge, the implications and limitations of the study, the avenues identified for further empirical enquiry, and the researcher's final reflections.

### 1.7 Concluding Comments

The goal of the current chapter is to introduce the wider study and so engender a familiarity within the reader of its core components. The chapter opened with a contextualising section providing the background to the current study. The researcher's motivations for embarking on this particular research path were driven by a keen interest in the domains of strategy and IS. The study's value was then detailed, providing the academic merit of conducting research into this phenomenon. Subsequently, the research question posed was deconstructed, followed by an explication of the chosen research approach. The chapter concludes with a synopsis of the study's contribution and a macrolevel view of each of the study's seven chapters.

# **Chapter 2 - The Strategy as Practice Perspective**

### 2.1 Purpose and Method

This chapter aims to provide a comprehensive review of the extant literature within the strategy as practice (SAP) field. In addition, materials that explain the theoretical dimensions of the practice perspective, coupled with a small sample of practice studies located within related fields of research have been included to provide a more holistic overview of the SAP domain.

The researcher has attempted to employ a systematic method to the conduct of the review. Learning from more technical approaches (Grant and Booth, 2009), it is the researcher's goal to overcome the primary derogations directed towards reviews located within the business domain, namely of lacking rigour and possessing researcher bias (Tranfield et al., 2003). Keyword searches were conducted across a variety of online academic search engines, with the majority of sourced materials located through Ebsco.

The researcher retained a primary focus on those studies that explicitly pertained to the SAP domain, yet was also cognisant of the need to reference literature that established the theoretical underpinnings of the perspective. Thus, the finalised collection encapsulates identified studies within the SAP domain, key theoretical works located within the wider practice domain, and a small number of publications residing within related fields such as leadership as practice (Carroll et al., 2008; Raelin, 2011), organisational change as practice (Jansson, 2013), accountancy as practice (Kornberger and Carter, 2010), business ethics as practice (Clegg et al., 2007) and marketing as practice (Browne et al., 2014; Echeverri and Skalen, 2011; Järventie-Thesleff et al., 2011) which were employed for illustrative purposes. Indeed, Whittington (2011: 185) proposes that a broader view of the 'practice turn' is needed, so that we "pick up ideas developed in one discipline to pursue them in others".

The practice of strategy-making is a central component of the current study's research question. This review has established the critical lens through which the researcher will proceed to review the literature pertaining to SISP in Chapter 3, encapsulating senior managers' role therein.

### 2.2 Chapter Road-map

The review is structured as follows; firstly, section 2.3 provides an explanation of the very nature of SAP, thus providing the foundation upon which the chapter is built. From there, an historical perspective on the practice perspective at large is proffered in section 2.4, with the dominant theories of practice as espoused by the pre-eminent authors within the domain contained in section 2.5. The establishment of an integrated framework (Whittington, 2006) for the study of SAP forms the next core element of the review in section 2.6, with its explicit focus on practice, praxis and practitioners. A further critical concept in the form of strategic episodes is the focus of section 2.7.

Having specified the core components that comprise the very essence of SAP, an analysis of the consulted and reviewed literature is provided in section 2.8. Thus, the dominant research characteristics found within the domain are signalled, inclusive of the presence of both senior managers and a public service context in the extant literature. From this point, the complicated relationship between SAP and strategy process research is reviewed in section 2.9, before some of the inherent challenges of a practice perspective are synopsised in section 2.10. The practicality of the SAP perspective and its wider implications are espoused in section 2.11. A preliminary conceptual model to have emerged from the SAP literature and that is grounded in the current study's research question is revealed in section 2.12. The chapter is brought to a close by the researcher's own concluding comments on the consulted and reviewed literature in section 2.13. Table 2.1 provides a high-level overview of each of the SAP literature's themes and associated key sources.

## 2.3 An Overview of the SAP Perspective

The nature of strategy has become increasingly vague, so much so that it can encapsulate whatever meaning one wants to attribute to it (Hambrick and Fredrickson, 2001). In their study of the dynamics of the evolution of the strategy concept, Ronda-Pupo and Guerras-Martin (2012: 180) define its essence as "the dynamics of the firm's relationship with its environment for which the necessary actions are taken to achieve its goals and/or to increase performance by means of the rational use of resources". With that in mind, real-world strategies are espoused to fall somewhere along a continuum bookended by deliberate and emergent strategies (Mintzberg and Waters, 1985). Strategising involves making difficult choices (Porter, 1996), the outcomes of which can have a

Table 2.1 – SAP Literature Themes and Associated Key Sources

Theme	Key Sources
An Overview of the SAP Perspective	• Whittington (1996)
	• Jarzabkowski and Spee (2009)
	Vaara and Whittington (2012)
Origins of the SAP Perspective	Sandberg and Tsoukas (2011)
	• Suddaby et al. (2013)
	• Leonard and Higson (2014)
Theoretical Influences	• Wittgenstein (1951)
	• Giddens (1976)
	• Bourdieu (1990)
Whittington's 3Ps: Practice	• Whittington (2006)
	• Jarzabkowski et al. (2007)
	• Jarzabkowski and Whittington (2008)
Whittington's 3Ps: Praxis (at macro, meso,	• Whittington (2006)
and micro levels)	Jarzabkowski and Spee (2009)
	• Sandberg and Dall'Alba (2010)
Whittington's 3Ps: Practitioners	• Whittington (2006)
	• Jarzabkowski and Whittington (2008)
	<ul> <li>Jarzabkowski and Spee (2009)</li> </ul>
The Concept of the Strategic Episode	Hendry and Seidl (2002)
	Maitlis and Lawrence's (2003)
	• Whittington (2006)
Characteristics of the Reviewed Literature	• Hughes (2015)
The Practice vs. Process Debate	• Hutzschenreuter and Kleindienst (2006)
	• Paroutis and Pettigrew (2007)
	• Whittington (2007)
Challenges Posed by the SAP Perspective	Feldman and Orlikowski (2011)
Practicality of the SAP Perspective	• Whittington (2003)
	Feldman and Orlikowski (2011)
	Vaara and Whittington (2012)

significant impact on the future success or failure of an organisation. Yet, an understanding of the very essence of strategy continues to pose problems for practitioners and scholars alike (Hafsi and Thomas, 2005; Nag et al., 2007).

An emerging perspective on strategy research that can help to bridge this gap has gained traction in recent years. Although it draws from its competing perspectives (Carter et al., 2008; Vaara and Whittington, 2012), it has managed to firmly establish itself amongst its peers. The perspective in question is the practice perspective on strategy research (Jarzabkowski and Spee, 2009; Vaara and Whittington, 2012; Whittington, 1996).

SAP prioritises "the doing of strategy; who does it, what they do, how they do it, what they use and what implications this has for shaping strategy" (Jarzabkowski and Spee, 2009: 69). "Central to a practice lens is the notion that social life is an ongoing production and thus emerges through people's recurrent actions" (Feldman and Orlikowski, 2011: 1240). It can assist in answering fundamental questions such as "where and how is the work of strategising and organising actually done; who does this strategising and organising work; what are the skills required for this work and how are they acquired?" (Whittington, 2003; cited in Chia and MacKay, 2007: 218). The practice lens has a specific focus on the micro activities of strategy-making, viewing strategy as something that organisational members 'do' rather than something that an organisation simply 'has' (Jarzabkowski et al., 2007; Johnson et al., 2007; Rasche and Chia, 2009; Sandberg and Dall'Alba, 2010; Splitter and Seidl, 2011; Whittington, 1996; Whittington et al., 2006). As such, "it is interested not exclusively in the fate of organisations as wholes, but also in the practical performance of the people who engage with them" (Johnson et al., 2007: 3), i.e. it places a more refined focus on the performance of practitioners and practices in strategy praxis (Jarzabkowski and Whittington, 2008).

A practice lens subsequently allows researchers to more closely examine and describe exactly what is involved in organisational phenomena as they unfold (Sandberg and Dall'Alba, 2010). However, it also encapsulates the grounding of these micro activities within their wider social context (Bürgi et al., 2005; Palmer and O'Kane, 2007), i.e. "actors in their micro-situations are not acting in isolation but are drawing upon the regular, socially defined modes of acting that arise from the plural social institutions to which they belong" (Jarzabkowski et al., 2007: 6), thus linking the micro to the macro context (Oliver and Bürgi, 2005; Regner, 2008; Seidl and Whittington, 2014; Whittington et al., 2011). In reflecting upon his seminal paper entitled 'The Manager's Job: Folklore and Fact' some fifteen years after its initial publication, Henry Mintzberg cites his greatest disappointment as being the lack of new efforts stimulated by his work into the real 'doing' of managerial work. Still prevalent, it is this very shortcoming that the SAP lens aims to negate. As Mintzberg (1990: 170) so expertly surmises;

"In a world so concerned with management, much of the popular literature is superficial and the academic research pedestrian. Certainly, many studies have been carried out over the last 15 years, but the vast majority sought to replicate earlier research. In particular, we remain grossly ignorant about the fundamental content of the manager's job and have barely addressed the major issues and dilemmas in its practice."

Whilst divergent streams of literature exist from which insights can be gleaned into various forms of managerial activity, e.g. process research, research on strategy formulation and implementation, and research on leadership, the 'doing' of strategy (Järventie-Thesleff et al., 2014; Suddaby et al., 2013) remains a topic of research needing further empirical investigation. Close observation of, and engagement with strategists as they participate in their daily activities is required. To better understand strategising, the focus of strategy research "needs to become less exclusively concerned with company performance, more with the performance of the strategists themselves" (Whittington, 1996: 734). It was on account of being persuaded by the merit of SAP, coupled with recognition of its growing stature, that the researcher embraced the practice perspective on strategy research, making it a central pillar of the current study.

### 2.4 Origins of the SAP Perspective

A rather parsimonious retrospective (Leonard and Higson, 2014) of emergent views on strategy research across the decades could resemble the following; the 1960s reflected a 'planning' approach; from the 1970s onwards a 'policy' approach emerged, followed by the strategy process perspective in the 1980s (Whittington, 1996: 2001). It was the 1990s that heralded the introduction of the practice perspective on strategy research, with its presence continuing to grow in recent times. Indeed, it has rather quickly become a viable alternative to the dominant institutional and resource-based approaches to strategy research (Chia, 2004), with an inherent capability to overcome some of the issues associated with prior research (Whittington and Cailluet, 2008), including "the over-reliance on static research designs and cross-sectional data typical of some earlier process research" (Floyd et al., 2011: 935).

So what actually triggered the need for a practice perspective within the field of strategy? The catalyst appears to have been a disjoint between traditional strategy research and its relevance to managerial practice (Jarzabkowski et al., 2007; Jarzabkowski and Spee, 2009; Jarzabkowski and Wilson, 2006; Nordqvist and Melin, 2010; Oliver and Bürgi, 2005; Sandberg and Tsoukas, 2011; Splitter and Seidl, 2011). This segregation of scholarly research and the realities of management were of particular concern due to strategy research's emphasis on being an applied science (Splitter and Seidl, 2011). Thus, the SAP perspective with its emphasis on managerial activity and the 'doing' of strategy (Palmer and O'Kane, 2007; Whittington, 1996) lends itself to offering a novel perspective to that of alternative approaches. A first example of this 'new' perspective can be traced to

Whittington's (1996) paper entitled 'Strategy as Practice', a paper which has had a profound effect on stimulating further research in this domain over a very short period of time (Corradi et al., 2010). It is very much ingrained in European academia (Jarzabkowski, 2003, 2004, 2008; Whittington, 2007; Whittington, 1996, 2001, 2002) and can be viewed as countering the prevailing economics-centric (Suddaby et al., 2013) characteristics of North American approaches to strategy research (Bartunek et al., 2011; Carter et al., 2008; Jarzabkowski et al., 2007; Jarzabkowski and Spee, 2009; Oliver and Bürgi, 2005; Statler et al., 2008).

Since its emergence, the field has experienced considerable growth, as evidenced in a growing virtual community, an official website (www.strategy-as-practice.org), popular conference tracks at high-profile conferences inclusive of the British Academy of Management's annual conference (Hughes and McDonagh, 2014), special issues inclusive of the 2014 Journal of Strategic Information Systems' special issue heralding the Information Systems Strategy – SAP joint agenda (Huang et al., 2014; Leonard and Higson, 2014; Peppard et al., 2014; Whittington, 2014), books (*Cambridge Handbook of Strategy as Practice* – Golsorkhi et al., 2010) and an escalating number of publications in ranked journals (Jarzabkowski and Kaplan, 2015).

### 2.5 Theoretical Influences

Vaara and Whittington (2012) trace the origins of the practice perspective back to the work of Wittgenstein (1951) and Heidegger (1962). Wittgenstein is viewed as having the most significant influence upon the placement of the practical dimension of philosophy front and centre of philosophical debate in modern times (Deslandes, 2011). The foundations established by Wittgenstein's work were built upon by Heidegger, with the former's assertions being untangled and given structure by the latter (Chia, 2006). Subsequent years saw a proliferation of practice-based theories across the social sciences (Vaara and Whittington, 2012), with its emergence in the strategy field occurring in just the past couple of decades. The suggestion was that strategy research could be advanced through the adoption of social theories of practice (Hendry, 2000; Hendry and Seidl, 2003), most prominently those of Giddens (1976), MacIntyre (1985), Foucault (1980), Bourdieu (1990), and de Certeau (1984), and the influence of this work is evident in the present-day literature (Chia, 2006; Deslandes, 2011; Splitter and Seidl, 2011).

As alluded to earlier in this chapter, research into SAP has drawn upon a diverse foundation of practice theories emanating from within the social sciences. However, from a review of the extant SAP literature it would appear that activity theory (Jarratt and Stiles, 2010; Jarzabkowski, 2003; Johnson et al., 2003) and structuration theory (Feldman and Orlikowski, 2011; Jarzabkowski, 2008) have gained the most traction amongst the preeminent authors.

### 2.5.1 Activity Theory

The activity-based view prioritises the ramifications of organisational work and practice (Whittington, 2003), going "inside organisations, their strategies and their processes, to investigate what is actually done and by whom" (Johnson et al., 2003: 5). Alternatively, activity theory "provides a research framework for investigating how the practice of strategising is being framed by, and is framing, the perceptions, views and mental models of leaders as they strategize within their organisation's structures, processes, norms and values" (Jarratt and Stiles, 2010: 29). Such a framework is composed of four inter-related components from which strategy emerges, namely; the collective structures of the organisation, the actors involved, the practical activities in which they interact and the strategic practices through which such interaction is facilitated (Jarzabkowski, 2003). This framework has many uses for strategy researchers, three of which have been identified by Jarzabkowski (2003); (i) its focus on practical activities, i.e. the place of interaction in which individuals engage with their contexts over time; (ii) its interpretation of the practices through which individuals interact with their structural context by way of technical and psychological tools, and; (iii) how it can be used to examine and explain both the continuation of particular patterns of practice and also changes in such practices within the boundaries of their activity systems. SAP-based studies which have adopted activity theory include work by Jarratt and Stiles (2010), Jarzabkowski (2003), and Jarzabkowski and Balogun (2009).

### 2.5.2 Structuration Theory

A structuration-based approach deals with "the routinized nature of practice by presenting the interaction between agents and socially produced structures through the emergence of daily routines" (Paroutis and Pettigrew, 2007: 103). Alternatively, structuration theory's fundamental premise is that "actors produce and reproduce the institutionalized social structures that persist over time and space and provide guidelines for action" (Giddens, 1979, 1984; cited in Jarzabkowski, 2008) in a process termed

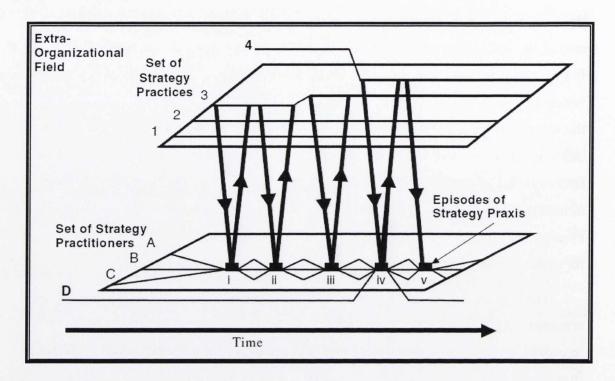
"duality of structure" (Jarzabkowski, 2008: 622). An institutional realm and an action realm form this 'duality'. The institutional realm is created through the beliefs, norms and interests of the individuals within an organisation, which over time are separated from these individuals and are effectively 'institutionalised' in the sense that they will out-last any of the individuals or individual actions that helped form it. The institutional realm frames the action realm, in which individuals are conscious of the institutional orders in which they operate and are hence guided by them. The relationship is not deterministic, as the individuals retain the ability to either conform to these orders or rebuke them, the outcome of which will either sustain the institutional order or act as a catalyst for a reformulation of the order (Giddens, 1979; 1984). It is this link between the actions of individuals and the subsequent effect they have on either reinforcing or corrupting an existing organisational structure that renders institutional theory an effective framework for strategy research (Jarzabkowski, 2008).

Having examined the rich heritage from which research into strategy practice originates, particularly from a theoretical perspective, it is evident that the concept of 'practice' has been legitimised from a scholarly standpoint. Indeed, the array of theories from which SAP researchers have borrowed has given the nascent field a solid foundation from which it has continued to grow. However, there have been efforts from within the strategy practice discipline itself to forge its own direction, to unshackle itself from extant theories that were developed during different times and within different disciplines, and to develop theories and frameworks that it can claim to be its own. Such formative steps are fundamental building blocks in the growth of a research domain, allowing it to move from academic infancy towards a position of established independence. The most dominant theory or framework to have emerged from this field in its brief existence is the focus of the subsequent section of this chapter.

### 2.6 Towards an Integrated Framework

Whittington (2006) has developed a framework specifically for researching strategy practice (See Figure 2.1). Whilst its genesis can certainly be traced to extant theories of practice within the wider social sciences (Contu and Willmott, 2006), Whittington's framework differs in that it was designed with strategic practice at its core. It has been acknowledged as being one of the most developed and influential frameworks found within the strategy literature (Johnson et al., 2007; Regner, 2008; Sandberg and Dall'Alba,

Figure 2.1 - The SAP Perspective: Integrating Practice, Praxis and Practitioners



Starting at the base of the Figure, A-D represents <u>practitioners</u>. Specifically, A-C portrays internal organisational actors primarily in the form of senior managers, but also possibly emanating from lower organisational levels. D represents a practitioner emanating from the extra-organisational field, possibly in the form of a consultant. These practitioners engage in various activities, but they converge at five points (i-v) which represent <u>episodes</u> of intra-organisational strategy <u>praxis</u>. These episodes may manifest themselves as formal board meetings or simply as informal conversations. 1-4 at the top-end of the Figure represents both intra-organisational and extra-organisational <u>practices</u> from which practitioners (A-D) draw upon during their intra-organisational episodes of strategic praxis (i-v). 1-3 portray those practices which have become accepted and embedded within the organisation. However, the practices which are drawn upon by the practitioners within organisations are in a constant state of flux. As such, 4 represents those extra-organisational practices from which the organisation did not originally draw from in episodes i-iii, but which became internalised from episode iv onwards as the strategy practitioners amended their stock of available strategy practices.

(Adapted from Whittington, 2006)

2010) and has been advanced by other visible authors within the domain (Jarzabkowski et al., 2007).

Whittington (2006) presents an integrated framework built upon the three core pillars of practice, praxis and practitioners. There exists a fundamental interdependency between all three elements. Indeed, one of the core strengths of Whittington's framework is its emphasis on the interconnectedness between practice, praxis and practitioners that defines SAP (Sandberg and Dall'Alba, 2010). Studies which may focus solely on one element for reasons of convenience would benefit from acknowledging the embedded nature of such practice studies and the subsequent impact they have upon the wider stream of SAP research (Whittington, 2002). A closer examination of each of Whittington's three pillars is now detailed.

### 2.6.1 Whittington's Three P's: Practice

There exist many definitions of 'practice' within the consulted and reviewed literature (Jarzabkowski and Spee, 2009). Reckwitz (2002: 249; cited in Jarzabkowski et al., 2007) broadly defines it as:

"... routinized types of behaviour which consist of several elements, interconnected to one another: 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."

Strategy practices are viewed by Jarzabkowski and Whittington (2008: 101) as involving the "various routines, discourses, concepts and technologies through which this strategy labour is made possible – not just obvious ones such as strategy reviews and offsites, but also those embedded in academic and consulting tools (Porterian analysis, hypothesis testing, etc.) and in more material technologies and artefacts (PowerPoints, flip-charts, etc.)." In a sense, they provide the boundaries within which strategic activity occurs, imbuing behavioural, cognitive, procedural, discursive and physical resources upon strategists (Jarzabkowski et al., 2007). However, they do not enforce rigid boundaries, but rather allow for iteration and adaptation (Vaara and Whittington, 2012). Thus, there exists an entwinement between strategy practices and strategy praxis, with practitioners playing somewhat of a mediating role between both concepts and the extent to which each shapes the other.

Jarzabkowski and Spee (2009) discuss some of the more dominant approaches to the study of practices. The authors identify linguistic techniques that focus on the discursive

practices of strategists as having garnered significant attention (Liu and Maitlis, 2014; Samra-fredericks, 2003). An emerging approach to studying the doing of strategy focuses upon meetings and strategy workshops, conceptualised in this instance as 'episodes' taking place in the wider arena of strategy praxis. Within these episodes, strategy-making activity is shaped by the prevalent practices that are incumbent within the episode. Studies adopting this episodic approach include the work of Hendry and Seidl (2003), Jarzabkowski and Seidl (2006; 2008), and Johnson et al. (2010). Other studies take a more empirical approach, focusing on the practices involved in doing strategy and their effect on strategy praxis (Jarzabkowski, 2003; Paroutis and Pettigrew, 2007). Again, it is the interconnected nature of the practice perspective which is evident across the majority of studies which adopt such a lens, giving credence to Whittington's (2006) framework.

### 2.6.2 Whittington's Three P's: Praxis

At its broadest level, praxis refers to the "vast social enterprise of day-to-day activity" (Campbell-Hunt, 2007: 794), encapsulating both micro and macro dimensions (Sandberg and Dall'Alba, 2010). It comprises the "interconnection between the actions of different, dispersed individuals and groups and those socially, politically, and economically embedded institutions within which individuals act and to which they contribute" (Jarzabkowski et al., 2007: 9). Such a definition is highlighted as being pertinent, as it captures both how practice can be operationalised at multiple levels, i.e. from macro to micro, and also its inherent adaptability as it shifts through the interactions between these levels. Jarzabkowski and Spee (2009) extend upon this multi-level perspective on praxis, identifying three such levels within the SAP literature; micro refers to studies concerning individuals or groups' experience of a particular episode, i.e. a decision or a meeting; meso refers to studies located at an organisational or suborganisational level, i.e. a change programme or a strategy process, and; macro studies explore praxis at an institutional level, i.e. attempting to explain praxis within a specific industry. Such a multi-level perspective is pervasive across virtually every sub-discipline of management research (Dopfer et al., 2004; Kozlowski et al., 2013; Mathieu and Chen, 2011).

Strategy praxis encapsulates what strategy practitioners actually do (Whittington, 2006), i.e. the activities involved in both the formulation and implementation of strategy (Sandberg and Dall'Alba, 2010). This 'doing' may manifest itself in a multitude of seemingly mundane activity, yet such activity is at the heart of the strategy practitioner's daily role. The graft of completing "capital expenditure proposals, manipulating spread-

sheets, preparing PowerPoint presentations, reviewing annual budgets and plodding through committee cycles are all largely absent from the literature on decision-making or change" (Whittington, 2002: 4). Praxis and practices are mutually constitutive, with researchers adopting praxis studies to not only explore the specific activity under investigation, but also to increase understanding of the manifested nature of practices (Vaara and Whittington, 2012). Thus, the outcome of seemingly inconspicuous strategy praxis can be found to be hugely influential, so much so that they can either legitimise or delegitimise particular practices (Vaara and Whittington, 2012; Whittington, 2002).

### 2.6.3 Whittington's Three P's: Practitioners

"Strategy's practitioners are defined widely, to include both those directly involved in making strategy – most prominently managers and consultants - and those with indirect influence – the policy-makers, the media, the gurus and the business schools who shape legitimate praxis and practices." (Jarzabkowski and Whittington, 2008: 101-102)

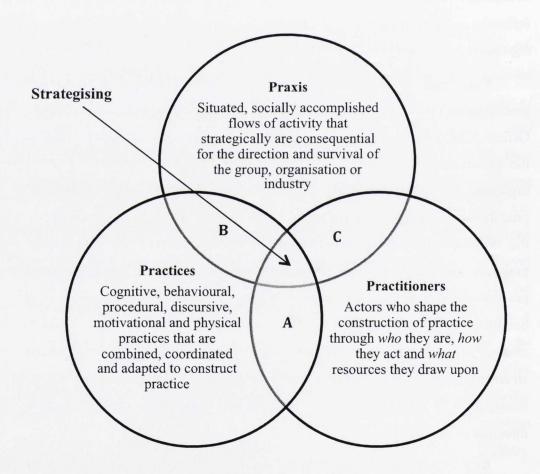
Two main ontological dimensions have been identified for classifying strategy practitioners; (i) whether the practitioner is an individual actor, e.g. the Chief Executive Officer (CEO), or an aggregated group of actors, e.g. senior managers, and; (ii) whether the practitioner is internal to the organisation, e.g. an employee, or external to the organisation, e.g. a consultant (Jarzabkowski and Spee, 2009). A focus on strategy practitioners encompasses three fundamental issues: who they are, how they got there, and the skills that they need (Whittington, 2002). Practitioners are inter-related with both practices and praxis as it is prevalent organisational practices that engender strategy practitioners with agency in regard to how they act and behave (Jarzabkowski et al., 2007). Sandberg and Dall'Alba (2010: 1361) view them as "the critical connection between strategy praxis and strategy practices, as it is they who conduct the activities and carry out strategy practices." Practitioners represent a suitable unit of analysis for a SAP-based study, as it is they who shape the strategy that will ultimately determine the future direction of the organisation.

SAP research has managed to extend the wider strategy research agenda's principal focus on senior managers (Hendry et al., 2010; Johnson et al., 2007; Vaara and Whittington, 2012). Work has been conducted on the role of strategic specialists (Paroutis and Pettigrew, 2007), and there has also been a focus on the role of middle managers in strategy (Lavarda et al., 2010). Drawing parallels with Whittington's (2002) aforementioned fundamental issues when focusing on strategy practitioners, it is espoused

that practitioners engage in this strategic shaping activity through "who they are, how they act and what practices they draw upon in that action" (Jarzabkowski et al., 2007: 10).

Jarzabkowski et al.'s, (2007) interpretation (see Figure 2.2) of Whittington's (2006) framework possesses an inherently parsimonious structure, and is therefore helpful to the development of an initial grasp of the interconnected nature of practice, praxis and practitioners. However, this framework is lacking the comprehensiveness of Whittington's (2006) work due to its ommission of a visual representation of strategic 'episodes', in addition to the exclusion of explicitly linking the micro to the macro environment.

Figure 2.2 - Jarzabkowski et al.'s, (2007) visual interpretation of Whittington's (2006) Framework



Strategising comprises the nexus between practice, praxis and practitioners. A, B, and C represent stronger foci on one of these interconnections depending upon the research problem to be addressed.

(Adapted from Jarzabkowski et al., 2007)

### 2.6.4 The Introduction of a fourth 'P': Profession

Later work from Whittington (2007) introduced a fourth 'P' in the form of 'Profession'. This theme views strategy as a "kind of profession like law, medicine or journalism (with its fringe of part-timers and transients, the closest analogy): it is an occupational group with a collective identity and a set of connections that goes far beyond particular organisations" (Whittington, 2007: 1580). The profession of strategy is comprised of such bodies and entities as business schools, academic journals, consulting firms and business media that can all be viewed as being 'strategic'. It is responsible for the formation and subsequent dissemination of various strategic practices, and for the development and deployment of particular types of practitioner. Whittington acknowledges that the theme of 'Profession' had been largely implicit in his earlier models.

Possibly for reasons of parsimony, the theme of 'Profession' has not been widely acknowledged in the extant literature. Therefore, the study of SAP has for the most part retained a predominant focus on the three core themes of practice, praxis and practitioners (Vaara and Whittington, 2012).

### 2.7 The Concept of the Strategic Episode

Within the stream of SAP literature resides the recurrent theme of the strategic 'episode'. Incidents of strategic episodes are an explicit component of Whittington's (2006) framework. An episode can be defined as a "sequence of communications structured in terms of its beginning and ending" (Hendry and Seidl, 2003: 176), the beginning and ending of which is not only observable by the external observer, but also by the communication within the sequence. Indeed, conversational and discourse analysis have proven valuable research topics within the SAP domain due to their apparent linkages to the wider social component of strategising (Balogun et al., 2014; Hardy and Thomas, 2014). Episodes may commence spontaneously, have a pre-defined routinised schedule, or commence as a pre-determined response to a particular set of circumstances, e.g. not achieving a monthly sales forecast. With reference to the finalisation of an episode, it is normally dependent upon either a time-limitation or goal-orientation, neither of which tend to be mutually exclusive in practice (Hendry and Seidl, 2002). Others have adopted a slightly different perspective on the meaning of the term 'episode', with Simpson (2009) classifying Maitlis and Lawrence's (2003) entire two-year study of the British symphony orchestra as an 'episode', comprised of observations of over sixty meetings of various

stakeholder groups and numerous informal conversations. Such a classification is more the exception than the norm within the SAP literature, with the majority of studies identifying a single instance of a meeting or informal conversation as an episode.

The concept of an 'episode' originates from Niklas Luhmann's (2000) social systems theory and has been adopted by a number of the pre-eminent SAP scholars. The Luhmannian perspective is particularly appropriate due to its focus on seemingly mundane practices that could be construed as being episodic in nature. The breadth of such episodic practices is diverse in nature, ranging from the unplanned, unofficial episodes such as the commonplace 'water cooler' conversations to the scheduled, formal strategy workshops, meetings and reviews. It is the latter which has garnered the attention of SAP scholars to date, manifesting as studies exploring strategy workshops (Johnson et al., 2010) or strategy meetings (Jarzabkowski and Seidl, 2006, 2008). Remaining with Luhmann's (2000) theory, Hendry and Seidl (2003) posit three critical areas upon which attention can be focused, them being initiation, termination, and conduct. Such an approach has been adopted by studies in the SAP domain (Jarzabkowski and Seidl, 2006, 2008), giving credence to this analysis technique as an effective research tool.

There is nothing exceptional or unusual about the majority of episodes, as it is during episodes of some form that almost all organisational processes take place. However, such strategic episodes are in many ways the most visible and easily accessible forum to view the actual work of strategising, "for it is through episodes that organisations are able to routinely suspend their normal routine structures of discourse, communication and hierarchy, and so create the opportunity for reflexive strategic practice" (Hendry and Seidl, 2003: 176).

Strategic episodes play a crucial role in studies incorporating a SAP lens. Indeed, episodes form a core component of Whittington's (2006) framework, sitting prominently alongside practice, praxis and practitioners. In many regards, these strategic episodes can be viewed as the hub of the 'work' of strategising. It is within them that the mediating role of practitioners comes into effect, as they are influenced by prevalent practices and are also given licence to deviate from such practices by their own praxis. As discussed, the most obvious and visible arenas for such strategic episodes are within the upper echelons of the organisation, manifesting themselves through meetings of senior managers in the form of strategy reviews or strategy workshops. However, episodes can also take the form of seemingly banal organisational occurrences that in some way incorporate a strategic component to proceedings.

Whilst acknowledging the significance of the latter examples of strategic episodes, it is the former, i.e. formal strategic meetings of senior managers, which comprises the bulk of the extant research and represents the most accessible form of such strategic activity. By focusing on these episodes we can explore how they are initiated and by whom, how attendees are chosen, what form of conduct is expected during such episodes and how much scope for detached, strategic reflection is granted. We can also investigate how such episodes are terminated, for what reasons an episode may be terminated, and crucially how the outcomes of such episodes are re-aggregated back into the organisation in an effective and non-disruptive manner. What Hendry and Seidl's (2002) work achieves is the incorporation of a Luhmannian approach to the structured analysis of strategic episodes. Whilst the importance of such episodes is evident from the extant literature, there exists little in the way of a clinical approach to their effective exploration. By focusing on the initiation, conduct and termination of such episodes, there exists an opportunity to engage in research into this integral dimension of SAP either in its own right or as part of a more encompassing study of SAP.

# 2.8 Dominant Research Characteristics of the Consulted and Reviewed Literature

The current review of SAP literature encompasses 126 sources. Being a relatively new perspective on strategy research, there does not exist the abundance of source material found in more established research fields, particularly from an empirical viewpoint. The author collected all available SAP journal articles and combined them with core readings underpinning the philosophical dimension of the practice lens at large. In addition, a small number of disparate, yet related readings featuring a practice perspective from fields other than strategy were collected. Whilst a number of the classified SAP studies are explicitly referenced in the following sections, the complete list is situated in Appendix I. The breakdown of sources reviewed (see Table 2.2) is as follows:

#### 2.8.1 Source Classification

At a fundamental level, the current review encapsulates 114 journal articles and 12 books.

Table 2.2 – SAP Literature Analysis

Category	Sub-category	Frequency	
Source classification	Journal	114	
	Book	12	
Content Analysis	Conceptual	62	
	Empirical	52	
Methodological Approach	Single case study	24	
	Multiple case study	18	
	Ethnography	9	
	Survey	1	
Sectoral Analysis	Private	30	
	Public	16	
	Mixed	6	
Geographic Location Analysis	Europe	42	
	North America	5	
	Australasia	4	
	Mixed	1	
Unit of Analysis	Senior Managers	17	
	Middle Managers	2	
	Mixed	33	

## 2.8.2 Content Analysis

The 12 identified books are largely foundational in nature, detailing key aspects of the SAP domain (Golsorkhi et al., 2010). Focusing specifically upon the content-type featured within the 114 journal articles uncovered interesting results. Some 62 articles can be broadly categorised as conceptual in nature, i.e. they do not feature primary data in the form of an empirical investigation. Rather, they are prescriptive in that they explain a conceptual facet of the practice perspective. Considering that the SAP perspective is relatively nascent in its development (Brown and Thompson, 2013), the reasoning behind such a skew in the reviewed literature towards a conceptual perspective is understandable. The establishment of a strong conceptual foundation by the pre-eminent authors within the field provides both a legitimisation of the perspective and a theoretical underpinning from which researchers inclusive of the current researcher can build upon in their own research projects.

## 2.8.3 Methodological Analysis

The remaining 52 articles feature some form of primary data collection, of which the methodology employed was the focus of analysis. Remaining true to the very essence of a practice perspective on research, i.e. proclivities towards the actual 'doing' of strategy

work on the part of practitioners, the dominant research methodologies are conducive to an in-depth analysis of the focus of investigation. Consequently, either a single case study (24) or a small number of case studies (18) are the dominant research designs employed. Ethnographic studies account for a further 9 studies (Kwon et al., 2014; Liu and Maitlis, 2014), again highlighting both a requirement and a desire on the part of researchers to get as close as possible to the data. The prescriptive literature often points to the suitability of an ethnographic approach to SAP-based research (Chia and MacKay, 2007; Fenton and Langley, 2011; Jarzabkowski et al., 2007; Miettinen et al., 2010; Rasche and Chia, 2009; Whittington, 2004). However, the prevalence of ethnographic studies does not quite match the sentiment of goodwill expressed towards its applicability to SAP research, an anomaly most likely manifested out of the inherent difficulties associated with conducting an ethnographic study. Such difficulties include gaining the requisite access to candidate organisations, the immense personal commitment required of the researcher during prolonged periods of immersion within the field, the validity of the research approach itself, and the practical fear of having to justify oneself to reviewers and editors for departing from the more conventional research approaches of survey or interview-based research (Myers, 1999; Watson, 2011). Finally, just a single survey-based study was conducted by Gunn and Williams (2007), again highlighting the inherent bias towards a qualitative approach (Bromily and Rau, 2014) within SAP-based research.

#### 2.8.4 Sectoral Analysis

Turning to a sectoral analysis of the reviewed empirical research, 30 studies were conducted within the private sector versus 16 in the public sector. A further 6 studies feature a mixture of both private and public organisations. These findings are congruent with the universality of a practice-based perspective, i.e. that the exploration of what is actually 'done' in a particular field (in this instance the field of strategy) is not confined to a particular sector. Those studies conducted within the public sector place a strong emphasis on the education realm, with universities in particular being strongly represented (Hoon, 2007; Jarzabkowski, 2003; Jarzabkowski and Seidl, 2006; Lavarda et al., 2010). The employment of universities may be explained by their shared characteristics with other public organisations inclusive of hospitals, cultural organisations, and policy-making bodies. Such organisations tend to possess diffuse power relationships and a professional, autonomous workforce who are likely to deal in knowledge-based goods and services (Jarzabkowski and Seidl, 2006).

## 2.8.5 Geographic Location Analysis

The SAP perspective has been viewed as being dominated by European researchers (Carter et al., 2008), and this European bias is manifested in the geographic location of the studies that form this literature review. A vast majority (42) are grounded in European organisations. North America provides the location for a mere 5 studies, whilst Australasia accounts for 4 studies and a mixture of geographic locations account for a single study.

## 2.8.6 Unit of Analysis

The final analysis metric employed concerns the unit of analysis that was used for the featured 52 empirical studies. Mirroring studies across various strategic disciplines, there exists a significant weighting towards senior management (17). This is understandable, as ultimate responsibility for strategising tends to fall under the remit of the senior management cohort. Strategising may be viewed as the core senior management task, the rewards for which appear to be large and growing if various metrics of senior management remuneration are suitable indicators of importance (Whittington, 2002). Although not brandished as such at the time of its publication, one of the first SAP studies was conducted by Mintzberg (1990), during which the actual realised work of the manager was explored. It thus moved beyond the rhetoric or 'folklore' of the largely prescriptive extant management studies of the time. Examples of more recent research conducted under the SAP umbrella have employed studies of senior managers in a manufacturing organisation (Samra-fredericks, 2003), the consumer packaging industry (Statler et al., 2008), and within the university sector (Jarzabkowski, 2003, 2008; Jarzabkowski and Seidl, 2008). Whilst it has been recommended that the field of SAP adopts a wider lens in regard to the focus of its studies (Jarzabkowski and Spee, 2009; Venkateswaran and Prabhu, 2010), the dominance of a focus on senior managers or a combination of senior managers and additional organisational actors continues to pervade the domain (Beech and Johnson, 2005; Paroutis and Pettigrew, 2007).

The majority of remaining studies (33) reflect this combined approach and incorporate a wider stream of actors, even if the primary focus largely resides upon senior managers. Finally, two studies focus upon what could be classified as middle management.

# 2.8.7 Summary of Literature Analysis

To synopsise the dominant traits of the SAP literature, we can see that prescriptive/conceptual articles are more common than their empirical counterparts. It could be deemed understandable that the founding authors within the discipline have set

forth to establish a strong theoretical foundation upon which future research can be built. The empirical work that has been completed thus far strongly favours a case study approach featuring either a single case or a small number of case sites. Both the public and private sectors are represented, but it is Europe that dominates the geographic locale of the reviewed studies. Finally, in keeping with other facets of strategy research, it is senior managers who represent the focal unit of analysis.

The SAP literature is attempting to distinguish itself as a distinct research domain, particularly from strategy process research (see section 2.9). For a nascent field, the researcher believes it to have made considerable strides over its relatively short tenure. It has established a distinct methodological approach in the form of in-depth qualitative case studies, with its prescribed suitability to ethnographic approaches yet to be fully realised (Rasche and Chia, 2009). SAP studies have demonstrated their adaptability to a diverse range of research contexts, spanning both public and private domains. With the practice of strategy-making largely falling within the remit of senior managers, its natural that senior managers have dominated the practitioner group under investigation. The researcher is of the belief that the extant SAP literature and its identified 52 empirical studies reviewed has a distinct thread in its focus upon micro activity. Indeed, this may be viewed as the empirical work's unique attribute, i.e. its focus upon the actual 'doing' of strategy work. Emergent themes place a particular emphasis on the social dimension of strategy work (Hendry, 2000; Palmer and O'Kane, 2007; Vaara and Whittington, 2012) and its inherent complexity, and also the role of strategic episodes as vehicles by which the work of strategising is enabled (Hendry and Seidl, 2003; Jarzabkowski and Seidl, 2006; Johnson et al., 2010). Further research is needed into the linkages between micro-level strategising activity and the wider macro-level domain in which it transpires (Herepath, 2014; Jarzabkowski and Spee, 2009; Vaara and Whittington, 2012). As the literature continues to mature through a greater quantity of empirical research adopting varying methodological approaches and focusing upon a wider array of strategy practitioners, the researcher shares Rouleau's (2013) sentiment of optimism for the future of the SAP domain.

# 2.9 The Practice vs. Process Debate

The extant literature is rife with alternative perspectives regarding the practiceprocess relationship. It is the primary goal of this section to shed light upon this relationship and ultimately decipher the differences that distinguish the SAP perspective from the strategy process viewpoint. The strategy process perspective tends to refer to the temporal evolution of individual organisations or groups of organisations (Whittington, 2007). The process of strategy-making has long been viewed as both a social and political process (Bower and Doz, 1979; Elbanna, 2006; Jarzabkowski and Seidl, 2008; Spee and Jarzabkowski, 2011). It is seen as inherently more complex than a once-off exercise in resource allocation (Noda and Bower, 1996). Such complexity has led to an eclectic array of academic prescriptions for the process of strategy-making (Hutzschenreuter and Kleindienst, 2006; Mintzberg and Lampel, 1999). The main interest of process research remains, however, the fate of the whole organisation, rather than the performance of the individual practitioner (Whittington, 1996: 734). Accepting the diverse nature of the strategy process realm, such research can be broadly defined as involving a "consideration of how and why things - people, organisations, strategies, environments - change, act and evolve over time" (Langley, 2007: 271).

SAP can be looked upon as either contributing to the all-encompassing strategy process viewpoint (Hutzschenreuter and Kleindienst, 2006) or as its own distinct perspective (Whittington, 2007). From the former perspective, SAP has been viewed as an extension of strategy process (Jarzabkowski and Wilson, 2002), used to enrich the process perspective (Hodgkinson and Wright, 2006) by focusing on the micro activities of strategymaking in addition to its social and political dimensions (Hutzschenreuter and Kleindienst, 2006). Some pre-eminent authors within the field view SAP as the natural next step after strategy process, adopting the mantle of a 'post-processual' perspective (Chia and MacKay, 2007). It is the researcher's viewpoint that SAP is distinct in its own right, but possesses obvious similarities with strategy process research. Consequently, whilst viewing SAP as unique, the researcher believes it to form a natural extension of strategy process research, with an aim to build upon the broader perspectives afforded by strategy process studies to focus upon the more micro-level activities (Seidl and Whittington, 2014) that encompass the 'doing' of strategy work by strategy practitioners. After first highlighting the similarities that exist between the two perspectives, the reasons for making this judgement will be elaborated upon.

# 2.9.1 Similarities between the SAP and Strategy Process Perspectives

SAP and strategy process research have been brandished as being similar due to their inherent focus on events and activities within organisations, with only some minor differences to tell the two apart (Paroutis and Pettigrew, 2007). Whittington (2007) synopsises these similarities succinctly; both adopt an explicit focus on the activities of

strategising; methodologically there are similarities in that they both favour a qualitative approach to the conduct of research within each of their domains, and; the early introduction of the SAP perspective was lacking precision in the language it adopted by interchanging key concepts with strategy process research.

The current researcher believes that it is this final point that created the perception that SAP does not merit the distinction or justification of being its own distinct perspective. The nascent practice perspective's inability to clearly define its key tenets, coupled with its interchanging of key concepts such as 'practices' and 'processes' is largely culpable for any lingering confusion regarding the distinctiveness of the perspective in comparison to strategy process.

# 2.9.2 Core Differences between the SAP and Strategy Process Perspectives

Having established a unique theoretical underpinning, a number of additional differences exist between the SAP and strategy process perspectives. The key distinction between each is that strategy process research tends to view strategising at a very broad or macro level (Johnson et al., 2003; Whittington, 2002), and in so doing neglects to focus upon the more micro activities and actual 'doing' of strategy (Jarzabkowski et al., 2007; Jarzabkowski and Spee, 2009; Johnson et al., 2007; Rasche and Chia, 2009; Sandberg and Dall'Alba, 2010; Splitter and Seidl, 2011; Whittington, 1996; Whittington et al., 2006). SAP research has a tendency to embrace seemingly mundane, every-day activities (Chia, 2006) such as strategy meetings or workshops (Barge, 2009; Jarzabkowski and Seidl, 2006, 2008; Johnson et al., 2010) that lead to organisational strategy formation. To quote Whittington and Cailluet (2008: 244) "the practice perspective is to go inside the process to examine intimately the kind of work that is actually being done." Strategy process research inherently studies change and strategy formulation and implementation at an organisational level at the expense of a focus on the activities of the practitioner (Van de Ven, 1992; Whittington, 1996). It is this pertinent distinction that defines the division of the SAP perspective from strategy process.

Further clarity can be brought to this distinction by again returning to Whittington's (2007) terminology of viewing strategy under the 'sociological eye', i.e. that strategy is inherently a social practice. Adopting the viewpoint of strategy being simply concerned with organisational performance is to miss so much of the very essence of strategy. Strategy is something that people do, both as individuals and groups. For strategising to take place all sorts of additional components are required, inclusive of routines and procedures, discursive elements and material aids (Jarzabkowski and Kaplan, 2015;

Kaplan and Orlikowski, 2013). As highlighted, it can occur in a formal or informal episodic manner. SAP has a much more comprehensive scope than strategy process. To quote Whittington (2007: 1584), strategy "needs the full vision of the sociological eye to grasp strategy's connections, its embeddedness, its ironies, its problems and, finally, both its changes and its continuities."

# 2.10 Challenges Associated with the Practice perspective on Strategy Research

The adoption of a practice perspective to strategy research comes with a number of challenges. At a fundamental level, engaging in research that adopts a practice perspective can be challenging due to the ambiguity and complexity surrounding the phenomena under investigation. The researcher must be tolerant of such working conditions as they engage with their host organisation(s) and the inherent contingency, multiplicity, and emergence that exists therein (Feldman and Orlikowski, 2011). A commitment to an immersion in the field is a necessity, as is an ability to work closely with practitioners and observe their everyday practices and praxis. Indeed, the obtainment of such organisational access can be an initial precluding impediment. The collection and analysis of such data can be a challenging and time-consuming endeavour, requiring diligence on the part of the researcher.

At a conceptual level, Feldman and Orlikowski (2011) identify two further challenges awaiting the prospective SAP researcher. Using the analogy of the boxes and arrows figures that are so prevalent in organisation theory, the authors stress that much of the extant theory pertaining to the organisation is focused on entities, represented in this instance by the 'boxes'. They are sufficiently meaningful as and of themselves and are labelled as such. The distinction a practice perspective engenders is a focus on the oftentimes unlabelled 'arrows', i.e. the relationships that produce outcomes (Feldman and Orlikowski, 2011). The authors explain how this can cause difficulties for readers and reviewers. They have a tendency for wishing to uncover what knowledge has been attained and which resources have been employed as opposed to how this particular knowing has been achieved or resources been utilised. This could be explained by humans having an inherent preference for dealing in those things which are easily tangible (the 'boxes' as referred to by Feldman and Orlikowski, 2011) over those things that are less so (the 'arrows').

Taking this into consideration, the obvious question to consider is why one would engage in a SAP-based study? It is the goal of the following section to answer such a question.

# 2.11 The Practicality of the SAP Perspective

The fundamental importance of the work of strategising cannot be underestimated. The time, resources, and sheer human effort that it entails are oftentimes hugely significant. It is with this in mind that Whittington (2003) prescribes six broad research questions around which research can be formed, the obtainment of the answers to which can be greatly aided through the adoption of a practice perspective. These questions are:

"Where and how is the work of strategising and organising actually done; who does this strategising and organising work; what are the skills required for this work and how are they acquired; what are the common tools and techniques of strategising and organising; how is the work of strategising and organising organised itself; and finally how are the products of strategising and organising communicated and consumed?" (Whittington, 2003: 117).

The practical importance of such questions are evident, and it is the consequent necessity of exploring this actual 'doing' of strategy that renders the SAP perspective a particularly suitable tool for answering the what, who, where and how of strategising.

Feldman and Orlikowski (2011) suggest that a practice perspective offers a further practical advantage, i.e. it has the capacity to generate findings that can be of real use to practitioners. The identification of organisational levers for enabling change can stimulate an organisation's ability to enact such practical change when required. It can also allow the organisation to reinforce those practices that are identified as being of value. These levers are neither external nor distinct from the organisation; rather, they are manifested through the every-day micro activities embedded within the organisation, during which the interactions and inputs of all relevant actors are of importance.

Vaara and Whittington (2012) delineate four ways in which the SAP perspective enriches traditional strategy research:

From a theoretical standpoint, it broadens the theoretical underpinnings of strategy research, moving beyond theories grounded in economics that have dominated the field towards sociological theories of practice. Whilst economists of the stature of Porter and Penrose are most widely cited within research centred on strategic management, earlier sections of this chapter pertaining to the theoretical aspect of the practice perspective

highlight the key contributions made by social theorists such as Bourdieu, Foucault and Giddens. Strategy research adopting a practice perspective enables the field to foster a much more holistic relationship with the social sciences, moving beyond the dominance of economics to a much richer foundation.

In an extension of the previous point, a practice perspective broadens the scope of what strategy research actually explains. If an explanation of economic performance is at the heart of traditional strategy research, SAP research examines performance across an array of different parameters, amongst which the performance of various practitioners is a common theme. In addition, outcomes of SAP research can move beyond measures of performance to encapsulate disparate themes such as the role of 'episodes' in the social practice of strategy (Jarzabkowski and Seidl, 2006, 2008), the causes of failure within organisational strategising (Elliott and Macpherson, 2009; Maitlis and Lawrence, 2003), and how organisational identity can manifest itself as a strategic practice (Oliver and Bürgi, 2005).

This broadened scope provides the foundation for practice studies to feature organisations from a much more diverse range of sectors than are typically featured in strategy research. Whilst traditional strategy research focuses largely on economic outcomes in privately-owned organisations, practice studies have encapsulated organisations from the non-profit domain (Maitlis and Lawrence, 2003), national governments (Modell, 2012), universities (Jarzabkowski and Seidl, 2006), and city administrations (Kornberger and Clegg, 2011). Such diversity allows SAP research to explore institutional contexts and not simply economic environments.

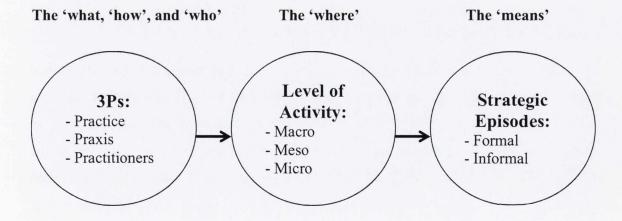
Finally, the practice perspective has initiated a substantial methodological shift. The vast majority of studies located within the strategic management realm employ quantitative methods, largely in the form of large-scale statistics-based measures. Conversely, SAP counters such an approach by predominantly deploying qualitative research methods focused on a small number of organisations. Getting close to the phenomena under investigation is essential under the practice perspective, which has resulted in interviews (Jarzabkowski and Balogun, 2009; Modell, 2012; Paroutis and Pettigrew, 2007), observations (Lavarda et al., 2010; Rasche and Chia, 2009; Splitter and Seidl, 2011), and ethnographic techniques (Kwon et al., 2014; Liu and Maitlis, 2014; Llewellyn and Spence, 2010) having been either deployed, or espoused as being suitable for the study of SAP. The study of micro, focused activities or 'episodes' has also gained traction in the form of

strategy workshops (Johnson et al., 2010) and strategy meetings (Jarzabkowski and Seidl, 2006, 2008).

# 2.12 A Preliminary SAP-based Conceptual Model

Returning to the research question and the practice of SISP by senior managers, the SAP literature armed the researcher with a range of key concepts that would assist in the subsequent review of SISP literature and the execution of fieldwork. In particular, Whittington's (2006) 3Ps of practice (the 'what'), praxis (the 'how'), and practitioner (the 'who'), Jarzabkowski and Spee's (2009) delineation of levels of activity into macro, meso, and micro domains (the 'where'), and the concept of the strategic episode (Hendry and Seidl, 2002), i.e. the 'means' by which the work of strategising is conducted, provided signposts for the collection and analysis of data. They strengthened the chosen case study methodology by adding a practice-based lens, allowing the researcher to focus upon the realised 'doing' of SISP by senior manager practitioners. These core aspects of the SAP literature are mapped in Figure 2.3, forming a preliminary conceptual model that could initially be used to assist in the conduct of a novel review of the SISP literature, before acting as a lens to aid in the focussed collection and analysis of pertinent case data.

Figure 2.3 – A Preliminary SAP-based Conceptual Model



# 2.13 Concluding Comments on the Consulted and Reviewed Literature

A range of materials was consulted for the purpose of completing this review. Through this process an intricate understanding of the field of SAP was garnered, leaving the researcher assured of the merits of this stream of literature both for the wider strategy context and the research question that is central to this study.

The compilation of this review proved to be an enlightening experience, with the researcher becoming increasingly convinced that the SAP perspective represents much more than an emergent strand of literature. Rather, it can be viewed as a world-view, a concept intimated by Sandberg and Dall'Alba (2010), applicable across a range of disparate disciplines (Whittington, 2011). Such versatility manifests itself in the researcher's own analysis of the extant literature through the breadth of research settings featured, with the SAP domain showing little bias towards or preference for a particular 'type' of environment. Novel studies featuring diverse research contexts are present; Kornberger and Clegg's (2011) study tracks the City of Sydney's strategising activities which resulted in the production of the 'Sustainable Sydney 2030' report; Lanzara's (2010) work examines how the introduction of video-recording technology impacts upon the practices of practitioners within the criminal court system in Italy; Bouty and Gomez (2009) and Gomez and Bouty's (2011) studies ground the practice perspective within the unique confines of haute cuisine; and Modell's (2012) work adopts a particular focus on the restrictive impact of management control practices upon strategy formation within the Swedish government, and how this process was mediated by external, political forces. These studies again highlight the adaptability of the practice perspective to research across a broad spectrum of settings.

The SAP perspective has emerged from a rich philosophical and theoretical background. Through the adoption of Whittington's (2006) framework and its core elements of practice, praxis and practitioners we can explore a multitude of forms of strategising. The further refinement of this perspective to incorporate the concept of the strategic 'episode' (Hendry and Seidl, 2003; Whittington, 2006) forms a robust foundation from which to embark upon the exploration of the actual work of strategising. Jarzabkowski and Spee's (2009) layering of the context under investigation into macro, meso, and micro levels adds yet further depth and richness. The reviewed literature-set is buoyant with a multitude of future research directions (Vaara and Whittington, 2012; Whittington, 2011), with the field showing signs of increased momentum and relevance in recent times.

It is armed with this established SAP perspective that the researcher will proceed to review literature pertaining to SISP in Chapter 3 and the inherent 'praxis' such activity entails. This second literature review encapsulates both the role of 'practitioners' (manifested in the form of senior managers) therein and the impact prevalent 'practices' may have on the 'work' of SISP.

# **Chapter 3 - A Strategy as Practice Perspective on the Strategic Information Systems Planning Literature**

# 3.1 Introduction: Purpose and Method

The goal of this chapter is to provide a comprehensive review of the strategic information systems planning (SISP) literature. A number of reasons exist as to why a review of the SISP literature is pertinent and of value. First and foremost, SISP is a core component of the current study. This research is investigating the practice of SISP by senior managers, thus answering enduring calls for studies into information systems (IS) strategising behaviour within organisations (Boynton and Zmud, 1987; Earl, 1993; Peppard et al., 2014; Teubner, 2013) located within a public service context (Rocheleau, 2007; Rubin, 1986). Secondly, a number of corroborating reasons for conducting such a review are found within the extant literature. An effective IS strategy is recognised as contributing to improved firm performance (Leidner et al., 2011; Ravichandran and Lertwongsatien, 2005), and as a key enabler of business strategy (Preston and Karahanna, 2006). SISP has proven a significant challenge for management (Mirchandani and Lederer, 2014a), dominating management agendas in recent decades (Teubner, 2013) and becoming integral to business positioning and processes (Stace et al., 2012). It was discovered that 87% of business leaders believe IS to be critical to their business (Chen et al., 2010), with IS strategy ranked within the top five IS concerns for management (Luftman and Ben-Zvi, 2011).

The current review has been conducted with a wholly unique attribute; it has been undertaken through a SAP lens (Jarzabkowski and Spee, 2009; Whittington, 2006). The fundamental pillars of the practice lens, namely practices, praxis, and practitioners have been used as a framework by which the literature has been distilled. Specifically, Jarzabkowski and Spee's (2009) classification system has been adopted to enable a more systematic approach to reviewing the extant literature. Whilst encapsulating the aforementioned 3P's of practices, praxis, and practitioners, it also allows for the recording of the specific level at which the observed praxis transpired, the outcomes that may be attributed to each individual study, and pertinent data relating to generic facets of the literature such as a brief synopsis of each paper's content, the specific author and year, the

study's placement within the espoused typology, and finally the particulars of the methodology employed.

The result of such an approach is a novel review of the SISP literature, capturing the core components of the nascent SAP field within the SISP domain. Such value is heightened by the current study's adoption of a SAP lens as a core element of its methodological approach to enquiry into the practice of SISP by senior managers. To add further structure and a chronological dimension to this review, the literature will be segregated into four distinct eras: the 1970s & 1980s, the 1990s, the 2000s, and the 2010s. Sidorova et al. (2008) posit that such segmentation allows for the particular research topics (or in this particular instance practices) to pass through a significant part of their life cycle. Merali et al. (2012: 126) defer to the argument posed by Sidorova et al. (2008) that the "intellectual core and identity construction of the discipline can be revealed by aggregating individual research papers at a higher semantic level". Such an approach was deemed pertinent for this particular review of the SISP literature.

In terms of a methodology for compiling relevant literature, the researcher attempted to employ a systematic method to the conduct of the literature search (Grant and Booth, 2009) which is uniform to that employed in Chapter 2, thus aiding its rigour (Paré et al., 2015) and reducing the possibility of researcher bias (Tranfield et al., 2003). A comparable approach can be found in the work of Karpovsky and Galliers (2015), with the authors adopting a practice perspective for their rigorous review of the IT/IS-business alignment literature. In a similar vein, the approach employed by Merali et al. (2012) was used as a reference point due to the similarity in source materials used and the meticulousness by which the review was conducted. Keyword searches (inclusive of 'Strategic Information Systems Planning', 'ISSP', 'IS Strategy', 'IS Planning', 'Information Systems Strategy', 'Strategic Information Systems', and 'IT Strategy') were conducted across a variety of online academic search engines, with Ebsco being employed as the tool through which the majority of academic materials were located. The search resulted in a literature set comprised of 242 papers spanning the timeframe 1971-2015.

Encouragement as to the academic merit of the compiled literature set was gleaned from a recent publication as to the state of the IS strategy domain (Teubner, 2013). Similar characteristics are evident across both studies, inclusive of; the 1990s representing the peak of research activity followed by a marked decline in the 2000s; a recognition that the practice of SISP and SISP research have diverged as evidenced by the conspicuous gaps in both research endeavors and the methods by which the extant research has been conducted,

and; a corresponding assertion as to the merit of returning to practice and the inherent value that a SAP lens can bring to the SISP domain. With the SAP lens being primarily concerned with the 'doing' of strategy, the principal focus of this review is on empirical studies published within academic journals. Conceptual/prescriptive works were also used as a secondary source of data, along with a selection of books and practitioner-focused publications. In addition to this core literature, studies from the SAP domain, literature from additional streams within the IS domain, and relevant methodological papers are cited where deemed appropriate.

# 3.2 Chapter Road-map

The current review adopts the following structure; firstly, the reviewed literature and basic terminology employed throughout the chapter is detailed in sections 3.3 and 3.4 so as to clarify the meaning of the key concepts around which the review is built. The foundation of this chapter is the framework devised by Jarzabkowski and Spee (2009) located in section 3.5. Thus, the bulk of the chapter concerns the detailing of the framework's components in the form of the methodological approaches used (section 3.6), practices (section 3.7), praxis (section 3.8), practitioners (section 3.8), outcomes (section 3.9), and the location of the reviewed literature in the authors' nine-box typology. Practices are categorised as individual, group, organisational, or institutional practices. Praxis is measured at micro, meso, and macro levels. Practitioners are segregated as to whether they are individual intra-organisational actors, aggregate intra-organisational actors, or aggregate extra-organisational actors. Outcomes follow the same categorisation as practices, namely in the form of individual, group, organisational, or institutional outcomes. To bolster the pedagogical merit of the review, the literature is distilled into four distinct time periods.

From this in-depth critique of the SISP literature, exposed gaps within the empirical work are elucidated in section 3.10, coalescing around three broad themes. This is followed by an agenda for future research in section 3.11, and a proposal as to the key role that the SAP perspective may play in such an agenda. Finally, a conceptual model derived from the reviewed SISP literature is detailed in section 3.12, before concluding remarks are expressed on the presented findings in section 3.13. Table 3.1 provides an overview of the themes from the undertaken literature review and their associated key sources.

Table 3.1 – SISP Literature Themes and Associated Key Sources

Theme	Key Sources		
The Reviewed Literature Defined	• Ward and Peppard (2002)		
	• Chen et al. (2010)		
	• Teubner (2013)		
Terminology	• Schryen (2013)		
	• Peppard et al. (2014)		
	• ATIS Telecom Glossary (2007)		
Methodological Approaches Found Within the SISP Literature	• Hughes (2015)		
SISP Practices	• Individual - Enns et al. (2003)		
	• Group - Mithas et al. (2011)		
	• Organisational - Huang et al. (2014)		
	• Institutional - N/A		
SISP Praxis	<ul> <li>Jarzabkowski and Spee (2009)</li> </ul>		
	• Meso: Domain B - Beath (1991)		
	• Meso: Domain E - Basu et al. (2002)		
SISP Practitioners	<ul> <li>Jarzabkowski and Spee (2009)</li> </ul>		
	• Individual Actor - Peppard (2010)		
	Aggregate Actor - Dutta (1996)		
SISP Outcomes	• Individual - Lederer and Mendelow (1988)		
	• Group - Henfridsson and Lind (2014)		
	• Organisational - Sabherwal and Kirs (1994)		
	• Institutional - Luftman and Ben-Zvi (2011)		
Gaps in the Reviewed Literature	• Hughes (2015)		
A Future Research Agenda	• Hughes (2015)		

# 3.3 The Reviewed Literature Defined

Whilst there exists evident entanglement across the various streams of literature as it pertains to IS strategy at large, a delineation is provided by Chen et al. (2010) through their categorisation of three closely related avenues of research. They include strategic information systems planning (SISP) (Brown, 2004; Merali et al. 2012; Teubner, 2013), the alignment of business strategies and IS strategies (Chan and Reich, 2007; Henderson and Venkatraman, 1993; Kearns and Lederer, 2000), and the use of IS for competitive advantage (Eng and Luff, 2011; Okpattah et al., 2014; Piccoli and Ives, 2005; Powell and Dent-Micallef, 1997). As alluded to by the authors, the boundaries between each literature set are blurred, and it was common when compiling the current literature collection pertaining to SISP to encounter papers with a focus upon the core topics of either of the two associated literature sets, i.e. IS strategic alignment and the use of IS for competitive advantage.

Whilst a large body of the reviewed literature focuses upon SISP tools, the practitioners involved in SISP, and organisational traits conducive to effective SISP, so too does a significant portion of literature pertain to planning for IS strategic alignment or planning for the use of IS to obtain competitive advantage. This is not surprising as each of these dimensions can be viewed as core SISP components and the complete disaggregation of each of these three streams of literature would prove an unrealistic goal due to the inherent commonality between each of them (Chen et al., 2010). Such a finding is supported by Earl (1989; 1993), who recommends that SISP targets the alignment of investment in IS with business goals and the exploitation of IS for competitive advantage. Lederer and Sethi's (1996: 35) definition of SISP as being "the process of identifying a portfolio of computer-based applications that will assist an organisation in executing its business plans and realising its business goals" also corroborates this finding.

When referring to SISP, i.e. the predominant focus of the literature set reviewed for this chapter, the author is referring to the planning or formulation stage of IS strategising. As is evident in both this and the following section, many of the key concepts found within the IS domain possess a litany of interchangeable terms which essentially describe the same activity. SISP is no exception in this regard. The term SISP was adopted for two reasons; firstly, it is commonly employed across the reviewed literature (Brown, 2004; Chen et al., 2010; Merali et al., 2012; Teubner, 2013), and secondly, it encapsulates two key elements fundamental to the current study, i.e. the strategic nature of the IS, and the planning phase (Teubner, 2013) which is the particular stage of strategising under investigation.

The remit of SISP research is elucidated by Segars et al. (1998; quoted in Brown, 2004: 20), who define its focus as being "on the strategic to tactical level" and that "in terms of scope, it is organisational; in perspective of top management, in terms of level of abstraction, more conceptual than physical, and in time frame, medium to long". Ward and Peppard (2002: 118) proffer a similar definition, viewing it as "thinking strategically and planning for the effective long-term management and optimal impact of information in all its forms: information systems (IS) and information technology (IT)..." The contrast in approaches and mind-sets towards IS at large is exemplified in the predominantly conceptual work of Earl and Feeny (1994; 2000) and Bensaou and Earl (1998). Earl and Feeny (1994) first contrast organisations that view IS as a liability with those that perceive it to be an asset. The authors then progress their research (Earl and Feeny, 2000) to focus upon the varying 'IT Creeds' of CEOs and the requirement for the modern-day CEO to

become IT 'Believers'. In Bensaou and Earl (1998), the authors examine Eastern and Western management philosophies on the role of IS. The authors label the Western approach as being overly complicated, suggesting that learning may be attainable through greater study of Japanese thinking. SISP is more complex than an exercise during which the technical merits of an array of alternative solutions are evaluated (Galliers, 2006). Rather, the social dimension of the process (Avgerou and McGrath, 2007; Cecez-Kecmanovic et al., 2014; Galliers, 1991) is of particular importance due to the disparate organisational backgrounds of those involved. The practice of SISP is iterative and dynamic, with assumptions needing to be tested and viewpoints sought from internal and external to the organisation (Galliers, 2004, 2006, 2011). This lends itself to examination under the 'sociological eye' (Whittington, 2007) of a SAP-based perspective.

The crux of these assertions is that SISP, whilst possessing pervasive boundaries, nevertheless has an inherent identity. As this chapter unfolds, it will become evident that the reviewed literature possesses the outlined characteristics, with a focus upon the strategic, a proclivity towards IS strategising at an organisational level and the recurrent presence of senior managers therein.

# 3.4 Terminology

"The academic field of IS research is terminologically pervaded with syntactically similar notions" (Schryen, 2013), with terminology proving inconsistent over time (Peppard et al., 2014). For the purpose of presenting a more legible, parsimonious, and uniform template for this chapter, I will set forth my approach to dealing with the plethora of terminology so prevalent within the IS domain.

The distinction between IS strategy and IT strategy is of particular importance for this particular study. IS strategy is identified as being a business management issue, i.e. concerned with the 'what' of business needs, and thus comfortably lends itself to focusing upon senior managers' role therein due to it being a socio-technical construct (Galliers, 2004, 2006, 2011). Conversely, IT strategy lies mostly within the domain of the IT function, concerned with technological alternatives, i.e. the 'how' to support business needs (Earl, 1989; Galliers, 1999). Similar to Schryen (2013), I adopt both the term and the holistic view of IS as described in the ATIS Telecom Glossary (2007, Option 3 cited in Schryen, 2013): "The entire infrastructure, organization, personnel, and components for

the collection, processing, storage, transmission, display, dissemination, and disposition of information."

Other key terms which are employed throughout the review include 'senior managers' when referring to the cohort of organisational employees comprised of the CEO and their heads of functions, and the Chief Information Officer or 'CIO' when describing the top ranked IS employee within an organisation. Throughout the decades a litany of disparate titles has been bestowed upon these fundamental subjects of the study. Strategic information systems planning (SISP) is cited at various junctures as IS strategy-making, IS strategising, information systems strategic planning (ISSP), information systems strategy (ISS), or strategic information systems (SIS) (Merali et al., 2012; Ward, 2012).

# 3.5 An Overview of the Adopted Framework

Jarzabkowski and Spee's (2009) framework has been adopted for the current study. It was selected due to its inherent suitability and relative ease of use for reviewing the SISP literature. Some adjustments have been made, principally in regard to the categorisation of practices and outcomes. The chosen categories, whilst largely featured in Jarzabkowski and Spee's (2009) framework, aren't as exhaustive due to the current literature's focus on SISP rather than SAP research as featured in the original incarnation of this framework. Therefore, the initial list of categories was deemed too nuanced for the classification of the extant SISP literature. In addition, it was decided that the capturing of a greater level of detail of the methodologies employed would be of value. Hence, the empirical research is classified into case study (single/multiple), survey, quantitative approach (other than survey), qualitative approach (other than case study) or mixed methods. Practices are categorised into individual, group, organisational, and institutional practices. Praxis is captured at three levels: micro, meso, and macro. Practitioners are categorised based on two main assumptions; the first is whether the practitioner is an individual, e.g. the CIO, or an aggregate actor, e.g. senior managers; and secondly, whether the practitioner is internal to the organisation in the form of an organisational employee, or external to the organisation, e.g. a hired consultant. Finally, outcomes follow the same categorisation as practices, namely in the form of individual, group, organisational, and institutional outcomes. Each of these dimensions will be explored in much greater depth in the subsequent sections. Whilst the vast majority of the classified SISP studies are explicitly referenced, the complete list is located in Appendix II. A macro-level view of the reviewed literature can be found in Table 3.2.

Table 3.2 - A Macro-level View of the Consulted and Reviewed Literature

Timeframe	1970s & 1980s	1990s	2000s	2010s	Total
<b>Total Papers</b>	36	81	73	52	242
Conceptual Papers	15	19	28	27	89
Empirical Papers	21	62	45	25	153
Breakdown	E-18	E-57	E-43	E-20	E-138
	B-3	B-5	B-2	B-5	B-15
Methodologic al Approach	Case study (single)-8	Case study (single)-12	Case study (single)-5	Case study (single)-6	Case study (single)-31
	Case study (multiple)-4	Case study (multiple)-9	Case study (multiple)-7	Case study (multiple)-4	Case study (multiple)-24
	Survey-6	Survey-25	Survey-21	Survey-12	Survey-64
	Quantitative approach-0	Quantitative approach-2	Quantitative approach-4	Quantitative approach-1	Quantitative approach-7
	Qualitative approach-3	Qualitative approach-5	Qualitative approach-2	Qualitative approach-2	Qualitative approach-12
	Mixed methods-	Mixed methods-	Mixed methods-	Mixed methods-	Mixed methods
Practice	Individual-2	Individual-6	Individual-7	Individual-5	Individual-20
	Group-6	Group-18	Group-9	Group-3	Group-36
	Organisational-	Organisational- 48	Organisational- 37	Organisational- 18	Organisational- 119
	Institutional-0	Institutional-0	Institutional-0	Institutional-0	Institutional-0
Outcomes	Individual-2	Individual-7	Individual-4	Individual-5	Individual-18
	Group-2	Group-5	Group-5	Group-3	Group-15
	Organisational-	Organisational- 56	Organisational- 40	Organisational- 20	Organisational- 134
	Institutional-1	Institutional-2	Institutional-1	Institutional-1	Institutional-5

<sup>\*</sup> The decision was taken to combine both the 1970s and 1980s timeframes due to the paucity of empirical research conducted in the 1970s and the congruence in research focus across both decades.

# 3.6 Methodological Approaches found within the SISP Literature

Whilst a more in-depth critique of the methodological approaches found within the IS domain is located within Chapter 4, a brief synopsis of the reviewed SISP literature now follows. The examination of the featured 153 empirical studies from a methodological

perspective yields some interesting findings. Whilst a number of reviews of IS research at large (Avison et al., 2008; Chen and Hirschheim, 2004; Hirschheim and Klein, 2012; Orlikowski and Baroudi, 1991; Palvia et al., 2007; Vessey et al., 2002; Williams et al., 2009) have produced varying results due to the specific literature-sets under review, i.e. journal specific (Palvia et al., 2007; Avison et al., 2008) or region specific (Chen and Hirschheim, 2004), the current review of research focused upon SISP produced encouraging results. It would appear that earlier calls for a more varied approach to IS research (Galliers, 1993; Mingers, 2001; Orlikowski and Baroudi, 1991) have been somewhat answered, with the dominance of the positivist, survey-based approach being somewhat eschewed within the SISP domain. This is perhaps understandable due to the nature of the focus of investigation and the inherent difficulty associated with quantifying such a phenomenon. Thus, it lends itself to exploratory research of a qualitative nature, and hence the prevalence of case-based research is logical. The findings are also in tandem with the recent work of Hirschheim and Klein (2012) which also found a growing acceptance within the IS research community of interpretive research approaches using a variety of qualitative methods.

# 3.6.1 Breakdown of Methodological Approaches

Within the reviewed literature it is the survey approach that proved most prevalent, accounting for 64 studies. The case study approach with 55 studies was eclipsed into second position. A closer inspection reveals that single case (31) out-matched a multiple case study design (24). Mixed methods proved to be the third most frequently employed methodological approach, accounting for 15 studies. Finally, research employing either some additional form of qualitative approach (12) such as focus groups or interviewing (Lederer and Mendelow, 1989), or an alternative quantitative method (7) to surveys such as statistical analysis (Barua, 1991) complete the literature set.

## 3.6.2 Methodologies Employed Across the Decades

If we view the methodological approaches employed across the decades, we can trace a subtle, yet notable pattern that mirrors the focus upon particular types of practices across the same timeframe. During the 1970s & 1980s we can see a distinct preference amongst researchers for case work/qualitative studies versus survey and other quantitative approaches (15 vs. 6). However, during the most prolific decade (the 1990s) for research into SISP, we see this disparity marginally overturned in favour of survey/quantitative approaches (27 vs. 26). The role reversal completes itself during the 2000s with surveys

and other quantitative techniques assuming a position of dominance within the domain versus case work and other qualitative approaches (25 vs. 14). Finally, in the current decade to date quantitative studies are still in the majority, although there has been a lessening in the numerical gap (13 vs. 12).

# 3.6.3 Concluding Comments on Methodological Approaches

Why is there an apparent lack of stability across the decades in the methodological approaches employed by SISP researchers? Taking a macro-level viewpoint of the reviewed literature enables informed assumptions to be made. The earlier studies within the domain could be classified as being exploratory in nature, with basic assertions, frameworks and guidelines forming the predominant research quests. Such work naturally lends itself to qualitative approaches such as case-work, and this is evidenced in the studies found within the 1970s & 1980s (Henderson and Sifonis, 1988; Lyles, 1979; McFarlan, 1971; Pyburn, 1983; Shank et al., 1985). As the domain of enquiry established its theoretical underpinnings, the 1990s heralded a marked increase in the number of studies employing quantitative methods, up to the 2000s when quantitative methods reached the point of far outnumbering qualitative studies.

This storyline has some inherent logic, as having established some empirical foundations through exploratory work, a phase of 'testing' these nascent assumptions through quantitative research is a natural progression for the domain. However, as is also evident in the pattern of SISP practices that have been researched, we witness a return to the fundamentals. Researchers are once again exploring the practice of SISP through qualitative techniques, perhaps signalling a lack of satisfaction across academia and practice in the previously established prescriptions. Going deeper to uncover which micro activities actually comprise SISP is an inherent capability of a SAP lens, adding credence to the adoption of such an approach in the current landscape of the SISP literature (Teubner, 2013).

#### 3.7 The Classification of Practice

Jarzabkowski and Spee's (2009) classification of various practices have been adopted and simplified so that they are more readily adaptable to the SISP literature. The practices as delineated by the authors were designed for SAP-based studies. As a consequence, the specificity of particular categories would be largely inappropriate for a literature set which does not feature a SAP focus. Thus, four broad categories from Jarzabkowski and Spee's

(2009) work have been decided upon, into which each empirical paper in the SISP domain can be readily categorised. The categories are: individual practices, group practices, organisational practices, and institutional practices. The categorisation of practices proved to be a challenging task, a fact echoed by Jarzabkowski and Spee (2009). Whilst practices are oftentimes bundled, interrelated activities (Jarzabkowski and Spee, 2009), their segregation into distinct practices is oftentimes difficult. Thus, if more than a single practice was found to occupy a core element of a reviewed study, each practice was recorded. A simple example of the need to include multiple practices can be found in Basu et al.'s (2002) examination of the impact of organisational commitment, senior management involvement and team involvement in SISP. There exist two obvious practices under investigation by this study: group practices in the form of senior management involvement in SISP, and organisational practices in the form of organisational commitment to SISP. The selection of just a single practice for inclusion in the devised table was deemed to be a misrepresentation of the reviewed literature. Hence, following the approach of Jarzabkowski and Spee (2009), multiple practices were incorporated when appropriate. An overview of the practices identified in the researcher's review of the SISP literature can be found in Table 3.3.

Table 3.3 - Classification of Practices across the Decades

Timeframe	1970s & 1980s	1990s	2000s	2010s	Total
Practice Individual-2  Group-6  Organisational-16  Institutional-0	Individual-2	Individual-6	Individual-7	Individual-5	Individual-20
	Group-6	Group-18	Group-9	Group-3	Group-36
	Organisational-	Organisational- 48	Organisational- 37	Organisational- 18	Organisational-119
	Institutional-0	Institutional-0	Institutional-0	Institutional-0	Institutional-0

Individual practices refer to practices at a personal level, and thus focuses upon a single practitioner. Within the SISP literature, this can take the form of the CEO, the CIO, or another stakeholder in the SISP process. Group practices refer to practices that target the actions of groups, with a typical example being senior managers. Organisational practices do not pertain specifically to any individual or group, but rather are norms of behaviour encompassed within an actual framework of SISP such as particular IS strategising templates that have been adopted or are inherent throughout the wider organisation. An example could be an organisation's practice of positioning its CIO within the upper

echelons of its management hierarchy. This is an ingrained organisational way of 'doing' something which impacts upon its SISP activity. Finally, institutional practices refer to those activities beyond the organisational level, instead referring to modes of SISP that can be associated with particular sectors or industries.

The concept of 'practice' is now examined through the defined periods of the 1970s & 1980s, the 1990s, the 2000s, and the 2010s. The evolution of each category of practice will be traced across the decades. The section closes with conclusions based upon the resultant findings. The description of various practices will frequently make reference to the praxis, i.e. the specific activity observed within the reviewed empirical study, the practitioners who are fulfilling their role in carrying out the particular practice through their own praxis, and finally the outcome as to what was actually revealed by the study's findings.

#### 3.7.1 Individual Practices

1970s & 1980s: The two empirical studies featuring practices at the individual level examine the relationship of the CIO with senior managers. Specifically, these papers deal with issues surrounding practices employed by CIOs to gain an understanding of senior management's objectives (Lederer and Mendelow, 1987) and the practices used by CIOs to sell their vision for the IS department to senior managers (Lederer and Mendelow, 1988).

1990s: Six studies have a significant focus upon practices at the individual level (Applegate & Elam, 1992; Beath, 1991; Jarvenpaa & Ives, 1990; King and Teo, 1997; Lederer and Sethi, 1996; Watson, 1990). Jarvenpaa and Ives study the views of CEOs on IS over time and across industries based upon an anlalysis of their letters to shareholders. Watson (1990) focusses upon influences on the Head of IS's perceptions of key issues and relates them to their scanning behaviour and relationship with their CEO. Beath's (1991) work concentrates on the role and activities of the IS champion. These champions are managers who passionately advocate the merits of IS within the organisation. The author charts the IS champion's activities in garnering support and selling their vision. Applegate and Elam (1992) explore the role of the CIO, and in particular highlight the CIO's need to acquire organisational knowledge which is very much linked to the organisational practices of the recruitment and poisitioning of the CIO. The CIO is also the focus of the work of Teo and King (1997), with the central practice under investigation being the CIO's role in influencing strategic alignment. Prescriptions for planners of strategic IS represents the core thesis of Lederer and Sethi's (1996) paper, with an adherence to the espoused prescriptions found to bestow a greater chance of producing a successful IS strategy.

2000s: The individual practices examined during the 2000s (Cegielski et al., 2005; Enns et al., 2003; Preston and Karahanna, 2006, 2009a, 2009b; Roepke et al., 2000; Teubner, 2007) concern just one organisational employee in the form of the CIO. The coming together of both the focus on senior managers as a group and the CIO as an individual may point to a recognition within the field of the criticality of these two particular entities above all others. Similar to Preston and Karahanna's (2009a) work on senior managers and the concept of a shared understanding with the CIO, Enns et al. (2003) examine the CIO's lateral influencing behaviours in order to build support for and gain peer commitment to IS strategic initiatives. A somewhat counter viewpoint of the CIO is provided in Teubner's (2007) case study of SISP in a financial services organisation. The author found a rather contradictory role to that espoused in the wider academic literature, i.e. that of the CIO being an equal to their fellow executives and playing a key role in wider organisational strategising. Rather, in this particular instance the CIO viewed themselves as the leader of a support function to the organisation and not as a core component of wider organisational innovation. Finally, Roepke et al. (2000) focus on IS leadership, and the requirement for the CIO to be able to both develop and leverage human capital on account of the increasingly strategic nature of IS.

2010s: Continuing from the 2000s, four of the five papers specifically focused upon individual practices again chose the CIO as the subject under investigation (Cetindamar and Pala, 2011; Luftman and Derksen, 2014; Mirchandani and Lederer, 2014a; Peppard, 2010). Peppard (2010) examines how the true potential of the CIO may be unlocked, with particular individual practices of influence being expectation management and educational practices for senior managers. Cetindamar and Pala (2011) link the roles of the CIO to organisational performance. Whether it's the co-ordination of IS across business functions or the representation of IS within the senior management team, the fulfilment of such roles were found to improve firm performance. Luftman and Derksen (2014) present the findings of a comprehensive survey of IS executives, signalling a myriad of practices undertaken by CIOs. The findings assert that the top IS concern identified by respondents is the practice of aligning IS with the business. Mirchandani and Lederer (2014a) examined the effect of autonomy and procedural justice upon CIOs and the effectiveness of subsequent SISP activity. Finally, Stein et al. (2013) explore the role of IS artefacts in professional identity construction for individual back office workers at a Big 4 acounting firm.

## 3.7.2 Group Practices

1970s & 1980s: Group practices investigated (Brancheau and Wetherbe, 1987; Lederer and Mendelow, 1988; Lederer and Sethi, 1988; McFarlan, 1971; Raghunathan and Raghunathan, 1988, 1989a) include problems encountered by IS planning groups (McFarlan, 1971), an evaluation of the effect of the IS steering committee (Raghunathan and Raghunathan, 1989a), senior management's supporting practices when both planning and implementing strategic IS plans (Raghunathan and Raghunathan, 1988; Lederer and Sethi, 1988) and aligning business and IS plans (Lederer and Mendelow, 1988), and the identification of key issues for IS managers (Brancheau and Wetherbe, 1987).

1990s: Similar to organisational practices, group practices saw an exponential increase in their prevalence during the 1990s. The majority of this work features some aspect of the role of senior managers in SISP from the perspective of their support or commitment to an IS strategic initiative (Apte et al., 1990; Bacon, 1991; Byrd et al., 1995; Dutta, 1996; Earl, 1993; Hasan and Lampitsi, 1995; King and Teo, 1996; Lacity et al., 1997; McKenney et al., 1997; Mentzas, 1997; Wexelblat and Srinivasan, 1999). It could be deduced that this is indeed a core facet for IS strategising based upon the body of empirical studies which focus on this dimension of SISP activity. The support can manifest itself through senior management's need to 'sell' IS strategies to organisational stakeholders and manage user expectations (Bacon, 1991), their guidance throughout the SISP process (King and Teo, 1996), their general leadership role (McKenney et al., 1997), and their allocation of the necessary resources to IS strategising in addition to providing education and motivation (Wexelblat and Srinivasan, 1999). Further studies focus upon various dimensions of SISP such as strategic alignment and senior managers' role therein (Dutta, 1996), or factors which may influence the role of senior managers during SISP activities (Hasan and Lampitsi, 1995).

The additional group to feature prominently within this thread of research explores the role of IS managers during SISP activities (Currie and Willcocks, 1996; Lacity and Hirschheim, 1995; Lederer and Sethi, 1992; Sabherwal and King, 1995; Sabherwal and Kirs, 1994). Sabherwal and Kirs (1994) investigate how IS management sophistication facilitates alignment and perceived IS success. Lacity and Hirschheim (1995) explore IS managers' influencing practices in relation to organisational stakeholders. The work of Sabherwal and King (1995) focuses upon strategic IS decision-making practices on the part of IS managers, detailing five types; planned, provincial, incremental, fluid and political. Lederer and Sethi (1992) identify general difficulties associated with IS

strategising, whilst Currie and Willcocks (1996) explore how IS managers and business managers come to agreement on the strategic and operational aims of the project.

2000s: Group practices located in studies published during the 2000s were primarily located within the remit of senior management (Basu et al., 2002; Pita et al., 2009; Preston and Karahanna, 2009a) and above (Stiles, 2001). The work of Basu et al. (2002) and Pita et al. (2009) concentrates on senior management's participation in SISP. The key finding of both papers is that senior management involvement in IS strategising has a positive effect on the achievement of objectives (Basu, 2002). A more specific aspect of SISP in the form of strategic alignment is the focus of Preston and Karahanna's (2009a) work. Again, the authors find that senior management involvement is crucial, specifically investigating the notion of a shared understanding between senior managers and the CIO as an antecedent for achieving strategic alignment. Finally, in going a step beyond senior managers and examining the role of the Board on strategising at a fundamental level, Stiles (2001) details the methods by which Boards influence the boundaries of strategic action, but acknowledges the relatively limited role of the Board in SISP.

2010s: Mithas et al.'s (2011) work involving the group practices of senior managers illuminates the benefits of the senior management group's development of an IS infrastructure and information management capability, linking such practices to improved organisational performance. Leidner and Milovich's (2014) work on the role of middle managers highlights their criticality to the implementation of IS strategies, with their involvement and awareness dependent on the underlying IS strategy, i.e. whether it is either innovative or conservative. The final study that incorporates group practices is that of Henfridsson and Lind (2014). The authors explore sub-communities' ability to bring together disparate actors and contribute to emergent IS strategy.

# 3.7.3 Organisational Practices

1970s & 1980s: The empirical studies from the 1970s to feature organisational practices are primarily concerned with the structuring of SISP, effectively portraying initial attempts to impose some order onto an activity of growing organisational importance. Specifically, McFarlan (1971) introduces formative notions of the concept of strategic alignment. Over time, strategic alignment has formed a key research agenda for the domain. A much more current definition posits IS-business strategic alignment as being "the congruence between an organisation's business strategy and IS strategy" (Preston and Karahanna, 2009b: 1). It is often cited as being a key tenet of deriving the maximum benefit from IS, and as a critical management issue (Brown and Magill, 1994). In

particular, McFarlan (1971) identifies practices concerned with sharing the strategising expertise of the organisational planning department with its IS counterpart, and a sharing of knowledge and departmental goals across the organisation. The result of such practices are espoused to be improved communication and an ability to develop an effective SISP process, points echoed by King's (1978) conceptual work. The work of Henderson and West (1979) and Lyles (1979) examine organisational practices involving the creation of teams in order to generate critical IS needs and make decisions (Henderson and West, 1979), and to assist in the operationalisation of long range IS strategising (Lyles, 1979).

Of the empirical studies from the 1980s, the importance of the organisational ranking of the CIO in regard to their ability to operate effectively is stressed (Raghunathan and Raghunathan, 1989b; Pyburn, 1983). Selig (1982) investigates the establishment of an organisational review of IS strategies. There is an expansion in the tools and frameworks being adopted by the SISP domain. In particular, the Critical Success Factor (CSF) methodology features prominently (Boynton and Zmud, 1984; Shank et al. 1985; Henderson et al. 1987). Developed by Rockart (1979), the method "is a procedure that attempts to make explicit those few key areas that dictate mangerial or organisational success" (Boynton and Zmud, 1984: 17). The practice of adopting the CSF method was found to engender senior management buy-in, largely due to its simplicity (Boynton and Zmud, 1984; Shank et al. 1985). This is in itself a hugely important finding, as senior management support for IS initiatives is often cited as being crucial to their ultimate success (Ragu-Nathan et al., 2004; Thong et al., 1996; Young and Jordan, 2008). In addition, various other practices or tools are explored in the empirical studies pertaining to organisational practices in the 1980s. IBM's Business Systems Planning (Highsmith, 1981; Lederer and Sethi, 1988), the customer resource life cycle model and Porter's Competitive Forces (Ives and Learmonth, 1984), Strategic Systems Planning (SSP) and Information Engineering (IE) (Lederer and Sethi, 1988), metrics for the actual measurement of IS performance within the organisation (Singleton et al., 1988), and a five phase planning process for IS (Rackoff et al., 1985) are included. What this tells us is that researchers in the field were attempting to either adopt or develop various frameworks that could be used to embellish some form of structure onto the practice of SISP.

Strategic alignment is again present in the literature (Pyburn, 1983; Lederer and Mendelow, 1989). Due to the increasing complexity of the IS function, the difficulty and criticality of achieving a fit or congruence across the organisational and IS plans is heightened. The centrality of senior managers to the practice of alignment is apparent both

in their style of decision-making (Pyburn, 1983) and in the positive correlation between the establishment of a senior management mandate for the coordination of business and IS plans and the ultimate achievement of such a goal (Lederer and Mendelow, 1989).

1990s: Applegate and Elam (1992) and Li and Ye (1999) explore the positioning of the CIO within the organisational hierarchy, detailing the criticality of the CIO having a strong relationship with their CEO. Indeed, the criticality of a supportive CEO is stressed in the largely conceptual work of Earl and Feeny (1994), with the authors highlighting that a CIO is dependant upon their CEO (preferably an IT 'Believer') to allow them to assume a value-adding position within the organisation. An additional thread of research looks at practices concerning the precise organisational role afforded to IS (Avison et al., 1999; Bacon, 1991; Burn, 1993; Kettinger et al., 1994; Premkumar and King, 1992, 1994). These studies explore how an organisation decides to use it's IS function (Avison et al., 1999; Premkumar and King 1992), its capital or resource allocation strategy for the IS function (Kettinger et al., 1994; Premkumar and King, 1994), and how varying organisational configurations or IS maturity levels can impact upon the strategic use of IS within the organisation. The work of Willcocks and Smith (1995) and Currie and Willcocks (1996) examine Business Process Reengineering (BPR) enabled through IS, thus highlighting the increasingly pervasive nature of IS over time. Organisational tools for measuring the actual realised IS strategy is the focus of Chan et al.'s (1998) work, whilst Segars and Grover (1998) engage in a similar study in their pursuit of measuring the realised benefits of SISP. Organisational change management practices are explored by Clark et al. (1997), with the organisational restructuring practices of an IS department due to client demands studied by Sutherland and Remenyi (1995). Andreu and Ciborra (1996) look at the role for IS in facilitating organisational learning and core capability development.

A swathe of studies focus and expand upon a number of the practices found in the earlier literature. Specifically, strategic alignment practices feature prominently across the decade (Chan et al., 1997; Floyd and Wooldridge, 1990; King and Teo, 1997; McKenney et al., 1997; Teo and King, 1997; Teo and Ang, 1999; Teo and King, 1996; Zviran, 1990). Zviran's (1990) work empirically investigates the relationship between organisational objectives and IS objectives, discovering a correspondence between both sets. Floyd and Wooldridge (1990) attempt to establish a link between the achievement of alignment and financial performance, with Chan's (1997) work following a similar path in deducing that strategic alignment is an appropriate measure for ascertaining IS effectiveness. The impact of integrating business and IS plans is assessed by Teo and King (1996), with the practice

of alignment validated by the research findings, i.e. it was found to positively impact upon firm performance and reduce perceived IS problems. The authors also produced additional work on the topic of alignment, concerning its stages or evolutionary nature (Teo and King, 1997). McKenney et al.'s (1997) work encompasses a longitudinal study of the Bank of America and the crucial role of IS in an alignment capacity throughout the organisation's tumultuous history.

Similar to the 1970s & 1980s, there exisits a strong body of research devoted to IS strategising tools or frameworks to assist in the practice of SISP. This could be viewed as an indication that despite the growing stature of the SISP domain, its practitioners were still in need of guidance as to the very practice of SISP itself. A reusability-based strategy is brought to life through the experiences of a bank (Apte et al., 1990), the identification of IS opportunities are assisted through the use of two established strategic management models in the form of Porter's Value Chain and Wiseman's Strategic Thrusts (Bergeron et al., 1991), the CSF methodology makes a further appearance in Cerpa and Verner's (1998) work, whilst a litany of additional approaches, tools, profiles, and recommendations are found across the literature concerning the process of IS strategising and particular practices employed therein (Bacon, 1992; Doherty et al., 1999; Earl, 1993; Lacity et al., 1997; Min et al., 1999; Segars and Grover, 1999; Smits and Poel, 1996).

The final key strand of practices located within the organisational practices category entail those practices concerned with the use of IS for competitive advantage or financial performance. This signals an identification from within the domain of the possibility for a much more sophisticated, nuanced, and advantageous role for IS. It points to a shift in the organisational perception of IS, as having moved from a mere support function in its infancy, to maturing into a source of realised competitive advantage and financial gain. Kivijärvi and Saarinen's (1995) study reveals that investment in IS assures no guarantee for improved financial performance in the short term, but in the longer term with its resultant maturing of the organisation's IS it was found to provide a positive correlation. Specifically, studies taking a sectoral approach examine the use of IS for competitive advantage within the healthcare industry (Fuller-Love and Cooper, 1996; Kim and Michelman, 1990), the retail industry (Powell and Dent-Micallef, 1997) and the financial services industry (Barua et al., 1991; Floyd and Wooldridge, 1990).

The featured papers conclude with Wilson's (1991) and Gottschalk's (1999) work linking the practices of SISP with the actual implementation of formalised plans. Wilson's (1991) study conveys the barriers to successful IS implementation, whilst Gottschalk

(1999) advocates that clear role responsibility for the implementation of the IS strategy should be planned and included in the actual IS strategy itself. As this expansive range of organisational studies indicate, the strategic use of IS developed a scope which grew to include organisational functions outside of the IS department itself. It had penetrated the fabric of the organisation to a point where its capabilities could be leveraged across the entire organisation's roles and activities.

2000s: A significant number of organisational practices in the 2000s are related to cultural dimensions of the organisation (Roepke et al., 2000; Kanungo et al., 2001; Basu et al., 2002; Tippins and Sohi, 2003; Avgerou and McGrath, 2007). Kanungo et al. (2001) specifically relate organisational culture to SISP. Avgerou and McGrath (2007) cast their lens upon the social environment, and detail how human activity is often at odds with the assumed pattern of rational behaviour. Roepke et al. (2000) focus on the necessity of fostering a culture conducive to IS leadership due to the increasingly strategic role of IS. Basu et al.'s (2002) work examines the effect of an organisation's commitment to IS upon its ability to achieve its IS strategising objectives. This theme is further granularised by Tippins and Sohi (2003) in their paper on the development of organisational learning to leverage IS competence, thus playing a significant role in IS outcomes.

It is apparent that the use of frameworks or strategising tools represents a dominant theme in the SISP literature from the 2000s. The various models propose benefits in regard to particular dimensions of SISP; Kim et al. (2000) and Ranganathan and Sethi's (2002) work explores decision-making processes for IS. Croteau and Bergeron (2001) target both outward and inward IS deployment postures. Duhan et al. (2001) focus on SMEs and the potential for using core competencies in the development of an IS strategy. Salmela and Spil (2002) outline the 'four cycles method' which takes into account continuous, emergent practices of IS strategising which had been lacking in the extant literature, a theme continued by the work of Grover and Segars (2005). Weill et al. (2002) develop a framework from the study of top performing firms which can shape IS strategising practices. Wang and Tai (2003) and Newkirk et al. (2003) investigate the attainment of greater IS effectiveness. Newkirk and Lederer (2006) explore particular phases of IS strategising practices and establish which of these phases are most important given a particular environmental context, whilst Philip (2007) tests eight tenets for successful IS strategising. As is evident from the focus of the majority of these studies, the goal is to improve SISP.

An additional theme to emerge from this particular segment of the literature pertains

to the use of IS for competitive advantage or financial performance. Similar to the practice of strategic alignment, the drive for a tangible output from SISP is an enduring topic of research. As discussed, with IS investments tending to be significant in resource terms, it is logical that some barometer of return from such investments is a quest within the extant literature. Shin's (2001) econometric approach to examining the impact of IS on financial performance concludes that it does not in fact improve overall financial performance, but does improve financial performance as measured by net profit. This perhaps points to greater efficiencies induced by the introduction of IS. Choe's (2003) study focuses upon the effect of environmental uncertainty, finding that opportunities exist for improved firm performance given suitable environmental characteristics. The strategic value of IS is examined in Oh and Pinsonneault's (2007) work, with the authors finding the existence of a significant relationships between the achievement of alignment and superior firm performance, whilst Chari et al. (2008) identify IS investment and diversification strategies which can correlate to improved firm performance.

Strategic alignment proves to be both an enduring priority and a key facet of SISP. Sabherwal et al. (2001) take an in-depth look at the practice of alignment, highlighting the importance of the punctuated equilibrium model. Chan (2002) reveals that the informal organisational structure is a crucial component for the achievement of alignment. Cao and Schniederjans (2004) choose an e-commerce environment for their study of the practice of alignment, whilst Newkirk et al. (2008) examine the effects of rapid business and IS change on an organisations ability to achieve alignment.

The remaining studies featuring organisational practices cover a variety of topics, with IS offshoring (Hahn et al., 2009; Rai et al., 2009), globalising an organisation's IS (Akmanligil and Palvia, 2004), and IS failure (Pita et al., 2009) all represented. The papers on IS offshoring and the globalisation of an organisation's IS highlight the development of the domain and the increasing complexity associated with the practice of SISP. Pita et al.'s (2009) work on IS failure finds that the key determinant to successful IS strategising is senior management commitment. This finding underpins the current study's focus upon the participation of senior managers in the practice of SISP due to their criticality to the activity. Organisational practices concerned with the organisational type or structure are also represented (Levy and Powell, 2000; Silva and Hirschheim, 2007). Levy and Powell (2000) view SISP from an SME perspective, recognising the nuances of this particular domain and that SMEs' needs are different to those of larger organisations. Silva and Hirschheim (2007) explore the relationship between SISP and an organisation's deep

structure. The study also has links to the first thread concerning cultural dimensions of the organisation due to deep structures being largely built upon the concept of an organisation as a socio-political arena. Das and Van de Ven (2000) investigate how the nature of the product technology and the market influences the type of strategy employed by the organisation to get their new product technology accepted by the market. Ragu-Nathan et al.'s (2001) work focuses upon the development of a defined method for measuring IS strategy, particularly in regard to strategic alignment. Finally, Teubner (2007) explores the linkages between practice and academia, revealing that organisations tend to pay little attention to academic literature in regard to how they practice SISP.

2010s: Six studies can be classified as providing models, frameworks, or best practices for the conduct of SISP. Jukic and Jukic (2010) propose a step-by-step guide for IS strategising, whilst Bechor et al. (2010) develop a model for measuring the success of SISP based on KSFs, approach, and context. Bakar et al. (2010) use an organisational learning perspective to evaluate SISP performance. In their study into the relationship between IS strategising and firm performance, Leidner et al. (2011) found three generic strategic stances in the form of innovator, conservative, and ambidextrous, with ambidextrous organisations found to be the top performers. Returning to the concept of strategic alignment, McLaren et al. (2011) develop a model to measure the fit between an organisation's competitive strategies and its IS capabilities. Finally, Stace et al. (2012) propose a typology of five IS strategies to aid IS investment decisions.

Baptista et al. (2010) study the paradoxical effects of institutionalisation on the strategic awareness of IS in organisations. This study highlights how the strategic potential of IS may become under-exploited, thus exposing the business to risks associated with the particular IS that has become institutionalised. Mithas et al., (2011) and Okpattah et al. (2014) make linkages to firm performance: the former examine improved organisational performance through IS's ability to leverage other key firm capabilities (customer, process, and performance management capabilities), with the latter work elucidating the impact of IS sophistication and the IS strategy itself on firm performance. Luftman and Ben-Zvi's (2011) work on key issues for IS executives found the top concerns to be alignment, speed to market, business process re-engineering, business productivity and cost reduction, and SISP itself. In Watson et al. 's (2011) research, the use of IS for driving greener, more ecological projects is explored, whilst Mirchandani and Lederer (2012) propose that in uncertain environmental contexts, more situational analysis is required and less IS strategy conception and implementation. The result of such an approach will be a more strategically

agile organisation. Situational factors also form a core construct in the research of Silvius and Stoop (2013), who link such factors and the practice of SISP to SISP success. Arvidsson et al. (2014) use a single case study of a paper mill to explore the implementation of strategic change associated with IS use. Huang et al. (2014) adopt a SAP lens to explore the role of IS practices in ambidexterity in China's leading ticketing organisation. Finally, Mirchandani and Lederer (2014b) study the relationship between the organisational practices of core and infrastructure business activities with SISP and SISP effectiveness.

#### 3.7.4 Institutional Practices

No practices were identified as being at the instituional level across any of the 153 empirical studies that formed this review. A possible reason for this anomaly could be the inherent difficulty in obtaining the requisite access to investigate such practices at the level of a particular industry or market.

# 3.7.5 Concluding Comments on Practices

This section has detailed the various patterns of practices discovered across the decades. At a macro-level, this division between conceptual and empirical work is surprising for the very fact that as the field has matured, it has passed through three quite distinct phases; the 1970s and 1980s represented a close split between empirical and conceptual work (21 vs. 15). During both the 1990s and 2000s it was evident that a much larger body of empirical work was produced (62 vs. 19 and 45 vs. 28 respectively), and finally in the current timeframe of the 2010s we have seen a shift in favour of conceptual work (27 vs. 25). This could be on account of the prescribed strategising tools developed in the 1970s and 1980s, that were then empirically tested in the 1990s and 2000s, being found to be insufficient and hence the resurgence in prescriptive literature. Whilst outside the immediate scope of both this review and study, it's possible that the high failure rates of IS projects could be culpable for a perceived return to the drawing board. IS failure has become an all too prevalent phenomenon. Studies reflect failure rates to be in the region of 24% (Eveleens and Verhoef, 2010). Considering the huge investments at stake (a 2002 study by KPMG cited in Brown et al., 2007 reported that 56% of firms endured at least one IS project failure during 2001, with the average cost of these projects estimated to be in the region of \$15 million), it is a plausible explanation for this shift in the research agenda. As suggested, this could be due to the seemingly unsuccessful attempts of earlier work in improving SISP. Perhaps another explanation could be that due to the increased

proliferation of IS and the inherent complexity associated with modern-day IS from both a social and a technical perspective (Arvidsson et al., 2014), there is a resultant need for more conceptual guidance from within the ranks of academia.

Individual practices tend to coagulate around the CIO. Focus on the individual CIO practitioner and associated practices with a social dimension have remained consistent over the decades. Yet, just 20 empirical studies were identified as having an explicit focus upon individual practices, lacking in diversity, and thus forming a shortcoming of the extant SISP literature. Perhaps this rather narrow representation of individual practices is attributable to the CIO being the most recognisable practitioner for studies exploring SISP, as it is they who head the IS function. Further exploration of a more disparate array of individual practitioners would prove of value to this field of research. From a group practice perspective, senior managers form the fulcrum of empirical endeavours, with a particular emphasis upon their support and participative activities. It is the researcher's belief that the SISP literature requires further empirical research into group practices with the identified 36 studies proving rather limited in their focus upon senior managers and specific dimensions of SISP. A more holistic viewpoint of senior managers in the wider practice of SISP is required, as is substantive work on the middle manager and external consultant practitioner groups.

A consistency between the focus upon the individual CIO and senior manager group can be traced, with their coming together encapsulated in the work of Preston and Karahanna (2006; 2009a; 2009b). Indeed, such a coming together is mirrored in organisational practices' focus upon strategic alignment, proving an enduring practice across the decades. Organisational practices have continued to develop. Correlations have been sought between aspects of SISP and competitive advantage, forming topics of enquiry in the current decade (Leidner et al., 2011; Mithas et al., 2011). Organisational practices represent the most developed component of the SISP literature, accounting for 119 studies. Yet, the researcher believes that the domain still lacks a more holistic view of its core practice, i.e. SISP, by its principal practitioner group, i.e. senior managers. It is here that the current study wishes to makes its contribution to knowledge in the SISP domain.

It is worth noting that conspicuous by their absence is the presence of any institutional practices. As will be seen in the subsequent section pertaining to praxis and practitioner, there is congruence to this finding as praxis is observed only at the meso-level. Institutional practices would tend to be drawn upon by practitioners during macro-level praxis, which is lacking in the reviewed literature. In addition, the difficulty in

obtaining access to empirically investigate macro-level praxis and the various institutional practices that may be employed during such phenomena can be viewed as a possible reason for the dearth of such practices. Yet again, the interconnectedness of the 3Ps (Whittington, 2006) of the SAP lens is obvious. Particular methods for closing these gaps in the empirical research and examples of specific studies that could be undertaken are located in the latter sections of this chapter.

### 3.8 The Classification of Praxis and Practitioner

This section deals specifically with how the reviewed papers covered the relationship between praxis and practitioners. Praxis is measured at three levels: micro, meso, and macro. Micro-level concerns studies that focus upon praxis performed at the individual or group level as it is realised within a particular strategising event such as a meeting. Meso-level refers to research that involves praxis at the level of the organisation, such as an organisational SISP initiative. Macro-level refers to those studies that incorporate praxis at an institutional level, which would include studies that explain actions within a specific industry or sector. Practitioners are classified into three groups: individual actor (intra-organisational), aggregate actor (intra-organisational), and aggregate actor (extra-organisational). See Figure 3.1 for the reviewed literature's classification into Jarzabkowski and Spee's (2009) typology.

The nine-box grid displays the chosen typology as devised by Jarzabkowski and Spee (2009). It provides a visual representation of the reviewed literature by the type of practitioner and the level of praxis. An immediately obvious characteristic of the SISP literature as measured by such dimensions is that it resides solely within the remit of domains E and B, with the vast majority of studies falling into the former. Although rather simplistic, this typology is of great value in that it provides an excellent overview of the reviewed literature through the adopted SAP lens, with a particular focus on praxis and practitioner. A explanation of the nine domains will provide clarity as to the particular features of each.

Figure 3.1 - Typology of the SISP Literature by Type of Practitioner and **Level of Praxis** 

vel of Praxis			
Macro	C	F	I
	Total Studies: 0	Total Studies: 0	Total Studies: 0
Meso	B Total Studies: 15	E Total Studies: 138	H Total Studies: 0
Micro	A	D	G
	Total Studies: 0	Total Studies: 0	Total Studies: 0
	Individual Actor	Aggregate Actor	Aggregate Actor
	(Intra-organisational)	(Intra-organisational)	(Extra-organisational)

(Jarzabkowski and Spee, 2009)

Domain A: Studies within this domain examine the internal organisational practitioner at an individual level, concentrating upon their praxis as it pertains to a micro-strategising event such as a particular IS strategy workshop. No studies were found within this category.

Domain B: Features studies that focus upon the engagement of individual internal practitioners in organisational or sub-organisational praxis. The reviewed literature included 15 such studies. Examples of such work includes Beath's (1991) study on the role of the IS champion pertaining to how they establish support and sell their vision of IS

within the organisation. Enns et al.'s (2003) paper focuses on the CIO's (the individual, intra-organisational practitioner) lateral influencing behaviours to gain peer commitment for strategic IS. Peppard (2010) explores how the true potential of the CIO may be unlocked by looking at typical role praxis such as expectation management. Mirchandani and Lederer (2014a) investigate the impact of CIO autonomy and procedural justice in subsidiaries of multinational organisations.

<u>Domain C</u>: Examines the actions of individual intra-organisational actors and praxis at the macro-level of institutions, markets or industries. No studies were located within this domain.

<u>Domain D</u>: Incorporates research into the relationship between aggregate intraorganisational actors (e.g. senior managers) and praxis at the micro-level (e.g. a particular decision-making instance). Studies which could be classified as falling into Domain D were lacking in the current literature review.

<u>Domain E</u>: Features studies which examine the role of aggregate, intra-organisational actors and praxis at the organisational level. This particular domain incorporates the vast majority (138) of the reviewed empirical studies pertaining to SISP. There is an inherent logic to such a broad swathe of the literature falling into this category; SISP resides under the ultimate remit of senior managers (aggregate intra-organisational practitioners), with their support of, and involvement in IS initiatives cited as being crucial to their success (Ragu-Nathan et al., 2004; Thong et al., 1996; Young and Jordan, 2008). SISP is also intrinsically employed at the organisational level (meso-level praxis), hence the resultant body of literature located within Domain E. Examples of such research include Dutta's (1996) work on the role and responsibility of senior managers in the achievement of IS strategic alignment, Basu et al.'s (2002) research into senior management's involvement in SISP, and Mithas et al.'s (2011) paper which uncovered the praxis of senior managers in the development of an organisational IS infrastructure and information management capability. Leidner and Milovich (2014) focus their attention on middle managers, specifically in relation to their awareness and involvement in SISP being linked to the type of IS strategy an organisation has, i.e. conservative or innovative.

<u>Domain F</u>: Includes studies which examine the relationship between aggregate intraorganisational practitioners and praxis at an institutional, sectoral, or industry level. No such studies were found within the reviewed literature.

<u>Domain G</u>: Features research into aggregate, extra-organisational practitioners (e.g. consultants, academics, gurus) and praxis at the micro-level (e.g. a particular strategy

workshop or meeting). Empirical studies in the right column of the grid featuring extraorganisational actors were not located within the reviewed body of literature.

<u>Domain H</u>: Incorporates papers focusing upon aggregate, extra-organisational actors and praxis at the organisational or sub-organisational level.

<u>Domain I</u>: Research located within Domain I examines aggregate, extra-organisational actors and praxis conducted at the institutional, sectoral, or industry level.

#### 3.8.1 Praxis and Practitioners across the Decades

An overview of the empirical studies from a praxis and practitioner perspective reveals a constant, targeted focus on the part of researchers upon aggregate actors from within the organisation and praxis at the meso-level (E). Indeed, the only additional box from Jarzabkowski and Spee's typology to feature within the reviewed literature pertains to individual, intra-organisational actors engaged in meso-level level praxis (B). The subsequent allocation of studies into each of these domains is skewed heavily in favour of Domain E. Across the decades, we see that in the 1970s & 1980s the breakdown is 18 vs. 3, in the 1990s this disparity is magnified further with a representation of 57 vs. 5 in favour of Domain E. The 2000s represent the largest chasm between the respective domains, with just 2 studies residing in Domain B vs. 43 in Domain E. Finally, in the current decade we can view somewhat of an increase in the number of empirical studies attributable to individual, intra-organisational actors operating at a meso-level of praxis, with 5 such studies vs. 20 studies with an explicit focus upon meso-level praxis by aggregate, intra-organisational actors.

Perhaps the heavy slant towards aggregate intra-organisational actors can be partially explained by the large number of studies examining meso-level praxis through case-work and the resultant non-specificity in regard to individual practitioners involved. A clear categorisation of a study may be made when the study's explicit focus is on an individual practitioner (Domain B) such as an IS champion (Beath, 1991), the CIO (Enns et al., 2003), or the CEO (Jarvenpaa and Ives, 1990). However, a study adopting a case study approach is oftentimes less precise with its practitioner-level focus, and instead may draw upon a range of actors from within an organisation. In such instances, these studies were categorised as featuring aggregate intra-organisational practitioners (Domain E) unless specific individual practices were explored, and feature quite heavily in the reviewed literature (Kivijärvi and Saarinen, 1995; McFarlan, 1971; McLaren et al., 2011; Sabherwal et al., 2001; Selig, 1982). Again, such research does not focus upon individual practices

such as the IS champion's activites to foster support (Beath, 1991), the CIO's lateral influencing behaviours in order to gain commitment to IS strategising (Enns et al., 2003), or the CEO's practice of sending an annual letter to shareholders (Jarvenpaa and Ives, 1990). Instead, much broader organisational practices are generally the focus of researcher attention, such as structures for planning, development and control (McFarlan, 1971), the approaches used by multi-mational corporations to SISP (Selig, 1982), the effect of IS investment on organisational performance (Kivijärvi and Saarinen 1995), the alignment activities of organisations (Sabherwal et al., 2001), and the development of a model which can be used to assess the fit between an organisation's competitive strategies and its IS capabilties (McLaren et al., 2011).

#### 3.8.2 Practitioners Featured Within the Reviewed Literature

Whilst praxis remains consistent at the meso-level, practitioners are examined at both individual and aggregate intra-organisational levels. Taking a closer inspection of the type of practitioner attracting the attention of academic research, it is clear that they are predominantly of senior management status, i.e. the CEO or a direct report. There is congruence in such a finding given that praxis is exclusively found at the meso-level, i.e. the organisational or sub-organisational level. Activity at such a level tends to reside within the remit of senior management, so a finding to the contrary would prove incongruent with the level of praxis observed within the literature. This again highlights the inter-related nature of the 3Ps, in this instance relating to the praxis and practitioner dimensions.

# 3.8.2.1 The Individual, Intra-organisational Practitioner

From an individual practitioner perspective, given that the literature is drawn from the field of IS, it is unsurprising that it is IS practitioners and specifically the CIO in receipt of the majority of academic endeavour. Indeed, this focus has remained consistent and enduring across the decades as evidenced in the spread of such studies. Lederer and Mendelow (1987) explore the CIO's difficulties in IS strategising, particularly in regard to understanding senior management's objectives. The research of Aplegate and Elam (1992) tracks the evolution of the role of the CIO, identifying the growing need for CIOs to possess broader organisational knowledge. Enns et al. (2003) investigate the CIO's lateral influencing behaviours in an attempt to understand how they may gain peer commitment for IS strategic initiatives. The paper by Peppard (2010) looks into how the true potential of the CIO can be unlocked by focusing on activities such as the CIOs' expectation

management capabilities and their methods for educating their fellow senior managers. Cetindamar and Pala (2011) attempt to link the roles of the CIO to organisational performance. Mirchandani and Lederer (2014a) surveyed 130 CIOs to ascertain the impact of autonomy and a sense of fair treatment upon SISP in subsidiaries of multi-national organisations. Also included are studies pertaining to additional, intra-organisational practitioners such as the IS champion (Beath, 1991), the CEO (Jarvenpaa and Ives, 1990), and the IS planner (Lederer and Sethi, 1992).

# 3.8.2.2 The Aggregate, Intra-organisational Practitioner

When we turn to the presence of aggregate actors (intra-organisational), it is senior managers who hold the attention of researchers. Whilst not always explicitly expressed as the focus of the research itself, e.g. case work involving multiple organisational actors, it is nevertheless an easy implication to make given the participants in the primary data collection endeavours. Similar to CIOs, senior managers' presence in the literature also persists across the decades. This can be demonstrated by studies which explicitly state such a focus, e.g. Raghunathan and Raghunathan's (1988) work on the impact of senior management support on IS strategising, Hasan and Lampitsi's (1995) research on senior management's use of IS in a public sector context, and both Basu et al.'s (2002) and Silvius and Stoop's (2013) investigations into the impact of senior managers' involvement in IS strategising. It is also evident in papers featuring senior managers as a prominent component of their topic of investigation but which may not include the group within the title of the study itself, e.g. Lederer and Mendelow's (1989) work into the difficulties associated with aligning business and IS plans reveals the key role played by senior management support in overcoming such difficulties, Byrd et al.'s (1995) single case study into SISP in a large, diversified public organisation also illuminates the criticality of the role of senior managers in regard to their supportive role, and Pita et al.'s (2009) investigation into SISP failure finds that senior management commitment is the key determinant of successful IS strategising.

Additional practitioner groups to feature within the literature includes research on the effect of IS steering committees on IS strategising (Raghunathan and Raghunathan 1989a), IS managers as an intra-organisational group and their influencing practices in relation to organisational stakeholders (Lacity and Hirschheim, 1995), the influence of Boards on organisational strategy (Stiles, 2001), and the role of middle managers in IS strategy (Leidner and Milovich, 2014).

# 3.8.3 Concluding Comments on Praxis and Practitioner

Praxis has retained a constant presence at the meso-level in the SISP literature. However, there has been a steady evolution of praxis sophistication investigated across the decades. The earliest studies uncover realised praxis of an insular nature, focused on how practitioners attempt to plan for IS at a fundamental level (Henderson and West, 1979; McFarlan, 1971). Over time, the realised praxis moved beyond the IS function in the from of using IS for competitive advantage (Rackoff et al., 1985) or how best the IS plan may be aligned with the wider business plan (Teo and King, 1997). More recent studies focus upon praxis with an inherent social component, with influencing and communication praxis explored through empirical investigation (Cetindamar and Pala, 2011; Enns et al., 2003).

Turning to practitioners, the dominant presence of the individual, intra-organisational practitioner in the form of the CIO has remained constant, despite a small number of studies focusing on additional individual, intra-organisational practitioners such as Beath's (1991) work pertaining to the IS champion. The presence of intra-organisational, aggregate practitioners in the form of senior managers has also proved consistent. A number of studies look beyond senior managers such as Raghunathan and Raghunathan's (1989a) work on IS steering committees, but they reside in the minority.

The adopted typology has vividly demonstrated the quite narrow focus of the SISP literature in relation to praxis and practitioner. Only two of the proposed nine combinations espoused by Jarzabkowski and Spee (2009) are featured, with a sole focus upon meso-level praxis and either individual, intra-organisational practitioners or aggregate, intra-organisational practitioners. Whilst this may rightly be viewed as a weakness of the SISP literature, alternatively it can be viewed as a tremendous opportunity for further study. The latter sections of this chapter will elucidate these gaps in greater detail and propose tentative approaches for future empirical research.

# 3.9 Outcomes

Jarzabkowski and Spee (2009: 87) propose that SAP outcomes are ensconced in two particular types of explanations; "in the first, studies examine the implications of what particular strategists do for constructing particular streams of activity", and the second "seeks to build upon the first by examining whether a variation in the generative mechanisms is associated with a variation in the outcomes". The same terminology as was used for the categorisation of practices has again been employed for the purpose of

categorising outcomes. Namely, these are individual, group, organisational, and institutional outcomes.

Therefore, a study with a focus on the praxis of an individual such as the CIO would tend to identify an outcome at an individual level. Research examining the praxis of aggregate actors such as senior managers will mostly illustrate outcomes at a group level. Organisational outcomes mostly emanate from studies of strategy praxis at an organisational level, oftentimes featuring some form of impact on the financial or competitive positioning of the organisation. Finally, institutional outcomes tend to pertain to studies focused upon strategy praxis at an institutional level, resulting in outcomes that affect a particular market or sector. Similar to the approach employed in the categorisation of practices, multiple outcomes were included when appropriate, an approach mirrored by Jarzabkowski and Spee (2009). Using the Basu et al. (2009) example again, there exist two obvious outcomes for this particular study: group outcomes in the form of senior management involvement in SISP having a positive effect on the achievement of objectives, and organisational outcomes due to organisational commitment predicting an inverted-U relationship with the achievement of objectives.

There exists a strong correspondence between the type of practice under investigation and the level of outcome derived from a study. Examples of such studies include Cao and Schniederjans' (2004) paper on the alignment between operations strategy and IS strategy. The practice primarily being investigated is an organisational practice concerned with the alignment of the operations and IS strategies. Consequently, the predominant outcome is expressed at an organisational level, i.e. if the alignment practice is successful, the outcome will be improved organisational performance. Another example is Hahn et al.'s (2009) research into IS offshoring. Similar to Cao and Schniederjans' (2004) paper, the practice under investigation is an organisational practice, i.e. in relation to decisions pertaining to IS offshoring. The resultant outcome is largely an organisational outcome, i.e. success in the organisational practice of IS offshoring can result in the achievement of competitive advantage for the organisation. However, this is not always the case. It is important to note that depending on the particular study, the focus of the outcome may be different to the practice explored. This is particularly true when viewing institutional outcomes. No institutional practices were discovered, yet five institutional outcomes were identified. The reasons for this anomaly are explained in section 3.9.4. An overview of the outcomes identified in the researcher's review of the SISP literature can be found in Table 3.4.

Table 3.4 - Classification of Outcomes across the Decades

Timeframe	1970s & 1980s	1990s	2000s	2010s	Total
Outcomes	Individual-2	Individual-7	Individual-4	Individual-5	Individual-18
	Group-2	Group-5	Group-5	Group-3	Group-15
	Organisational-	Organisational- 56	Organisational- 40	Organisational- 20	Organisational-134
	Institutional-1	Institutional-2	Institutional-1	Institutional-1	Institutional-5

#### 3.9.1 Individual Outcomes

As stated, a macro-level view of the literature suggests a largely positive correlation between the practices under investigation and the resultant outcomes from each study. Where some differences do exist, the reasoning for this differentiation is hypothesised. Taking the aggregate figures from the reviewed empirical studies, we can see that 20 studies had an explicit focus upon individual practices, with 18 studies producing individual outcomes. Such a close match may be explained by the relative ease at which a researcher focusing upon practice at an individual level can also deduce outcomes at the level of the individual. In an example from the literature, Enns et al. (2003) explore the CIO's (individual practitioner) lateral influencing behaviours (individual practice) to gain peer commitment to SISP (the individual outcome being the obtainment of peer commitment by the CIO if they are successful with their practice of exerting influence upon their peers). This parsimonious example demonstrates a clear path between the individual practitioner, the individual practice, and the individual outcome. Additional examples of the various types of individual outcomes present in the reviewed literature include how CIOs may obtain senior manager support (Lederer and Mendelow, 1988), a more thorough understanding of the role of the CIO so as to unlock its true potential (Peppard, 2010), and how the particular type of IS strategy impacts upon how the CIO should involve middle managers (Leidner and Milovich, 2014).

# 3.9.2 Group Outcomes

In regard to groups, 36 studies investigated group practices, with a smaller number (15) reporting group outcomes. The reason for the disparity between the number of group practices and the number of group outcomes recorded may be due to the author(s) focusing upon an outcome which more comfortably aligns with a different outcome classification category. An example would be Raghunathan and Raghunathan's (1988) research on the

impact of senior management support on SISP. In this example, the impact of senior managers' (aggregate, intra-organisational practitioner) support (group practice) on IS strategising resulted in the study to propose an organisational outcome, i.e. increased senior management support for SISP leads to improved, more successful SISP activity. The predominant outcome of the study focuses upon the impact of the practice of senior management support on the organisational practice. An example of a study to produce group outcomes featuring an additional practitioner group is that of Henfridsson and Lind (2014). The authors focus on organisational sub-communities, highlighting the potential role they hold in contributing to emergent IS strategy that may subsequently stimulate linkages between disparate sub-community groups.

# 3.9.3 Organisational Outcomes

Organisational practices were found in 119 studies, but this number grew to 134 for organisational outcomes. Whilst both figures are high, the reason for the numerical disparity could again be traced to the author(s) choosing to focus upon organisational outcomes despite the fact that organisational practices were not the primary focus of the research. There exists some logic to the increase in organisational outcomes over organisational practices. The obtainment of a tangible organisational benefit from any facet of SISP could be seen as a fruitful outcome of the research endeavour. Outside of the immediate IS domain, the actual impact of SISP practices will be more easily digested if explained in organisational terms. An example of such work includes Sabherwal and Kirs' (1994) research into the alignment between organisational CSFs and IS capability in academic institutions. The group practice concerns IS management sophistication's facilitation of alignment and perceived IS success. However, the primary outcome of this research is that alignment facilitates both perceived IS success and organisational performance, i.e. an organisational outcome. A further example of a study to feature organisational outcomes is that of Huang et al. (2014). By drawing on a SAP perspective, the authors portray the importance of IS in enabling an organisational ambidexterity capability.

#### 3.9.4 Institutional Outcomes

There were no institutional practices located within the reviewed literature set, yet there exist 5 studies that are classified to have institutional outcomes. This may partially be explained by the inherent difficulty in obtaining access to practices that in some way shape or change how SISP is accomplished within a particular market or sector. However,

institutional outcomes are more attainable as studies focused upon a specific sector (Floyd and Wooldridge, 1990; Kim and Michelman, 1990) or involving large quantitative data sets (Brancheau and Wetherbe, 1987; Luftman and Ben-Zvi, 2011) can be 'institutionalised' to either the particular sector under investigation or to the very practice of SISP at large. An example of an institutional outcome within the literature can be found in Teubner's (2007) paper exploring SISP within the financial services sector. The study does not explore institutional practices, i.e. practices which influence or shape IS strategising at a sectoral level, but instead explores both individual practices (in the form of the CIO's role as the leader of a service providing function to the organisation) and organisational practices (in regard to the organisation's placement of the CIO in the management hierarchy). However, the author's findings predominantly detail the mismatch between academic writings and the realities found in practice. Bolstered by supporting research, the author finds that little attention is paid by organisations to the academic SISP literature when they are engaged in the practice of SISP. The author claims this to be due to ignorance on the part of academia towards the 'real problems' (Teubner, 2007: 105) faced by practitioners. Thus, a primary outcome from this study is a recognition that academia does not play a leading role in the actual practice of SISP, and as such the paper can be classified as producing an institutional outcome, i.e. this outcome can be attributed to a much broader audience and viewed as somewhat of an institutionalised problem.

#### 3.9.5 Concluding Remarks on Outcomes

There exists a relative dearth of studies producing outcomes at individual, group, and institutional levels, thus supporting claims that IS research oftentimes doesn't recognise its multi-level nature (Bélanger and Tech, 2014). Whilst the lack of empirical work producing institutional outcomes may be somewhat understandable, work resulting in explicit outcomes pertaining to key roles such as the CEO and CIO came from just 18 studies. Equally surprising is the small number of studies that presented outcomes at a group level, particularly in relation to the key group of senior managers. Whilst such individuals and groups feature much more frequently across the reviewed literature than these numbers would suggest, this finding is perhaps explicable by a tendency on behalf of researchers to relate their outcomes to the impact of the various SISP practices on the broader organisation (understandable given the calls for there to be a more tangible output from SISP). However, what these gaps afford is a sizeable opportunity for researchers to more explicitly focus upon neglected outcomes pertaining to key individuals and groups.

# 3.10 Gaps in the Reviewed Literature

One of the strengths of the adopted typology is the clear delineation between those domains which feature a body of literature relating to its particular combination of praxis and practitioner, i.e. E and B, and those that are lacking in the presence of any such studies, i.e. A, C, D, F, G, H, and I. What is obvious is the SISP literature's preoccupation with a combination of praxis conducted at an organisational level, i.e. meso-level praxis, and either individual practitioners or aggregate practitioners located within organisations. The literature is thus quite narrow in its focus. Whilst it has explored in depth what could be classified as its core domains, it has nevertheless been proven to be quite neglectful of vital avenues of possible empirical endeavour. Therefore, there exists a significant opportunity for research into the remaining seven domains of the adopted typology. Whilst the current study firmly resides within domain E and is thus congruent with the dominant focus of SISP literature, its distinguishing feature is the fact that it is employing a SAP lens within the SISP domain. Such studies are lacking in the reviewed literature, rendering the research novel. The value of such an approach is detailed in subsequent sections of this thesis. In addition, whilst the current study is rightfully following the dominant focus of SISP literature, the researcher discovered that extant studies lack the presence of empirical investigation that captures a more holistic representation of SISP as practiced by senior managers. Instead, the literature set is grounded in more nuanced aspects of the field's principal topic of enquiry.

This review of the SISP literature provides a wealth of future directions for researchers within the discipline. It is apparent that a practice lens would assist in the successful execution of studies within a number of these domains due to its inherent focus on the micro activities encompassed within SISP. The seven boxes lacking in empirical studies coalesce around three broad themes, namely; SISP-related praxis at a micro-level across all practitioner categories; SISP-related praxis at a macro-level across all practitioner categories, and; the praxis of aggregate external practitioners at all levels of praxis.

# 3.10.1 IS strategy Praxis at a Micro-level

The reviewed literature uncovered no studies that were explicitly focused upon SISP praxis at a micro-level, i.e. within a stand-alone meeting or workshop occurring below the organisational level. Where such activity is explored, it is of a meeting or workshop that is more appropriately categorised as residing at the meso-level, involving senior managers

and concerned with organisational matters. Consequently, this uncovers a tremendous opportunity for research within this strand, i.e. Domains A, D, and G. Praxis at this microlevel is particularly suited to the adoption of a SAP lens due to its inherent focus upon micro activities. Examples of possible studies for each domain could include:

<u>Domain A</u>: A study of an IS middle manager's (individual, intra-organisational practitioner) praxis during a particular IS workshop that is not concerned with organisational-level SISP activity (micro praxis), possibly examining how the IS middle manager influences their fellow middle managers during such episodes.

<u>Domain D</u>: A study into middle managers' (aggregate, intra-organisational practitioner) praxis during a specific IS strategy-related episode that is concerned with matters below the organisational-level (micro praxis).

<u>Domain G</u>: An exploration of the role played by external consultants (aggregate, extraorganisational practitioner) during an IS strategy-related episode, focusing on how they engage with middle managers during such episodes.

# 3.10.2 IS Strategy Praxis at a Macro-level

The reviewed body of literature pertaining to SISP contained no studies that explicitly explored praxis at an institutional level, i.e. attempted to explain praxis at an institutional, market, or industry level. To state more succinctly, there exists no empirical papers that seek to explore the manner in which SISP is conducted in a particular industry due to the industry's inherent characteristics. Nor does research exist into how or why SISP activity has shifted or evolved within a particular market or industry. The distinction here between studies such as Kim and Michelman's (1990) examination of factors for the strategic use of IS in the healthcare industry or Floyd and Wooldridge's (1990) analysis of the relationship between competitive strategy, IS, and financial performance in the banking sector, is that these studies are examining praxis at an organisational level. The organisations may emanate from a particular industry, but the praxis being explored is not at the institutional level. Outcomes may be drawn from such studies which could be described as institutional outcomes in regard to a particular segment or industry, i.e. it may be possible to form assumptions as to the nature of a particular sector's SISP characteristics. However, it is the praxis under investigation which determines the level at which such studies are classified within Jarzabkowski and Spee's (2009) typology, and the extant research resides at the meso-level of praxis, i.e. at an organisational level.

Again, the SAP lens adopted for this review uncovered rich avenues for further research in domains C, F, and I. Examples of possible research to be conducted within each domain include:

<u>Domain C</u>: A study into the role of a CIO (individual, intra-organisational practitioner) in assisting a relevant government body (e.g. the Department of Public Expenditure and Reform) in the formulation of particular government IS initiatives (macro praxis as it has the potential to shift how a particular sector engages in SISP), e.g. a cloud computing circular, or a move towards shared services. How such a CIO may integrate such knowledge back into the meso-level practice of SISP amongst senior managers could provide a fruitful avenue for extending such a study back to the organisational-level.

<u>Domain F</u>: If studying SISP across PSOs, research into the role of a recognised best practice IS function (aggregate, intra-organisational practitioner) in assisting a relevant government department (e.g. the Department of Public Expenditure and Reform) with devising a government-led IS initiative. A natural extension of such work could involve the resultant mediating role of senior managers between this macro-level activity and the meso-level practice of SISP.

<u>Domain I</u>: Research into the role played by external consultants (aggregate, extraorganisational practitioner) in devising a shared services platform seen to be an exemplar for future cost savings within a particular sector or industry, e.g. within the Irish public service. Once again, how senior managers then subsume the SISP-related practice of shared services into the organisation would prove an appropriate extension of such a study.

# 3.10.3 The Praxis of Aggregate, Extra-organisational Practitioners

The third theme absent within the reviewed literature concerns the praxis of aggregate, external practitioners in SISP. This is surprising, as the fieldwork conducted for the current study revealed a central role for external consultants in SISP within both case studies. Whilst reference is often made to the role of consultants within the extant literature (Bakar et al., 2010; Beath, 1991; King and Teo, 1996; Powell and Dent-Micallef, 1997; Roepke et al., 2000; Sutherland and Remenyi, 1995; Teubner, 2007), an explicit, empirical focus on their specific praxis is lacking. The work of Ko et al. (2005) pertains to knowledge transfer from consultants to clients, however it is concerned with the implementation of IS rather than the planning phase upon which the current study is based. Thus, the role of consultants has tended to reside in the prescriptive domain, and thus is lacking in any real rigor or academic credibility. In Canato and Giangreco's (2011: 231)

prescriptive paper entitled 'Gurus or Wizards? A Review of the Role of Management Consultants', the authors highlight that despite the growing presence of such consultants in modern business, "few management studies explicitly focus on the consulting industry". Thus, the SISP domain can perhaps draw some comfort from the fact that this exclusion may be a much more systematic problem evident in the wider academic literature. Despite this, the field should embrace such an opportunity to conduct exploratory research into the role of external consultants in the SISP process. For example, the work of Ginsberg and Abrahamson (1991) originating from the wider management realm on the role of external consultants as advocates of change, could provide an initial starting point from which inspiration may be drawn. Whilst Domains G and I have been discussed earlier in the sections pertaining to IS strategy praxis at both micro and macro levels, Domain H is a natural extension of Domains B and E which have thus far received all of the empirical attention.

<u>Domain H</u>: Praxis at the meso-level has dominated the academic literature, but the focus has thus far remained on either the individual intra-organisational practitioner or the aggregate intra-organisational practitioner. Having uncovered through fieldwork the key role played by aggregate, extra-organisational practitioners during SISP, a study of external consultants exploring their praxis during organisational SISP (meso praxis) would prove to be of value. It could relate to how external consultants engage with senior managers and the mediating role of senior managers therein.

In summary, the adoption of a SAP lens has afforded a unique view of the SISP literature. Despite the significant body of empirical research conducted to date, much has yet to be explored. Using Jarzabkowski and Spee's (2009) typology, three broad areas requiring further research have been uncovered; SISP praxis at a micro-level, SISP praxis at a macro-level, and the praxis of aggregate, extra-organisational practitioners during SISP at all levels. A further, related strand not included in Jarzabkowski and Spee's (2009) typology concerns the individual, extra-organisational practitioner. Whilst this can be viewed as a nuance of the existing categorisation scheme, it is yet a viable research avenue. The praxis of the individual external consultant, academic, or guru is a research stream of merit. Thus, it is plausible that as the field develops further, Jarzabkowski and Spee's (2009) nine-box typology could rightfully be extended to twelve boxes. The additional three boxes that we can tentatively refer to as Domains J, K, and L would contain studies exploring the praxis of the individual, extra-organisational practitioner at micro, meso, and macro levels. Borrowing from Schryen (2013: 139) in regard to how we may broadly start

exploring such avenues of empirical enquiry, we turn our attention to "how we can get there".

# 3.11 A Future Research Agenda

In addition to the three areas identified through Jarzabkowski and Spee's (2009) framework in need of further research, we have also seen how the very fundamentals of SISP have begun to be revisited by researchers due to an apparent dissatisfaction in academic and practitioner circles as to the extant knowledge of the very practice itself. Whilst pioneering empirical research is needed into SISP praxis at a micro-level, SISP praxis at a macro-level, and the praxis of aggregate, extra-organisational actors at each of micro, meso, and macro levels, new ways of exploring SISP in those areas which have already garnered the bulk of academic attention (Domains B and E) also need to be employed.

# 3.11.1 The SAP Approach within the SISP Domain

The inherent suitability of the SAP approach has been espoused throughout this chapter as a viable means to uncover the very essence of the practice of SISP. Through such a lens with its inherent focus upon practice, praxis, and practitioners, SISP can be empirically explored in unique ways. It has the potential to bolster extant research and to ameliorate areas currently lacking in any substantial academic focus. This recognition stretches beyond the researcher's own assumptions and is indeed mirrored in the most recent academic publications. A 2014 edition of the Journal of Strategic Information Systems (JSIS) was devoted to research into IS strategy adopting a SAP perspective (Peppard et al., 2014; Whittington, 2014). Teubner's (2007, 2013) work highlights how the growing chasm between SISP research and practice can potentially be narrowed through a return to practice. The benefits to such an approach are two-fold; the topics favoured by practitioners can become more closely aligned with those featured in academia, and the results and findings of such research will become more useable and relevant to practitioners.

# 3.11.2 Support for the SAP Approach from the IS Domain

In addition to acknowledgement of the growing interest in relating research to practice (Galliers et al., 2012; Thompson, 2012), explicit calls for the adoption of a SAP lens within the SISP domain (Teubner, 2013), and the evident recognition and up-take of

the approach as was evidenced in the special issue of the JSIS (Arvidsson et al., 2014; Henfridsson and Lind, 2014; Huang et al., 2014; Leonard and Higson, 2014), encouragement may be found from related disciplines to have adopted a practice-based approach, e.g. leadership as practice (Carroll et al., 2008; Raelin, 2011), organisational change as practice (Jansson, 2013), accountancy as practice (Kornberger and Carter, 2010), business ethics as practice (Clegg et al., 2007) and marketing as practice (Browne et al., 2014; Echeverri and Skalen, 2011; Järventie-Thesleff et al., 2011). Such a transdisciplinary view of IS is supported by a number of key authors within the domain (Galliers, 1999: 2003; Robey, 2003; DeSanctis, 2003).

# 3.11.3 Concluding Comments on a Future Research Agenda

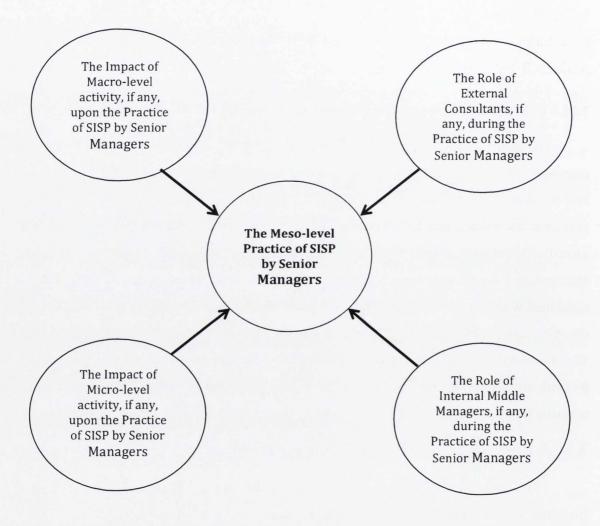
The noted challenges associated with the adoption of a SAP lens are not to be dismissed. However, there is encouragement to be found from within the field of IS itself and its related disciplines. There exist rich and abundant avenues to explore and an academic community that has demonstrated its willingness to embrace such research. The identified shortcomings in the reviewed SISP literature may be looked upon as a tentative starting-point for future research. The review of the SAP literature found in Chapter 2 combined with this elaboration of how the perspective may be incorporated with the SISP domain offers a possible starting-point for how to conceptualise such research endeavours. The elucidation of the methodology employed by the researcher for the current study is located in Chapter 4 and can be viewed as an additional resource from which future research may draw upon.

# 3.12 A Preliminary SISP-based Conceptual Model

The adopted SAP perspective has aided the researcher in reviewing the SISP literature by focussing upon those aspects most pertinent to answering the research question posed. The review revealed that the practice of SISP by senior managers is present in a fragmented manner in the literature. The lack of empirical investigation at either macro or micro levels confirms a rather narrow research stream, as does the predominant exploration of the aggregate, intra-organisational practitioner. Whilst the current study is grounded in the core of the research domain, its approach is holistic in manner. It recognises that the meso-level practice of SISP by senior managers may feature macro and micro-level dimensions in addition to disparate practitioners/practitioner groups from internal or external to the organisation. Such recognition reinforces the integrated nature of the undertaken research. The novel approach of reviewing the SISP literature

through a SAP lens reaffirmed the value that a SAP-based perspective could have for the conduct of subsequent fieldwork and the collection and analysis of primary and secondary data sources. Figure 3.2 forms a preliminary conceptual model that builds upon Chapter 2's Figure 2.3 by adding key themes uncovered during the review of the SISP literature.

Figure 3.2 - A Preliminary SISP-based Conceptual Model



Jarzabkowski and Spee's (2009) classification scheme consisting of a nine-box grid revealed a dearth of studies exploring the impact of the macro and micro-level domains upon senior managers' practice of SISP. It also revealed that the role of disparate practitioners inclusive of external consultants and middle managers during senior mangers' practice of SISP remains largely unknown. Conceptual work has stressed the importance of grounding strategic IS within the 'grassroots' of the organisation and the need for senior managers to remain cognisant of the lower organisational ranks in order to develop strategic IS that are difficult to replicate by competitors (Ciborra, 1992). Competitive advantage may not be attained through the very act of purchasing an IS solution that is as

readily available to competitors, rather it is the use made of the technology that matters most (Galliers, 2006). Given that the current study holds a research goal of providing a holistic representation of the practice of SISP by senior managers, each of these factors formed avenues for empirical enquiry about which the researcher remained cognisant during the conduct of casework.

# 3.13 Concluding Comments on the Reviewed SISP literature

This chapter has been devised with the intention of offering a unique review of the SISP literature. In order to do so, the compiled literature was viewed through a SAP lens. Specifically, the framework as proffered by Jarzabkowski and Spee (2009) was utilised. It is hoped that the resultant review has provided fresh insights into the SISP domain through an explicit focus upon practice, praxis, practitioners, and levels of activity. Also, by incorporating a focus upon the particular outcomes as featured in each of the reviewed empirical studies, it is the intention to create value through the inclusion of a tangible output from each paper.

An additional goal of the chosen approach was the fostering of synergies across the two literature reviews as featured in this thesis, i.e. Chapter 2's review of the SAP literature and the current chapter's review of the extant SISP literature. It is hoped that the unmistakable gaps revealed by Jarzabkowski and Spee's (2009) framework will spur future research into each of these particular domains. The means by which these gaps may be filled has been discussed, with the role for the SAP approach therein having been detailed. It is also hoped that the SAP lens as espoused can be used to further explore what can be viewed as the 'core' of the research field, i.e. the meso-level praxis of aggregate, intraorganisational practitioners, in new and exciting ways. Indeed, it is this very approach that has been chosen for the current study in exploring how senior managers practice SISP.

The researcher identified particular shortcomings in the literature in its treatment of group practices by senior managers and wider organisational practices. The deficiencies pertain to a lack of a more holistic understanding and representation of the practice of SISP by senior managers, with the literature tending to be rather nuanced and subsequently fragmented in how its core practice, i.e. SISP, practiced by its key practitioner group, i.e. senior managers, is represented. Just 36 studies were identified as retaining an explicit focus upon group practices, with investigations into senior managers coalescing around their support of SISP or various facets of their participation in the practice. Whilst organisational practices would appear to be comprehensively explored at least from a

numerical standpoint with 119 such studies identified, once again a somewhat disjointed representation of the wider practice of SISP pervades. It is across the parameters of senior managers and the wider practice of SISP that the researcher has targeted to add to the stock of extant knowledge within the domain.

Across both literature reviews the malleable nature of the SAP lens has been demonstrated, thus rendering it applicable to a diverse range of research areas. The explicit calls for such an approach from within the IS domain adds credence to such a claim, whilst a recent special issue of one of the field's most prominent journals elucidates the merit and distinction bestowed upon the SAP approach by the IS academic community. The specific methodology chosen for the current study and the explicit means by which it was executed now becomes the focus of attention in Chapter 4.

# Chapter 4 - The Research Approach and its Application

### 4.1 Introduction

The current chapter sets out the research philosophy that guided the study, the research approach employed, and the associated research methods that were selected to best answer the research question posed, which is:

'How is Strategic Information Systems Planning Practiced by Senior Managers?'

A number of choices needed to be made in this regard. Such choices were largely driven by the nature of the research question and the researcher's philosophical standpoint. At a fundamental level, it is a how-type question, locating the study in the wider field of IS. It is the practice of SISP that is under investigation. Senior managers form the focal practitioner group, with the research contextualised to the public service domain. Philosophically, the researcher's belief system is commensurate with the interpretive paradigm. Ultimately, a case study design using a SAP perspective was chosen.

Whilst the case study methodology has been widely employed for the conduct of SISP research, the use of a SAP perspective lends a novel element to the research approach. Forming a lens through which data collection and analysis was conducted, the employed SAP perspective imbued the study with a focus on those elements central to the practice of SISP. The rationale for selecting this particular approach in preference to a number of possible alternatives and an overview of the field of IS from a methodological perspective are presented. Whilst recognising the merit of competing philosophies, methodologies, and methods, the researcher is confident that the optimal approach has been selected. An illumination of why the researcher has reached such a conclusion and made these critical choices is now presented.

#### 4.1.1 Macro-level Overview of Chapter Sections

Having employed Section 4.1 to introduce the Chapter, Section 4.2 presents an overview of the philosophical approaches to IS research. It highlights the various sets of assumptions social scientists possess which guide their approach to research, particularly as they pertain to the field of IS. The strengths of the researcher's interpretivist viewpoint are provided. The theme of positioning the research is continued in Section 4.3 with its

focus upon the decision to conduct a qualitative study, providing a justification for the chosen approach and its suitability for answering the research question. Section 4.4 elucidates the highly pertinent rigor versus relevance debate and the difficulty IS researchers face when trying to achieve academic rigor whilst simultaneously remaining relevant to the practitioner community. The researcher's adoption of the chosen case study design using a SAP lens is highlighted as a valuable tool in achieving such a duality for the current study. The purpose of these opening sections is to lay the foundation for the remainder of the chapter and provide a broad overview of the philosophical and methodological landscape of the IS domain.

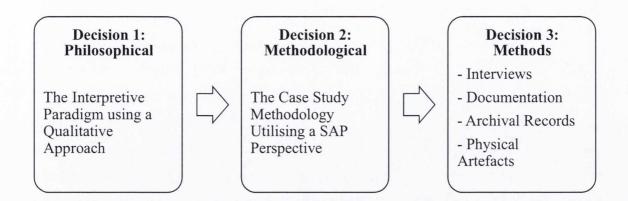
Section 4.5 forms the core of the chapter, presenting an in-depth review of the chosen research approach. The researcher's rationale for selecting a case study design and using a SAP lens, the key aspects of conducting research using this approach, and the various research methods associated with its execution are explored. Ultimately, the approach's inherent suitability for the current study is highlighted. The analytical strategy adopted is the focus of Section 4.6. The nine-step process is described and illuminated through the use of specific examples from the collected data. This process ultimately resulted in the emergence of four core themes that subsequently shaped the case study reports. The structuring of the case study report, inclusive of the steps taken to ensure quality is ensconced in Section 4.7. The disparate methodological approaches that were considered but ultimately rejected are detailed in section 4.8. Whilst the merits of each are acknowledged, the reasoning behind their non-selection is provided. Section 4.9 is a reflection piece, chronicling the researcher's thoughts upon the execution of the study having now drawn it to a close. Finally, Section 4.10 provides a synopsis of the aforementioned sections and their associated choices, and how such choices proved most appropriate for the current study. Figure 4.1 portrays a macro-level view of the three broad research decisions that were made.

# 4.2 Philosophical Approaches to Research in the Field of IS

Social scientists possess an underlying set of assumptions that guide their approach to research. Broadly encapsulated, these assumptions can be classified as; ontological, epistemological, methodological, and beliefs about the nature of human beings (Burrell and Morgan, 1979). They can be defined as follows:

- Ontology is concerned with the very nature of reality.

Figure 4.1 - The Three Key Research Approach Decisions



- **Epistemology** relates to the grounds of knowledge; how one may go about understanding the world and subsequently communicating this as knowledge.
- **Methodology** is concerned with how one goes about investigating and obtaining knowledge about the social world. It is directly influenced by the researcher's ontological and epistemological beliefs, in addition to their views concerning human nature.
- The nature of human beings encapsulates beliefs pertaining to individuals and groups, with particular reference to their relationship with the environment in which they exist.

These assumptions are the central criteria for locating the paradigm, i.e. a basic set of beliefs or meta-theoretical assumptions that guide action (Clarke and Braun, 2013; Guba and Lincoln, 1994; Porra et al., 2014), in which a study is based. Due to the study's location within the wider field of IS, the researcher strove to garner a comprehensive understanding of the extant paradigms in the field and ultimately locate himself philosophically along the spectrum of alternatives. This proved a fundamental first step in the process of choosing an appropriate research approach for answering the research question posed. It ultimately led the researcher along the path towards a qualitative study employing a case study design. In addition, it was also a pivotal juncture in taking the researcher towards a SAP-based perspective due to its inherent applicability to the researcher's philosophical predilections.

A number of different classification schemes exist for distinguishing alternative paradigms. Guba and Lincoln (1994) prescribe four distinct paradigms in the form of positivism, post-positivism, critical theory, and constructivism. Burrell and Morgan (1979) suggest a competing configuration consisting of functionalist, interpretivist, radical structuralist and radical humanist. Orlikowski and Baroudi (1991) proffer three dominant

paradigms of positivism, interpretivism, and the critical paradigm. The researcher has adopted Orlikowski and Baroudi's (1991) classification for the purpose of this research due to its parsimony and prevalence within the field of IS.

It is the conventional view that the research question ultimately guides decisions about research design and research methods (Bryman, 2007). However, the research question itself is often the product of the researcher's own paradigmatic predilections, with questions constructed in such a way as to fit with the researcher's preferred research approach (Bryman, 2007). The positivist and interpretivist paradigms are dominant in the field of IS. The researchers ascribed to each resemble rival teams on occasion (Goldkuhl, 2012), with fundamental, opposing perspectives between the two approaches categorised in the following ways; objective versus subjective, nomothetic versus idiographic, quantitative versus qualitative, outsider versus insider, and etic versus emic (Lee, 1991). Such dividing lines have resulted in calls for positivist versus interpretivist rhetoric to be discarded altogether such is the negative impact it has had on the scholarly community (Weber, 2004). However, for the purpose of providing a comprehensive overview of philosophical approaches in the field of IS, such terminology will be a feature of this section.

It has been argued that IS is a multiple paradigm discipline (Hirschheim and Klein, 2012; Mingers, 2004; Porra et al., 2014) and despite the inherent risks associated with such a construction, that it is this paradigmatic pluralism that has allowed the field to grow and become established as it has matured (Klein and Hirschheim, 2008). Whilst the literature is dominated by the positivist and interpretivist paradigms, the critical paradigm has emerged in more recent times to assume an important, albeit relatively infrequent presence within IS studies. An overview of positivist, interpretivist, and critical perspectives now follows, along with a comparison of qualitative and quantitative research approaches.

#### 4.2.1 Positivism

Positivism has its origins in the natural sciences and is the dominant paradigm within IS research (Orlikowski and Baroudi, 1991; Chen and Hirscheim, 2004). Ontologically, it is based on the premise of an external reality that exists independently of the observer (Chen and Hirschheim, 2004). From an epistemological perspective, it is deemed possible that the investigator is capable of studying the phenomenon without influencing it (Guba and Lincoln, 1994). Relationships can be quantified through the assignment of measurable variables. It assumes an objective (hard) view of the world, and thus from a methodological standpoint there is a search for universal laws relating to the

objects under investigation. Although qualitative research approaches can exist within the positivist paradigm (Tsang, 2014), it is quantitative research that is most prevalent. Common research methods include surveys, laboratory experiments, formal methods and mathematical modelling.

The positivist stream of research is to be commended for the rigor and enforced standards with which it is executed. However, it is not without its weaknesses. In striving for universal laws, it overlooks many of the contextual and historical influences which may have a significant influence on the subject of the investigation (Orlikowski and Baroudi, 1991). Such a regimented approach can severely limit the breadth of research undertaken within the field of IS. Additionally, the plausibility of the researcher's ability to exclude all values and biases from the study is questionable, as even the decision to adopt a value-free stance could be argued to demonstrate a certain value position or bias (Saunders et al., 2009). The researcher believes that the social, political, and cultural influences on SISP are integral factors which warrant investigation, and that a failure to do so will result in findings that do not provide a holistic picture of the phenomena under investigation.

# 4.2.2 Interpretivism

The interpretive approach to IS research has become increasingly prevalent (Orlikowski and Baroudi, 1991). Ontologically, interpretivism is based on the premise that our knowledge of reality is socially constructed by human actors (Walsham, 1995b). Unlike the positivist tradition, an objective reality awaiting discovery does not exist: social reality can only be interpreted (Tsang, 2014). It is assumed that our knowledge of reality is developed by social constructions such as; language, consciousness, shared meanings, documents, tools, and other artefacts (Klein and Myers, 1999). It rejects the notion that research can be undertaken without the researcher's values having an effect on data collection. It also discounts the possibility of factual accounts of events, instead seeking a relativistic understanding of phenomena (Orlikowski and Baroudi, 1991). In interpretive methodologies the researcher attempts to understand the meanings imbued in human and social interaction, placing themselves in the social setting of the study and engaging with the participants so as to get a sense of how interactions take place from the participants' perspective (Chen and Hirschheim, 2004). Qualitative data are most commonly associated within the interpretive paradigm (Goldkuhl, 2012). Potential sources of such data are interviews, observations in the field, questionnaires, documents, texts, the use of visual materials, and the use of personal experiences. Triangulation of multiple sources of data is

often used to ensure that the data is commensurate with the story the researcher believes they are telling (Saunders et al., 2009).

Just as positivism has its critics, so too does interpretivism. Such critics state that interpretivism does not examine the oftentimes external conditions which give rise to certain meanings and experiences, that it lacks an explanation for the unintended consequences of action, and that it fails to address social conflicts within society and organisations by ignoring contradictions which may be prevalent in social systems (Doolin, 1998; Orlikowski and Baroudi, 1991). Additional criticisms are labelled at interpretivism's tendency to place too much value upon empirical research that forces scholars to invest energy in providing empirical support that ultimately provides little benefit, and that the interpretive perspective often neglects to explain historical change, i.e. how organisations have evolved over time (Stahl, 2014; Walsham, 2014).

# 4.2.3 Critical Research Theory

Myers and Klein (2011: 17) describe critical IS research as being "concerned with social issues such as freedom, power, social control, and values with respect to the development, use, and impact of information technology." It is important to distinguish critical theory from both positivism and interpretivism in that both positivism and interpretivism "tend to focus on description and understanding rather than on emancipation and the importance of values and assumptions at the individual level" (Brooke, 2002, p.50). It is this evaluative dimension that is one of the critical paradigm's key distinguishing features (Orlikowski and Baroudi, 1991). Critical research subscribes to a much broader historical, social and political view of the IS discipline than that of either positivism or interpretivism (Cecez-Kecmanovic et al., 2008). It is emerging as a potentially important perspective in IS research (Myers and Klein, 2011), and is attracting a growing interest from the IS research community (Kvasny and Richardson, 2006). Doolin (1998) argues that there is an increasing need for IS researchers to adopt a more critical viewpoint in their work, specifically in regard to the role that IS plays in maintaining social and power relations in organisations.

However, despite the progress that the critical research approach has made in more recent times, its legitimacy as a viable option in the IS research field is still in question (Myers and Klein, 2011).

# 4.2.4 Paradigmatic Representation within the Extant IS Literature

The research question locates the study within the SISP domain, itself located within the wider field of IS. Subsequently, the researcher conducted a review of the various research paradigms that exist within the IS domain. Studies show the existence of disparities across a number of key parameters pertaining to IS research, particularly; the frequency of use of competing research philosophies, i.e. positivism and interpretivism, the preferred research philosophies of particular geographic regions, and the research approaches found in the most prominent IS journals. Table 4.1 represents a positivist vs. interpretivist comparison across selected studies. As is evident from the featured studies, Avison et al.'s work (2008) eschews the dominant trend toward positivism. This can be explained due to the study incorporating only studies located in the Information Systems Journal (ISJ), which was founded on the premise of creating a home for predominantly interpretive-based research.

**Table 4.1 - The Positivist vs. Interpretivist Dichotomy in Selected Studies of IS Journals** 

Study	Time Period	No. of Articles	Positivist	Interpretivist
Orlikowski & Baroudi (1991)	1983-1988	155	96.8%	3.2%
Vessey et al. (2002)	1995-1999	488	95.3%	4.7%
Chen & Hirschheim (2004)	1991-2001	1,893	81%	19%
Avison et al. (2008)	1991-2008	275	29.1%	70.9%
Williams et al. (2009)	1985-2007	345	74.8%	25.2%
Hughes (2011)	1963-2010	110	70.9%	29.1%

The researcher's own initial study of 110 IS articles featuring an inherent focus upon IS and senior managers published from 1963 to 2010 supports the presented statistics. Whilst forming the researcher's initial foray into the wider IS literature, this first literature review played a formative role in shaping views on the role of senior managers during SISP. Ultimately, this led the researcher to a more refined research question, the answering of which forms the motivation for this study. Positivist research accounted for 70.9% of the studies versus interpretivist's 29.1%. The survey method was most frequently employed (50%), followed by case study (19%). 71% of the studies were located in the U.S., with 10.9% and 10% emanating from Australasia and Europe respectively. MIS Quarterly contributed the largest percentage of publications with 21.8%, followed by the Journal of Management Information Systems with 10.9%.

The majority of these studies elucidate an ingrained IS research approach which is to be commended for its focus in one regard, but questioned for its lack of plurality in another. Current practices may leave the field susceptible to a state of homogeneity (Williams et al., 2009). Boundary spanning across the various paradigms would prove beneficial, yet remains a significant challenge (Klein and Hirschheim, 2008). Calls for a more varied, pluralistic approach to IS research are evident in the literature (Orlikowski and Baroudi, 1991; Galliers, 1993; Mingers, 2001). Indeed, it is Mingers' (2001) recommendation that different research methods from different paradigms should be combined. The author asserts that such endeavours will ultimately produce richer research results. By adopting a single method approach, Mingers (2001: 244) claims that "one is often gaining only a limited view of a particular research situation".

However, a barrier exists in the form of publication pressures, resulting in researchers opting for the safer approach of adopting well-established research strategies (Mingers, 2001; Chen and Hirschheim, 2004; Williams et al. 2009). Academic faculty face tenure objectives that are predominantly based on the number, as opposed to type of publications attained. The 'publish or perish' mantra is an over-arching influence. Faculty tend to adopt positivist, quantitative research over interpretive, qualitative research due to the fact that it is less time-consuming, is more widely accepted, and has inherently more objective evaluation criteria (Chen and Hirschheim, 2004). The desire for an increase in interpretive, qualitative, multi-method research would appear to exist within the IS community. It is encouraging that a more recent overview of the field of IS (Hirschheim and Klein, 2012) signals that at least some progress is being made, particularly in regard to a greater acceptance within the IS research community of interpretive research employing a range of qualitative research methods. However, the challenge of converting this goodwill into a sustained, tangible shift in the approach to IS research remains a conundrum yet to be fully solved.

# 4.2.5 Rationale for selecting the Interpretive Paradigm

The interpretive paradigm is concerned with how to understand the meanings attached to organisational life (Saunders et al., 2009), and has been selected for a number of reasons. Ontologically, it is the researcher's belief that reality needs to be socially constructed, i.e. an objective reality external to the individual awaiting discovery does not exist. Instead, reality needs to be interpreted. From an epistemological standpoint, the research question is exploratory in nature, i.e. it aims to explore how senior managers practice SISP. There exists little empirical enquiry into this particular phenomenon from a

holistic viewpoint, focused upon the 'doing' of SISP. The researcher will examine the practice from the perspective of the actors involved, from which subjective interpretations will be made in order to inductively generate novel theory. This inherently implies an interpretivist epistemology. The researcher can discard the positivist epistemology on the grounds that it is not the research's goal to test an existing theory or hypothesis through quantification or statistical analysis. The critical paradigm can be rejected on the basis that the researcher does not wish to critique a particular aspect of society, nor is the research emancipatory in nature. Thus, the study is firmly grounded within the interpretive paradigm.

This fundamental positioning piece of locating one's own philosophical beliefs was instrumental in subsequent decisions pertaining to the selection of a research methodology and associated research methods. The exploratory nature of the study rendered a qualitative study most suitable. Subsequently, a case study design and its inherent tools (Yin, 2009) were identified as forming a comfortable fit for the obtainment of the research's objectives. The use of a SAP lens (Jarzabkowski and Spee, 2009; Whittington, 2006; Orlikowski, 2010) further sharpened the researcher's ability to target the specific elements of the study most crucial to answering the research question, enabling links to be made between the micro activities of senior managers and more macro-level practices. It conforms to the interpretive researcher's quest for an understanding of the meanings pervasive in human and social interaction (Chen and Hirschheim, 2004).

# 4.3 The Qualitative/Quantitative Decision

The decision of whether or not the study will take the form of a qualitative or a quantitative study, or a combination of both, is largely influenced by the researcher's own epistemological beliefs. The following sections investigate these approaches in detail, including a justification for the approach chosen for the current study.

# 4.3.1 The Quantitative Approach to IS Research

Quantitative IS research is primarily approached from a positivist epistemological perspective, typically using numerical analysis as a means to illustrate factoral relationships in the phenomena under investigation (Chen and Hirschheim, 2004). Having originated in the natural sciences, the quantitative approach has dominated IS research practices (Chan, 2000; Galliers and Huang, 2012; Palvia et al., 2007; Vessey et al., 2002). However, it has seen this dominance challenged in more recent times by qualitative

research, particularly in Europe (Chen and Hirscheim, 2004). Data are primarily numerical, with examinations conducted through the use of statistical analysis (De Villiers, 2005). Quantitative research is frequently hypothesis-driven, whilst study results are often used for predictive purposes (De Villiers, 2005). Despite recognition of its objective, rigorous methods, quantitative research has been criticised for not providing a holistic picture of the phenomena under investigation, particularly with IS research increasingly focused on organisational and managerial issues that require rich insights into these complex constructs (Galliers, 1993; Darke et al., 1998).

# 4.3.2 The Qualitative Approach to IS Research

As defined by Denzin and Lincoln (2005: 3), "Qualitative research is a situated activity that locates the observer in the world', employing an inherently multi-method focus (Denzin and Lincoln, 2005) combined with a plurality of research paradigms, i.e. positivist, interpretivist, and critical (Carroll and Swatman, 2000). As interest in the social and organisational issues linked to the development, interaction, and use of IS has grown in recent times, so too has the use of qualitative research methods such as case-based research, ethnography, and action research (Carroll and Swatman, 2000; Darke et al., 1998; Tsang, 2013). Qualitative research is ideally suited to the study of processes as they happen, as opposed to research focused on specific outcomes or impacts (Kaplan and Maxwell, 2005). The process of qualitative research is defined by three interconnected activities, namely; the construction of a framework guided by the researcher's beliefs (theory, ontology) that specifies a number of questions (epistemology) the researcher then examines in specific ways (methodology, analysis). Qualitative research methods are primarily inductive, with the generation of theory taking place during the course of the study (Kaplan and Maxwell, 2005). Researchers devise categories and meanings from the collected data by way of an iterative process (Kaplan and Duchon, 1988).

Due to the highly subjective nature of qualitative research, criticism has been aimed at the approach for a lack of clear linkages between the data collected and the conclusions drawn (Carroll and Swatman, 2000). This potential weakness is associated with the difficulties qualitative research has in overcoming the triumvirate of quality, validity, and rigor, each of which are hallmarks of high-level academic research (Carroll and Swatman, 2000; Darke et al., 1998; Gioia et al., 2012; Whittemore et al., 2001).

# 4.3.3 Reasons for choosing a Qualitative Approach

As defined by Denzin and Lincoln (2005: 3), the qualitative researcher is one who studies "things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them", an assertion echoed by Conboy et al. (2012). The current study aims to explore how senior managers practice SISP. The research took place in the natural setting of two PSOs, with the goal being to inductively generate novel theory. Qualitative research methods are primarily inductive (Kaplan and Maxwell, 2005) and aided in this process. In addition, qualitative research methods in IS have increased in prevalence, particularly in Europe (Chen and Hirscheim, 2004). Due to the socio-technical nature of the phenomenon under investigation (Galliers, 2004, 2006, 2011), the researcher is convinced that the adoption of qualitative research methods was appropriate.

# 4.4 The Rigor versus Relevance Debate

The rigor versus relevance debate has been hotly contested in academic publications (Desouza et al., 2006; Fällman and Grönlund, 2002; Gioia et al., 2012; Robey and Markus, 1998; Straub and Ang, 2011). Indeed, it is particularly pertinent for the current study and its adopted research approach. With IS being an applied discipline, this debate has been fervent within the IS community. The main crux of the argument centres on whether or not IS research can maintain its academic rigor and legitimacy whist being in possession of relevancy for the practitioner community. This duality is one with which the discipline has struggled. Knowing one's target audience is crucial in attempting to overcome such a hurdle. As defined by Fällman and Grönlund (2002, n.pg.), "Rigor denotes a structured and controlled way of planning, carrying out, analysing, evaluating and producing products of research, independently of the research method used." Fällman and Grönlund (2002, n.pg.) define relevance as "the act of making efforts into research issues that is of concern to a perceived audience."

A research programme that is both rigorous and relevant has been demonstrated to be realistically achievable. Petter et al. (2012: 357) assert that in both the current and future eras of research located within the field of IS research methods should provide a holistic account of the particular phenomenon under investigation and "yet be reasonably parsimonious in order to be useful to the researcher and to the practitioner." Knowing the audience of one's research coupled with an attention to detail are keys to bringing such

research goals to fruition. As Pearson et al. (2005: 60) advise; "... what is important is that we recognise who our audience is in our research efforts." As noted in Chapter 2, the very origins of the SAP perspective can be traced to the disjoint between academic endeavours within the traditional strategy domain and the realities of management 'in practice' (Jarzabkowski et al., 2007; Jarzabkowski and Spee, 2009). Research adopting a SAP perspective (inclusive of the current study), may be viewed as attempting to bridge this gap. The SAP perspective, with its emphasis on managerial activity and the 'doing' of strategy (Palmer and O'Kane, 2007; Whittington, 1996), imbues itself to neutralising the deficiencies of alternative approaches.

# 4.4.1 Incorporating Rigor and Relevance: The Role of the Chosen Research Approach

The current study's investigation into the practice of SISP by senior managers in PSOs follows the sentiments of authors inclusive of Fällman and Grönlund (2002) and Robey and Markus (1998), in that rigor and relevance need not be seen as competing ideals, but rather may be realised in tandem. The incorporation of a SAP perspective furnishes the study with a relevancy to practitioners whilst also benefitting from the rigorous empirical investigatory tools afforded by strict adherence to a robust case study design.

The case study design (Eisenhardt, 1989; Gerring, 2004; Stake, 1995; Yin, 2009) and its core elements are detailed later in this chapter. Remaining faithful to the chosen approach's prescriptions, inclusive of the maintenance of a clear chain of evidence chronicling the researcher's activities, imbued the study with a defined structure. The SAP lens further instilled a consistency and uniformity of action, focusing data collection and analysis within the broader case study design upon those elements most critical for the answering of the research question. This was achieved though the study's anchoring upon the 'doing' or praxis of strategy work (Whittington, 2006), routinised behaviour in the form of practices (i.e. the practice of SISP), and a focus upon SISP's practitioners (in this instance senior managers). Levels of activity (Jarzabkowski and Spee, 2009) in the form of macro (an industry or market), meso (the organisational level), and micro (the suborganisational level), the social dimension of SISP, and strategic episodes (predominantly comprised of SISP meetings) are all concepts to which practitioners can relate and easily understand, if not specifically in such SAP-related terminology.

These concepts formed beacons for the collection and analysis of data. More specifically, having decided upon a case study design, a SAP perspective infiltrated the

core sources of evidence employed during data collection, thus reaffirming the rigorous approach employed whilst maintaining relevancy to the practitioner. Documentation, archival materials, and physical artefacts were distilled into a multi-level design (Kozlowski et al., 2013) consisting of macro, meso, and micro categories. Specific practices were discerned from each source, as were the practitioners involved and the praxis that transpired. The interviewing process was also formatted to examine activity at macro, meso, and micro levels (see Appendix III). The practices associated with SISP, the practitioners involved, and the praxis that actually took place in the employed case sites represented specific topics of discussion. The construct of strategic episodes formed an additional talking point, with interviewees relating with comfort to various SISP-related meetings in which they were involved.

Subsequently, data analysis was premised on the aforementioned core tenets. The rich resources of primary and secondary data accrued were analysed through a SAP lens. The researcher was able to move with confidence through the large quantities of collected data armed with a comprehensive knowledge of the key elements of which to be aware. The rigor afforded by the implementation of a theoretically driven case study design combined with the relevancy imbued through the implementation of a SAP lens instilled a novelty to the research approach. It has resulted in a programme of research that the researcher is confidant belies the notion that rigor and relevance need be mutually exclusive.

# 4.5 The Chosen Approach: A Case Study Design Using a SAP Perspective

Having formulated a research question that established a grounding within the field of IS, the adoption of the interpretive paradigm combined with the use of a qualitative research approach was deemed appropriate for the current study. Subsequently, the choice of research methodology became of paramount importance. It is a widely held tenet of social research that it is the research question which drives subsequent decisions relating to the choice of research approach (Bryman, 2007; Denzin and Lincoln, 2005; Senn, 1998). Therefore, a methodology is required that can:

- Provide a holistic approach to answering a 'how'-type question
- Allow for an exploratory study seeking to build theory
- Embrace an investigation into a social activity, i.e. the practice of SISP by senior managers

Based on such criteria, a case study design using a SAP perspective was decided upon as an appropriate research approach. Such a selection answers explicit calls within the IS literature for more multi-faceted research (Galliers and Huang, 2012; Galliers, 1993; Mingers, 2001; Orlikowski and Baroudi, 1991), countering some of the more negative commentary on the perceived one-dimensional nature IS research. The SAP lens was used as a honing tool to bring greater precision to the over-arching case study design. It represents a novel approach that engendered value to the research process in its ability to specifically target those elements most crucial to the study. Cavaye (1996, p.229) states:

"It is widely accepted that the selection of a research strategy entails a trade-off: the strengths of the one approach overcome the weaknesses in another approach and vice versa. This in itself is a powerful argument for pluralism and for the use of multiple research approaches during any investigation."

The chosen approach also reflects the growing use of qualitative research methods within the field of IS (Carroll and Swatman, 2000; Chen and Hirschheim, 2004; Darke et al., 1998) and answers calls for more such research to be undertaken (Galliers and Huang, 2012).

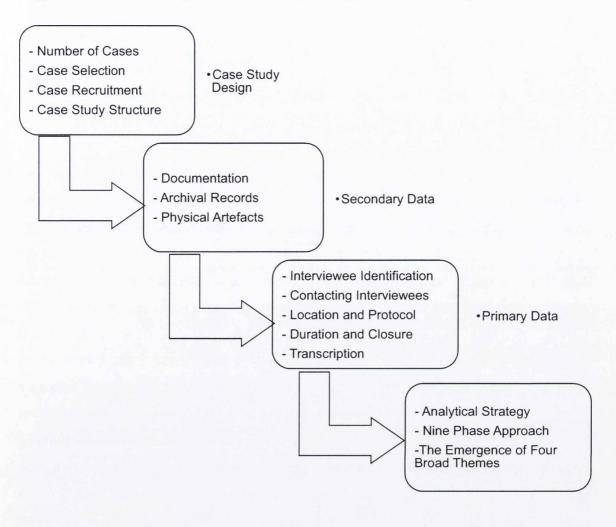
# 4.5.1 The Case Study Design

The current section provides a theoretical overview of the case study design and its operationalisation in practice, inclusive of: the number case studies employed, the case selection criteria used, the recruitment of suitable case study sites, the structure imposed upon the investigation, and the data collection and analysis techniques employed. Figure 4.2 provides a visual representation of the design's core components.

Yin (1994: 13) defines the scope of a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident." Gerring (2004: 342) believes a case study is best defined as "an intensive study of a single unit for the purpose of understanding a larger class of (similar) units." Eisenhardt (1989: 534) simply defines the case study as "a research strategy which focuses on understanding the dynamics present within single settings."

Case studies are the most commonly employed qualitative strategy in IS research (Hamilton and Ives, 1982; Orlikowski and Baroudi, 1991), becoming increasingly popular within the field (Doolin, 1996). They can be used to achieve various research aims, such as providing rich descriptions of phenomena in context and developing or testing theory

Figure 4.2 - The Adopted Case Study Design's Core Components



Adapted from Yin (1994)

(Darke et al., 1998; Eisenhardt, 1989). Case studies are acknowledged to possess an advantage when engaging in research that is exploratory in nature (Gerring, 2004). It has become an increasingly attractive approach for researchers looking to investigate the development, implementation and use of IS within organisations (Darke et al., 1998). Such is the prevalence of case-based research within the field of IS that it is now rarely, if ever questioned as a valid research setting (Lee and Hubona, 2009).

Theory building from case-based studies is growing in popularity (Hoon, 2013), with a large number of influential works emanating from the approach (Eisenhardt and Graebner, 2007). As an exploratory study, the research also benefits from the potential richness of the accrued data, which is a major strength of the case-based approach (Siggelkow, 2007). Kuhn (1987) opines that a discipline without a substantial body of thoroughly executed case studies is a discipline without a systematic production of

exemplars, and that such a discipline is an ineffective one. With IS strategy research tending to favour a private sector setting, it was encouraging to discover that IS-related studies in the current decade situated across government agencies (Bakar et al., 2010), in a public healthcare organisation (Abraham and Junglas, 2011), and in a local government body (Steventon et al., 2012) have each adopted a qualitative case study design.

#### 4.5.2 Number of Cases

A key consideration in the design of a research strategy is whether to employ either a single or a multiple case approach (Yin, 2009). A single case can allow for the collection of extremely rich data due to its explicit focus on just one research site (Franklin et al., 2014), being particularly appropriate for extreme or exemplary situations to which the researcher has gained access (Zivkovic, 2012). However, such an approach is not without its potential drawbacks. A number of such concerns are raised by Lee (1989) and Gable (1994), with a single case study's lack of generalisability (Tsang, 2014) being identified as the principal concern with such a design (Van de Ven and Huber, 1990). Conversely, a multiple case approach may diminish the potential richness of the data collected with each additional case added, but equally increases in theory generalisability as more cases are incorporated into the study. Multiple cases typically provide a stronger base for building theory (Benbasat et al., 1987; Yin, 2009), tending to result in "more robust, generalisable, and testable theory than single-case research" (Eisenhardt and Graebner, 2007: 27). A multiple case study design also allows for cross-case comparison (Darke et al., 1998; Tsang, 2013), which further contributes to the building of rich theory (Benbasat et al., 1987). Perry (1998) depicts the many differing views in regard to the ideal number of cases, ranging from two at a minimum up to fifteen at the maximum end of the scale.

Two cases were decided upon for the current study. The researcher believes two cases strike a reasonable balance between having the necessary breadth from which to build credible theory and also allowing for the depth to pursue rich data on account of the exploratory nature of the research. From the researcher's review of the SAP literature it is apparent that studies of this nature have a strong tendency to feature either a single or a small number of case studies. The reasons for such were realised during data collection and analysis. More than two cases could have resulted in data management issues: the employed two cases proved challenging due to the large quantity of data accrued for each case site. The researcher's viewpoint, having now completed the study and being of a position to stand back and view it from a more objective position, is that an increase in the

number of cases would have proved detrimental to the quality and depth of the research undertaken given the constraints of completing a doctoral thesis in the allocated timeframe.

#### 4.5.3 Case Selection

The value of the research is dependent on more than just the number of cases chosen. The quality of the cases selected and the researcher's analytical and investigative abilities are of equal, if not greater importance (Perry, 1998). On account of the relatively small number of cases, the choice of case sites should involve discretion and judgement (Amaratunga and Baldry, 2001). Cases should be selected for their ability to contribute to the overall investigation rather than a logic predicated on convenience (Poulis et al., 2013; Stake, 1995). The identification of a population of possible case study sites is a good starting point and is crucial to the case selection process. An appropriate population "helps to define the limits for generalising the findings" (Eisenhardt, 1989: 537). The public service domain was selected as the context for the study due to the researcher's ability to gain entry to such organisations, the likelihood of being able to obtain the requisite comprehensive access due to the availability of information in the public service, and the relative shortage of IS research employing PSOs.

As there are usually a limited number of suitable cases that can be used for a particular study, Pettigrew (1997) recommends that cases are chosen in which the process being investigated is explicitly observable. The nature of the research topic should be the first consideration in this regard (Benbasat et al., 1987). From the finalised population, theoretical sampling may be used for case selection, i.e. cases are chosen for theoretical, not statistical reasons (Glaser and Strauss, 1967), with the goal being to extend the emergent theory (Eisenhardt, 1989). The current study's case selection criteria were as follows:

**Public Service Organisations**: each case must reside within the Irish public service domain, and thus satisfy the evident lack of IS research set within a public service context. A reason for exclusion under this dimension would be if the case is located within a sector other than the public service, e.g. the private sector, the voluntary sector, etc.

The Role of IS: the organisation will ideally view IS as a core business function, the establishment of which can be ascertained through initial contact with candidate case sites. In such organisations, the need for SISP and senior managers' participation therein is likely to be increased. An unsuitable case under this criterion would be an organisation that

views its IS department as a non-core function, requiring day-to-day oversight, but lacking any strategic intent.

The Practice of SISP: evidence must exist within each case site of a commitment to SISP. This can be measured by the presence or lack thereof of IS strategies, IS strategy reviews, and other IS strategy-related documentation. An example of an unsuitable case under this dimension would be an organisation devoid of such materials, or indeed any tangible evidence as to the existence of the practice of SISP.

The Role of Senior Managers: cases are chosen in which senior managers are actively involved in the practice of SISP. An example of an unsuitable case under this criterion would be an organisation that outsources the planning of its IS function to a third party, effectively eliminating senior managers from SISP.

## 4.5.4 Recruitment of Candidate Organisations

Having decided upon two cases for the current study and with the case selection criteria grounding the study in the public service domain, the task of recruiting suitable organisations became the focus of the researcher's exertions. To begin, the pool of possible case sites was identified via online searches of all organisations located within the Irish public service domain. Given that two cases would be employed, a replication logic (Yin, 2009; Zivkovic, 2012) was deemed appropriate for investigation into an under-explored phenomenon. Subsequently, it was decided that both cases should be located within the same segment the public service, would be of a similar size in terms of revenue and employee count, with similar results predicted from each organisation.

The ensuing step was a process of verification to establish the suitability of potential case sites through the application of the case selection criteria. A participatory agreement was secured for what will be referred to from now on as PS1. The researcher's supervisor having an existing relationship with the organisation played a facilitatory role. An introductory meeting was scheduled with the CEO of PS1, at which the organisation was deemed suitable for the study as set out by the case selection criteria. The process of recruiting a second case study led to an organisation being discarded for failure to meet the devised criteria. Having established contact and personally met with the organisation's CEO, it was discounted from the study for not having its senior managers actively involved in the practice of SISP. The practice of SISP in this instance appeared to fall under the sole remit of the Head of IS with little to no additional input from the senior manager cohort. Thus, the organisation was rendered unsuitable for the current study. Consequently,

contact was made with the Head of IS of what will be identified for the remainder of the thesis as PS2. An initial meeting confirmed that PS2 was an appropriate research site. The Head of IS formed the primary liaison in PS2, likely due to the fact that they held a senior, C-level position within the organisation. In PS1, the Head of IS was not afforded such a role despite being a head of function, with the CEO assuming the role of primary contact.

At the initial meetings with the CEO of PS1 and the Head of IS of PS2 the objectives of the study, why the organisation was suitable for the study, and what the researcher was likely to require during the investigation in the form of access to potential interview candidates and secondary data was disclosed. This was a trust-building measure, viewed as essential to improving the candidate organisation's likelihood of participating in the study. Following the successful completion of these steps, formal confirmation was made to verify that each organisation would be included in the study and to extend gratitude for allowing the researcher the required access.

Ultimately, the two selected cases were from the public service healthcare domain. Both cases met the case selection criteria on the basis that they are located within the public service, view IS as integral to their functioning (a fact likely aided due to the criticality of the services provided within the healthcare environment), had published IS strategies covering periods of three (PS1: 2010-2012) and five years (PS2: 2011-2015) respectively, and had senior managers who actively participated in the planning phase of their IS strategies.

## 4.5.5 Structuring the Investigation

The case studies were conducted in a sequential manner. The benefit of such an approach was that it afforded the researcher an opportunity to reflect upon each individual case before proceeding to the next (Eisenhardt, 1989).

The first task upon entering each case site was an exhaustive collection and review of secondary data. The secondary data bolstered the validity of the collected interview data as subsequent findings were triangulated from multiple sources of evidence (Eisenhardt, 1989). Upon the completion of this task, interviews were scheduled with senior managers (defined for the study as the CEO and their heads of functions). It was decided that a direct report of each senior manager would be interviewed when appropriate and where possible so as to bolster data accuracy through further triangulation. A key aspect of the interviews conducted with middle managers was their explicit focus upon the role of senior managers, i.e. the study is not focused upon the role of middle managers, and so questions were

aimed at how middle managers perceived the role of senior managers during the practice of SISP. Interviews with additional organisational stakeholders were conducted when the collected data indicated that doing so would be of benefit to the study. In PS1, it was clear that two individual external consultants were directly involved in the practice of SISP and were subsequently interviewed. In regard to sequencing, interviews with the highest-ranked organisational employee in the form of the CEO were scheduled so that they were conducted in the latter stages of fieldwork. This strategy ensured that the researcher was sufficiently knowledgeable of the host organisation and consequently could extract the maximum possible benefit from each of these key interviews.

#### 4.5.6 Data Collection

Multiple data collection methods are normally employed during case-based research (Benbasat et al., 1987; Venkatesh et al., 2013). This multi-method approach ameliorates the validity of the results due to the triangulation of findings (Eisenhardt, 1989). It can also prove to be highly synergistic by improving data accuracy and in limiting the researcher's own biases (Miles and Huberman, 1994). Sources of data may include interviews, direct observation, organisational documentation, archival records, and physical artefacts (Benbasat et al., 1987), with the principal goal being to collect rich data which accurately represents the phenomena under investigation. Table 4.2 details the data sources employed for the current study.

## 4.5.6.1 Phase 1: Secondary Data

Secondary data were the focus of initial data collection efforts upon entering the field. As per Yin's (2009) taxonomy, secondary data sources were comprised of documentation, archival records, and physical artefacts. The rationale for an extensive gathering of secondary data pertaining to each site was so that the maximum benefit could be accrued from the subsequent interview stage of fieldwork. The researcher's accumulated knowledge of each field site aided the interview process by enhancing the researcher's ability to interact with interview subjects and providing a source of triangulation for the accumulated interview data.

Secondary data also allowed the researcher to contextualise the study and thus provided a rationale as to how both SISP and senior managers' practice therein has been shaped. This context-setting exercise was executed at both macro and meso levels within each host organisation. Particular emphasis was placed upon governmental (macro) and

Table 4.2 - Data Collection: Sources of Evidence (Adapted from Yin, 2009)

Source of Evidence	Strengths	Weaknesses	Included in the current study?
Documentation	Stable – can be reviewed repeatedly. Unobtrusive – not created as a result of the case study. Exact – contains exact names, references, and details of an event. Broad coverage – long span of time, many events and settings.	Retrievability – can be difficult to find. Biased selectivity, if collection is incomplete. Reporting bias – reflects (unknown) bias of author. Access – may be deliberately withheld.	YES Examples – minutes of meetings, written reports, articles appearing in mass media.  Solid foundational evidence for case, used for corroboration.
Archival Records	(Same as those for documentation) Precise and usually quantitative.	(Same as those for documentation) Accessibility due to privacy reasons.	YES (limited) Examples – service records showing number of clients served, organisational records showing budget and personnel records.
Interviews	Targeted – focuses directly on case study topics. Insightful – provides perceived causal inferences and explanations.	Bias due to poorly articulated questions. Response bias. Inaccuracies due to poor recall. Reflexivity – interviewee gives what interviewer what they want to hear.	YES Example – In-depth interviews conducted with 31 interviewees across both case sites.  Exhaustive – all key personnel targeted were interviewed. No further suggestions proffered by interviewees.
Direct Observations	Reality – covers events in real time. Contextual – covers context of case.	Time-consuming. Selectivity – broad coverage difficult without a team of observers. Reflexivity – event may proceed differently because it is being observed. Cost – hours needed by human observers.	NO Not employed due to issues of reflexivity. The ability to gain the required access over a sustained period of time also uncertain.
Participant- Observation	(Same as above for direct observation) Insightful into interpersonal behaviour and motives.	(Same as above for direct observations) Bias due to participant observer's manipulation of events.	NO Not employed due to the potential bias such actions would have on the study's findings.
Physical Artefacts	Insightful into cultural features. Insightful into technical operations.	Selectivity. Availability.	YES Example – The physical artefacts produced from the practice of SISP are the IS strategy reports covering 2010-2012 (PS1) and 2011-2015 (PS2) and their associated materials.

organisational (meso) initiatives that had an influence upon the practice of SISP. Secondary data was inclusive of:

- **Documentation**: in the form of relevant government reports, strategy-related reports, and IS strategy-related reports. The sourcing of such documentation was primarily from governmental and each host organisations' websites. This process was aided by the study being located in the public service domain and the subsequent availability of such reports for public consumption.
- Archival Records: inclusive of minutes of meetings, emails, internal memos, and other such archival records. Interviewees and other organisational informants further facilitated the collection of these materials should any sources have been missed.
- **Physical Artefacts**: the product of the practice of SISP by senior managers in PS1 and PS2 are the IS strategy reports covering the periods of 2010-2012 and 2011-2015 respectively. Each report was used by the researcher as a means to gain an understanding of the type of work that was undertaken by senior managers in their practice of SISP, and thus formed critical artefacts of the explored phenomenon.

(Adapted from Yin, 2009)

Table 4.3 provides an overview of the secondary data sources collected for the current study. The multi-level data collection (Kozlowski et al., 2013) approach employed is commensurate with the adopted SAP lens, representing a further use of Jarzabkowski and Spee's (2009) construct of levels. Data sources were categorised based upon specified levels. Materials located at any of the European context, the public service context, or the healthcare context, e.g. government-sourced strategies or initiatives, were classified as residing at the macro-level. Organisational materials, e.g. business or IS strategies, were classified as being situated at the meso-level. This seemingly rudimentary yet effective SAP-derived classification scheme proved a valuable organising mechanism for the wealth of collected data. Thus, this process serves as an example of the SAP lens' pervasive role during the execution of the current study. The comprehensive, structured collection of secondary data provided a solid foundation from which to build upon during the course of subsequent fieldwork.

Table 4.3 - Categorisation of Secondary Data Sources

Context of Origin	Number of Documents	
The Macro-level	59	
The Meso-level	65	
Total	124	

## 4.5.6.2 Phase Two: Semi-structured Interviews as Primary Data

Interviews formed the primary data source collected for the present study. A number of core readings were consulted on the art of interviewing (Fontana and Frey, 1994; Hermanowicz, 2002; Kvale, 1996), in addition to publications specifically examining the role of the interview within IS research (Myers and Newman, 2007; Schultze and Avital, 2010). Consistent throughout these materials is a recognition of the value of qualitative interviews to an investigation should they be effectively designed and implemented accordingly. The interviews employed for the current study were semi-structured (Kvale, 1996; Mojtahed et al., 2014) in design. As opined by Hermanowicz (2002: 480), interviews have an ability to "bring us arguably closer than many other methods to an intimate understanding of people in their social worlds", making it particularly appropriate for retrieving rich, qualitative data. The current study's semi-structured interviews adhered to an agreed upon protocol in relation to recording techniques, the descriptive process, whether or not feedback would be provided, and additional ethical concerns (Myers and Newman, 2007).

## - Interviewee Identification

The principal participants in the interviewing process were senior managers, defined for this study as the CEO and their heads of functions. Additional organisational stakeholders were interviewed as a result of both recommendations from interviewees and discoveries of possible candidates as the interview process unfolded. This resulted in the conduct of 17 interviews in PS1 and 14 interviews in PS2. The conclusion of the interviewing stage was determined by the researcher's judgement of when the point of saturation was reached, i.e. no new data was being uncovered from additional interviews and all referred interviewee candidates had been interviewed.

#### - Contacting Interviewees

Interviewees were contacted in advance by email to determine an exact time for when the interview would take place. When difficulty was encountered in regard to contacting a potential interviewee, a second email would be sent. Failing to receive a response at this stage resulted in the researcher calling the organisation to initiate contact. Fortunately, the vast majority of interviewees were responsive to the initial interview request. The researcher believes the positive response could be attributed to an introductory email being sent to an initial cohort of possible interviewees by the CEO in PS1 and the CIO in PS2 that detailed the purpose of the study and the researcher's programme of work.

#### - Interview Location and Protocol

All interviews were held at each respective organisation's premises, barring the two interviews conducted with external consultants in PS1. Both of these interviews involved the researcher travelling to the consultant's place of work. Interviews were electronically recorded in all instances, a factor established by the interview protocol (See Appendix IV) provided to interviewees. The interview protocol ensured anonymity would be respected and addressed related matters pertaining to ethical concerns. The electronic recording of interviews assisted in improving both data accuracy and verification, allowing the researcher to focus on eliciting the desired data without the distraction of extensive note-taking. Ethical concerns were referred to Kvale's (1996) guidelines, which broadly coalesce around the principles of informed consent, confidentiality, and consequences.

#### - The Evolution from Questioning to 'Inter-viewing'

The interview (See Appendix III) was structured by a set of themes and questions (Kvale, 1996). This ensured that the interview remained focused upon the topic of investigation, whilst also allowing enough space for deviation into additional topics of interest proffered by interviewees. Such an approach adheres to the qualitative interview's purpose of describing and clarifying people's experiential life (Schultze and Avital, 2010) Interview questions were open-ended, with an emphasis on being value-free so as to negate the possibility of biasing the interviewee's responses. They were derived from prior exposure to the SAP and SISP literature sets, and a familiarity with the collected secondary data pertaining to the host organisations and the wider context within which the study is located. The influence of the adopted SAP lens and its inherent delineation of activity into macro, meso, and micro levels are apparent. The interview approach naturally evolved throughout the course of the study, reflecting an increasing familiarity with the topic of investigation on the part of the researcher and a lessening of the reliance upon a predefined

list of questions. This growing experience in the art of interviewing led to a more literal realisation of the 'inter-view'.

#### - Interview Duration and Closure

The requested duration of each interview was 60 minutes. For the most part, interviews remained within the one-hour timeframe, occasionally going over or under dependent on the interviewee, their level of engagement, and their allowance of such time discrepancies. The ultimate remit of interview duration resided between forty-five minutes and one hour and forty-five minutes. A follow-up email was sent to each interviewee in appreciation of their time and participation. It was also employed to remind participants when appropriate of any materials promised or requested during interviewing.

## - Interview Transcription

The interviews were transcribed by a recommended transcription service. The service was found to be highly reliable, discrete, and professional. To ensure confidentiality, a written agreement (See Appendix V) was signed prior to the commencement of the transcription process. Interview transcripts were emailed to the researcher by way of password protected emails. They were verified for accuracy via comparison with their corresponding recording, with no errors of concern discovered.

## 4.5.7 The Use of a SAP Perspective

The incorporation of a SAP perspective (Jarzabkowski and Spee, 2009; Johnson et al., 2007; Orlikowski, 2010; Whittington, 2006) for the chosen case study design manifested itself as a filter through which the data were collected and distilled. The key tenets of the practice perspective, namely practice, praxis, and practitioners, the levels at which praxis transpires in the form of macro, meso, and micro levels, in addition to the wider social environment and strategic episodes formed beacons for the collation and analysis of data.

To clarify how the researcher has employed a SAP lens, the work of Orlikowski (2010) brings this particular element of the research strategy into focus. A clear differentiation exists between the use of formal practice theory (Bourdieu, 1990; Feldman and Orlikowski, 2011; Giddens, 1984; Schatzki, 1996) and the SAP-based approach utilised for the current study. Practice theory is concerned with "practice as the principal constituent of social affairs, and thus a basic epistemic object of social theory" (Cecez-Kecmanovic et al., 2014: 815). Conversely, practice as a perspective may be viewed as an

outlook that links macro and micro levels to assist in the conduct of research rather than the 'world-view' underpinnings of its philosophical counterpart. Orlikowski (2010) provides an illuminating delineation, including a third mode of engaging with practice in the form of practice as a phenomenon. It is this segregation of the subject matter that has been adopted for use in the SAP domain.

**Practice as a phenomenon** places its focus upon what happens in practice and deep empirical engagement, recognising that there is oftentimes a large gap between the theories and frameworks proffered by researchers and the actual doing of practitioners 'in practice'. The techniques used to close this gap involve getting as close as possible to the lived reality, mostly through techniques akin to immersive participant observation and various forms of action research.

Practice as a perspective, the mode employed for the current study, identifies it "as a powerful lens for studying particular social phenomena" (Orlikowski, 2010: 25), with Orlikowski (2010) viewing its ascendency in more recent times as being an important departure from more traditional perspectives that tended to focus on either macro or microlevel dimensions. Practice as a perspective links the more mundane, micro-level activities of strategy practitioners with more macro-level structures and practices. A conceptual grounding in practice theories is a pre-requisite, and given that the research is a strategy-focused practice study, the utilisation of Whittington's (2006) 3Ps framework (see Figure 2.1 in Chapter 2) proved most appropriate in this instance.

Practice as a philosophy places practice at the fulcrum of one's own ontological belief system, and that "all social reality is understood to be constituted in and through practices" (Orlikowski, 2010: 27). To distinguish this mode from the previous two, Orlikowski (2010) further delineates them as follows; practice as a phenomenon is an empirical claim that practices matter, and thus should form the basis of investigation into organisational phenomena. Practice as a perspective is a theoretical claim that practices shape reality, and need to be explained through practice theoretic accounts of organisational reality. Practice as a philosophy is a "meta-theoretical claim that practices are reality, and thus studies or organisations must be grounded ontologically, theoretically, and empirically in lived practice" (Orlikowski, 2010: 27).

Employing a practice as a perspective approach for the wider study, the researcher was able to avail of the ability to focus upon both macro-level contextual factors and more micro-level activity. Simultaneously, transparent linkages between both dimensions were discovered. Indeed, such linkages proved crucial in the exploration of senior managers'

practice of SISP. Senior managers' micro activities occurring at the organisational or suborganisational level were influenced by macro-level practices and, conversely, there existed examples of more micro-level activity infiltrating macro-level practice. Remaining true to a practice as a perspective approach, the study was conceptually grounded in Whittington's (2006) framework, which provided the necessary lens through which to view the workings of such a duality.

## 4.5.7.1 A Justification for Using a SAP Perspective

There exist explicit calls for the adoption of a SAP perspective within the SISP domain (Teubner, 2013). The recognition and up-take of the approach is evidenced in a special issue of the Journal of Strategic Information Systems (JSIS), with Whittington's (2014) commentary in particular applauding the information systems strategy - SAP joint agenda. Such publications elucidate the distinction bestowed upon the approach by the IS academic community. Further encouragement may be found from related disciplines to have adopted a practice-based approach.

Evidence exists within the extant literature of the fortitude of the SAP perspective. Johnson et al., (2007) proffer four such advantages; firstly, in its purest form a SAP perspective sheds light on the actual 'doing' of strategy, enriching our knowledge of the ways in which strategising actually takes place (Vaara and Whittington, 2012). Secondly, it removes the level of abstraction associated with traditional strategy research, thus going deeper into the core issues within the field. Thirdly, as demonstrated in Whittington's (2006; 2002) framework, a SAP perspective can act as an integrating mechanism for the field of strategy research whereby the central components can be interconnected into a coherent whole. Not only are more micro-level activities explored and detailed, but their linkages to the macro-level picture may be traced in addition to the role of the strategy practitioners therein (Vaara and Whittington, 2012). Finally, the fourth advantage is a culmination of the previous three, in that SAP research offers a new and exciting direction for the field. It unshackles itself from the constraints inherent in some of the more traditional strategy research approaches, allowing strategy practitioners to assume a more central role in the research agenda.

Feldman and Orlikowski (2011) suggest that a practice-based perspective offers an additional broad advantage, this time from a theoretical standpoint. The authors posit that a practice focus upon strategy research can result in the production of powerful theoretical generalisations. Although not predicators of action or explanations of universal variation in the vein of statistical generalisations, the theoretical generalisations that may be produced

by a practice-based study can be viewed as principles that explain and guide action. Consequently, they provide insights into relationships and dynamics that may be applied to a broader spectrum of situations whilst remaining historically and contextually grounded, and thus are powerful because they travel.

The growing popularity of the practice as a perspective approach, its inherent suitability of situating the practitioner in context and linking micro and macro level activity, the existence of a pedagogically digestible theory to guide the study in the form of Whittington's (2006) 3Ps framework, and its suitability to "address organisational phenomena that are posited to be relational, dynamic, and emergent" (Orlikowski, 2010: 27), enamoured the researcher with a staunch belief that its adoption was of merit for the current study's case study design.

#### 4.5.8 Ethical Considerations

An enduring feature of research located within the IS domain has been the high importance attached to ethical considerations (Mingers and Walsham, 2010; Stahl et al., 2014). Despite such perceived importance, criticism has been labelled at the field for either a lack of ethical direction (Myers and Venable, 2014) or lack of availability of ethics-related prescription (Mingers and Walsham, 2010). For the current study, the researcher decided that The Association for Information Systems' (AIS) code of ethics (Avison et al., 2009) was a suitable, credible guideline for the current study. It provides a comprehensive checklist of expected behaviours for the conduct of research within the field of IS. In summary, the AIS categorises ethical codes into three groups of descending importance.

Category One: consists of two codes that must always be adhered to, with any disregard for either code on the part of the researcher constituting a serious ethical breach. The two codes are; do not plagiarise, and; do not fabricate or falsify data, research procedures, or data analysis.

Category Two: consists of eight codes that are labelled as recommended ethical behaviour. Firstly, respect the rights of research subjects, particularly their right to information privacy, and to being informed about the nature of the research and the types of activities in which they will be asked to engage. Second, do not make misrepresentations to editors and conference program chairs about the originality of papers you submit to them. Third, do not abuse the authority and responsibility you have been given as an editor, reviewer or supervisor, and ensure that personal relationships do not interfere with your judgement. Fourth, declare any material conflict of interest that might

interfere with your ability to be objective and impartial when reviewing submissions, grant applications, software, or undertaking work from outside sources. Fifth, do not take or use published data of others without acknowledgement, or unpublished data without both permission and acknowledgement. Sixth, acknowledge the substantive contributions of all research participants, whether colleagues or students, according to their intellectual contribution. Seventh, do not use other people's unpublished writings, information, ideas, concepts or data that you may see as a result of processes such as peer review without permission of the author. Finally, use archival material only in accordance with the rules of the archival source.

**Advice**: consists of four suggestions designed to protect the researcher during the course of their study. Firstly, keep the documentation and data necessary to validate your original authorship for each scholarly work with which you are connected. Second, do not republish old ideas of your own as if they are a new intellectual contribution. Third, settle data-set ownership issues before data compilation. Finally, consult appropriate colleagues if in doubt.

The researcher employed this code of ethics as the cornerstone of the study from an ethical standpoint, referring to it periodically to ascertain that standards were being met.

## 4.6 Analytical Strategy

The current section sets out the cycles of analysis employed for the study. A process consisting of nine distinct phases was adopted from Maykut and Morehouse (1994).

## 4.6.1 The Use of Qualitative Data Analysis Software

It was decided that the use of qualitative data analysis software would prove most beneficial for organising the large quantities of collected data. The researcher's university provided training for NVivo's product offering, and having verified its reputation through online reviews and with colleagues, it was selected for the current study. The researcher viewed the software's role as a tool to aid in the sorting and categorisation of data, and not as an abstract mechanism to remove the theorising component from the study – this task should remain firmly within the remit of the researcher's cognitive abilities. The opportunity to trace each step of coding and provide an audit trail for the process of coding is the core strength of adopting qualitative data analysis software.

## 4.6.2 The Adopted Coding Strategy

The coding strategy employed is that proposed by Maykut and Morehouse, (1994). Having spent time considering various coding techniques (Charmaz, 2006; Corbin and Strauss, 2008; Glaser and Strauss, 1967; Maykut and Morehouse, 1994) it became clear that they all possessed an inherent similarity: phases predominantly involved an initial sorting of the data, consolidation and ordering of categories, and the search for linkages between and across higher order categories from which the theory could emerge. The selected strategy was found to possess such traits and be highly rigorous in its approach.

Maykut and Morehouse's technique is largely based on the coding principles of grounded theory (Glaser and Strauss, 1967). It involves nine discrete cycles of analysis. At each stage of the analytical strategy the researcher retained the use of the adopted SAP lens and its inherent levels perspective. Table 4.4 provides a visual representation of the employed coding process. The four broad themes to emerge from the coding phase of data analysis starkly reflect the researcher's use of a SAP lens and its associated delineation of activity into macro, meso, and micro levels.

## 4.6.3 Phases of Data Analysis

**Phase 1**. The open coding phase involves the assignment of text blocks from the interview transcripts to precisely defined and labelled codes (Maykut and Morehouse, 1994). The goal of this phase is a deconstruction of the data into initial codes. This resulted in the development of 172 such codes.

**Phase 2**. Involves the categorisation of codes identified in Phase 1 and their further distillation so as to ensure that the assigned labels accurately reflect the coded content.

**Phase 3.** The phase referred to as 'coding on' involved breaking down the now restructured themes into sub-themes. This allowed for a more precise understanding of the rich qualitative data through capturing aspects such as attitudes, beliefs, and behaviours that had been coded to these themes.

## These phases were conducted separately for both PS1 and PS2

**Phase 4.** Data reduction - involved the consolidation of codes from the prior three cycles into a more theoretical map of themes that could be used within the case reports.

Table 4.4 - Stages and Process in Data Analysis (Maykut and Morehouse, 1994)

Analytical Process	Practical Application in NVivo	Strategic Objective	Iterative process throughout analysis
1. Comparing units of meaning across categories for inductive category coding	Phase 1 Open Coding	Data Management  (Open and hierarchal coding through NVivo)	Assigning data to refined concepts to portray meaning
2. Refining categories	Phase 2 Categorisation of Codes		
3. Exploring relationships and patterns across categories	Phase 3  Coding on		Refining and distilling more abstract concepts
	Phase 4 - Data Reduction - Consolidation  Phase 5 - In case analysis  Phase 6 - Cross case analysis	Descriptive Accounts  (Reordering, 'coding-on' and annotating through NVivo)	Assigning data to themes/concepts to portray meaning
4. Integrating data to write findings	Phase 7- writing analytical memos  Phase 8 - Validating		<b>↑</b>
	analytical memos  Phase 9 - synthesising analytical memos	Explanatory Accounts  (Extrapolating deeper meaning, drafting summary statements and analytical memos through NVivo)	Assigning meaning
		drafting summary statements and analytical memos through NVivo)	Generating themes and concepts

**Phase 5.** In-case analysis - included the analysis of all themes and sub-themes as they pertain to each case. This enabled the researcher to report at the level of the individual case.

**Phase 6.** Cross case analysis - this phase involved the comparative analysis of all emergent themes and sub-themes pertaining to both research sites. Thus, points of both similarity and distinction between the two cases could be brought to the foreground and examined.

**Phase 7.** Involved the writing of analytical memos in relation to the higher-level themes in order to capture the content of each category and develop empirical findings against them. This proved to be a creative period for the analytical strategy, during which the researcher engaged in reflection of a conceptual nature. It involved taking a step back from the data in which the researcher was deeply immersed so as to view the data at a more macro-level. This aided in theory generation and the subsequent linking of empirical phenomena with the developed themes and sub-themes.

Phase 8. The validation phase required the researcher to test and validate the analytical memos and, where appropriate, to revise them as a self-auditing measure. It involved looking beyond the coded text within each theme for deeper meaning. It was achieved through searching for linkages both between and across categories, and through comparisons with extant literature. In this regard, both the SAP and SISP literature sets were consulted so as to ascertain the study's findings in relation to extant knowledge. The literature reviews found in Chapter 2 and Chapter 3 proved a useful tool for this exercise. The result of this process is evidence-based findings grounded firmly in the data. Due to the study's adoption of a SAP lens and a focus upon the realised 'doing' of SISP by senior managers, the researcher is satisfied with the analytical process followed to arrive at the study's findings.

**Phase 9.** The final phase involved the synthesis of the aforementioned analytical memos into a detailed, coherent report. The challenge faced by the researcher during this phase was the structuring of a large body of data into a comprehensive yet digestible format. The case study report forms the topic of the subsequent section of this chapter.

Table 4.5 provides examples of the coding process from each of the four core themes to have emerged. Essentially, the table tracks at a high-level how the coding technique employed was realised in practice, i.e. the initial open-code attached to an interview quote, the sub-theme to which it was assigned having passed through the additional phases of coding as detailed above, and under which of the four themes it ultimately resides. The role

Table 4.5 – Illustrative Coding Chart

Quote	Open Code	Sub-theme	Theme
PS1 - CEO: "I have sought approval from the Department to appoint a Chief Information Officer, and I have got approval. However, the salary for which I have got the approval won't let me appoint anybody."	Practice - Macro - Negative Influences	At the Public Service Level	Theme 1: The Role of Macro-level Contextual Factors during the Practice of SISP by Senior Managers
PS2 - MM1: "The European Medicines Agency have looked at the new model that we have within IS, with the IS side and the business services side and project management, business analysis, and the process side. They have sort of semi-adopted our structure here, over there, in a roundabout way."	Structure of IS Function - Technical Structure	The Practice of Structuring the IS Function	Theme 2: The Role of Intra-organisational Meso and Micro level Practices during the Practice of SISP by Senior Managers
PS1 - SM6: "In terms of the facilities around (PS1), and what our needs and requirements are, obviously working with (External Consultant) for those few years was very beneficial, and I still would meet them out occasionally and bounce ideas off them."	Consultants - Positive perceptions of their role during SISP	Senior Managers' Engagement with External Consultants during the Practice of SISP	Theme 3: Senior Managers and Associated Practitioner Groups with whom they engage during the Practice of SISP
PS2 - SM5: "I think actually it is an ability, you have to be articulate, you have to be able to communicate, you have got to be able to sell your ideas, and you have to make people understand."	Communication - Importance of	The Role of Dual Skill Sets in Enabling Effective Communication	Theme 4: The Role of the Social Dimension during the Practice of SISP by Senior Managers

of prior literature reviews is discernible in the featured examples. The adopted SAP lens' influence is particularly evident in the example pertaining to Theme 1, with the interviewee's quote open coded to 'Practice – Macro – Negative Influences'. This code captures a financial practice at the macro-level that has proven detrimental to the hiring of a CIO practitioner in PS1. It is located in the case study report under the sub-theme 'At the Public Service Level' as it is a public service practice that has resulted in PS1's inability to recruit such a figure. This sub-theme ultimately falls under 'Theme 1: The Role of Macro-level Contextual Factors during the Practice of SISP by Senior Managers'. In this example, the considerable role assumed by the coding approach can be linked back to the reviewed

literature and then traced throughout the analytical process to the four core themes that ultimately emerged.

## 4.7 The Case Study Report

The format of the case study report is a multiple case version of the classic single case study design (Yin, 2009). It encompasses individual narratives for each of the two cases, cross-case analysis, and results. The case study report is found in Chapter 5.

## 4.7.1 Structure for Case Study Composition

The structure of each case study is linear-analytic, it being espoused as the most employed, understood and advantageous for a research thesis (Yin, 2009). It follows a standard structure of subtopics, inclusive of findings from the collected and analysed data, comparisons with the reviewed literature, methods used, and conclusions and implications.

A context-setting section has been incorporated. It details the European context, the public service domain, the healthcare sector, and the role of senior managers and SISP therein. Four key themes were identified in answering the research question posed. They emerged via the methods and techniques detailed, i.e. the conduct of literature reviews (secondary data), interviews (primary data), and data analysis (primary and secondary data), and will be discussed in relation to each case. The themes are largely commensurate with a SAP perspective, again highlighting the integrative function the SAP lens played throughout the wider study. The four themes are as follows:

**Theme 1**: The Role of Macro-level Contextual Factors during the Practice of SISP by Senior Managers

**Theme 2**: The Role of Intra-organisational Meso and Micro level Practices during the Practice of SISP by Senior Managers

**Theme 3**: Senior Managers and Associated Practitioner Groups with whom they engage during the Practice of SISP

**Theme 4**: The Role of the Social Dimension during the Practice of SISP by Senior Managers

#### 4.7.2 Interviewee Acronyms

A total of 31 practitioners participated in the interviewing process: 17 from PS1 and 14 from PS2. In PS1, all eight senior managers (identified as 'PS1 – SM1' through to 'PS1

– SM8') who were involved in the practice of SISP were interviewed, in addition to seven middle managers (identified as 'PS1 – MM1' through to PS1 – MM7') that were either identified by the researcher or via a senior manager's recommendation as being insightful. Senior managers were defined for the current study as the CEO and their heads of functions. Middle managers were defined as direct reports of the heads of functions. Finally, two external consultants (identified as 'PS1 – EC1' and 'PS1 - EC2') with whom senior managers engaged during the practice of SISP were interviewed. The consultants were interviewed due to their close working relationship with the organisation at an individual level. Both consultants were accessible and willing to participate in the study.

For PS2, all seven senior managers (identified as 'PS2 – SM1' through to 'PS2 - SM7') who participated in SISP were interviewed, in addition to seven middle managers (identified as 'PS2 – MM1' through to 'PS2 - MM7') that were again either identified by the researcher or referred by a senior manager. When deliberately identifying a particular practitioner, e.g. to highlight the CEO's unique viewpoint on a subject, they are identified as such. The use of the assigned acronyms is abandoned in such instances to avoid any possibility of correlations being made and so preserve the anonymity of interviewees. Upon completion of the interviewing schedule, the researcher deemed additional interviews to be unnecessary on the grounds of data saturation having been reached.

## 4.7.3 Ensuring Quality

The topic of quality in IS research has been a feature of the extant literature (Conboy et al., 2012; Galliers and Huang, 2012; Klein and Myers, 1999). It has also been a feature of the more generalised prescriptions on the conduct of case work and the methodology's tools for establishing validity (Stake, 1995; Yin, 2009; Zivkovic, 2012). Empirical research conducted within the social sciences realm has a recognised set of parameters by which quality can be established (Yin, 2009). Each of these four tests has specified tactics by which researchers can be guided for case-based studies. The tests are:

- Construct validity: involves the identification of appropriate operational measures for the topic of investigation
- Internal validity: seeks to establish a causal relationship and is used only for explanatory or causal studies and not for descriptive or exploratory studies. Due to the exploratory nature of the current study, this test does not directly apply.
- External validity: defines the parameters within which the research findings may be generalised.

- Reliability: ascertains if the study's findings can be replicated should the same procedures be followed.

(Adapted from Yin, 2009)

For the current study, the three applicable tests are construct validity, external validity, and reliability. Internal validity is primarily a concern for the case study researcher who wishes to explain how and why x leads to y, i.e. a causal case, which is not a feature of the employed research approach. To view how the researcher established quality, Table 4.6 provides an overview of the measures taken to ensure each test was sufficiently satisfied.

## 4.7.4 Concluding Comments on how the Adopted SAP Perspective Informed Data Collection and Analysis Strategies

The novel aspect of the research approach is its use of a SAP perspective (Jarzabkowski and Spee, 2009; Orlikowski, 2010; Whittington, 2006) in conjunction with the wider case study design (Yin, 2009). The SAP perspective proved pervasive throughout both data collection and analysis strategies.

Data collection commenced with a focus on accumulating an exhaustive library of pertinent secondary materials in the form of documentation, archival records, and physical artefacts (Yin, 2009). The adopted SAP lens furnished the researcher with a categorisation mechanism in the form of a levels perspective consisting of macro, meso, and micro realms (Jarzabkowski and Spee, 2009). As the researcher moved to the collection of primary data in the form of semi-structured interviews, the SAP lens once again proved a valuable asset. Interviews followed a format that encapsulated a levels viewpoint, with the researcher commencing interviews by discussing the broad macro-level context, before granularising question topics to meso and more micro-level activities or praxis. Interview questions also possessed characteristics of a SAP perspective in their focus upon the 3Ps of practice, praxis, and practitioner (Seidl and Whittington, 2014; Whittington, 2006), with each forming broad topics for discussion as they pertained to the practice of SISP within each host organisation.

Data analysis followed the coding technique of Maykut and Morehouse (1994). Armed with a SAP perspective, the researcher remained vigilant of the identification of core SAP constructs inclusive of various SISP-related practices, the realised SISP praxis within each organisation, the spectrum of practitioners who played a role during senior managers' practice of SISP, the particular level at which the various praxis or activities

Table 4.6 - Ensuring Quality: Measures taken to Establish Validity

Tests	Case Study Tactic	Phase of Research
Construct Validity	- Multiple sources of evidences were collected in the form of interviews, documentation, archival records, and physical artefacts.	Data Collection
	- A clear chain of evidence has been established and can be traced throughout the study as detailed in this chapter	Data Collection
	- The individual case study reports have been reviewed and verified by key informants from the employed case studies.	Composition
External Validity	- Replication logic was employed in the form of literal replication, with similar results expected at the outset of the study.	Research Design
Reliability	- A defined protocol has been described in this chapter, of which the researcher was cognisant throughout the conduct of the study. The sequencing of data collection, the methods by which data collection and analysis was undertaken, and appropriate ethical considerations were established and observed.	Data Collection and Analysis
	- A case study database was established through the use of NVivo, the chosen qualitative analysis software. Extensive libraries of pertinent case data stored both locally and in cloud-based storage supplemented this resource.	Data Collection

(Adapted from Yin, 2009)

transpired, the importance of the social dimension during SISP-related activity, and the various forms of SISP-related episodes. The resultant four themes to have emerged from the rigorous coding process possess evident SAP-related characteristics, as does the devised conceptual framework located in Chapter 6 that forms the primary contribution of the study.

Finally, the composition of the case narratives found in Chapter 5 were purposely structured to exhibit traits of a SAP perspective, i.e. the chapter opens with a contextualising piece that returns to the pervasive levels construct (Jarzabkowski and Spee, 2009). It details the macro-level environment common to both PSOs, before moving to the meso-level domain for each individual case study, encapsulating the realised praxis or micro activities uncovered during casework. Viewed holistically, the adopted SAP perspective formed a central component of the employed research approach. It imbued the study with a defined focus upon the 'doing' of SISP, answering explicit calls for the use of

such a lens (Peppard et al., 2014; Whittington, 2014) and proving a synergistic match for the adopted case study design.

## 4.8 Alternative Methodological Approaches

A number of alternative methodologies were appraised, each of which possess their own unique strengths and weaknesses. Choices must be made based on a number of factors inclusive of the very nature of the research question and the researcher's own inherent philosophical beliefs and preferences. Ultimately, the culmination of this process was a conviction that the case study design adopting a SAP perspective is most appropriate for the current study. The alternative approaches that were explored and considered are now detailed.

## 4.8.1 The Grounded Theory Methodology

Strauss and Corbin (1990: 24) define the grounded theory methodology as "a qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon." The use of grounded theory is advocated within the field of IS (De Villiers, 2005; Loonam and McDonagh, 2008; Urquhart and Fernández, 2013). Indeed, there has been an increase in both interest and adoption of the approach (Bryant, 2002; Fernández, 2004; Myers and Avison, 2002; Pozzebon et al., 2011). It is embedded with a number of fundamental guidelines, inclusive of; coding, memo-writing, sampling for theory development, and comparative methods (Charmaz, 2006).

There exist two distinct schools of thought within grounded theory. The Glaserian approach (Glaser and Strauss, 1967) is premised on discovery, i.e. that the researcher enters the research setting with no prior knowledge of the phenomenon under investigation. The Straussian school of thought (Strauss and Corbin, 1990) relaxes the notion of the researcher commencing fieldwork with what is effectively a blank slate, instead allowing for literature to play a guiding role from the outset of the study (Matavire and Brown, 2013). It also introduced a more rigorous coding technique in the form of open, axial, and selective coding, thus bringing greater verification and accountability to the process.

An iterative cycle of induction and deduction comprises the collection and analysis of data within the Straussian approach to grounded theory (Hekkala, 2007). The two key principles driving this cycle are theoretical sampling and constant comparison (Charmaz,

2006; Urquhart et al., 2010). Glaser and Strauss (1967: 45) define theoretical sampling as "the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyses their data and decides what data to collect next and where to find them, in order to develop their theory as it emerges". Constant comparison is a process by which the researcher constantly compares the data to discover linkages, patterns, and themes across the data (Loonam and McDonagh, 2008). Data analysis ceases when the researcher feels that the point of 'theoretical saturation' has been reached, i.e. the point of diminishing returns from any further analysis (Glaser and Strauss, 1967; Urquhart and Fernández, 2013). The researcher contemplated the use of the grounded theory methodology, consequently deciding it to be a less optimal fit than the chosen approach for answering the research question.

## 4.8.2 The Process Methodology

According to Pettigrew (1997: 338), process can be defined as "a sequence of individual and collective events, actions, and activities unfolding over time in context." Alternatively, Langley (2007: 271) defines process thinking as involving a "consideration of how and why things – people, organisations, strategies, environments – change, act and evolve over time." A more succinct definition from Pettigrew (1992: 11) describes it as catching "reality in flight."

Process studies may provide an account of how one event leads to and shapes subsequent events, explicate the dominant pattern influencing the sequence of events, or include some combination of both (Van de Ven and Poole, 2005). Processual research is predominantly qualitative in nature (Hinings, 1997), but both qualitative and quantitative approaches can be used (Van de Ven and Poole, 2005). It has been shown to be appropriate for research into IS strategy-related phenomena (Caffrey and McDonagh, 2014) and for integration with the case study methodology (Dempsey and McDonagh, 2015). The driving principal underlying process thinking is that social reality is not in a fixed state (Pettigrew, 1997). The importance of time and history cannot be over-emphasised. History is viewed by Pettigrew (1990: 270) as "not just an event in the past but is alive in the present and may shape the future."

The primary challenge with a study employing a process methodology is data management. Process data are fundamentally 'messy' (Langley, 1999). Sorting, clarifying and structuring these data can be a gruelling task due to their complexity, with Pettigrew (1990: 281) warning of the risk of "death by data asphyxiation". The process methodology predominantly requires a longitudinal research strategy (normally characterised by a study

spanning a timeframe in excess of ten years), focused on a single, qualitative case study, and drawing upon multiple data sources by means of strict adherence to procedures for data gathering and analysis (Sminia, 2009). Ultimately, the current study's multiple case study design examining a much shorter timeframe rendered the process methodology an unsuitable fit for the current research project.

## 4.8.3 Ethnography

Originating from the field of social and cultural anthropology, ethnography is a qualitative methodology in which extended participant observation plays a central role, with the ethnographer effectively becoming part of the situation under investigation (Sanday, 1979). The cornerstone of ethnographic work has been identified as the "venturing out and documenting the specific day-to-day actions of working" (Locke, 2011: 624). It is one of the most in-depth research methodologies (Myers, 1999), largely owing to the extensive periods of time spent in the field (Wadham and Warren, 2014) and extended engagement required of the ethnographer in generating the "small epiphanies" that have been central to ethnography's contribution (Locke, 2011: 637). The ethnographer typically adopts a flexible and unstructured research design, relying on their own experiences, knowledge, actions and subjective interactions with phenomena in the field to generate insights. This has led to the ethnographic researcher being commonly referred to as their own research instrument in such studies (Sanday, 1979; Schultze, 2000).

The over-arching strength of ethnographic research is its in-depth and intensive approach, frequently allowing the researcher to question taken for granted assumptions about phenomena (Myers, 1999). Those wishing to discredit ethnographic research can cite the extreme length of time required in the field coupled with the arduous task of analysing the data and writing-up the study, the validity of the research due to the subjectivity of the research instrument, i.e. the ethnographer (Myers, 1999), and the dearth of empirically grounded ethnographic studies executed in the field of IS (Brown, 2014). Watson (2011) provides an honest account of why he, despite being a notable practitioner of ethnography, is oftentimes reluctant to engage in ethnographic research. The reasons for such reticence can be summarised as a fear of the difficulties of gaining the comprehensive access required to conduct such a study, a fear of the intense personal commitment required to immerse oneself in the field for prolonged periods of time, and the very practical fear of having to justify oneself to reviewers and editors for departing from the more conventional research approaches of survey or interview-based research. Such reasons were prominent

factors in the researcher's own decision to eschew the undertaking of an ethnographic study.

#### 4.8.4 Action Research

Action research is an established social science methodology originating out of the massive social changes triggered by World War II (Baskerville and Myers, 2004). Shani and Pasmore (1985: 439 cited in Coghlan, 2011) define action research as:

"... an emergent inquiry process in which applied behavioural science knowledge is integrated with existing organizational knowledge and applied to solve real organizational problems. It is simultaneously concerned with bringing about change in organizations, in developing self-help competencies in organizational members and in adding to scientific knowledge. Finally it is an evolving process that is undertaken in a spirit of collaboration and co-inquiry."

Action research's goal is to rectify current practical issues whilst simultaneously expanding scientific knowledge (Baskerville and Myers, 2004). Unlike the case study researcher who is content to simply observe organisational phenomena, the action researcher collaborates with organisational stakeholders to create organisational change and improvement (Coghlan, 2009). This leads to the 'double challenge' of both bringing about change and studying the change process (Avison et al., 2001). A key characteristic of action research is the collaborative nature of the researcher-practitioner relationship (Baskerville and Wood-Harper, 1996).

Doubts have been raised about its ability to maintain scientific rigour (Baskerville and Wood-Harper, 1996; Mathiassen, 2002). Overall, it has gained little attention in the IS research literature (Baskerville and Pries-Heje, 1999). This is perhaps due to a lack of clear criteria on which to judge the quality of action research studies (Baskerville, 1999). Despite being recognised as possessing a joint 'collaboration' between researcher and client, this may not always be the case (Holgersson and Melin, 2014). The researcher can lose control of the direction of their research due to client demands, thereby jeopardising the completion of the study initially envisioned (Avison et al., 2001; Baskerville, 1999). For the current study the researcher was cognisant of each of these pitfalls when deciding that an action research project was not the optimal approach for this research project.

## 4.9 Reflections on the Research Approach in Practice

The researcher has cultivated a number of reflections accrued from using the case study design with a SAP perspective.

To begin, the framing of a SAP-oriented research question is of paramount importance. A familiarisation with the wider theoretical underpinnings of the domain (Bourdieu, 1990; Foucault, 1980; Giddens, 1976; Heidegger, 1962; Wittgenstein, 1951) in addition to the conceptual foundations of the SAP field (Jarzabkowski et al., 2007; Whittington, 2002; 2006) is a pre-requisite for research of this nature. The case study methodology alone was found to lack a coherent integrative mechanism with which to answer the research question posed. Whilst a multitude of widely-cited prescriptive texts (Eisenhardt, 1989; Stake, 1995; Yin, 2009) exist to detail the various tools, techniques, and methods which comprise the methodology, an inherent vagueness was found to prevail as to how such a study would be rendered operational. The adoption of a SAP perspective (Orlikowski, 2010) in conjunction with a case study design was found to counteract this shortcoming, providing a robust framework (Whittington, 2006) upon which the research could be based.

At the core of a SAP-based study is the requirement to link specific levels of activity (Kozlowski et al., 2013). Whilst the case study methodology alone could potentially be used for this research goal, it was only when a SAP lens was applied that the author was able to precisely identify and target those components crucial to the practice of SISP by senior managers. A clear delineation of the levels at which praxis transpires is imperative. The wider study adopted the categorisation of macro, meso, and micro levels (Jarzabkowski and Spee, 2009). Whilst a precision on the part of the researcher is required to make explicit the boundaries of each level, the pervasive nature of activity between levels forms a key attribute of SAP-based research (Johnson et al., 2007). The ultimate dividend is a refinement oftentimes found lacking in rudimentary casework.

The core tenets of a SAP perspective were continuous threads running throughout the entire study. As an integrating mechanism, it was found to instil coherence to the process. Initially, it provided a lens through which to conduct a review of the SISP literature (Hughes and McDonagh, 2014b), proving to be both a clinical and novel approach. Whilst the core elements of a SAP perspective are oftentimes not explicit within the SISP literature, the casting of such a lens over the domain revealed their presence in a tangible, if not disjointed form. In addition, the SAP perspective formed a core element of both data collection and analysis. From a data collection standpoint, a SAP-based study must remain

diligent to the concept of levels. Decisions need to be made concerning the type of data and the particular level at which it is to be collected. In regard to data analysis, the onus is on the researcher to first apply their analytical focus to individual levels, before searching for extant linkages both between and across multiple levels. The establishment of a clear chain of evidence is a fundamental requirement for such an endeavour.

The product of a SAP-based study should rightfully take account of the perspective's key principles in any proposed conceptual frameworks or findings. The current study proposes such a framework, composed of a defined strategy practice (SISP), praxis (the realised activity uncovered by casework), practitioners (principally senior managers, but also inclusive of additional cohorts of practitioners with whom senior managers engaged during their practice of SISP), the social dimension of SISP, strategic episodes (SISP-related meetings), and the specific level at which the study has been undertaken (meso-level, situated within the wider macro-level context of the public service domain). It was deemed essential that the framework should capture the aforementioned fluidity between levels.

In terms of a limitation of the current study, it follows a prevalent trend within the SAP domain of not complying with the ethnographic approach oftentimes espoused within the prescriptive literature. Ethnography has been widely lauded as an ideal match for SAP-based studies (Chia and MacKay, 2007; Fenton and Langley, 2011; Jarzabkowski et al., 2007). However, as evidenced in the methodological analysis of the SAP literature, a mere 9 studies out of the 52 empirical works reviewed employed an ethnographic approach. In contrast, the research is dominated by either single case (24) or a small number of case studies (18). Similar methodological characteristics are present in the SISP literature, with ethnography occupying a similarly vacuous space (Brown, 2014). The researcher is confident that a sustained commitment to executing rigorous casework, in conjunction with the interweaving of a SAP perspective throughout all major elements of the research design, has compensated for any perceived shortcomings attributable to the non-utilisation of an ethnographic approach.

Finally, the combination of a case study design with a SAP perspective is a novel approach within the SISP domain. Although the SAP perspective finds itself at a relatively nascent stage of its academic tenure, it has garnered a favourable response from scholarly ranks (Whittington, 2014). During immersion in the field, it was discovered to have an ability to speak directly to the practitioner. Thus, it inhabits a comfortable equilibrium within the rigor versus relevance debate that has pervaded much of the wider IS literature

(Fällman and Grönlund, 2002; Petter et al., 2012). It is hoped that the many benefits it imbues will encourage fellow researchers to consider underpinning core casework with a robust theoretical perspective, be it SAP-based or otherwise.

## 4.10 Concluding Comments on the Chosen Research Approach

A common trait of social research is that the research question drives subsequent decisions regarding the choice of research approach (Bryman, 2007). The researcher held no ingrained biases towards a particular methodology upon commencing the current study. Thus, an objective evaluation of the merits of each potential research strategy outlined in this chapter was undertaken so as to make an informed decision based upon which was believed best able to answer the research question.

The current research aims to explore how senior managers practice SISP. After a period of reflection, a case study design utilising a SAP perspective was decided to be the most suitable research strategy. Ontological and epistemological beliefs were fundamental influences on this decision, given that the researcher views the world through the lens of the interpretive paradigm. Despite grounded theory, process research, ethnography, and action research each having their own distinct, positive attributes, they ultimately form a less coherent fit than the chosen research approach. Data are qualitative in nature, the collection of which was both historical (in the form of archival materials, organisational documentation, and physical artefacts) and real-time (through in-depth interviews). The process of data collection relied upon pre-defined access agreements between the researcher and both case sites.

The prevalence of the case study methodology within both of the study's core literature sets of SAP and SISP adds credence to its selection. Employing a SAP perspective within a wider case study design brought a greater focus to the research initiative. It sharpened the researcher's ability to hone-in on the key elements of the study, whilst still abiding by the structural framework and tools provided by the case study methodology. Mechanistically, a SAP lens' integrative power proved hugely beneficial to the researcher throughout the conduct of casework (Hughes and McDonagh, 2014a). This more organic view of IS research is supported by a number of key authors within the domain (Galliers, 2003; DeSanctis, 2003). Flexibility and adaptability are valued over rigidity, with the preservation and strengthening of ties with contributing disciplines being

called for (Robey, 2003). It is such reasoning that encouraged the researcher to seek synergies through the use of a SAP lens with a case study design.

## **Chapter 5 - The Case Studies of PS1 and PS2**

#### 5.1 Introduction

The focus of the current chapter is an exploration into how senior managers practiced SISP in the employed case studies. The chapter opens with a contextualising piece in which both organisations are situated in their macro-level environment. The study's macro-level domain is divided into European, public service, and healthcare contexts in sections 5.2, 5.3, and 5.4 respectively. Each level represents alternative scopes to view this extra-organisational field. Due to both case sites residing within the same subsector of the public service, this opening section is applicable to both PS1 and PS2. Subsequently, each case is introduced sequentially in sections 5.5 and 5.6. The four themes and related sub-themes that emerged from data analysis are presented for both cases. The similarities and discrepancies uncovered across each theme for PS1 and PS2 are explored in the cross-case comparison in section 5.7. The study's findings relative to extant literature are detailed in section 5.8, before concluding comments are provided in section 5.9. The thesis then moves to the wider study's theoretical component in the form of Chapter 6's elucidation of the generated conceptual framework.

## 5.1.1 The Boundaries of the Study

To re-establish the boundaries of the study from a timeframe perspective, it pertains specifically to the periods of PS1's 2010-2012 IS strategy and PS2's 2011-2015 IS strategy. Pertinent materials are included that are connected to earlier, and in some cases later timeframes. Such materials are employed to either illuminate from where the practice of SISP originated for the specified timeframe or demonstrate how the practice may have fluctuated over time.

To clarify the study's boundaries from a practitioner standpoint and remain faithful to answering the research question, it was the senior manager cohort's practice of SISP that formed the focus of the investigation. Whilst reference is made to individual senior managers throughout the case studies of PS1 and PS2, primarily in the form of the Head of IS and CEO due to their prominence during fieldwork, the study retains a focus on the senior manager collective in both PS1 and PS2. Only group-affecting attributes of

individual senior managers have been included, e.g. a sub-theme in Theme 3 concerns the Head of IS-CEO relationship. It was included because of the subsequent impact it had on the senior manager cohort's practice of SISP. Such a focus formed a deliberate effort on the part of the researcher to establish and maintain the study's boundaries. A defined focus upon each senior manager and their role in SISP was not the study embarked upon. Separate studies on the role of the CEO during SISP, the role of the Head of IS during SISP, the role of the CFO during SISP, etc. could form the basis of future research on these intra-organisational, individual practitioners.

## 5.1.2 Remaining Cognisant of the SAP Perspective: A Grounding in the Data

Being a SAP-based study, the researcher strived to remain faithful to the perspective by implicitly focusing upon the actual 'doing' of SISP. Unlike studies adopting a process perspective (Pettigrew, 1992; Van de Ven and Poole, 1995; Langley, 2007), the current study examines a much shorter timeframe, i.e. SISP by senior managers for PS1's 2010-2012 IS strategy and PS2's 2011-2015 IS strategy. In an attempt to remove a level of abstraction that would be in conflict with a SAP-based study, the practice of SISP will be presented using the direct views and opinions of interviewees. A comprehensive body of pertinent secondary data is incorporated into a context-setting piece that introduces the current chapter and as a support to the primary data where appropriate. Combining primary and secondary data acted as a validatory measure to triangulate findings. It also lent a richness of source materials to the case narratives. Indeed, at the very core of a SAP-based study is an attempt on the researcher's part to get as close to the phenomenon as possible so as to explore the actual doing of strategy (Whittington, 1996; Palmer and O'Kane, 2007).

## 5.1.3 The Use of a SAP Perspective in Structuring the Case Findings

The study's findings coalesced around four SAP-based themes that emerged from the analysis of the primary data. They are:

**Theme 1**: The Role of Macro-level Contextual Factors during the Practice of SISP by Senior Managers

**Theme 2**: The Role of Intra-organisational Meso and Micro level Practices during the Practice of SISP by Senior Managers

**Theme 3**: Senior Managers and Associated Practitioner Groups with whom they engage during the Practice of SISP

**Theme 4**: The Role of the Social Dimension during the Practice of SISP by Senior Managers

To add structure to the case narratives, the use of a core tenet of the SAP perspective in the form of 'levels' has been adopted (Jarzabkowski and Spee, 2009). In particular, the macro-level context is sub-divided into the European context, the public service context, and the healthcare context. The meso, or organisational level, represents where the focus of the study takes place. Intra-organisational micro-level practices were also found to play a role during the practice of SISP.

## 5.1.4 Establishing Uniformity across Terminology

Throughout the course of this chapter, the litany of terms used as synonyms for IS (primarily either 'ICT' or 'IT') have been replaced with 'IS' barring their use in the titles of published documentation or their use in the official names of organisations/governing bodies. The reasoning behind this decision is composed of two factors: firstly, it was deemed appropriate to represent a uniform approach to terminology in order to bolster the legibility and parsimony of the text and so avoid confusion on the part of the reader (please refer to Chapter 3's Section 3.4 on terminology). The inter-changeability of each term was oftentimes evident during the course of interviewing, with interviewees using multiple variations whilst describing the same phenomenon. Secondly, the study is exploring the practice of SISP, which by its very abbreviation uses the term IS.

In addition, the 'Head of IS' is the title given to the highest-ranked IS practitioner within each organisation. Once again, a desire to present a uniform approach was a deciding factor in making this decision. PS1 did not employ a CIO-type practitioner to head its IS function whereas PS2 did possess a recognised CIO who was viewed as an equal to their senior manager colleagues. Given that PS1 attempted to hire a CIO-type practitioner to head its IS function as part of its 2010-2012 IS strategy, it will be referred to as such where appropriate so as to distinguish its current Head of IS from the practitioner the organisation was aiming to recruit.

# 5.2 The European Context: Macro-level Practices that Influence the Meso-level Practice of SISP

"We know that in healthcare we lag at least 10 years behind virtually every other area in the implementation of IS solutions. We know from a wide range of other services

that information technology applications can radically revolutionise and improve the way we do things."

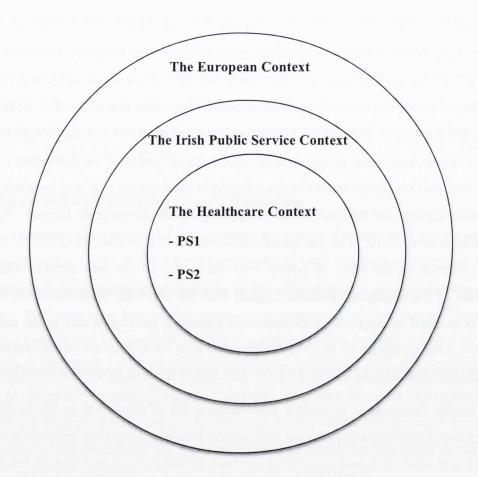
Toomas Hendrik Ilves, Chair of the independent eHealth Task Force (European Commission, 2012)

The two case studies employed for the current research find themselves influenced at the broadest level by the European context within which they reside (see Figure 5.1). The influence of pan-sector European IS initiatives have had an influence upon SISP within the public service healthcare domain in particular. Seminal publications that signalled an initial recognition of the need to embrace eGovernment (Council of the European Union, 2000), towards more recent publications that highlight the growing role and importance of IS ('A Digital Agenda for Europe', 2010; 'Digitizing Public Services in Europe: Putting ambition into action', 2010; 'The European eGovernment Action Plan 2011-2015', 2010), track the evolution of the EU's IS policy over the course of the past decade. The risk averse nature of the healthcare domain coupled with the drive for standardisation across markets has resulted in macro-level IS initiatives playing a prominent role in the practice of SISP by senior managers in both of the featured case sites. This particular dimension will be explored in relation to PS1 and PS2 in subsequent sections of the current chapter.

EU Health Policy aims to meet a wide-ranging set of objectives in the healthcare domain, inclusive of preventing disease, advocating healthier lifestyles, promoting health information and education, and supporting dynamic health systems and new technologies (European Commission, 2014). The Commission of the European Communities' document entitled 'Together for Health: A Strategic Approach for the EU 2008-2013' (2007) details the challenges to the EU's population from a health perspective, rendering it necessary to develop a new strategic approach. The first theme concerns the demographic changes brought about by an ageing population, enabled by the advancements in medicinal treatment. The second theme concerns threats to health, inclusive of climate change, pandemics, and bioterrorism. Finally, the most pertinent of the three themes for the current study are the rapid advancements in new technologies for the prediction, prevention, and treatment of illnesses.

The EU healthcare system faces an imposing challenge. Expenditure has risen from 5.9% of GDP in 1990 to 7.2% of GDP in 2010, with forecasts predicting it to grow yet further. The concurrent rapid decline in the working contingent of the total population from 61% to 51% (European Commission, 2012) provides a conundrum for policy-makers. However, despite the prevailing economic downturn, opportunities present themselves in the form of the market potential of eHealth. eHealth involves the use of "digital technology"

Figure 5.1 - Situating Practice: The Macro-level Context



to improve access to care, quality of care and make the healthcare sector more efficient" (European Commission, 2014: 15). It has been brandished as an increasingly crucial element of EU health policy. The market for eHealth has eschewed prevalent global trends and grown from \$9.8 billion in 2010 to \$11.6 billion in 2011. Forecasts put it at \$27.3 billion by 2016 (European Commission, 2012).

In conclusion, the documentation concerning EU strategies in the healthcare domain, and more specifically IS within healthcare, represents a resource of guiding principles to EU nations. EU policy does not have the power to compel Member States to follow its lead. However, the exchange of ideas across a broad spectrum of nations has tended to lead to the development of a set of macro-level objectives that provide a beneficial framework, in theory at least. How these are viewed at the level of the Irish public service is the focus of the subsequent section.

## 5.3 The Public Service Context: Macro-level Practices that Influence the Meso-level Practice of SISP

Ireland is a parliamentary democracy. The Constitution of Ireland sets out the form of government and defines the powers and functions of the President, both Houses of the Oireachtas, and the Government. A direct vote elects the President, who assumes the role of Head of State.

There are sixteen government departments, each of which are headed by a Minister (Anon, 2014b: Departments). They are:

- Department of Agriculture, Food and the Marine
- Department of Arts, Heritage and the Gaeltacht
- Department of Children and Youth Affairs
- Department of Communications, Energy and Natural Resources
- Department of Defence
- Department of Education and Skills
- Department of Environment, Community and Local Government
- Department of Finance
- Department of Foreign Affairs and Trade
- Department of Health
- Department of Jobs, Enterprise and Innovation
- Department of Justice and Equality
- Department of Public Expenditure and Reform
- Department of Social Protection
- Department of the Taoiseach
- Department of Transport, Tourism and Sport

The Ministers collectively form the Government, with the Head of the Government being the *Taoiseach* (Prime Minister). There are two Houses of Parliament, known as *Dáil Éireann* (House of Representatives) and *Seanad Éireann* (Senate) (Anon, 2014b: Departments).

The public service is a broad term, but can be defined to include "all bodies that are directly or indirectly controlled by a Government department or office, or by a local authority" (Central Statistics Office, 2014: 1). It is composed of the civil service, the public service, and state-sponsored bodies. Its size and scope is significant, employing in

excess of 350,000 people (16% of a total labour force of just over 2.2m) (OECD, 2008) in fields as diverse as defence, justice, education, and health (Government of Ireland, 2008b).

## 5.3.1 The Department of Public Expenditure and Reform

At the public service level, directives largely emanate from The Department of Public Expenditure and Reform (DPER), inclusive of 'Public Service Reform' (2011), 'Supporting Public Service Reform: Cloud Computing Strategy' (2012), 'Supporting Public Service Reform: eGovernment 2012 - 2015' (2012), and the Department's 'Statement of Strategy 2011-2014' (2011). The Department's aim is to "serve the country, its people and the Government by delivering well-managed and well-targeted public spending, through modernised, effective and accountable public services" (Mission Statement, n.d.). 'Public Service Reform' (2011) details the reductions in spending on public services necessitated by the economic downturn, yet also highlights that IS are at the core of keeping the customer at the centre of services provided. The consolidation and decentralisation of public service bodies is also detailed. The documents pertaining to eGovernment and cloud computing strategies were developed by the Centre for Management and Organisation Development (CMOD) in conjunction with the Public Service CIO Council, highlighting the criticality of IS to government in delivering improved public services for the citizens of the State. In what may be viewed as a progressive development within the DPER, the Office of the Government Chief Information Officer (OGCIO) has replaced CMOD, which follows on from the appointment of a new Government CIO in June 2013. The newly formed Office is responsible for "ICT Strategy development of the Public Service; Government Networks; eGovernment Systems Development; eGovernment Policy; EU and International engagement; ICT Metrics; plus delivery of an IT Shared Service to the Departments of Public Expenditure and Reform, Finance and the HR Shared Service Peoplepoint" (The Department of Public Expenditure and Reform, 2013: Minister Howlin launches new Office of the Government Chief Information Officer (OGCIO)).

The DPER's 'Statement of Strategy 2011 - 2014' (2011) provides an insight into the restrictions the current economic climate has placed upon public expenditure. The impact these restrictions have had on the practice of SISP by senior managers will be uncovered later in the current chapter. The Circular 'Arrangements for ICT Expenditure in the Civil and Public Service' (2009) provides a more detailed insight into the restrictive measures imposed upon IS expenditure, highlighting a lessening of autonomy for public service bodies in relation to their IS expenditure in more recent times as a result of economic

factors. Deloitte's report (2010) assesses reform in light of the dramatic spending cuts. The consultancy house identifies integration, connectedness, and shared services as key drivers towards a more efficient government.

#### 5.3.2 A Tumultuous Public Service Context

The two cases employed for the wider study find themselves in a tumultuous environment, largely spurred by the need for change due to the economic downturn. Indeed, change and collaboration proved to be recurrent themes. The very practice of SISP at the organisational-level may be viewed as a microcosm of the larger macro-level picture, with collaboration across departments and a requirement for an openness to change featuring heavily within the employed case studies.

Whilst the drive for renewal is not a new concept within the public service domain and can be traced back to 'The Devlin Report' (1969), it has nevertheless been brought into sharp focus due to the financial crisis. The recent climate is encapsulated in both the 'Government Statement on Transforming Public Services' (2008) and the OECD's 'Towards an Integrated Public Service' (2008). The former identifies increased flexibility as the means by which to traverse the ominous challenges of changes in the nation's demographics, increasing public expectations, and infrastructure needs. A common vision for the public service, achievable through leveraging shared services, information, and extant goodwill will garner the coveted flexibility required. Deloitte's (2010) publication addressing reform commends initial governmental efforts, but stresses the need to follow-through on these actions via engagement with the public service and the establishment of a shared vision for reform. Somewhat mirroring the practice of SISP, it is the social dimension that is identified as being key, with an integrated public service being dependent upon the changing of behaviours more so than the changing of structure.

The 'Public Service Agreement 2010-2014' (2010) (more commonly referred to as 'The Croke Park Agreement') provides an overview of the many constraints and difficulties within which public servants or 'practitioners' operate. Pay freezes and reductions, diminishing resources, and a lack of talent undoubtedly render the job of the public service practitioner increasingly difficult. The 'Government for National Recovery 2011 – 2016' (2011) document provides a broad overview of the proposed steps to be taken in an effort to lift the country out of economic recession. Built around the four broad themes of economy, reform, fairness, and progress, the report lists sets of key parameters and goals. Finally, the integral role of IS in helping the economy to prosper is evidenced in the Government's launching of a collaborative initiative with industry. The 'ICT Skills

Action Plan: 2014-2018' (Department of Jobs, Enterprise and Innovation, 2014) is aimed at meeting the skill demand from the thriving technology sector. Once again, the importance afforded to IS is apparent.

#### 5.3.3 Public Service IS Initiatives: eGovernment

Whilst a litany of prescriptions are detailed within the 'Government Statement on Transforming Public Services' (2008), attention is drawn to the prominence of eGovernment due to the nature of the current study and the centrality of IS to achieving the transformation initiative. Indeed, eGovernment has captured the attention of the Government of Ireland and been established as a beacon for bolstering efficiencies and reform (Department of Public Expenditure and Reform, 2012b). eGovernment refers to "On-line availability of public services, and the associated transformation of the business of public service agencies" (Government of Ireland, 2007, p.8). Whilst this is a rather succinct encapsulation of eGovernment, precisely defining it has proven to be a much more complex exercise (Department of Finance, 2009a). The Department of Finance (2009) developed a comprehensive working definition, noting that the very use of a 'working' definition signalled a recognition of the rapidly evolving nature of the domain.

The rapid development of technology throughout the 1990s prompted a significant governmental recognition of IS in its action plan for implementing the information society in 1999 (Department of the Taoiseach, 1999). A second, more ambitious action plan was launched in 2002 (Government of Ireland, 2002). Not only were the scale and scope of the projects expanded upon, but initial attempts to foster inter-agency interaction were also heralded. Such themes have endured to the present day. Despite the apparent momentum evident in the 2002 document, there was a drop-off in interest manifested by the 2007 audit of eGovernment (Government of Ireland, 2007), detailing that eGovernment had been without a formal strategy for the previous year. In addition, an evident lack of oversight was reported; whilst broad objectives for eGovernment had been identified, neither tangible targets nor active oversight were adopted.

The initial momentum floundered, appearing to reprise again in 2008 with the 'Report of the Task Force on the Public Service' (Department of the Taoiseach, 2008). The shortcomings had been identified, with the establishment of a new set of parameters for the monitoring and improvement of eGovernment. Returning to the language of SAP, a strict range of practices was introduced. Firstly, a centralising website (http://ictprocurement.gov.ie) for procurement was established. Secondly, a list of eight arrangements mandated all Departments, Offices, and Agencies to adhere to a set of

requirements. They ranged from the appointment of a designated point of contact for all matters pertaining to eGovernment, to the establishment of a comprehensive list of all eGovernment-related projects currently on-going or planned, to the provision of reports on the progress of each of these planned projects. The entire process could be viewed as a comprehensive self-auditing, self-reporting measure, conducted within strict parameters and needing significant attention from each organisation.

The culmination of these efforts was the publication of the 'eGovernment Strategy 2010' (Department of Finance, 2009b). The duality between the national context and the European context is brought to life, with tangible gains being highlighted via the use of EU eGovernment benchmarking measures. Having initially achieved promising results, Ireland slipped to 17<sup>th</sup> by 2007. The aforementioned lack of an eGovernment strategy across that period (2006-2009) is likely culpable for such slippage. With renewed focus and endeavour, Ireland rose to 7<sup>th</sup> in the rankings. The EU benchmarking mechanism had a positive impact in assisting the turnaround.

The current state of eGovernment is ensconced in 'Supporting Public Service Reform: eGovernment 2012-2015' (2012). Whilst acknowledging the significant progress made up to the point of its publication, the paper sets forth a more progressive approach to eGovernment; one that aims to exploit the tremendous potential it holds. 45 points of action are detailed, all of which fall under nine broad themes. The document signals a natural progression and maturation of governmental policy pertaining to eGovernment. The foundations established by earlier initiatives have become increasingly developed. The current document signals a growing familiarity with, and expertise in the domain.

#### 5.3.4 Public Service IS Initiatives: Cloud Computing

The cloud computing circular 'Supporting Public Service Reform: Cloud Computing Strategy' (2012) marked the second in a series of IS Strategy and Policy documents developed by CMOD and the Public Service CIO Council. The Irish public service defines cloud computing in accordance with the definition as detailed by the US Government's National Institute of Standards and Technology (NIST) (2011). Subsequently, "... cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction" (National Institute of Standards and Technology, 2011: 2).

The document places cloud computing as a central pillar of future public service IS strategy. The cloud computing strategy itself provides guidelines for public bodies considering a move to public clouds, private clouds, or the Public Service Community Cloud. In addition, the strategy outlines a formalised data/computer centre rationalisation, which aims to build upon formative steps to consolidate back-end infrastructures and systems to data centres belonging to other public bodies.

### 5.3.5 Concluding Comments on the Situating of the Practice of SISP at a Macro-level: The Public Service Context

The review of government-wide documents serves a purpose in detailing the landscape within which the current study's topic of investigation, i.e. the practice of SISP by senior managers, unfolds. Much of their content can be viewed as prescribed practices to reduce expenditure, improve efficiency, reduce costs, or maximise resources. They provide a contextualising, macro-level backdrop for the study.

Whilst the detailed government-wide IS initiatives provide macro-level direction to Irish PSOs, it ultimately falls under the responsibility of each government Department, Office, and Agency to develop their own IS strategy, albeit a strategy directly linked to wider Government initiatives. For the two featured case studies of PS1 and PS2, how each organisation planned its IS strategy and the extent to which they incorporated macro-level public service strategies can be ascertained from their respective case narratives. Consequently, the realised impact of the macro-level environment upon the meso-level, organisational context can be ascertained for the specified timeframe of the current study.

# 5.4 The Healthcare Context: Macro-level Practices that Influence the Meso-level Practice of SISP

The two case studies employed for the current study reside within the healthcare domain under the remit of the Department of Health. Similar to most countries, the Irish health service finds itself in a process of change and renewal (Department of Health and Children, 2010). The Department of Health's role is to "provide strategic leadership for the health service and to ensure that Government policies are translated into actions and implemented effectively", and to "... support the Minister and Ministers of State in their implementation of Government policy and in discharging their governmental, parliamentary and Departmental duties" (Department of Health, 2012a: 6).

The Department's 'Statement of Strategy 2011-2014' (2012) signals its broad strategic objectives. Running parallel to the 'National Recovery Plan 2011-2014' (2010), a total of €2 billion was to be taken out of the health budget over the corresponding period of time. The financial crisis presents a very real challenge to the sector. Yet, the objectives of keeping the nation's population healthy, providing the healthcare that people need, delivering high quality services, and getting the best value from health system resources remain constant. The strategy aims at delivering upon these objectives through six strategic programme areas. They are fair access and sustainability, patient safety and quality, health wellbeing, primary care, acute hospitals, and specialised care services.

The themes of change and reform have been persistent threads in the Department of Health's policies and strategies. The most significant programme of reform in the history of the State is 'Future Health: A Strategic Framework for Reform of the Health Service 2012 - 2015' (2012). The large-scale fundamental reform required to address the ominous challenges facing the health service are predominantly encapsulated in the move to a single-tier system with support from Universal Health Insurance (UHI). The four interdependent pillars of reform upon which the strategic framework is built are health and well-being, service reform, structural reform, and financial reform. The role of IS in the programme is viewed as crucial; "The success of all of these reforms will depend on significant improvements in information and in the IS infrastructure to support the integrated and effective utilisation of that information" (Department of Health, 2012b, p.4).

#### 5.4.1 The Health Service Executive: An Overview

Established in January 2005, the Health Service Executive (HSE) is Ireland's largest employer, with in excess of 130,000 staff and a budget of circa €15 billion (Health Service Executive, 2008b). Its remit is the provision of Ireland's health and social care needs, providing thousands of services to the Irish people across the nation (Health Service Executive, 2008a). As outlined in the 'Health Act 2004', it's responsibility is to "use the resources available to it in the most beneficial, effective and efficient manner to improve, promote and protect the health and welfare of the public" (Health Service Executive, 2008b: 8). It's accountable to the Minister for Health, with the Department of Health assuming an oversight role in the evaluation of its performance. The Department of Health's strategic plan sets the agenda for the HSE's prioritisation of objectives in terms of service delivery (Health Service Executive, 2008b). The HSE, due to its size and role in the provision of the healthcare service in Ireland, assumes a position of prominence in the

macro context of the current study.

The HSE has been in a state of flux since its inception. Its 'Transformation Programme 2007-2010' (2006) highlighted the challenges facing the country from a healthcare perspective. The aforementioned trends pervasive across Europe are also present in Ireland: a growing population with ever-increasing life expectancies is a real concern to the sustainability of then current practices. Recognising this, the document stresses the need for change and transformation. The HSE 'Corporate Plan 2008-2011' (2008) has inextricable links with the over-arching Department of Health's strategy for the same period, with an inherent focus upon service provision and improvement. Transparent self-auditing was implemented with the publication of the 'Corporate Plan Report: Report against the HSE Corporate Plan 2008-2011' (2011). This is a positive measure, providing a rigorous detailing of where the plan succeeded, where it could have done better, and where it failed. The elucidation of the disjoint between the espoused practices and the realised praxis within the HSE for the less than optimal performance areas should provide valuable insights for the organisation to help craft future strategies.

Following the four-year corporate plans of 2005 - 2008 (2005) and 2008 - 2011 (2008), the HSE has since moved to shorter, annual plans branching into more distinct categories, e.g. national service plans, national operational plans, regional service plans, group service plans, and support services business plans. Nevertheless, the Department of Health's 'Statement of Strategy 2011-2014' (2012) and 'Future Health: A Strategic Framework for Reform of the Health Service 2012 - 2015' (2012) from the healthcare domain, and 'Towards Recovery: Programme for a National Government 2011-2016' (2011) and the 'Public Service Agreement 2010-2014' (2010) emanating from the wider public service, are examples of prominent prescriptions or practices PS1 and PS2 found themselves needing to remain cognisant of when planning their own strategies. Extending the scope further encapsulates influences originating from Europe, inclusive of 'Together for Health: A Strategic Approach for the EU 2008-2013' (2007) and the 'eHealth Action Plan 2012-2020 - Innovative healthcare for the 21st century' (2012). The management of the various directives and their transformation into a strategic plan that not only meets the specific requirements of the organisation, but also adheres to the guidelines or practices espoused by wider governmental bodies, is a challenging endeavour. How the two featured case studies managed this seemingly complex task will be explored in their respective case findings.

#### 5.4.1.1 The Health Service Executive: The Role of IS

IS plays a critical role in delivering upon the HSE's strategic objectives. A timely report by the Health ICT Industry Group (2009: 3) on IS's role in healthcare transformation proclaims that "health service transformation cannot be achieved without IS." The document's central message is that "lives can be saved, patient care outcomes improved, and costs reduced through the effective use of IS in the healthcare transformation process" (2009: 2). IS are identified as the bridge to closing the contradictory gap of Ireland possessing a healthcare service ranked considerably below the best in Europe despite being one of the most costly. A theme found in the SAP literature is the role of its social dimension, a factor highlighted in this particular report. Sustained leadership at all levels is espoused as a pre-requisite for success. Acknowledgment is made of the progress that has been made.

However, the most significant statistic uncovered is of a negative nature: Ireland was spending just 0.75% of its total HSE budget on IS. Whilst this figure appears low in isolation considering the transformational power of IS, its starkness is intensified when the corresponding average figure for Ireland's peer European countries is over three times that amount at 2.5%. The report's recommendations are largely mirrored in government-sourced documentation. The HSE's 'Transformation Programme 2007-2010' (2006) is not quite so damning in its assessment of the current climate from an IS perspective. It identifies IS as one of its 13 transformation programmes aimed at achieving six transformation priorities. Indeed, IS could be associated with a number of additional programmes in some capacity, e.g. shared services, so whilst not recognised as the sole pathway to an improved service offering, it was on the radar of the relevant stakeholders within the domain. To quote Gerard Hurl, the National Director of IS at the HSE, "IS has to be at the heart of healthcare" (Faughnan, 2010: 10).

## 5.4.2 Implications for Organisations Located within the Wider Macro-level Environment for the Timeframe of the Current Study

The current study's exploration of the practice of SISP by senior managers concerns IS strategies for PS1 and PS2 covering the periods of 2010-2012 and 2011-2015 respectively. In order to ascertain the macro-level environment facing both organisations during this time, the most pertinent secondary data coalesces around the late 2000s and early 2010s. Taken together, each of the European, public service, and healthcare contexts play a role in shaping the practice of SISP. Whether merely prescriptive or representing a more concrete leveraging of how SISP is practiced in PS1 and PS2, the macro-level

context forms an important component for the current study over the defined timeframe. It's apparent that during the inception of both the 2010-2012 and 2011-2015 strategies, the importance attached to IS within the healthcare domain was high. Whether this sentiment of goodwill manifested itself into IS receiving the support it warrants, or ultimately got lost in prescription and failed to materialise into realised praxis, will be explored under Theme 1 of the case findings.

#### 5.5 The Case of PS1

The current section opens with an introduction to the PS1 case site, forming a context setting piece. To retain anonymity, the wording has been tailored accordingly. A rich resource of secondary data was employed. The four key themes and related subthemes that were identified during data analysis form the remainder of the section. It is here that the realised praxis of PS1's senior manager practitioners during their practice of SISP is described. The combination of rich secondary and primary data presents a holistic account of the explored phenomenon, triangulating the data and thus limiting the possibility of bias becoming an issue. Before detailing the case findings in section 5.5.2, the following sections provide contextual detail on the case of PS1 under a range of subheadings:

- About PS1: Provides high-level data on the organisation and its function.
- PS1's Senior Management Structure: Signals the composition of PS1's Top Management Team (TMT), proving pertinent due to its Head of IS being the only head of function to be omitted.
- The Role of PS1's Macro-level Environment: Provides a synopsis of the macro-level context detailed in prior sections of this chapter specifically as it relates to PS1.
- PS1's Organisational Strategy: Details the wider organisational strategy from which the 2010-2012 IS strategy emerged, with commonalities across both evident.
- The Emergence of a First Formalised IS Strategy: The origins of the organisation's IS strategy 2010-2012, which forms the focal point of the current study's investigation, is then traced to two collaborative research reports conducted with a single external consultant.
- PS1's IS Strategy 2010-2012: An overview of the 2010-2012 IS strategy elucidates the strategy content accrued from senior managers' practice of SISP in PS1.

#### **5.5.1 About PS1**

PS1 is a Non-Commercial State Agency. It is based in the Irish capital city of Dublin, with a number of regional facilities located around the country. Its functions include:

- The organisation and administration of its particular health-related service.
- To make available the core component of its service and related components.
- To make available equipment or reagents suitable for use in relation to its service.

- To make such charges (if any) as the Board thinks fit for the services referred to above and, where the Minister gives any direction in relation to such charges, to comply with such direction.
- To furnish advice, information, and assistance in relation to any aspect of its service to the Minister, any health authority, or any hospital authority.
- To make any necessary provision for publicity in relation to the service.
- To organise, provide, assist or encourage research and the training and teaching of persons in matters relating to its service.
- To co-operate with other bodies with analogous scientific functions.
- To organise and administer a service for obtaining and assessing reports of unexpected or undesirable effects of its service.

Source: PS1 website

PS1 operates in a highly regulated context. It fosters a close collaboration with clinicians to ensure the safe delivery of its service. The organisation operates in an environment in which its service offering remains under constant threat of emergent health risks. Despite a challenging economic climate, PS1 remains committed to proactively leading in the domain of taking precautionary measures so as to provide a service offering that limits its customers' exposure to risk (PS1, 2009).

#### 5.5.1.1 PS1's Senior Management Structure

PS1 operates with a TMT, which is the organisation's primary decision-making body ('IS Statement of Strategy 2010-2012', 2010). It's worth noting that its Head of IS does not feature on the TMT, and as such is the only head of function to be excluded (see Table 5.1 for its composition). The effect this had upon the practice of SISP will be explored in subsequent sections. Distinguishing between the TMT and senior managers as defined for this study is an important delineation. The Head of IS remains classified as a senior manager on the grounds that they act as a head of function. Their exclusion from PS1's TMT had ramifications for how senior managers practiced SISP.

#### 5.5.1.2 The Role of PS1's Macro-level Environment

As detailed in the preceding sections, PS1 finds itself in a complex macroenvironment, with a disparate array of bodies, i.e. the European Commission, the Department of Health, and the Department of Public Expenditure and Reform, exerting

Table 5.1 - Composition of PS1's Top Management Team

Top Management Team	
Chief Executive	
Operations – Supply Chain	
Quality and Compliance	
Medical and Scientific	
Human Resources	
Finance	

Source: 'Strategic Plan 2010 - 2012' (2009)

influence upon its SISP endeavours. Indeed, such a collective may be viewed as both enabling and/or constraining SISP. At a fundamental level, the Government-wide recruitment embargo enforced as a measure to counteract the financial crisis has rendered the hiring of a new member of senior management in the form of a CIO-type Head of IS a cumbersome, and ultimately failed initiative for the organisation. Conversely, the 'National Recovery Plan 2011-2014' (2010) and its associated cost-saving measures have made the organisation more efficient. Senior managers have pointed to the requirement of having to deliver greater value for money from IS, effectively needing to deliver the same services more cost effectively and at an elevated level of quality.

#### 5.5.1.3 PS1's Organisational Strategy

PS1's organisational strategy is ensconced within its 'Strategic Plan 2010 - 2012' (2009). The influence of the economic downturn is evident when contrasted with the organisation's prior 2005 - 2009 organisational strategy (PS1, 2005), which naturally makes little reference to the difficult climate the organisation faced when producing its 2010-2012 strategy.

The vision of PS1 is to provide an excellent service to the people of Ireland, with IS being seen as vital to the organisation's ability to do so. PS1's 'Strategic Plan 2010 - 2012' (2009) coalesces around six broad themes:

- To provide a sustainable and safe supply of its service's core component.
- To maintain international best practice.
- To provide appropriate patient services.
- To adapt to the changing business environment.
- To forge strong relationships and alliances.

- To reconfigure services.

Specifically concerning IS, PS1's 2010 - 2012 organisational strategy signals that a significant shift will be required in how IS are delivered in PS1. The focus of IS over this period is described as being:

- Embedding a strategic approach to the management of IS resources and capabilities throughout the organisation.
- Embedding a collaborative approach to IS-enabled change that will include a system of continuous evaluations of all major IS-enabled change programmes and projects.
- The creation of an integrated over-arching management information system.
- Review, streamline and consolidate IS operations and exploit opportunities for outsourcing aspects that can be more efficiently and cost effectively carried out by external parties.

PS1's IS strategy emerged from the wider organisation's strategic plan, with the role of IS being recognised as much more than a mere support function. IS are at the core of PS1, with the organisation's very operation being intrinsically linked to its IS systems. By comparing the 2010 – 2012 organisational strategy to the 2010 – 2012 IS strategy it is possible to ascertain the consistencies across both. Indeed, the first two areas listed above, i.e. embedding a strategic approach to the management of IS resources and embedding a collaborative approach to IS-enabled change, could largely be seen to have been achieved during the practice of SISP for the period, temporarily at least.

#### 5.5.1.4 The Emergence of a First Formalised IS Strategy

PS1's 2010-2012 IS strategy is viewed by organisational practitioners as the agency's first formalised attempt to create a defined IS strategy, proving a learning experience for senior managers ('Minutes of IS Council Meeting', 2012). The researcher sourced a non-published IS strategy for the period 2004-2009 (PS1, 2004), but this was not the product of a collaborative effort by senior managers, and is more akin to a simple checklist of the IS function's operations and future requirements. In order to trace the emergence of a focused IS strategy within PS1, two key documents are of importance. Firstly, 'Shaping the Future' (2008) is a collaborative research report with an external consultant primarily focused upon organisational strategy. It identified five over-arching strategic priorities for the organisation, out of which three were to be progressed over the following twelve to eighteen months as a matter of urgency. The five long-term priorities were:

- Developing a comprehensive analysis of the forces driving and impeding change in PS1's external environment.
- Developing a comprehensive analysis of the forces driving and impeding change within PS1's internal environment.
- Crafting a breakthrough strategy for planned change that positions PS1 as a premium provider of its service.
- Devising and implementing an effective transition management strategy that focuses on the realisation of a unified national organisation.
- Developing capability and capacity to effectively execute strategic change priorities.
   The three pressing strategic priorities were:
- The crafting of a breakthrough strategy for planned change that would position PS1 as a premium provider of its service.
- The constructing and implementation of an effective transition management strategy that focuses on the realisation of a unified national organisation.
- The development of capability and capacity to effectively execute strategic change priorities.

Whilst 'Shaping the Future' (2008) is located at a broader, organisational level, it nevertheless acted as the catalyst for PS1 to start thinking of IS in a more strategic manner.

The bedrock for the current IS strategic landscape within PS1 was established by the collaborative research project 'Maximising the Business Value of Information Technology: Key Strategic Themes' (2010), jointly led by PS1's senior managers and the same external consultant who collaborated on 'Shaping the Future' (2008). It points to the first documented intentions of the organisation to develop a realised strategic approach to IS, to establish a collaborative orientation in regard to IS strategy, and to strive for IS-enabled service excellence.

The key themes of this document are co-ordination, collaboration and integration both within and across departments. Such themes emerged largely due to the fragmented nature of PS1's IS resources and capabilities. The appointment of a CIO to head its IS function is noted as being of importance to addressing these challenges. Further themes identified are those of the need for the effective management of change and the key role played by middle management in leveraging the value of IS. Each of these topics is explored in the findings from the PS1 case study.

It is important to note that PS1's 2010-2012 IS strategy primarily represents a more refined version of 'Maximising the Business Value of Information Technology: Key Strategic Themes' (2010). As such, it is of value to the current study's exploration of the practice of SISP to view exactly how the document was formed through realised praxis on the part of the external consultant and PS1's senior managers. The external consultant includes a list of the diagnostic work undertaken to underpin the production of the report, which includes multiple sources of primary and secondary data. The collaborative effort made to engage senior managers and a range of additional organisational stakeholders in the practice is striking. Primarily manifested in the form of focus groups, working sessions, and in-depth interviews, a broad swathe of practitioners was engaged.

The consultation process took place in two organisational locations of Dublin and Cork over the period December 2008 to March 2009. The comprehensive, collaborative nature of this initiative is evident in the fact that 35 management and staff participated. It is from this extensive collaborative effort that keen insights on priority matters were accrued, out of which PS1's IS strategy 2010-2012 emerged (External Consultant, 2010). The practice of SISP by PS1's senior managers during this period and senior managers' continued practice for the duration of the 2010-2012 IS strategy are the focus of the PS1 case study.

#### 5.5.1.5 PS1's IS Strategy 2010-2012

PS1's IS objectives are ensconced in the directives outlined within its 'IS Statement of Strategy 2010-2012' (2010). The organisation's IS strategy is encapsulated within five key priorities:

- 1. The nurturing of a transformed IS function which is led by strong <u>leadership</u> and which can engage effectively with all stakeholder groups.
- 2. The establishment of a high performance team which can aid the <u>alignment</u> of business and IS strategies.
- 3. The establishment of a high performance team that can <u>deliver programmes of</u> **IS-enabled change**.
- 4. The establishment of a high performance team which can oversee the **provision of operational support to the IS function**.
- 5. An allowance for the provision of resources with which to <u>effectively manage</u> <u>change</u>, thus allowing for the successful delivery of the IS transformation programme.

A distillation of this IS strategy identifies three broad themes: the need for improved leadership of the IS function, the requirement for heightened collaboration across functions that will help deliver the alignment initiative, and the fostering of an environment susceptible to change, which is itself highly dependent upon improved leadership and collaboration. An important on-going practice to have been established was PS1's IS Council. Due to the lack of IS representation on PS1's TMT, the IS Council's purpose was to serve as the episodic fulcrum for the bringing together of PS1's senior managers, key IS middle management, and external expertise on a bi-monthly basis (Internal Document, 2011). How the role of the IS Council transpired in realised praxis during the IS Strategy's 2010-2012 timeframe will be explored in Section 5.5.4.2.

PS1's 2010-2012 IS strategy lacked the inclusion of any tangible performance metrics by which it could be assessed. An external consultancy house's advisory report (Mazars, 2011) based upon PS1's IS strategy stressed the need for performance metrics to be implemented, so that progress or lack thereof could be effectively monitored. Indeed, the introduction of increased accountability for future IS statements of strategy is a key recommendation, and also that the next iteration should be devised during 2012 and operational by the beginning of 2013. Based upon this suggestion the organisation conducted an internal audit to assess the status of the consultancy house's recommendations, resulting in varying levels of completion (Internal Audit Department, 2012).

Ultimately, whilst the detail of PS1's 2010-2012 IS strategy has been described in this section and thus a valuable grounding has been provided in the strategy's content, it is the practice of SISP by PS1's senior managers that forms the focus of the research.

#### 5.5.2 Case Findings for PS1

Having elucidated a high-level overview of the macro-level context in which the wider study is based followed by a detailing of the PS1 case site, the current section focuses specifically upon the study's topic of investigation, i.e. the practice of SISP by PS1's senior managers. The phases of data analysis employed for the current study were discussed in section 4.6.3. The execution of Maykut and Morehouse's (1994) coding strategy contributed to the emergence of the case findings, represented by four broad themes and related sub-themes. The case findings, i.e. the description of how the

phenomenon under investigation transpired in both PS1 and PS2, are grounded in the emergent themes. Each theme is now detailed as it pertains to PS1.

## 5.5.3 Case Findings for Theme 1: The Role of Macro-level Contextual Factors during the Practice of SISP by Senior Managers

Theme 1 explores the role of macro-level contextual factors during the practice of SISP by senior managers. The macro-level context will be viewed from a European perspective, a public service perspective, and a healthcare perspective. Comparisons between the public and private sectors conclude Theme 1.

#### 5.5.3.1 At the European Level

Despite the significant IS agenda found in the European context in which PS1 is located, there exists little evidence as to it having any tangible impact upon the practice of SISP by senior managers in PS1. From a technical standpoint, the organisation's IS must conform to GAMP (Good Automated Manufacturing Practice) standards and are regulated to that standard. Technical European directives pertaining to the regulation of the organisation's core service were prominent, but from a SISP perspective the influence proved minor:

PS1 – SM4: "I think we tend to be much more regulatory driven from an IS point of view in terms of the (core service) Directive, the regulatory requirement; certainly from my perspective... So that tends to be a huge driver. So things like, em, you know, conforming to (European) standards, that kind of thing."

Despite probing along these lines, the only additional impact of European directives upon SISP was at the lower end of the strategic scale, involving social media and compliance with data protection requirements:

PS1 – SM5: "...the way we run our website and the way we do our sort of social media platform in a compliant fashion with the (European) Directives, and the cookie stuff recently because of the Directive on that. We are currently putting that up on the website..."

#### 5.5.3.2 The Public Service Level

The impact of contextual factors at the public service level is significant, and has a palpable role in shaping the practice of SISP. This is particularly evident in regard to both

financial and human resource restrictions, with PS1 being subjected to a recruitment moratorium since 2009. This has been particularly detrimental to the IS Department, with some apparent disgruntlement caused by what would appear to be a lack of importance attributed to the function. Being a safety-critical service provider, PS1 is allowed freedom in regard to certain front-line positions. The IS department appears to fall outside of this zone, as evidenced in the difficulties encountered when trying to seek approval for the hiring of a CIO-type Head of IS. The current Head of IS does not possess the necessary credentials to be brandished as such. Whilst assuming the role of a head of function and reporting directly to the CEO, they hold a status within the organisation more akin to that of a middle manager, and hence the desire on the organisation's part to recruit a CIO-type figure. Given the critical role of IS within the organisation, it is understandable that this has caused some frustration amongst senior managers:

CEO: "I have sought approval from the Department to appoint a Chief Information Officer, and I have got approval. However, the salary for which I have got the approval won't let me appoint anybody. It is the same salary as the current IS manager, em, so you are not going to get, in the current climate there is a demand for good IS people. We are not going to get anybody with that experience and calibre for that salary."

At a broader level, financial constraints are also evident. The current economic climate and the need to reduce costs have impacted upon the wider organisation:

PS1 – SM8: "There is an awful lot happening and we have taken fifteen million out of our costs in the last four years, and that is a huge major change project, and that is where all our energies are. It is change, change, change, reduce costs, reduce costs."

The push for improving efficiencies has opened up possible cost-saving avenues that may not have been considered before, and this expansion of strategic options had an impact upon SISP:

PS1 – SM6: "I mean what the government recovery programme has, I suppose, highlighted is the need to, for greater value for money across all activities of the organisation, and IS are one of those clearly. So what it would have done is have prompted us more than before to look at other means of delivering the same services and at better quality and more cost effective, and what I mean is that the possibility of outsourcing."

Ultimately, whilst intentions at a macro-level have been signalled and the goodwill exists to see them through, the broad directives such as e-Government may not have the requisite infrastructure to assist government bodies:

PS1 – SM6: "We did talk to the players in Ireland in terms of what our strategy was for the government in terms of eGovernment, in terms of the whole programme of digitalisation, the whole programme of shared IS services, and that whole thing; and to be honest they are not very well advanced in that they have plans to do a lot of it but in terms of the infrastructure being available, the process being defined, they are not very well defined at the moment, and we talked to CMOD and we talked to other people around that who have been involved in this programme and while yes, their intention is to get there, em, I think that there is the agenda for it is so broad at the moment that the, em, the infrastructure is not in place to let them do a lot of the things that they would like to do, em, and there is a very significant task around that."

An external consultant with whom senior managers engaged during the practice of SISP corroborates such a viewpoint:

PS1 – EC2: "So the inherent logic the government will follow is that shared services is good for you and therefore we are all going to be getting into shared services; it is nonsense. Where is the inherent value to be gained by sharing, mostly sharing operational aspects of HR, Finance and IS? And so of course government forgets all that and just thinks that "We will just share services, we will need less people that is how we are going to do it" and it forgets about how to develop the fabric of the organisation."

#### 5.5.3.3 At the Healthcare Level

PS1's position within the public service healthcare domain poses its own inherent challenges. The very size of the organisation has limited its influence, leading to broader decisions within the wider public service healthcare domain being made without its input:

PS1 – SM8: "Too small. We are, you know, I have been to meetings where they have said "Why did you do this?" and "We never thought of this", because they only think of the HSE and they think about the five or six big hospitals, or the ten hospitals that are big to them..."

The apparent lack of importance attributed to the organisation by the wider healthcare domain is a sentiment echoed across senior management, as is a frustration with the lack of engagement from the higher ranks of the Department of Health:

PS1 – SM6: "So there is a vacuum, and interaction at high levels in terms of the Department of Health. We need, I need at least one or two meetings a year, with (-) on a one to one discussing strategy and that has never happened. In my ten years in this job, it has never happened. I have looked for them but I have never got a meeting."

The very nature of the healthcare domain and the responsibilities attached has resulted in an organisation very much concerned with its public perception and identity:

PS1 – MM2: "Like we were just adverse to any sort of negative media, but again it is our own problem because we don't sell ourselves."

Such an organisational mind-set has a tangible effect upon SISP, leading to a cautious, risk adverse approach:

PS1 – SM2: "I think there is quite a bit of institutional caution in senior managers in (-) services. I mean it is, em, (-) services is a safety first sort of organisation. It is not given to attracting entrepreneurs or risk takers. In fact we wouldn't want risk takers."

#### 5.5.3.4 The Public vs. Private Sector

The current study aims to explore how senior managers practice SISP. The public service itself thus forms an integral factor in the research question. It was deemed appropriate to explore this particular dimension further, specifically in regard to how it may differ from the private sector which features so prominently in both the SAP and SISP literature sets. It was common for interviewees to offer opinions on this topic without prior probing by the interviewer. This was particularly true for those interviewees who had experience of working in both public and private domains. The public service domain would appear to restrict the freedom of choice for senior managers who practice SISP:

PS1 – MM2: "Again I think it is, a lot of it is a public sector thing and it is not the easiest thing in the world, you know, because you can't just come in and apply private sector mentality in here. Like there is, it needs to be shaped in a certain direction to the deal with the incumbency and whatever."

Speaking of why there is a lack of strategic partnerships formed within the public service context, an experienced senior manager provided a succinct assessment:

PS1 – SM8: "But I put it down to the bureaucracy that you find in the public service. I come from the private sector... You would have this in the private sector. You wouldn't need it as much in the private sector, but you would have it, you know. Whereas the bureaucracy that exists in the public sector, and the power plays that go on, just make the pain too much, so you just stay out."

The result has manifested itself in tangible ways with supplier relations, impacting upon the practice of SISP:

PS1 – MM2: "We subsequently met a supplier who didn't bid and they said they put a mark-up of twenty five to fifty percent on anything that is going into the public sector. The very nature of that is going into the public sector and they just can't manage it, they lose control of it once it goes in."

### 5.5.3.5 Concluding Comments on Theme 1: The Role of Macro-level Contextual Factors during the Practice of SISP by Senior Managers

Returning to the research question, it is clear that the practice of SISP by senior managers does not exist in an organisational vacuum. Rather, it is largely impacted upon by macro-level contextual factors. Public service and healthcare domain factors play significant roles in shaping the practice of SISP, with the European context to a much lesser extent. The climate for practicing SISP in the current study was largely shaped by economic factors. Resource restrictions, particularly concerning recruitment and the resultant inability to secure the services of a CIO has had a negative effect upon SISP within PS1. The very nature of the public service domain, with its entrenched political jousting and more lethargic strategic processes in comparison to the private sector, play palpable roles in how senior managers practice SISP.

## 5.5.4 Case Findings for Theme 2: The Role of Intra-organisational Meso and Micro level Practices during the Practice of SISP by Senior Managers

Having explained the macro-level domain and the dominant influences upon the practice of SISP by senior managers in PS1, focus now turns to the intra-organisational context with its inherent meso and micro level practices. Specifically, how PS1's established practices impacted upon SISP was explored. During the interviewing process, three prominent practices emerged. They are: the conduct of strategic episodes, the role of PS1's IS Council, and the quest to outsource elements of PS1's IS function.

#### 5.5.4.1 The Practice of Strategic Episodes

As explored in Chapter 2, strategic episodes form the focal point for strategic activity. The work or praxis of strategising is primarily conducted within the context of a strategic episode. This proved true for PS1. A senior manager provided some background as to how the episodic structure for the 2010-2012 IS strategy was conceived:

PS1 – SM6: "I suppose if you go back a little bit, em, probably five years ago, I just was unhappy with the quality of advice coming to the TMT from IS, and I knew we were

going to go through a significant period of change with regard to our systems, with regard to budgets, with regard to how we do our business, and because IS are so important to the business, we needed a fresh look at all of this, and that is when we engaged (External Consultant) to help us look at that, because again, looking back over old ground, we were very traditional in how we did things or see how we did things, and outsourcing was never contemplated. It was never put forward as an option to do anything in IS. So we needed almost an education process for IS people, and began to develop their thinking into looking or seeing outside the box to some extent, and developing the team and educating them in a broad sense on IS; agenda items and so on; and that evolved then into working with the individual IS manager, working with the IS team, establishing the IS Council and the IS document strategy came, I suppose the genesis of it was in that process, and the material from it, came out of that process and was then put into a document with the IS manager."

Having spoken at length to the external consultant who led this process, a corroboratory picture is painted of this process. It became clear that collaboration between IS and the TMT was a crucial component, something that had been lacking up to that point. In Theme 1, the issue of PS1 not being able to secure the funding from its macrolevel environment to appoint a CIO-type figure was prominent. At the meso-level, this had some very palpable repercussions, with IS not having representation on the TMT. A breakdown in communication was a consequence, and it was through this consultant-led process that both parties were able to exchange views and collaborate within the confines of strategic episodes.

PS1 – EC2: "There were sessions with the Board which were hugely interesting. There were sessions where the Top Management Team, em, there were sessions where the Top Management Team and the, em, IS management team were brought together. Well architected in terms of preparatory work, and heads of areas within IS did kind of major presentations to the Executive as part of joint collaborative working sessions, and the preparatory work that was done by each person within the senior team within IS, was according to a particular template. So as far as strategising was concerned, that period from the one that has the richest in terms of what you might call strategy episodes is what became published for 2010 to 2012. So the work that was done in relation to that."

When discussing how more micro-level, within function strategising should theoretically take place within an organisation, the external consultant who led this process offered their viewpoints:

PS1 – EC2: "I think it takes place in two areas or a number of areas. I think it takes place within functions. So if you take all the core and support functions, it takes place within functions where the heads of functions literally promote a discourse or dialogue in relation to strategising, em, and that includes the IS function as well as all the other functions, and then it takes place within a series of teams. So the Top Management Team carrying all the heads of major functions, or including heads of major functions, so there is a kind of a, there is a dialogue within functions and then there is a dialogue across functions. The across functions take place within the Executive in that it represents all these functions; and I would not differentiate there between the IS function versus other functions."

As noted, more micro-level strategising should take place within the requisite function. It should then infiltrate into, and coagulate with, wider organisational strategy at the senior-level. Whilst such a process was adopted for the planning process of the 2010-2012 IS strategy, it is absent outside of this parameter due to the lack of IS representation on PS1's TMT. A senior manager expressed the positive strides made during this collaborative phase, reinforcing the notion that an opportunity is being missed by PS1 for not establishing this process as an organisational norm or practice:

PS1 – SM6: "That is when we had (External Consultant) in to look at that, and I think that we made a lot of progress at that time..."

#### 5.5.4.2 The Practice of PS1's IS Council

The IS Council's 'Terms of Reference' (2011: 1) lists its purpose as "To have governance oversight ensuring that the organisation maximises the business value of its investments in IS whilst also ensuring that its approach to the management of IS is in line with good international practice." It had a number of specific areas of interest, principal of which was to "ensure that the Top Management Team, IS Leadership Team, and Functional Management Teams thoroughly understand IS and its potential to support the business" (2011: 2). PS1's IS Council may be viewed as a measure to counter-balance its lack of a CIO. The establishment of the IS Council and its meetings or episodes could be seen as a theoretically sound practice to alleviate the negative effects of such a deficiency.

PS1 – SM4: "Well, I mean it was constructed to deal with the absence of the CIO and I suppose to protect the Chief Exec. That is its function in life."

A point raised is the fact that the CEO was assuming responsibility for the IS department. Lacking the expertise of a CIO, this is rightfully viewed as a risky position to assume:

PS1 – SM4: "I don't believe it is either fair or reasonable to expect the Chief Executive to bear that responsibility, and I believe that it is dangerous for the organisation."

Provided that the organisation is lacking a CIO-type figure to head its IS function and given the criticality of IS to its service provision, the IS Council's disbandment during the course of fieldwork was surprising. Whilst SISP may not have been its sole priority, it nevertheless existed to serve an integral role in strategic oversight as per its specific areas of interest listed above. Without it, communication between the IS function and the wider organisation breaks-down. A reason as to why PS1 stopped its practice of bi-monthly IS Council episodes is proffered by a member of senior management;

PS1 – SM5: "I could give you a good guess as to why it hasn't happened but I suspect it is because resource wise, effort and time is being diverted into the actual projects that are on hand, and the big one being (IS initiative). That takes all spare capacity away from things like looking at the future when the here and now is the future in so far as you know, (IS initiative) will absorb everybody's time and effort for the next year and a half. That is just, you could say that that is the IS strategy in like two lines, you know, until (IS initiative) is up and running and validated that is the only game in town."

The IS Council was deemed to operate at a level not commensurate with the predominantly senior level practitioner who attended its meetings. It became mired in the operational-level to the detriment of the strategic, assuming a position of mere functional auditor:

PS1 – MM7: "One is in trying to manage the risk register, and that was a huge component of, em, of the meetings, and rather than setting just the timelines and having the confidence and having meetings before the Council meetings to say "Yes, this is verifiable progress" the committee was involved and engaged in almost verifying the progress. So we became part of the audit process that I wouldn't have expected the committee to do."

Whilst noble intentions may have resulted in its formation, it appears to have failed in achieving its goal of forming a bridge between IS and the wider organisation from a strategic standpoint:

PS1 – MM4: "I mean in a way maybe it came slightly from the fact that, because IS don't have a seat on the senior management team, then they had no way into the team other than that IS Council when it got set up. So maybe from senior management's point of view it was partly as a way to kind of keep a check on what was going on. From ITs point of view, what they were really looking for was a bit of a more strategic view from the TMT and I don't think they ever kind of got that."

#### 5.5.4.3 The Practice of IS Outsourcing

The IS strategic practice of outsourcing is one in which PS1 has shown a keen interest. The outsourcing of its helpdesk was an objective nearing completion during the process of interviewing:

PS1 – SM6: "In terms of services we have tendered for outsourcing our helpdesk support, which should be coming to a conclusion very shortly, and that is the first thing that will be outsourced. We also are then looking at other services, the possibility of outsourcing them because with a diminishing number of people, em, and a requirement to reduce costs, we will have to look at different means."

The linkages between the macro and meso levels are apparent, as the push for cost savings from the macro-level have prompted PS1 to look for measures to reduce expenditure:

PS1 – SM6: "Where opportunities arise for us to outsource, we will do so."

A tangible pressure exists upon the organisation to outsource as a means of cost cutting, with additional services having been considered for outsourcing as a result:

PS1 – SM6: "So what it would have done is have prompted us more than before to look at other means of delivering the same services and at better quality and more cost effective, and what I mean by that is the possibility of outsourcing."

Whilst outsourcing was employed as a cost-saving measure, it is not always a positive option for an IS function's operation. The loss of control to an oftentimes-unknown body, or in this instance a stakeholder not quite fully trusted by PS1, caused the organisation to baulk at the prospect of enacting the project. Another key issue at play for PS1 in regard to the practice of IS outsourcing is the lack of a fully realised back-end support infrastructure. Theme 1 explored macro-level influences upon the practice of SISP, and noted that prescriptions emanating from the public service level do not always have the required infrastructure in place to allow PSOs to enact them. This appears to be true in

regard to shared services, with the deficiencies in the process apparent in a senior manager's account of the landscape:

PS1 – SM6: "I think in terms of shared services, we did meet CMOD with a view to that because there is available, for instance, of hosting services in, I think the Department of Justice are hosting some services and other Departments are hosting services. But what they offer actually is they offer you a server in that Department but you have to manage the server yourself. So it is not really an outsourced shared services."

Ultimately, the strategic practice of IS outsourcing is one that lacks direction within PS1. In theory, it could achieve the goal of reducing costs. However, a lack of leadership in the prioritisation of projects, a breakdown in communication between the IS function and the wider organisation, and an infrastructural deficiency from government to enable PSOs to embrace its espoused IS practices have resulted in a rather disjointed approach to outsourcing within PS1.

## 5.5.4.4 Concluding Comments on Theme 2: The Role of Intra-organisational Meso and Micro level Practices during the Practice of SISP by Senior Managers

The core practice of strategic episodes, an integral dimension of the SAP lens, forms a somewhat uneasy fit with SISP in PS1. During the planning phase of the 2010-2012 strategy, good 'practice' was employed due to the leadership and facilitatory role of the external consultant. Progress was made during this period of strategic endeavour. Out of this emerged the IS Council, which represented an attempt by PS1 to integrate a recurring, bi-monthly episode for issues of a strategic nature. However, it was primarily deployed to bridge the gap of PS1 lacking a CIO-type figure on its TMT. The IS Council ultimately floundered, resulting in its disbandment. The principle reason for this was its inability to stick to its key areas of responsibility as set out in its terms of reference. It quickly became mired in matters of an operational nature, which wasn't befitting of the senior-level practitioners sitting on the Council. The practice of outsourcing was heavily affected by the aforementioned issues of not having IS representation on the TMT. Attempts to outsource various components of the IS function were ongoing, but without the expertise and leadership of a CIO, efforts did not result in any significant overhaul. PS1 should not shoulder all of the blame in this regard as directives emanating from the public service level were theoretically of merit, but did not have the requisite infrastructure in place to make them feasible cost-saving options.

Ultimately, PS1 provides a stark example of an organisation that initially negated its lack of a CIO through the effective recruitment of external expertise. Whilst the practice of SISP during the formulation stage of its 2010-2012 IS strategy largely saw the external consultant act as a proxy CIO, the consultant's inevitable departure saw the consultant-established collaborative practices diminish over time without the sustained oversight of an in-house practitioner.

## 5.5.5 Case Findings for Theme 3: Senior Managers and Associated Practitioner Groups with whom they engage during the Practice of SISP

Theme 3 has an explicit focus upon the practitioners involved in SISP. As this study is focused upon senior managers' practice, it is they who assume the focal point of this section. Additional practitioner groups are also explored, but solely concerning their role in relation to senior managers. A number of core topics emerged through the course of the interview process. These were: the skills required for senior managers to effectively practice SISP, the crucial relationship between the CEO and Head of IS, issues caused due to the Head of IS not being a member of PS1's TMT, and the practitioner groups with whom senior managers engaged during the practice of SISP. Each of these sub-themes will now be explored.

#### 5.5.5.1 Required Skills for Senior Managers Engaged in SISP

When exploring how senior managers practice SISP, a topic that was widely discussed was that of the key skills required by senior managers to strategise on matters pertaining to IS. A number of traits were prevalent across the collected data. The first of these was the ability to communicate and collaborate across functions:

PS1 – SM6: "But you need people who are willing and open to engage and are willing and open to listen to counter views and to opposing arguments around strategy, because if you don't have that, what you have is, it could end up with a group think and you could end up missing something fundamental because everybody just went along with the person who seemed to be the most knowledgeable in the room."

Secondly, the ability to keep abreast of the macro-level context within which the organisation operates was deemed essential. In this instance, a senior manager outlines that knowledge of solely the public service context is not sufficient, and that trends within the global arena should be sought and adopted where necessary:

PS1 – SM7: "Well you need to have the vision. You need to know, I suppose, where the world is going. You have to go to that level, what is happening, you know."

To compliment this broader, macro-level awareness, senior managers must also be knowledgeable of the meso-level organisation at large, thus eschewing a function-centric viewpoint that best serves their particular department. In a sense, this represents a return to the concept of strategic alignment, and having an ability to predict how a particular IS-related initiative will be incorporated with the wider-organisation. An interesting point raised was that of the Head of IS not necessarily requiring an all-encompassing knowledge of the technological component of a particular IS initiative. Rather, subordinates can provide this level of expertise. The Head of IS should instead possess greater strategic capabilities, holding a dual skill set comprised of IS and wider business capabilities:

PS1 – SM4: "So it isn't so much the experience and knowledge in IS or information systems or, you know, whatever. It is about the broad business and that includes both private and public, and it is about the rigours of the kind of, I suppose the training that I would have received on the job and you know, seen, you know, witnessed, and used, and also the disasters..."

A summation of the outlined skills was provided by the external consultant who worked closely with PS1 in planning its 2010-2012 IS strategy. The need to be able to look both inside and outside of the organisation was stressed, as was the concept of the senior manager practicing SISP not necessarily needing to be a technophile. A basic understanding of IS, combined with the aforementioned skills are what really matters:

PS1 – EC2: "From a content perspective, the skills that are essential are being able to do high level analytical work in terms of external environmental analysis, and internal organisational analysis. They are the skills of a strategist, right; they are not the skills per se of an IS professional. So what you need are very strong OD (Organisation Development) skills plus the core analytical skills of the strategist in terms of external and internal analysis; being that the fruits of those analysis are expressed as a prioritised portfolio of change initiatives, and then working those through in detail."

#### 5.5.5.2 The Head of IS – CEO Relationship

Being a study focused upon the practice of SISP by senior managers, the two most prominent managers are the CEO and Head of IS. Whilst SISP is conducted within both case sites by the CEO and their heads of functions and is not isolated to just the CEO and Head of IS, they nevertheless form an important relationship. The CEO is responsible for

the entire organisation, whilst the Head of IS is culpable for the fate of the IS function. These two roles in general, and their relationship with one another in particular, formed focal points of conversation during interviewing in PS1. As discussed, the Head of IS was not a member of the TMT, with many interviewees stating the tenuous relationship shared by the CEO and Head of IS as a key factor in this regard. Returning to the purpose of the current study and why this is a topic of merit, the practice of SISP by senior managers within PS1 was affected by this relationship. The IS Council discussed in Theme 2 was largely formed to accommodate interaction between the IS function and senior managers due to the Head of IS not being on the TMT. In addition, the Head of IS and CEO meet separately on a one-to-one basis. The proposed hiring of a CIO didn't materialise due to macro-level constraints, further exacerbating the situation. This is related to the previous sub-theme in that communication again draws attention due to its criticality for the practice of SISP.

PS1 – SM8: "The organisation has very significant cultural, you know, problems in terms of internal strife and one of the critical things in it is having better communications, better ways of making information available to people, better ways of, em, just easing their work and getting them to work together."

Views were expressed that portray both the current Head of IS and the CEO in a negative light:

PS1 – SM8: "When you have a bad IS manager you need somebody that actually can manage that and has the wherewithal to spend the time to manage it. He hasn't. If that manager was reporting to somebody with more time, with enough expertise, you would either have terminated the person's employment or significantly changed the behaviour. But you won't do that with intermittent interventions by the Chief Executive who is rushing from place to place, and that is the problem. You needed the extra skill, the new skill; and that is it for me in a nutshell."

A senior manager cohort that doesn't trust the views of the sole organisational employee with command over the IS domain naturally led to issues in regard to how senior managers practiced SISP:

PS1 – MM2: "I don't think he is held within very high regard within the Executive which is a huge problem, because his opinion, I won't say his opinions, but his knowledge is you know, the information that he is providing is second guessed like."

The current Head of IS had no issue with PS1's attempts to hire a CIO, and

recommended that it should be a priority:

PS1 – Head of IS: "In our strategic plan there was a whole element around IS and the structure of, and we recommended like, you know, a CIO post to be created."

Frustrations were expressed at the lack of IS representation on the TMT by middle managers, perhaps viewing the situation from a more abstract position and not clouded by the internal politics at play:

PS1 – MM4: "So I think, my own opinion is I think there is some personality issues. I genuinely don't know why. Like I have no idea why but that does seem to be what it seems to be because for as long as I can remember there has been a question. Every time the question has been asked we have never gotten a definitive answer as to why not. We have given reason after reason as to why it should be, why there should be somebody sitting on the senior management team."

As the researcher was concluding his fieldwork with PS1 in July 2013, the subsequent IS Strategy for the period 2013-2015 was being drafted by the Head of IS. Whilst the IS Council has received criticism for its lack of strategic focus, it at least provided a forum for senior managers to engage on IS-related matters. A Council meeting on 12<sup>th</sup> January 2012 pointed to initial steps being made towards the planning of the 2013-2015 IS strategy ('Minutes of IS Council Meeting', 2012). However, some eighteen months later when the CEO was asked as to how the 2013-2015 IS Strategy was being planned, the apparent breakdown in both the CEO-CIO relationship and the practice of SISP was palpable:

PS1 – SM6: "Yes, there will be a document and I have asked the IS manager to do the first draft of that which I am expecting very shortly."

Interviewer: Is he just working on that himself or how does that even work?

PS1 – SM6: "I haven't asked him..."

The fruits of the practice of SISP for the 2010-2012 IS strategy appeared to have long been forgotten. The collaborative project involving an external consultant that received near universal approval had been discarded in favour of keeping the practice internal to the organisation. Given that the Head of IS was viewed as lacking the capability to influence their peers, gain support, and operate at a more advanced strategic level, it proves somewhat contradictory that the organisation subsequently entrusted the planning of its following IS strategy to this individual. The external consultant effectively negated PS1's shortcoming of not having a CIO-type Head of IS, filling this void with the strategic

insight required to plan an IS strategy spanning a period of three years. One of the glaring strengths of having the external consultant involved during the practice of SISP for the 2010-2012 IS strategy was their facilitatory role in bringing together the senior manager cohort and lower-level employees. This bolstered buy-in, with a wide range of personnel invested in the practice. The consultant-established practice of episodic interaction amongst practitioners, realised under the guise of the IS Council, floundered before its ultimate disbandment. The positive steps taken to improve relations across functions were not significantly advanced. Empowering the Head of IS to plan PS1's latest IS strategy points to the IS function returning to its near silo-like position within the organisational structure, led by a Head of IS lacking the support of their peers.

#### 5.5.5.3 Issues Caused by the Head of IS not being a Member of PS1's TMT

Concerning the lack of IS representation on the TMT, the effect this had on the practice of SISP by senior managers was explored with interviewees in detail. A senior manager offered their opinion on this matter:

PS1 – SM6: "I would like to see, em, the (Head of IS) talking to the business Directors and saying, "Look, what are your issues? What are the things that are not actually working well for you in terms of your processes, and how can we help you?" and they should be coming to him with "Look we have seen"..."

A possible explanation for why this is not happening is due to the Head of IS not having a seat on the TMT. There appears to be a contradictory role for IS within PS1. It is integral to the service the organisation provides, arguably more so than other functions that sit on the TMT:

PS1 – SM7: "It is involved in any, nearly any development nowadays, you know, and in some cases it is, I suppose, it is the driver for change in some cases. So we would be the leader and in other cases then it is, you know, managing and helping, em, and the support functions in various other cases. I wouldn't see, you know, within the organisation, like with all the others ones like HR, Quality, Finance; they are all members of the TMT. IS are not there, and I think that is a major issue for the organisation."

The ultimate result of this anomaly is that the Head of IS does not receive the necessary support for even rudimentary matters:

PS1 – MM2: "So that bit of trust or whatever was there is lost, probably incorrectly, and as a consequence of that everything is second guessed and just that trust and relationship has broken down I think, and as a consequence of that he is not representative

on the Executive, which doesn't help that any kind of causes that he has put forward, you know like, some very straightforward stuff, you know, what are straightforward technical requirements. You have Finance and HR making a decision that "Well do we really need that, and that is going to cost us this and..." again a strategic plan could solve all that BS "This is what we are doing, agree to it, do it" and that doesn't come down to personalities or whatever else."

A middle manager portrayed a picture of IS as a secondary function within PS1, not being in receipt of the recognition its criticality deserves:

PS1 – MM3: "To me there is a major hole in the management team here and it has been highlighted by numbers of people internal and external and still hasn't been filled, and I guess IT or IS strategy is always going to be second fiddle."

Corroborating this viewpoint is that of the external consultant who sat on the IS Council. PS1 doesn't appear to have accepted its reliance upon IS, nor has it recognised the benefits that could be accrued from having IS assume a position on its TMT:

PS1 – EC1: "I mean I wouldn't say it is a panacea in any organisation, but I think that if an organisation is doing well they have recognised their dependency on IS, like they have brought them to the table. Then if there was a CIO sitting at the top of the table I think it would make a huge difference."

## 5.5.5.4 Senior Managers' Engagement with Additional Stakeholders during the Practice of SISP

Throughout interviewing, a number of stakeholders emerged as being pertinent to the practice of SISP. They formed key groups with whom senior managers engaged. Each stakeholder group is now explored.

#### - IS Suppliers

IS suppliers wielded significant power in relation to PS1. This can be attributed to the largely be-spoke nature of its IS, the consequent wedding to these suppliers once they are in situ, and the relative lack of options for PS1 when it comes to alternative suppliers. Thus, there have been instances whereby suppliers have taken advantage of this situation to the detriment of the organisation:

PS1 – SM7: "Price is a totally, that is a different animal completely with them, you know. They are a law unto themselves and unfortunately yes, that is some of the situation, and in fact, if you want to call that an influence, it could be to actually guide us to go a

different path, you know, not to use an (supplier name) or a (supplier name), because it is too expensive; because part of our strategy is managing and controlling of IS costs. So we can't hand over our pot of gold to them, you know."

From these examples, we can see that price, quality, and even the strategic direction of the organisation from an IS perspective can all be derided by a supplier wielding too much power in a specialised arena. The concept of shared services has been discussed, an initiative emanating from government to leverage the scale of the wider public service in an attempt to wrestle back some of the power from such dominant suppliers. The issue for PS1 is that their primary IS are highly specialised, and thus it lacks a large pool of potential suppliers. To further compound this scenario, PS1 provides a critical service and thus cannot take a risk on a smaller, cheaper supplier simply to reduce expenditure.

#### - External Consultants

PS1's senior managers continually engaged with external consultants during SISP. Indeed, the planning phase of the 2010-2012 IS strategy was led by a single consultant. PS1 has a history of consultant-led strategic endeavours stretching to the wider organisation's strategy:

PS1 – SM4: "When I came into this organisation they were like headless chickens, and they were being led by an external consultant; can you imagine?"

As time progressed there was a maturing of the SISP practice within PS1. The various strategic episodes the organisation held during the planning of its IS strategy are testament to that, as was its attempt (although failed) to establish an IS Council. Most, if not all of these advancements can be attributed to the influence of external consultants. However, there exists some reticence at the role they can assume. Senior managers have witnessed consultants enter the organisation and have little to no affect on proceedings:

PS1 – SM6: "The IS Council I think at one stage during the course of that period, we tried to change the IS Council, how we did our business there, but I think maybe we hadn't the right people at the table. I don't know. The intention was to get in external people and it was to bring in that expertise from the outside to break up the internal thinking. But actually it didn't manage to do that in a significant way."

A middle manager finds the process of engaging with consultants as being all too formulaic, with little care given to the specific requirements of the organisation:

PS1 – MM2: "Yea, and again like, it is like I said to you; sometimes it just feels like it is a box ticking exercise as opposed to really having a true understanding of what the strategic plan for the organisation is..."

Conversely, positive viewpoints on the role of external consultants exist. A particular consultant, who was a key player in the crafting of the 2010-2012 IS strategy, was viewed as being of immense benefit:

PS1 – SM6: "In terms of the facilities around (PS1), and what our needs and requirements are, obviously working with (External Consultant) for those few years was very beneficial, and I still would meet them out occasionally and bounce ideas off them."

PS1 – SM7: "We had a number of meetings with (External Consultant) and some of them interesting and you know, no very good meetings I would say, you know. I suppose their teachings and their learnings would, you know, they were challenging and they challenged us."

The same positive viewpoint was expressed by a middle manager that was engaged by the same external consultant during their time engaged with PS1:

PS1 – MM3: "Last time around, (External Consultant); and they was a big influence actually, and certainly got us kind of more focused on thinking about business alignment rather than just purely being a technical organisation."

From these perspectives it is possible to conclude that the recruitment of external expertise is not the panacea for solving all issues an organisation may experience with SISP. Rather, the selection of the right individual(s) is paramount, or to return to the language or SAP, the right practitioner. In this instance, the consultant who was received favourably did not have an affiliation to a particular consultancy organisation, and was well known to the CEO. Conversely, the consultant who did not garner favourable reviews came from a disparate organisation, and the imposition of another organisation's tools and techniques does not appear to have been helpful to PS1's senior managers' practice of SISP.

#### - Middle Managers

The role played by middle managers during SISP is largely as a direct report to their corresponding senior manager. However, they did participate in a number of workshops during the planning phase of PS1's IS strategy 2010-2012:

PS1 – SM6: "Then from talking to the IS manager and his staff, and opening up their

perspectives to other viewpoints, I think has been helpful. So I think that they are, there are some very good people there."

The general consensus from senior managers is that they are not leveraging the potential of middle managers:

PS1 – SM7: "Incorporate that middle level of management and you know, there is no real forum for middle managers to meet and I do think that would have been a better format of IS Council."

A frank assessment is provided by a senior manager who views the younger layer of middle managers as being the practitioners who should be tasked with forging the way forward for the organisation's IS function, and not necessarily the generationally more advanced members of the TMT who aren't as well versed in the fast-moving trends of the IS domain:

PS1 – SM8: "The problem is that the people that are best placed to push IS are the younger people outside that door, and not me; and the problem is the wrong people are pushing it."

This lack of utilisation is not lost on PS1's middle managers, and their frustrations at being left outside the strategising arena are evident:

PS1 – MM3: "Well, there is no forum as things stand. The only way we can do that is to submit business cases and explain ourselves, and hopefully they don't get shot down without us being given the opportunity to explain why we think they are needed."

What's left is a disillusioned cohort of middle managers who view the hub of SISP as an exclusive members club, a club for which they haven't been granted membership:

PS1 – MM6: "So, I don't know, I would view it as a side table because nobody gets into the inner circle of TMT unless you are presenting to them for their feedback; and at that stage it is about decision making. So, em, and that experience is varied when you go into that room. I haven't been in that room so I am... but I have supported people who have come out of that room."

The potential held within middle managers as a tool to be leveraged by senior managers during the practice of SISP is a view supported by the two external consultants interviewed. The harnessing and incorporation of the middle level's expertise could reap rich rewards for PS1's IS strategising endeavours:

PS1 – EC1: "I think you need suitably qualified technical people but also I think you can't beat the experience on the ground and the knowledge of the business that they build up."

PS1 – EC2: "You could run a risk with the Executive that there is an element of day dreaming nearly, you know, wishful thinking detached from reality. Whereas your middle managers would have a much sharper sense of what will work, what we could commit to and what is doable. Of course the reality is that the Executive can do all sorts of things but middle managers are the ones who could block the whole thing potentially."

### 5.5.5.5 Concluding Comments on Theme 3: Senior Managers and Associated Practitioner Groups with whom they engage during the Practice of SISP

It is apparent that senior managers' practice of SISP does not occur in isolation. Rather, a range of stakeholders plays a role through their interactions with senior managers. For PS1, the stakeholders highlighted during the interview process were suppliers, consultants, and middle managers. At a more general level, a whole myriad of stakeholders both internal and external to the organisation can influence how senior managers practice SISP. The full spectrum of possible stakeholders was detailed by the external consultant who helped shape PS1's 2010-2012 IS strategy:

PS1 – EC2: "So the goal was to have included outsiders from the Department of Health, from the Department of Finance, you might at other times consider having outsiders from a large consultancy house, you might have some independent. In other words you can really think about what are the myriad of external influences here, you could bring. But how far they actually went with that I don't know. You would also think in terms of like good strategising in relation to IS, you would also have your customer panels, you would have your supplier panels. So you would engage; if you think about Porter's value chain, em, you know you would think about every aspect of your organisation and the system in which it is embedded and you would ensure that the business system in terms of how it is working, you would interact with all those critical groups as part of good strategy-making, you know."

For PS1, suppliers assume a position of strength due to the niche positioning of the organisation within the healthcare domain. A drive for safety also precludes experimentation with new suppliers, and hence the recognised names within the industry are further bolstered from a bargaining standpoint. Consultants have received both negative and positive critiques from interviewees. Concerning the former, their inability to

bring fresh ideas to the organisation was derided, as was a lack of understanding of PS1's particular circumstances. In relation to the latter, credit was given for a thorough, integrative approach across levels of management, allowing the organisation to see past the operational and move towards the more strategic aspects of IS. Ultimately, this largely came down to the individuals being discussed; particular consultants were seen to provide more benefit to the organisation than others. The final stakeholder group that was discussed was that of middle managers. The general consensus from both senior and middle levels of management was that middle managers were not being employed to their maximum potential. Despite being included in the formative stages of the 2010-2012 IS strategy by the external consultant, additional engagements have been lacking. A palpable divide has been etched between middle managers and their more senior counterparts. Where matters of SISP are concerned, the practice within PS1 was largely viewed as a closed activity in which only those in the upper echelons of the organisation could part-take.

## 5.5.6 Case Findings for Theme 4: The Role of the Social Dimension during the Practice of SISP by Senior Managers

An enduring theme throughout the interviewing process was that of the social dimension of SISP. It will now be explored in greater detail across the sub-themes of; a lack of communication in PS1, informal modes of SISP, and the criticality to senior managers of possessing a dual skill set composed of both business and IS acumen.

#### 5.5.6.1 A Lack of Communication in PS1

PS1 was viewed as having a communication issue. The two consultants interviewed provide an external viewpoint on some of the issues PS1 was experiencing with communication during the planning phase of its 2010-2012 IS strategy:

- PS1 EC1: "If you can't get the individuals all the way down engaged in what is going on at the top, it is very hard to fight through the strategy, you know, and I am not sure that happened in that instance that everybody recognised what the strategy was."
- PS1 EC2: "There was a frustration around the whole process of how work was prioritised and there was a frustration around, em, the communications from the IS unit to the rest of the organisation."

Not only was this deficit felt by those practitioners from external to the organisation, it was also a factor for both internal senior and middle managers:

- PS1 SM1: "IS tends to work in a little bit of a vacuum and I think that it needs to sell itself. Certainly go out there and develop relationships internally, em, you know, and not just some of the external pieces that we seemed to have worked quite well at. But internally I think there is a gap there."
- PS1 MM4: "Communication is obviously a major issue certainly in this organisation. Getting the IS requirements across in a way that senior management are seeing the benefit of it."

It became apparent that at least part of the reason for the poor communication channels is down to the rather exclusionary approach of senior managers to the practice of SISP. The most obvious manifestation of this is the fact that there is no IS representation on PS1's TMT. Senior managers are conscious of this anomaly, openly expressing that there should be more openness to their communications across functions, particularly in relation to IS:

PS1 – SM5: "How do your overcome that without the communication issues being addressed and without people understanding that that is necessary, and I don't think they do because I think they see that as being a sign of weakness, in some way letting everybody know everything."

The lack of inclusiveness extends to middle managers, an invaluable resource which senior managers could draw upon during the practice of SISP. Middle managers expressed an extant chasm between both layers of management:

PS1 – MM6: "I just think we could talk more, and I think we could talk openly more, and I would love to see that extended to the middle management team being able to have the robust and open conversations guided by an expert outside."

Broad swathes of opinion were proffered as to the reasons why this communication chasm was so prevalent during SISP. The IS function's practitioners' lack of a dual skill set was opined as a possible cause, whereby they remained too entrenched in the technicalities and not open enough to the wider business:

PS1 – SM6: "But on the business development side, I think there is a significant deficit, and I think that is partly driven by, em, the make-up of the department in terms of the people and their backgrounds, and I think the, em, lack of comfort in, em, having the

conversation around IS solutions for business problems, because it is, they are not comfortable in that space and they need to become much more comfortable."

The fundamental issue of the Head of IS' exclusion from the TMT is reasoned by a senior manager, highlighting an inability on the part of the Head of IS to communicate effectively and foster relationships at the senior level as a key factor:

PS1 – SM8: "But the level and their ability to relate and build the necessary working relationships and get through these problems, it wasn't there, and we weren't prepared to take the risk."

The importance of the external consultant's role again becomes apparent, with an IS practitioner pointing to being second-guessed prior to the consultant's validation:

PS1 - IS Practitioner: "We have been telling you this, you know, but now that you hear it from (External Consultant) or (External Consultant), now you believe it."

A lack of strategic alignment between the IS function and the wider business was described by a range of interviewees. The picture of a siloed organisation is painted, lacking cohesiveness and any sort of forum for a free exchange of ideas:

- PS1 MM4: "There is a bit of a disconnect sometimes I think between what is going on in IS and what is going on in the business. IS don't necessarily always hear what is going on in the business."
- PS1 EC1: "There is probably a little bit of a disconnect still between the business requirement versus what the IS were delivering, and I am not sure that the IS area was being given clear direction on what the requirements were."

Yet, great opportunities exist within PS1 should communication channels be opened. Bringing together a diverse set of backgrounds and facilitating an exchange of views can reap rewards:

PS1 – SM7: "Yea. We have seen that, that is one of the learning's we have seen out of some of the projects that we have done that have worked well, and people have come back and said "I wasn't aware that these are all the things you do, these are all the things that have to be done"..."

The very practice of SISP is recognised as a possible mechanism to improve communication within the organisation. SISP can enforce a dialogue across functions:

PS1 – EC2: "In other words, there is some shift that takes place within a person as they are engaged in a process, and em, I think that is of enormous value, you know."

## 5.5.6.2 The Role of Dual Skill Sets in Enabling Effective Communication

A key ability consistently recognised for enabling effective communication during SISP is a dual skill set, i.e. the possession of both an IS and a wider business acumen. This was identified within the senior manager ranks of PS1:

PS1 – SM5: "I think everybody who is a senior manager here is acutely aware of how important IS are to support what it is we do on a daily basis, and I suppose one of the key skills; the one that I keep telling you we are missing; is the ability to kind of marry that knowledge and expertise with the business objectives in a way that is future looking rather than always about, you know, keeping it all back, holding onto the power and you know, restriction."

The external practitioners' viewpoint on the importance of a dual skill set is surmised by a consultant, who recognises the need to move away from the techno-centric IS professional to one who is comfortable operating outside of their immediate function. For active participation during SISP, this is viewed as a necessity:

PS1 – EC1: "I think you need suitably qualified technical people but also I think you can't beat the experience on the ground and the knowledge of the business that they build up and that is, em, I think the IS people need to, they can't just stay technicians. If they are going to get into the strategy side they need to be linked in with the business, they need to understand the businesses strategy and try to be looking forward to see how that translates into technology."

PS1 has attempted to bridge the departmental gap through the deployment of two middle managers, both of whom have an IS background but who are oftentimes availed of during boundary spanning projects. In theory, this is a positive step for PS1. However, the practice is partially flawed, as confusion concerning reporting relationships remains:

PS1 – SM7: "Yea. Well (Middle Manager 1)'s role now is business analyst, you know, but (the Director of Operations) took them for (Information System 1). Again that is another decision that was made by TMT. A strange decision seeing as we are getting rid of (IS 1) to go with (IS 2), and your business analyst sitting outside of IS. But in fairness, we have got (Middle Manager 2), in that they are coming along as well. They will meet with (Middle Manager 1), they will have had influence there hopefully, you know, to help grow that because that is one of the challenge areas."

# 5.5.6.3 Informal Modes of SISP

SISP is not restrained to the formal, precisely defined strategic episode in which a rigid set of procedures are enforced. It may also happen via informal modes. An example of informal SISP is the 'water cooler' conversation. This mode of SISP involves any casual encounter between practitioners. Formal norms are not in effect, and for this very reason a more open exchange of views may be experienced. Within PS1, water cooler conversations played a pivotal role:

PS1 – MM6: "I think the water cooler conversations keep us sane in a general sense."

PS1 – MM6: "The water cooler conversation is great. Not the grapevine water cooler conversation. The other one. The one that is actually doing business is great. The one that is trading on rumours and doing the organisation damage, I am not interested in that water cooler, but I go to the other ones because I need to be at them, and there is a very select few that have water cooler conversations."

Informal meetings are recognised as having defined benefits over their more formal counterparts:

PS1 – SM4: "The best way to get the best out of people is through groups that are informal, that allow the safety of people being able to validly put their opinion on the table, of having very strong facilitation; whether that is external or internal; it doesn't much matter as long as they are bloody good at what they do in terms of understanding what the role is and about guiding people."

The CEO is recognised as being responsible for the emergence of this more informal approach to SISP:

PS1 – SM4: "X is the second Chief Executive here that I have reported to; em, the prior chap, God bless him, he is dead now, totally different, an absolutely different personality. Much more strict, formal and no chatting amongst yourselves down there, and I think X's style, his leadership style, his management style, his, em, people nous, is key to how this organisation has evolved, and it is the same with when it is, you know, our entire business strategy or IS strategy."

# 5.5.6.4 Concluding Comments on Theme 4: The Role of the Social Dimension during the Practice of SISP by Senior Managers

Communication, identified as a key factor for the effective practice of SISP by senior managers, was found lacking in PS1. A litany of reasons as to why this was the case were gleaned from interviewees. However, three fundamental causes were identified.

First and foremost is the existence of a TMT lacking an IS presence. This represents a fundamental omission, and one to which the majority of communication grievances may be attributed. Secondly, wider exploitation of informal modes of SISP would prove beneficial. They were widely acknowledged as being a key tool for practicing SISP, yet proved ineffectual due to a lack of means by which they could take place. Lastly, there existed a chasm not only between the IS function and the wider business, but also between middle managers and senior managers. The integral role that middle managers may play during SISP has been detailed. They offer an invaluable resource and expertise that senior managers may draw upon and leverage during their SISP activities. However, the exclusivity within which senior managers operated was counter-productive to harnessing this key organisational resource.

It is evident that improving communication channels within PS1 requires a wideranging approach. The hiring of a CIO-type Head of IS deemed acceptable to be a member of the TMT is a necessity. The opening of communication channels between senior and middle managers should be prioritised. The establishment of vehicles for informal modes of SISP must be realised. The fruit of such labours would be improved communication across the organisation, particularly for the siloed IS function.

# 5.5.7 Summary Comments on the Case of PS1

Each of the four themes and related sub-themes (see Table 5.2) to have emerged from data analysis provide significant findings in regard to how senior managers practiced SISP in PS1 for its IS Strategy 2010-2012. Theme 1's focus upon the macro-level environment clarified the significant influence of both the public service and healthcare domains upon PS1, with economic-induced practices in particular having an impact upon SISP. Theme 2's meso-level practices highlighted the criticality of the use of strategic episodes as a means to facilitate recurrent face-to-face interaction amongst key practitioners. Whilst concerted efforts on the part of the external consultant proved successful, such practices have subsequently been discontinued. Theme 3's focus on senior managers and their associated practitioner groups points to the key resource that is the

Table 5.2 - Case Findings for PS1: The Emergence of Four Themes and Related Sub-themes

Theme	Sub-themes for PS1
1. The Role of Macro-level Contextual Factors	- At the European Level
during the Practice of SISP by Senior	- At the Public Service Level
Managers	- At the Healthcare Level
	- The Public vs. Private Sector
2. The Role of Intra-organisational Meso and	- The Practice of Strategic Episodes
Micro level Practices during the Practice of	- The Practice of PS1's IS Council
SISP by Senior Managers	- The Practice IS Outsourcing
3. Senior Managers and Associated	- Required Skills for Senior Managers engaged in
Practitioner Groups with whom they engage	SISP
during the Practice of SISP	- The Head of IS – CEO Relationship
	- The Issues Caused by the Head of IS not being a
	Member of PS1's TMT
	- Senior Managers' Engagement with Additional
	Stakeholders during the Practice of SISP
	IS Suppliers
	• Consultants
	Middle Managers
4. The Role of the Social Dimension during the	The Lack of Communication in PS1
Practice of SISP by Senior Managers	The Role of Dual Skill Sets in Improving
	Communication
	Informal Modes of SISP

middle manager cohort. The strengths and weaknesses inherent in the use of external consultants are also highlighted. PS1 was able to leverage its middle managers for its 2010-2012 strategy through external consultant facilitation. A waning of middle management involvement in SISP-related activity subsequently transpired following the departure of the external consultant. This particular example shows the possible benefits the external consultant practitioner group can afford an organisation's senior managers during SISP. Detrimental aspects related to consultants adopting a formulaic approach and lacking any real effort to empathise with the host organisation's practitioners. Thus, the selection of external consultants proves a critical task. The fractious CEO-Head of IS relationship was also detailed. Finally, Theme 4's anchorage in the social dimension of SISP points to PS1's inability to sustain interaction between its senior and middle managers, with senior management being viewed as an exclusionary cohort. The lack of IS

representation on PS1's TMT stands-out amongst Theme 4's findings, a factor that severely restricted interaction amongst senior managers on SISP-related matters.

Ultimately, the failure of senior managers to build upon the successes of the practice of SISP associated with its 2010-2012 IS strategy is a key finding for the PS1 case. The organisation appears to have regressed following this initial progressive phase for how its senior managers practiced SISP. It also highlights the transitory nature of SISP-related practices, and how they may reside in a state of flux over time. The IS function featured in PS1's 2010-2012 organisational strategy, with the requirement to move towards a more strategic approach to IS highlighted in addition to its role in delivering "better quality business information to PS1, improve processes, develop closer links with our stakeholders and provide more dynamic interaction" (PS1, 2009: 15). This may be contrasted with PS1's current organisational strategy 2013-2016 (PS1, 2013) which makes no reference to the IS function and thus mirrors the decline in commitment towards a strategic IS agenda by senior management as evidenced during casework. Obvious comparisons can be made with Whittington's (2006) framework and the bundles of changing strategic practices contained therein. Instead of adding to the robust set of practices established for its 2010-2012 IS strategy, PS1's senior managers unfortunately shed a number of them during the course of the strategy's tenure.

## 5.6 The Case of PS2

The current section will form an introductory piece to the PS2 case study. Before detailing the case findings in section 5.6.2, a range of sub-headings will be employed to effectively illuminate the context in which the organisation operates, its core functions and responsibilities, and both the 2011-2015 organisational and IS strategies that are pertinent to the study. The sub-headings include:

- About PS2: Provides an overview of PS2's role and its regulatory remit.
- The Functions of PS2: Lists the four fey functions with which PS2 is tasked.
- PS2's Organisational Strategy: Details the wider organisational strategy upon which PS2's IS strategy was built.
- PS2's IS Strategy 2011-2015: Includes an overview of the diagnostic work undertaken by the employed consultancy house.
- The Emergence of Five Strategic Objectives: Signals the five core strategic objectives around which the 2011-2015 IS strategy document coalesces.

Subsequently, the four key themes and related sub-themes that were identified during data analysis are detailed. Whilst overlapping sub-themes exist with PS1, PS2 offers a number of unique insights into how SISP is practiced by senior managers in PSOs. Similar to the PS1 case study, an exhaustive resource of secondary data was utilised. Combining rich secondary and primary data allowed the researcher to provide a balanced narrative on the topic of enquiry, also assisting in data triangulation and the curbing of interviewee bias.

#### 5.6.1 About PS2

PS2 was established in 1995. It's role as a state agency is to "protect and enhance public and animal health by regulating medicines, medical devices and other health products", and to monitor the safety of cosmetics (Source: PS2's website).

Over time, its remit has significantly expanded to include:

- Human medicines
- Veterinary medicines
- Clinical trials
- Medical devices
- Controlled drugs
- Blood and blood components

- Tissues and cells

- Cosmetic products

The protection of animals used for scientific purposes

- Organs intended for transplantation

PS2's regulatory role encompasses five core areas:

To regulate a wide range of health products available in Ireland. This includes human

and veterinary medicines, medical devices, blood components and human tissues and

cells.

To regulate manufacturing, wholesale and distribution companies, medical device

notified bodies as well as other health product facilities.

To regulate other related areas including clinical trials and human organs for

transplantation.

- To monitor the safety of cosmetics.

To license and monitor the use of animals for scientific or educational purposes,

ensuring that the 3R principles (replacement, reduction and refinement) are applied.

5.6.1.1 The Functions of PS2

In terms of what the organisation actually does, PS2 is tasked with four key

functions:

To grant licenses to companies to make, distribute and market medicines after a

review of their safety, quality and effectiveness.

To continuously monitor medicines, medical devices and other health products,

responding quickly to any safety or quality concerns.

To produce safety and quality information to support the safe use of health products.

To inspect companies and facilities which test, make or distribute health products to

ensure that they comply with relevant standards and legislation.

(Source: PS2's website)

5.6.1.2 PS2's Organisational Strategy

The organisation's 'Strategic Plan 2011-2015' (PS2, 2011b) covers the same

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timeframe as its IS Strategy. The organisational strategy sets out five high-level strategic goals. They are:

- Enhance healthcare product safety and patient outcomes by effective risk management and market surveillance.
- Deliver clear, relevant and timely communications to patients, consumers and healthcare professionals.
- Improve service delivery within a high quality, risk-based regulatory framework.
- Influence legislation and policy development at European and international levels for the benefit of public and animal health.
- Build future capabilities to meet evolving regulatory requirements, and scientific and technological advances.

IS are viewed as playing a crucial enabling role for PS2 in assisting and delivering upon its objectives: "All information technology initiatives are undertaken in the context of providing new and/or improved services to stakeholders, enhancing decision-making and channeling scientific data to deliver on our public health remit" ('Annual Report 2011', 2012: 14). The current study explores how senior managers practiced SISP specifically for its 'IS Strategy 2011-2015' (2011). The timeframe for PS2's IS strategy was purposely chosen to align with the organisation's 'Strategic Plan 2011-2015' (PS2, 2011b), the European Medicines Agency's (EMA) 'Road map to 2015' (2010), and the Heads of Medicines Agencies' (HMA) 'A Strategy for the Heads of Medicines Agencies, 2011-15' (2010). Indeed, this highlights a drive for the deepening of collaborative ties both internally and with the EMA and Member State regulators. The increased linkages between the organisation's meso-level and the wider, macro-level context will be explored further in the case findings.

The EMA forms one part of the medicines regulatory network at the European level, with its mission being to "foster scientific excellence in the evaluation and supervision of medicines, for the benefit of public and animal health" ('Road map to 2015', 2010: 2). The second part of the European medicines regulatory framework is the HMA, which is a "network of the heads of the National Competent Authorities (NCA) whose organisations are responsible for the regulation of medicinal products for human and veterinary use in the European Economic Area" (Anon, n.d.: 'About HMA'). The final body in this regulatory triumvirate is the European Commission. Together, these three bodies form "a unique model for cooperation and work-sharing on statutory as well as voluntary regulatory activities" (Anon, n.d.: 'About HMA').

# 5.6.1.3 PS2's IS Strategy 2011-2015

The organisation's 2011-2015 IS strategy (Clarion Consulting, 2011) is comprehensively detailed in its IS strategy document. The manifested praxis of senior managers during their practice of SISP pertaining to the 2011-2015 IS strategy is the focus of the PS2 case study. Unlike PS1's collaborative use of a single external consultant, PS2 used a consultancy house to lead the development of its IS strategy. The diagnostic work undertaken by the consultancy house bears a similarity to that employed by PS1's external consultant. A three-stage approach was employed, consisting of:

**Definition**: During the definition phase the consultancy house met with the IS management team and the Directors to gain a thorough understanding of the current strategy and the drivers and influencers of that strategy.

Analysis: The analysis phase involved the following activities:

- Completion of workshops with IS teams that looked in detail at the Infrastructure and Application layers.
- One to one conversations with IS team members.
- Inputs from Executive team members and some key business users of IS services.
- Through detailed analysis a number of issues were identified that needed to be addressed, as were opportunities to create a better alignment between the IS model and the business needs.

**Recommendations**: Having completed the analysis phase, the options for change within the IS organisation were identified and the impacts of each option examined in detail. The basis of the recommendations was to:

- Address specific issues identified in the analysis.
- Reduce overall risk.
- Allow PS2 to develop an IS model and organisation that is aligned with business needs and will support the key business goals in the PS2 strategic plan.
- Improve the overall flexibility of the IS model by reducing complexity and potentially changing the way some services are delivered.
- Ensure that the key business skills required by the organisation are available and managed appropriately.

(Adapted from Clarion Consulting, 2011)

The collaborative effort is apparent, with the external consultancy house engaging both senior managers and a collective of additional stakeholders. The episodic practices employed were primarily focus groups and interviews with a wide range of organisational practitioners.

## 5.6.1.4 The Emergence of Five Strategic Objectives

The core strategic objectives to emerge from the report (Clarion Consulting, 2011) coalesce around five key headings:

### - Organisational Structure, Resource Levels and Skill Sets

- The Creation of a Business Services Unit: To fill gaps in required services and to enable PS2 to take advantage of international opportunities. The unit will also have a key role in improving overall organisational capability in a number of areas including project management and business analysis.
- Establishing a Project Management Office (PMO): A well implemented PMO will lead to an overall improvement in the way projects are managed, closer alignment between the portfolio of projects and the business strategy, and increased project capacity across PS2.
- Resource Levels: An increase of three full-time employees in the function.
- Building Organisational Capability: Include developing competency frameworks for key areas and the provision (via external partners) of training courses, mentoring and coaching.

# - Service Offerings and Service Delivery Models

- Outsourcing: PS2's preferred strategy is to buy in services where possible and to use
  a flexible resourcing model for project resources that allows levels outside of the
  core team to be flexed up or down in line with business needs.
- Reducing Complexity by Buying in More Services: The bulk of IS services are provided by the internal IS team supported by vendors. An opportunity exists for PS2 to look at alternative service delivery models for some services in order to reduce complexity and cost and to make the best use of IS staff.
- Market Move Towards Hosted Services: The market trend towards using hosted services needs to be evaluated on an on-going basis to ascertain if this type of service model can offer any opportunity to reduce operational expense without any additional risks associated with hosted service models.

## - Infrastructure and Disaster Recovery

- Introduce More Formality in Service Management and Move Towards Best Practice IS Service Management.
- Storage and Virtualisation Assessment: Identify and formalise data retention requirements, addressing both statutory and business requirements.
- Data Centre Location and Disaster Recovery: The use of an external data centre hosting location should be considered in order to address the gaps in the disaster recovery plan and the issues with the current data centre.
- Adopt a Standardised Desktop/Laptop/Server Roadmap Strategy: Conduct complete inventory of desktop/laptop estate, establishing PS2's true baseline.
- IS Security Policy/Governance: Review and implement a new access framework to facilitate maintenance of key systems by support staff.

# - IS Applications

- Select and Implement a Data Warehouse.
- Select and Implement a Document Management System.
- Plan for Nimbus Replacement.
- Possible Opportunity to Retire SWEDIS.
- Move Ownership of PS2 Website to Communications.
- Agree Roadmap for Applications.
- Develop a Formal Data Management Policy.
- Implement Formal Architecture Governance Processes.
- Standardise Database.
- Introduce an Application Portfolio Management Approach.

## - Methodologies and Frameworks

A Need to Move Towards the Implementation of a Service Level Agreement Between IS and the Business: This will allow a clear definition of the services that are being delivered and how they are delivered. It can greatly help the business and IS functions to work together with an agreed and defined service level. It is also very useful for setting associated service levels with IS vendors and is required to measure the performance of the IS function in a structured manner.

The strategy document provides an overview of the IS function's organisational role, viewing it as a key enabler. The organisation's 'Annual Report 2012' (2013a: 14) stresses that the "growing range of new and enhanced requirements identified in the strategy

highlight the growing dependence on information technology in delivering services to stakeholders." Indeed, such has been the IS function's prominence that it has been brandished as a "victim of its own success" ('IS Strategy 2011-2015': 6) with increasingly high expectations of what it can and should deliver. Consequently, the need for a comprehensive IS strategy that comfortably aligned with the business strategy was viewed as a necessity by the organisation. How PS2's senior managers practiced SISP for the 2011-2015 IS strategy will now be explored across the four emergent themes from the data analysis phase of casework.

## 5.6.2 Case Findings for PS2

Similar to PS1, the collected data coalesced around the identified four key themes. Each theme will now be explored in detail. Primary data was retrieved from senior managers and their direct reports through the conduct of semi-structured interviews. Direct reports were interviewed so as to help negate the potential for a biased viewpoint on the practice of SISP being provided by senior managers on their own praxis, thus ensuring that a more balanced dataset was collected. The use of a comprehensive resource of secondary data, inclusive of strategy reports, annual reports, and minutes of meetings, formed an additional technique employed by the researcher to triangulate findings. Whilst the content of the IS strategy is of importance, it's not the primary focus of investigation. Rather, it is the 'doing' of SISP, i.e. the 'how' of the planning phase, by senior managers that is the principle topic of investigation.

# 5.6.3 Case Findings for Theme 1: The Role of Macro-level Contextual Factors during the Practice of SISP by Senior Managers

Theme 1's exploration of the role of macro-level contextual factors during the practice of SISP by senior managers within PS2 is viewed from three perspectives: the European level, the public service level, and the healthcare level. For PS2, "Technology is recognised as a key component in supporting regulatory activities at both national and international levels" ('Annual Report 2013', 2014: 16). Theme 1 closes with observations on SISP-affecting variances between the public and private sectors.

## 5.6.3.1 At the European level

PS2 has inextricable links with Europe, particularly with the European Medicines Agency (EMA). All decisions pertaining to the core business must first be approved by the EMA. This is not solely a one-way process, as PS2 has two delegates who assume seats at the EMA's Committee meetings:

PS2 – SM4: "So literally nearly every decision we take now in relation to a medicine, we must refer it into the European Medicines Agency. If I want to contraindicate something or put a restriction on a medicine, it goes into the European Agency, there is a Committee at the European Agency called PRAC. We have two delegates from our system at the agency four days of every month, probably more, and everything is coordinated.

An emergent theme was the recognition and esteem with which PS2 is held in the European arena. PS2's CEO was invited by the European Commission to present to the Commission's high-level conference 'Exploring Innovative Healthcare – The Role of Medical Technology Innovation and Regulation' ('Annual Report 2011', 2012). The CEO was also elected at the International Summit of Heads of Medicines Regulatory Agencies to serve as Vice Chair with Japan for a two-year term on the International Coalition of Medicines Regulatory Authorities ('Board Meeting Report - 18 December 2013', 2013b). The organisation frequently extolled advice on suitable technologies and processes in a regulatory context and contributed to high-profile programmes at an operational and a strategic level ('Annual Report 2010', 2011). Interviewees expressed pride about the high regard bestowed upon PS2's IS function, especially due to the relatively small size of the organisation:

PS2 – SM7: "On IS we are in the very prominent position of being at the very top of the pile, in the top three."

PS2 – MM1: "Not only that though, apart from the organisational view of it, there is also a very good view of PS2's IS function across the whole of Europe..."

There have been tangible benefits to the establishment of a strong reputation for the organisation's IS function. Such credence has enabled the organisation to take a leading role in shaping the IS agenda within Europe, extolling advice and guidance to some of the more prominent nations.

PS2 – MM1: "Yea, recognition is a big thing, you know, the kudos of being a leader in the field, and for a long time with our workflow systems, we were the leader in the field,

and hopefully with the new workflow system we will be back again. Being an innovator, being a driver, being a, I hate saying it but being a leader in Europe at that level. For a small agency, and we would be a small to medium size agency across Europe from both the number of transactions that we do from the customers out there, we are punching above our weight. Like the UK, France, Germany, even Austria, would be bigger than us at this stage from volume wise. But they look at us and go "What are you doing? How are you doing it?""

A clear example of this leadership piece pertains to a particular application that was developed in-house by a key middle manager. Its function broadly formed a centralised European IS portal, with the software quickly gaining traction within the European domain ('Board Meeting Report - 27 March 2013', 2013b). It was promptly adopted by a large number of member states as the standard for this particular dimension of IS:

PS2 – MM4: "We would be very aware of what the EMA strategy is, what the European Commission... and we would be involved in the working group so we would have a fair view of the strategy, and I know I would talk regularly with my colleagues in IS about what impact that would have on us in the future. I think that with some of the new initiatives that we have developed in house; you have probably heard of (Application). We are actually making the strategy for them because it is sort of, we are bringing the rest of Europe along with us in some instances."

## - An Example of the Practice-Praxis Duality

A positive cycle of events has emerged in regard to PS2 within Europe:

- The fostering of a strong reputation within the IS domain has led to;
- An ability to lead, or at least play a strong participatory role in the shaping of the European IS agenda, which resulted in;
- The opportunity to develop IS applications that could become industry standards across Europe and simultaneously create an additional stream of revenue from licensing agreements.
- In 2013, the application's activity levels grew substantially, handling over 100,000 submissions on behalf of 20 European regulatory organisations and the pharmaceutical industry ('*Annual Report 2013*', 2014).

Returning to the language of SAP, this is a clear example of the practice-praxis duality. PS2's realised praxis or activity in the form of the development of its own in-

house application quickly infiltrated the macro-domain. Its use could now be deduced as being a European standard or practice that fellow organisations now view as the established norm within this particular dimension of IS.

### 5.6.3.2 At the Public Service Level

The public service level is dominated by the financial constraints imposed in the aftermath of the most recent economic crisis. An important distinction in this regard is the fact the PS2 is largely self-financed. Thus, it is not at the mercy of government cutbacks and restraints to the same extent as other PSOs such as PS1. However, the recruitment moratorium remains an impediment, and PS2 has faced its own challenges in this regard:

PS2 – SM6: "We can't recruit above and beyond what we might like to, what our numbers are set as, and we haven't been discounted which is the positive side. But we haven't been able to maybe advance to the level we would have liked to advance to..."

Aside from these recruitment restraints, the negative aspects of being a public service body are largely negated on account of the aforementioned self-funding nature of PS2. This has allowed the organisation to remain largely unscathed by the significant government cutbacks endured by the majority of other PSOs:

PS2 – SM7: "The short answer is absolutely no, and the reason is (PS2) is eighty six percent funded from fees that we generate from the work that we do for all sort of industry sectors that we service in terms of product applications, licenses for manufacturing sites and so on."

That is not to say the organisation is without its own financial challenges. This is particularly true of the IS department, which features the dual task of balancing priority objectives whilst remaining inside of budgetary allowances;

PS2 – SM3: "Financially there is lots of challenges as well for us as an organisation, and that has implications even if you look at an IS strategy "Will we have the money to invest?" You need the IS because you need to keep great control and know where your issues are, and particularly if they are safety issues and we have to get stuff off the market, push information out through the website and that. So there is a lot to watch at the moment. It is a mirror of what is happening around Europe. We are not unusual."

### 5.6.3.3 At the Healthcare Level

The healthcare context for PS2 largely mirrors its European context. PS2's standing is predicated on a strong reputation that ultimately bestows it with the necessary power to

operate effectively. Its reputation extends to patients, healthcare professionals, and the Department of Health. Strong engagement with each of these groups is a key activity. PS2 is the antithesis of an insular organisation. It actively engages with its stakeholders at all levels:

PS2 – SM4: "...I think, you know, as I talk about it, you kind of say "We have a very good, well-run organisation" that, you know, we work very hard to keep the trust of the patients and the healthcare professionals and the people that use medicines out there, and the trust of the Department of Health and the HSE and I am on immunisation committees and HSE committees out there and we really are respected I would think, for the scientific rigour we bring to it but also for the way we manage the place; and you know, we work very hard to maintain that."

Again, this has the self-fulfilling effect of allowing PS2 to assert itself, with its importance granting it greater autonomy from government for obtaining the resources it requires to reach its objectives:

PS2 – SM5: "We are also regulating the industry, which is now providing fifty percent of GDP, and so when we argue that we can't get the resources and we can't deliver the services that those companies are paying for, it actually, I mean nothing is easy in terms of government but we are getting better success than a lot of other agencies in getting the resources to deal with things that we need to…"

The social dimension of getting work done within the healthcare context is a key theme that will be discussed in greater detail later in the current chapter. PS2 has avoided the scenario of having a culture conducive to divisions between its medical personnel and business personnel by placing both types of practitioner in the highest ranked positions of the organisation. The CEO does not have a medical background. Other key members of senior management do not have medical backgrounds. Yet it works, largely due to the social environment and dual expertise fostered by the CEO:

PS2 – SM4: "Then we got a Chief Executive and then we put in the Directors underneath that, and it was never the Doctors versus, but I think it is better that, em, like the Chief Executive could be a medical person but I think it is better having a Chief Executive and the Directors and we all work from completely different backgrounds... But it all works extremely well and I think we are light years ahead of where the hospitals are trying to get to out there, and where the HSE is trying to get, but they will drag it up there."

### 5.6.3.4 The Public vs. Private Sector

From a professionalism standpoint, it would appear that no major differences exist between the PS2 and its private sector counterparts:

PS2 – SM5: "I think in terms of professionalism of the talent and in terms of what we are doing in the IS strategy, I think that there is no difference and certainly how we run this organisation, em, we have a high standard of professionalism."

Yet, some key differences do exist, particularly from a cultural standpoint. A public service career has been ingrained within the Irish psyche as being safe and secure, and this mind-set persists:

PS2 – MM5: "I think in the private sector from, I think within PS2 the organisation is very much, em, culturally adjustments are very much taken very slowly. So for example, IS changes that might impact culturally, they might be reluctantly adopted or they might be postponed or a lot slower to sort of implement, and I think from the private sector if there was cultural changes, you know, they would happen a lot quicker."

Reasons may exist for such a culture. Public service bodies exist to deliver a service, oftentimes a critical service. Their principle goal is not the drive for profits alone:

PS2 – SM5: "But the difference probably is that in private sector, particularly if you are looking at financial measures they are very black and white. If you have shareholders there is really only one measure that they are looking at, you know, and you could argue that is why we are in the financial problems that we are but... So therefore strategies in the private sector will be often much more aligned to your bottom line, whereas in the public sector the strategy is more aligned to your goals and objectives, and your goals and objectives in the public sector are not to make money for your shareholders."

# 5.6.3.5 Concluding Comments on Theme 1: The Role of Macro-level Contextual Factors during the Practice of SISP by Senior Managers

PS2 has established itself as a reputable organisation at all levels within its macro-environment. This applies to both the IS function and the wider organisation. At a European-level, its standing amongst the very best organisations for its IS function is commendable given its comparatively small size. The talent of its IS practitioners have been integral to the achievement of such a status, with the diffusion of its in-house developed application across Europe exemplifying the fruits of the organisation's competence and professionalism.

At the public service level, the organisation inherits a somewhat unique position for a public service body within Ireland in that it is largely self-financing. The consequence is that it has remained much more insulated from the prevalent financial constraints that blight many public service bodies in Ireland. PS2's ability to carry-over budgetary surpluses from year to year reduces pressures on the organisation to use its budget simply for the sake of doing so, allowing it to target key objectives from a more strategic, longer-term viewpoint.

Within the healthcare context, the characteristics of PS2's position in the European landscape are largely repeated. Its engagement with a range of stakeholders has been a useful tool in establishing a position of prominence. So too has its cultivation of a senior manager cohort in possession of a dual skill set, i.e. both business and IS expertise. Each of these factors has helped to render PS2 a formidable body at the European, public service, and healthcare levels.

# 5.6.4 Case Findings for Theme 2: The Role of Intra-organisational Meso and Micro level Practices during the Practice of SISP by Senior Managers

A number of prevalent themes emerged in regard to the role of intra-organisational meso and micro level practices during the practice of SISP by senior managers in PS2. They may be categorised as being; essential to the very practice of SISP, i.e. strategic episodes; as a goal to be achieved via SISP, i.e. strategic alignment; or as an organisational practice that has had an impact upon how SISP is practiced, i.e. the very structure of the IS function.

### 5.6.4.1 The Practice of Strategic Episodes

Strategic episodes form the core vehicle by which senior managers practice SISP. An interviewee provided an overview of the various forms strategic episodes take within PS2:

PS2 – SM1: "Well we would have away-days, em, I mean the organisation has strategy away-days anyway which are much more informal and again, what you do is you focus on something that wouldn't normally be something that you would come to talk about. So it is something out of the norm about your vision or your ideas for the future, and generally you try to make it as left field as you can to try and stimulate thought and sort of conversation. So we do that. So we have away-days, we have management team meetings that are broad across the organisation that provide opportunities for people to

provide input into what we are not doing too well, what they would like to see us doing, all of that stuff. We have annual planning meetings from the operational units that feed in to help develop our work plan for the coming year, but also out of that discussion you have things that are, you know, people say it is like a 'Wish List' you know."

Touching first upon the strategy away-days and the 'left-field' ideas that are often discussed at this form of strategic episode, the researcher was interested as to how such ideas came to fruition. Did they emanate solely from the IS department, or did other members of senior management play in role in their generation? An interviewee provided insight on this phenomenon:

PS2 – SM6: "The ideas are going to come from, you know, people who read business magazines, people who are part of networks, people who are, if you like; horizon-gazing one way or another, em, and then also it is not enough to envisage something, you have to then envisage how it is going to fit within the department, within the organisation, and then as I say, I think that days like the strategy day, whether they need to be more often or not, I don't know, where some idea can be taken and digested and tossed around to see does it fit, or how might it fit. I think that is the job of senior management."

The concept of a stagnant, five-fear IS strategy was quashed by a number of senior managers. SISP is not a practice conducted by senior managers within PS2 once every five years with no subsequent IS planning during the strategy's timeframe. Rather, annual plans occur within the over-arching five-year plan. PS2 consistently upgraded and improved its systems to align with its 2011-2015 IS strategy, targeting key objectives in a systematic manner ('Board Meeting Report - 18 December 2013', 2013). The rapid advancements in technology combined with the healthcare context in which the organisation is situated does not allow for such stagnation. This concept is taken yet further in PS2, granularising to the level of departmental plans:

PS2 – SM5: "In general all our strategy, we have away-days, em, we have rolling because we have a five-year strategy plan and then we have annual plans and then we have department plans..."

Informal strategic episodes were found to play a role within PS2:

PS2 – MM1: "It would be done in different ways. You would have the water cooler ones. Normally it is not the water cooler, it is normally, it is me or (IS Manager) or someone else going into (the Head of IS's) office and sitting there and next minute there is an informal meeting suddenly being called to have a think about something."

Consultants played a role during strategic episodes within PS2, either by being employed in a facilitatory capacity, or through the introduction of specific strategic planning processes:

PS2 – MM2: "They would come in or we would go off site, em, we would have a work shop in a day, we would have a war room upstairs, you know the war room, where we would do brainstorming and you would literally be locked in the war room for two or three days and..."

PS2's practice of conducting strategic episodes vividly illustrates the many forms such episodes may assume. It also highlights that the practice of SISP, and senior managers' role therein, is not simply confined to an intensive period prior to the production of a three or five-year plan. Whilst the seeds of what the organisation plans to achieve from a strategic IS perspective are sown at this time, it proved a continuous process requiring refinement throughout the course of its tenure.

## 5.6.4.2 The Practice of Strategic Alignment

The quest to achieve IS-business strategic alignment can be a key component of SISP. It emerged as a key practice within PS2, with the specific activities as to how the practice was enacted of particular interest for the current study. As a precursor, IS strategy emerged from the business strategy:

PS2 – SM1: "...the IS fell out of the business strategy..."

It is also worth noting that the development of PS2 over time, from its more humble beginnings, through to its current organisational structure, has played a role in how the practice of strategic alignment has been ingrained into the fabric of the organisation:

PS2 – MM4: "(PS2) started off as a small organisation and the Directors and the Managers have all worked very well together and it sort of helped when it is being built up that there is a good business/IS interaction and I think that it has continued that way. I think that is the support of it."

Returning to the fact that the IS strategy emerged from the business strategy, such a fundamental factor may be viewed as a positive step for the practice of strategic alignment. PS2's IS strategy did not develop in a silo. Rather, it was developed to support the extant organisational strategy ('Annual Report 2011', 2012). Such sequencing would naturally tend to bolster strategic alignment. Activities or praxis within PS2 reinforces the alignment of the IS function's strategic objectives with the wider organisation's strategic objectives.

A senior manager provided an insight into a key principle employed by PS2: inclusiveness. Through designating senior managers to IS project boards, a natural understanding is developed as to the objectives the IS function is attempting to achieve:

PS2 – SM1: "Yea, the thing about it is for some of those very large projects like the one there for the workflow and the document management project or programme of work, the project board for that is actually the senior management team. So all the Directors are engaged in that."

In theory, the concept of inclusiveness is desirable for the achievement of strategic alignment. However, a particular type of organisational culture needs to be in place for it to prove effective. An inward-looking Head of IS may not wish for their fellow senior managers to interfere. Conversely, a Head of IS lacking the respect of their peers may not be able to garner the support and input of fellow senior managers, despite a desire to do so. In the case of PS2, the Head of IS is particularly adept at fostering a culture of openness and transparency:

PS2 – MM1: "The accessibility is driven from (the Head of IS). That is the simple answer to it. You know they hate this idea of an IS function behind a locked door with a, we always laugh, with a buzzer and a hatch going "What do you want?" you know, that type of thing that some organisations do have..."

PS2 – SM2: "I suppose it is integrating the activities in the organisation, and their people wouldn't just look at "Ok, what is the solution to push through the work here?" it is "How does that work impact others?""

In addition to the fostering of a culture susceptible to achieving strategic alignment, a proven track record of meeting expectations further reinforces buy-in from fellow senior managers:

PS2 – MM3: "I think there is that kind of one foot in the business, one foot in IS, so that is partly, and I suppose, they have been known to deliver high quality systems."

The structure of the IS department within PS2 is unique and of importance in relation to the quest for achieving strategic alignment. It incorporates a change management component, with the Head of IS responsible for progressing programs of change within PS2. This is a role that naturally requires boundary-spanning activities. Provided objectives are being met, it further reinforces buy-in from senior managers for IS-related projects:

PS2 – MM2: "And now with the PMO (Project Management Office) putting that little bit of structure internally on it and not always having the one person being a PMO

(Project Management Officer), now you have a full team of people who are potential PMOs, you have a full team. So you don't even, from a meeting point of view, you go to workshops but then the PMO, the Project Officer, would actually do the majority of the work and co-ordinate your own. So the responsibility, it falls within the top level of the project as opposed to everybody is a boss but yet nobody is in charge, and I think that works really well and that is one of the big things that is a definite plus."

PS2 features a robust set of attributes that can be identified as being significant to the achievement of strategic alignment. The last of these factors, i.e. the structure of the IS function, is a particular practice found to be critical to SISP. It frequently emerged during the interview process as a novel and enabling feature for senior mangers.

## 5.6.4.3 The Practice of Structuring the IS Function

The responsibility of PS2's Head of IS stretches to encompass a change management component. Change management has been incorporated with the IS function on an ongoing basis due to both functions proving highly interdependent, with staff from the IS function being consistently required to span both activities (Clarion Consulting, 2011). Ultimately, the existence of the change management department is necessitated by PS2's increasing demand for business services such as project management, business analysis and process improvements. Change programmes and a culture incorporating a drive for continuous improvement have been embedded into the organisation since the early 2000s (Clarion Consulting, 2011). Synergies have resulted, the principal of which is the increased familiarity the organisational functions have with one another. The structure served as an integrating mechanism during the practice of SISP by senior managers for the 2011-2015 IS strategy, eschewing the oftentimes silo-like IS department that operates in isolation. It is one of the components that have enabled the Head of IS to garner the support and input of fellow senior managers as will be evidenced in section 5.6.5.3.

The function has developed over time with significant changes detailed in the current 2011-2015 IS strategy. Thus, the structuring of PS2's IS function has not proved to be a simple, one-off exercise in functional design, but rather a sustained practice that has endured over time. The 2011-2015 IS strategy demonstrates PS2's continuous practice of structuring and refining its IS function, with a new Business Services Unit being added under the leadership of the IS Director. The purpose of the Business Services Unit is "to deal with a number of issues identified in our analysis, to fill gaps in required services and to enable PS2 to take advantage of international opportunities", and incorporates change

management, a project management office, business analysis, and process improvement/reengineering expertise (Clarion Consulting, 2011: 17).

The genesis of this unique structure resulted from both circumstance and having a Head of IS in possession of a dual skill set encompassing both business and IS abilities. A senior manager describes it as follows:

PS2 – SM3: "It kind of happened by default in 2003 when we were beginning to do this work, (the Head of IS) had more ability to take it on. They had probably more time and a smaller department then. Whereas the other departments that were being looked at couldn't do it."

A fellow senior manager elucidates the Head of IS's role in making the structure a reality:

PS2 – SM5: "But it just so happened that the skill set, em, was sitting with (the Head of IS), you know, they had an interest in both parts, you know, you have a limit to, you know, you have X number of Directors and I think at the time we probably didn't have a HR Director, when we started the first big change programme. The very initial change programme we did in 1996, I think I did, but we had no consultants, just did it. But as the organisation grew and we did put in the first big IS workflow system, there was clearly a huge change function in it so (the Head of IS) took both of them. I mean the project was running, em, the change project came as a result to a large extent of the new IS. So they were much linked at that point and then I suppose that was the historical... So it works."

A key factor in this regard is the fluidity of movement of PS2's practitioners between the various business functions and the IS function. It continually reinforces IS as an integrated component of the business, instilling confidence in senior managers as to the capability of the IS function. The benefits that have been accrued from the structure are numerous. Having already touched upon a number of them, interviewees from diverse organisational roles shed light on additional aspects. From a skill set perspective:

PS2 – SM1: "Oh for sure, for sure it does impact, and I think it improves the IS because I think if you are starting from the basis of looking at the business first and if you have business skills in your IS function, I think one of the big challenges for a lot of the IS functions I have seen, or worked, you know, in other organisations, is that they don't have those skills."

From an efficiency and integration perspective:

PS2 – SM4: "So we have a great Change Management too, but everything we do has IS's support behind us, and then (the Head of IS) has a wonderful team that is, I must say, whenever there is anything they are there to help."

The structural design of the IS function within PS2 has garnered traction within the European context. Its uniqueness combined with the aforementioned benefits has resulted in it receiving positive attention from both fellow agencies and the EMA:

PS2 – MM1: "The European Medicines Agency have looked at the new model that we have within IS with the IS side and the Business Services side and Project Management Business Analysis and the process side. They have sort of semi-adopted our structure here, over there, in a roundabout way. They wouldn't call it the same thing because it wouldn't be the thing to do. But again, and other agencies are looking at the way we are doing project management and business analysis and the process re-engineering…"

It is evident that the practices employed by PS2 in defining its IS function in such a novel way has provided dividends for the organisation. The leveraging of the skill sets of key practitioners has been crucial, principal of which being the Head of IS's.

# 5.6.4.4 Concluding Comments on Theme 2: The Role of Intra-organisational Meso and Micro level Practices during the Practice of SISP by Senior Managers

PS2 exhibits meso and micro level practices that can be described as both effective and unique. The strategic episodes found within the organisation take many forms; from the formal, oftentimes consultant-led away days, to structured in-house meetings, to more informal gatherings of both senior and middle managers. It became apparent that the practice of SISP within PS2 did not solely occur during an intensive period prior to the publication of its 2011-2015 IS strategy. Rather, it is ongoing, providing the space for annual plans, bi-monthly reviews, personal plans, and informal discussions.

In its practice of strategic alignment, PS2 possesses ingrained, circumstantial factors in addition to a number of cultivated processes that have enabled it to effectively align its IS function with the wider business. Its growth from a much smaller organisation has resulted in a legacy effect of its senior managers being comfortable in working closely with one another. The fundamental factor of its IS strategy being developed after its business strategy is simple, yet crucial. PS2 places members of senior management upon project boards for specific IS-related activities that reinforce the alignment of the function with the organisation. It has a Head of IS who is highly respected with a history of delivering upon objectives. As a result, buy-in from the senior manager cohort is increased.

The very structure of the IS function, with its incorporation of a change management component, further heightens alignment. There exists an enmeshment of technical skills with more general business acumen. Such a structure cannot simply be enacted with immediacy in all organisations. Rather, it requires practitioners in possession of a dual skill set. Principally, it was the Head of IS who rendered this functional design possible. The result has been improvements to efficiency, integration, and skill sets across the organisation, combined with recognition from its macro-level environment. Applications developed by PS2's IS function have been recognised internationally and have been adopted by fellow EU regulators (Clarion Consulting, 2011).

# 5.6.5 Case Findings for Theme 3: Senior Managers and Associated Practitioner Groups with whom they engage during the Practice of SISP

Theme 3 focuses upon the practitioners involved in SISP, i.e. senior managers, and the key practitioner groups with whom they engage. As was the case in PS1, reference is made to individual senior managers only when the collected data points to such individuals having had an impact upon the wider senior manager cohort's practice of SISP. Beyond such instances, specified individual practitioner profiles lie beyond the boundaries of the current study and the research question posed, instead possibly forming an agenda for future research. The required skills for senior managers engaged in SISP, the Head of IS-CEO relationship, senior manager support of SISP, and senior managers' engagement with key stakeholder groups during the practice of SISP are the sub-themes now explored in detail.

# 5.6.5.1 Required Skills for Senior Managers Engaged in SISP

An ability to horizon-scan became an integral topic in discussions regarding the required skills for senior managers who practice SISP. An ability to see the bigger picture and an awareness of external factors that may ultimately affect the organisation at some point in the future were widely cited:

- PS2 MM6: "I think someone who has a capability of looking at the bigger picture and who has a bit of business knowledge and understands the overall priorities outside of their own area."
- PS2 SM6: "So as I say that is also the future proofing of the organisation; and probably being aware of the risks as well."

Perhaps even more integral, in what has been an enduring topic across the three themes explored thus far, is the ability to communicate effectively. Whilst the broader social dimension of SISP is explored in detail in Theme 4, effective communication remains a key skill for senior managers practicing SISP. The precise technical expertise will likely reside within the middle layer of management or particular project leaders, but having the interpersonal skills to actively engage with stakeholders is deemed an essential skill:

PS2 - SM1: "So I suppose problem solving and communication, em, do they need to have IS skills particularly? To be honest, they don't really need to know what it will do but to able to say "Actually wouldn't it be great if you had a technology system that did X, Y, and Z" that is very helpful."

PS2 – SM4: "I don't think it is necessarily; you have the individual expertise and maybe more than two individuals with that expertise but I think it is the interpersonal skills. It is the sharing, the, you know, realising that we are not eight siloed departments here. We are all working together…"

The CEO provides a telling insight into a fundamental aspect of the practice of SISP; the creation of the time to actually practice:

PS2 - CEO: "One of the key challenges for a senior management team, and mine is no different, is to take time to strategise. That is the first thing I would say because we meet and we talk about the urgent issues, and we meet every two weeks for management and we meet for two and a half hours or maybe three hours if it runs a bit longer. How much nitty-gritty detail are we talking about and how much of it is actually high-level stuff. That is the first thing, is to draw people out of their day-to-day stuff into actually strategising. That would be one of the first big challenges and we certainly have it."

The combination of an ability to see the broader picture with communication skills to gain buy-in and educate on the wider organisational ramifications of IS are skills with which senior managers practicing SISP need to be armed. The creation of the time and space to actually practice SISP is a natural pre-requisite, segregating it from day-to-day organisational oversight.

# 5.6.5.2 The Head of IS - CEO Relationship

Being the two most prominent practitioners for the current study, the Head of IS's relationship with their CEO is a pivotal one. In PS2, the relationship was positive. For the Head of IS, this resulted in the receipt of support from the CEO:

PS2 - Head of IS: "In so far as the Chief Executive has always, I mean I have worked through three Chief Executives here, and in each case I have found them immensely supportive of the technology function and any of the changes and improvements in technologies we were trying to bring on board."

The opportunity to work closely with the CEO on high-level initiatives enabled by the Head of IS's responsibilities for change management have contributed to close working ties:

PS2 - Head of IS: "I tend to spend a lot of time on high-level, I suppose, organisational change programmes. So these would be ones that would be quite sensitive and would be quite tricky maybe, culturally, socially, and they take a lot of time and I suppose I would work closely with the Chief Executive on that."

For the CEO, the esteem in which they hold the Head of IS is evident:

PS2 – CEO: "The standard was so high in terms of, em, the use of IT around the house, em, the leadership that was there in the department with the Director, and I keep telling them they are a unique person. They are not a classic kind of an IT person because they are also, they have a unique title of being Director of IT and Change Management, and that is unique enough in an individual."

PS2 – CEO: "We are fortunate on the IT side that (Head of IS), our Director, is a very, very good strategist and that unique set of skills where they are involved in Change Management and strategising all around that, feeds into the work they do in IT."

The Head of IS – CEO relationship in PS2 is predicated on a close working relationship and mutual respect. It is enabled by a Head of IS in possession of a dual skill set composed of business and IS acumen, their subsequent directorship of a boundary-spanning organisational function combining IS and change management, and a CEO supportive of the IS function and its requirements.

# 5.6.5.3 Senior Manager Support for SISP

The concept of senior management support (Dong, 2008; Ifinedo, 2008) features prominently within the wider IS literature as being crucial to the success of the IS function. Within PS2, there was evidence that this was indeed the case. It proves telling of the contrast between PS1 and PS2 that the former's sub-theme of 'The Issues Caused by the Head of IS not being a Member of PS1's TMT' is replaced by the latter's 'Senior Manager Support of IS'.

There are two reasons for such a factor existing within PS2, the first of which was instilled due to past achievements on the part of the IS function and its ability to deliver upon its promises:

PS2 – SM5: "So there is a huge; the benefits have already been seen for everything we have done in the past so there is a huge buy-in to support."

PS2 – MM1: "If someone walks up here today and says "My laptop is broken", within a day they will have a new laptop, a replacement one while the other one is being fixed, or if something needs to be done within a day or two days, it is that level of service that is sort of the reason we have gotten the buy-in from senior management. They realise the investment in IS. They understand the fact that by investing in IS properly, in the right way, you can keep your staff levels down, you can speed up, you can make it be more productive, you can take on more roles and responsibilities, which we don't necessarily have a choice in anymore."

PS2 – SM6: "Again we would say that overall we are very positive towards the IS department. As I say, when the chips are down they very much support the organisation."

The second reason, in what has become an enduring topic within discussions pertaining to PS2, relates to the Head of IS's abilities and personal reputation both nationally and further afield:

PS2 – SM2: "I suppose we are very trusting of the IS group as well led by (the Head of IS), in that we are probably one of the better ones in Europe, I wouldn't say the best but one of the better ones in Europe, and would challenge, (the Head of IS) wouldn't be behind the door in challenging the approaches maybe at the European Agency or European Commission and so on, so we would be seen as people who really think about it."

Trust and support have been largely established through a track record of delivering results, of proving a useful resource, and by maintaining an open door policy to organisational employees. There exists the possibility that small factors such as the aforementioned broken laptop screen or other minor issues for which the IS function will be held responsible can impact upon the much broader activity of SISP. Frustrations caused due to unsatisfactory outcomes from seemingly small issues can tarnish the reputation of the IS function. Finally, having a head of function that is respected both within the organisation and at the macro, European-level fosters a culture of support.

# 5.6.5.4 Senior Managers' Engagement with Additional Stakeholders during the Practice of SISP

Throughout the course of interviewing, the two key stakeholder groups that were consistently referred to as playing a role in regard to how SISP is practiced by senior managers in PS2 were external consultants and middle managers. Both stakeholders groups are now explored, with particular focus upon how senior managers engage with each during the practice of SISP.

### - Consultants

It would appear that a core role for consultants within a public service setting is to act as a validatory mechanism, checking and confirming that what is being worked upon is correct and of merit. Within the healthcare context, the need for assurances of this ilk prove particularly pertinent:

PS2 – SM5: "I suppose, particularly in relation to an IS strategy, it is going to be driven primarily by your IS people because that is where the expertise lies. Now it is quite hard for other parts of the business to say "No, that doesn't seem appropriate", so I think in this particular case it gives a nice balance to have somebody who has independent expertise to say "Actually, this is what we think you should be doing". So I would say overall, em, that given the significance of IS and IS spend to the organisation; it was worth having it validated by outside consultants."

Moving beyond this more rudimentary confirmatory role, consultants are viewed as engendering PS2 with fresh perspectives and external expertise, which have been used to ameliorate the practice of SISP through their engagement with senior managers. PS2 maintains a culture of innovation. It recognises that resting upon its achievements within the IS domain will result in a stagnation of its SISP activity. Consequently, it uses external consultation as a means to continue its evolution:

PS2 – SM7: "It would be, I think, unthinkable that an organisation with a settled group of staff, regardless of how well we think we are doing with our peers abroad and so on, and in Ireland and so on. It would be unthinkable that we wouldn't be challenged by external people when we are in particular, doing a strategy on IS. So using an external consultant was absolutely fundamental and we wouldn't have done it without their help."

Negating the possibility of groupthink gaining traction and the bolstering of boundary-spanning capabilities are further benefits that consultants have brought to PS2:

PS2 – SM6: "I think they have been extremely useful in what they have done in helping to move opinion along and giving us a horizon that we haven't had before."

Consultants were found to be supportive of middle management inclusion, alleviating any possible scepticism middle managers felt prior to their engagement:

PS2 – MM1: "Being a middle manager I was a bit sceptical at the time; "Jesus, what are they going to do? How are they going to go?" But to be fair, they interviewed everyone."

An interviewee provided insight as to what actually happened when consultants came into PS2 to work alongside internal practitioners during the practice of SISP:

PS2 – MM2: "They would come in or would go off site, em, we would have a work shop in a day, we would have a war room upstairs, you know the war room, where we would do brainstorming and you would literally be locked in the war room for two or three days and..."

Being the focal point of the IS function, the Head of IS played an integral role at the interface of each stakeholder group, proving proficient in their management of the process;

PS2 – SM4: "But I must say that when they have been in with us they have delivered, and that is because (the Head of IS) makes them deliver it too. It is very well project managed here from that point…"

# - Middle Managers

The second key stakeholder group is that of middle managers. The Head of IS again emerged as a factor in facilitating the interactions between middle managers and senior managers, breaking down the invisible barriers of seniority through their championing of social interaction:

PS2 – Head of IS: "So I do certainly encourage people to go and get involved if they can in the business and ask loads of questions. I would also encourage them to go and mix socially. That probably sounds like, you know, a bit strange. But I would say "Well you should go down to the coffee breaks, don't all sit together at the one table, all the IS people. Go and sit with the Doctors, the Pharmacists and ask them and challenge them and have a chat or whatever". So I think that piece is important."

A synergistic quality emerges through the interaction of the two ancillary stakeholder groups, i.e. consultants and middle managers. It is through consultant facilitation that middle manager engagement in the practice of SISP is largely enabled. This process is

aided by senior managers, particularly those not comfortable in discussing IS-related matters and thus pointing consultants in the direction of their more IS-savvy middle managers:

PS2 – SM1: "I suppose to be fair, when (External Consultancy House) did their interviews, in a lot of cases the Directors perhaps didn't feel terribly comfortable talking about IS and where it should go because it wasn't their bag, and they would have pointed (External Consultancy House) to their management, to their middle layer of managers."

Inclusiveness is a trait of the practice of SISP in PS2, with recognition on the part of senior managers of the knowledge and skill sets middle managers possess:

PS2 – SM1: "... the middle managers have a good sense of temperature and would tend to liaise with their own team and say "Look we are doing a strategy. A guy is coming to interview me, what am I going to tell him? What is the story here?" and they will get the feedback there."

PS2 exemplifies an ability to empower its middle managers. The fact that a European-acclaimed piece of software was developed in-house and championed by a middle manager is a stark example of the potential role middle managers can play in the practice of SISP to the benefit of the wider organisation:

PS2 – SM4: "I mean (Middle Manager) is just an absolute genius and a lovely guy to work with and works so, so hard. He has led so much through Europe."

Returning to the concept of inclusiveness within PS2 and the organisation's use of middle managers, we learn of an organisational culture that is welcoming of participation at all levels. An open-door policy is fostered, in which the manifestation of egos at the senior level have been eschewed in favour of pragmatism and acceptance:

- PS2 SM5: "... we have a structure, I have monthly meetings, and I have one-on-one meetings with my managers all the time. They are in and out, I have an open door policy and I have reviews with staff and so, yes, there is a two-way, formal monthly teams, and I also get input."
- PS2 MM3: "I think it is a fairly consultative type of organisation and I think it does happen. Maybe not direct consultation but everybody is kind of fed through the different lines of command..."

# 5.6.5.5 Concluding Comments on Theme 3: Senior Managers and Associated Practitioner Groups with whom they engage during the Practice of SISP

PS2 presents a rather harmonious picture of the practitioners engaged in SISP. For senior managers, the key skills advocated were the ability to horizon-scan and look outside the boundaries of the organisation to the macro-level context. This trait, coupled with an ability to effectively communicate at all levels, proved prominent. The nuanced technical understanding may be left to those experts located within the IS function who are directly responsible for each particular initiative.

The theme of harmony also persists when viewing the relationship between the CEO and Head of IS. It was facilitated by a CEO who is naturally supportive of the IS function combined with a Head of IS who commands the respect of their peers. The Head of IS's history of achievement and ability to operate within both the IS and wider business domains is a further contributing factor.

It is this history of delivering upon objectives which forms the cornerstone for senior managers' willingness to support the IS function and its functional Head. The timely resolution of more minor IS issues is proffered as an integral factor. A negative interaction with IS at any level has the ability to tarnish the wider function, even at a strategic level. A respected Head of IS in possession of excellent communication and interpersonal skills bolstered senior manager support for IS yet further.

The two key practitioner groups with whom PS2's senior managers engage during the practice of SISP are external consultants and middle managers. In regard to external consultants, they oftentimes played a confirmatory role, providing a safety net for the organisation given the characteristics of the healthcare domain within which they operate. In addition, despite PS2 being in possession of a highly respected IS function and functional Head, the CEO was keen to keep developing the organisation's practice of SISP by incorporating fresh ideas and perspectives, engendered through the utilisation of external expertise. A Head of IS equipped with the interpersonal skills to manage consultant interactions facilitated the relationship.

The second stakeholder group is that of middle managers. They enmeshed comfortably with external consultants, in that it was the external consultants who played a key role in garnering middle managers' participation in SISP. This process was again aided by a Head of IS who actively fostered inclusiveness on the part of their fellow senior managers on matters pertaining to the practice of SISP, and the willingness of those managers to oblige in doing so. The example of the highly successful application

developed in-house by a middle manager mirrors the reasoning behind the Head of IS's influence within the organisation: capable practitioners proving that they can deliver results reinforces a cycle of inclusion.

# 5.6.6 Case Findings for Theme 4: The Role of the Social Dimension during the Practice of SISP by Senior Managers

The social dimension of the practice of strategy-making has been explored in the extant literature (Jarzabkowski and Seidl, 2006; Chadwick-Coule, 2010; Bower and Doz, 1979). Throughout the conduct of interviews in PS2, the criticality of this theme to SISP was frequently discussed. Sub-themes of merit included the role of dual skill sets in enabling effective communication, informal modes of SISP, and the role of relationships during the practice of SISP, each of which are now explored.

# 5.6.6.1 The Role of Dual Skill Sets in Enabling Effective Communication

Interviewees widely cited the existence of a healthy social dimension to PS2's practice of SISP. The researcher explored how the organisation achieved such a trait. A cohort of practitioners in possession of a dual skill set, i.e. both IS and wider business knowledge, was deemed crucial. The Head of IS spoke on this topic:

PS2 – Head of IS: "A lot of it, as well, is around being able to speak the language of the business because you don't have credibility otherwise. If I go to a meeting and I start talking about the gigabytes and the size of the pipe and all this carry on, I have lost them. So they don't want to hear that. They want to hear how I will help them to do the business that they need to do to satisfy their organisational objectives as per their strategy. That is what they want…"

Due to the nature of the business, a wider disciplinary knowledge is essential due to the melting pot of professional backgrounds and skill sets involved:

PS2 – SM4: "Absolutely, and you know, I will bring up a safety issue and (the Head of IS) will give me their perspective. They are not medical, they are not scientific, but you know, they have heard these things before "Do you remember when we did...?" and I will say, "How will the GPs...?" I would say no, it is not a big deal. But we all have an opinion and work it out together basically."

A dual skill set is cultivated by the Head of IS. They actively promoted such a capability and led by example:

PS2 – MM7: "So I think part of (the Head of IS') role at that time, and maybe it is down to personality too to some extent, was understanding the business needs and talking to individuals and people, which they gained huge insight into the various areas and in to the activities."

Once again, PS2's unique structure of merging its IS function with change management has played an enabling role:

PS2 – SM2: "So it is not that, like I said, we decide this is the way we are going to do it and then tell IS and they say "That is an impossible process" so that we are working together on it, and the fact that (the Head of IS) is the Change Manager so they get to see from the outset what the change is going to be and to align the IS with that or better still, align the change with the IS itself, or what IS are capable of."

It is a dual skill set that enables communication to take place in an effective manner. The Head of IS needs to be able to speak the language of those with whom they are liaising, to be malleable, to empathise, and to see the particular IS initiative under discussion through the lens of the department(s) it will impinge upon:

PS2 – MM3: "So I think my old boss, the Director in the previous place used to say "There is no such thing as an IS project, it is a business project". So I think that is the way you have to approach things."

Taking the concept of a dual skill set a step further, those engaged in the practice of SISP need to be able to 'sell' their ideas, something greatly aided if they are able to communicate in terms most familiar with their target audience:

PS2 – SM5: "I think actually it is an ability, you have to be articulate, you have to be able to communicate, you have got to be able to sell your ideas, and you have to make people understand."

PS2's range of practitioners, from IS to non-IS and senior to middle manager, presented a unified viewpoint on the importance of wielding a dual skill set for the practice of SISP. The Head of IS, a practitioner in possession of such a trait, led by example in fostering it amongst their peers and middle managers.

### 5.6.6.2 Informal Modes of SISP

PS2 exemplifies an organisation with a culture of openness and cross-functional cooperation, ultimately rendering its senior managers adept at communicating via informal channels. The CEO stresses that informal episodes of SISP are more formal than the previously explored water cooler episodes in PS1, in a sense representing formalised informality. It is an accepted 'practice' within the organisation to adopt informal modes of SISP, with relationships, communication, strategic alignment, and the practice of SISP itself all bolstered as a result:

PS2 - CEO: "Yea, I know, informal to me it means over a cup of coffee or whatever. I think it is a little bit more structured than that with the leadership we have in our IS department. There are an awful lot of informal discussions that go on but they are structured. The IS people, whether it is the Director or some of the senior staff, make opportunities to meet people, make appointments formally in their diaries with people, or swing by somebody's office and sit down for ten minutes or whatever. So it is not really the chitchat in the canteen over a cup of coffee. It a bit more formal than that but it is still at a very informal level."

PS2's unique functional structure encapsulating IS and change management under the directorship of a single practitioner aided the opening of cross-functional communication channels:

PS2 – MM2: "So then just people would generally just chat or I mean, with the Projects Officer, because they have their finger in everything, we kind of bounce off it, and sure (a Middle Manager) is loving to talk to us. Like he will tell you anything and everything. But I think from their point of view definitely they are kind of pivotal and key there, because they are part of the whole Change Management, the whole IS. They are part of everything that is happening, so they are the nugget that can tell everybody what is happening, you know, they are the kind of the info central…"

PS2's practitioners valued their organisation's culture of openness. Their appreciation was evident in the very manner by which they discuss the topic, with the Head of IS's approachability shining through:

- PS2 MM2: "But the banter is good and people feel comfortable just bouncing things off."
- PS2 SM3: "Yea it is kind of informal. Well informal in the sense that when something is happening we talk."

Informal, cross-functional SISP activity was also present across middle layers of management:

PS2 – SM3: "You see some of them share an office. (IS middle manager) would share an office with one of my senior case manager type people so they would be talking

across the desk and they would be saying to them "This is a load of rubbish, what are you doing with it?"

#### 5.6.6.3 The Role of Relationships

The role of relationships was introduced by interviewees when probed on the theme of the social dimension of SISP. PS2 is an organisation in possession of effective business-wide communication channels and a healthy social dimension to its practice of SISP, manifested in its openness to both formal and informal interaction. It looks to cultivate relationships, starting at the very top with the CEO at the macro-level:

PS2 - CEO: "So we value our relationships with our European peers; and in fact, it is beyond Europe. We have levels of influence around the world as well, that are disproportionate you might say, to our size or to countries equivalent to our size. So it is conscious decision that we have made to give time and energy and resource to that because we value the position of influence that we can acquire by doing that."

Macro-level relationships have had a tangible affect on the organisation's success on the European stage. The architect of PS2's highly successful IS application details open and collaborative relationships:

PS2 - Middle Manager: "I suppose, it is the relationship between the agencies as well. The core group of agencies that came together initially were around the same size as us, had the same problems, are trying to deal with the same issues around, you know, no staff, reduced budgets, you know, simplicity, having a solution in place, and they saw our idea and they said "That is a good one, can we use that as well?" and we said "Yea, you can if you are willing to pay for it, along with everyone else", and that is where that has been brought out."

Dropping-down to the meso-level, strong relationships are found to exist amongst PS2's senior managers:

PS2 – MM2: "But generally between the senior managers there definitely is good camaraderie."

Culture is an additional organisational trait that enabled PS2 to establish enduring relationships both internal and external to the organisation. PS2 is recognised as being a 'friendly' place of work, a PSO in which a common commitment to achieving broader organisational goals has resulted in functions partnering with one another:

PS2 – MM3: "But in terms of participation in projects and resources and interaction, I think maybe it is related to the culture of the organisation. Maybe it is known as a friendly organisation, people get on well."

It was suggested that the activities involved in the practice of SISP, oftentimes inclusive of working on cross-functional projects, ameliorates the propensity for relationships to blossom:

PS2 – MM4: "So, and always find the project area very interesting and I am on one at the moment which is taking up a bit of my time but not very much, it could be more. But it is good and it builds relationships and that."

# 5.6.6.4 Concluding Comments on Theme 4: The Role of the Social Dimension during the Practice of SISP by Senior Managers

The social dimension of SISP proved to be a key topic during the conduct of interviews. For PS2, it was an area in which the organisation excelled. A number of reasons for such proficiency were evident: the Head of IS cultivates a dual skill set amongst practitioners involved in SISP, leading by example through their own pursuit of greater business-wide knowledge. The possession of a dual skill set enables the senior manager to empathise with their counterparts, to view the impact that particular IS initiatives will have on their cohort's respective functions, and to strategise for the good of the wider organisation. Such traits have had the effect of fostering a friendly, oftentimes informal culture within PS2. However, the CEO clarified that it is informality with a purpose.

Relationships have been developed both internal and external to the organisation, once again driven from the top by the CEO at the European level. PS2 is an organisation able to leverage its relationships at the macro-level, negate cross-functional barriers, and place the achievement of SISP's over-arching goals ahead of functional-level disputes.

#### 5.6.7 Summary Comments on the Case of PS2

The four themes and related sub-themes (see Table 5.3) to have emerged from data analysis represent valuable findings in regard to how PS2's senior managers practiced SISP for its 2011-2015 IS strategy. The macro-level environment encapsulated in Theme 1 points to PS2's senior managers being proactive participants in IS-related matters, particularly at the European level. It was at this most macro of levels that the organisation garnered recognition for IS strategy-related practices, specifically concerning the

Table 5.3 - Case Findings for PS2: The Emergence of Four Themes and Related Sub-themes

Theme	Sub-themes for PS2
1. The Role of Macro-level Contextual Factors	- At the European Level
during the Practice of SISP by Senior Managers	- At the Public Service Level
	- At the Healthcare Level
	- The Public vs. Private Sector
2. The Role of Intra-organisational Meso and	- The Practice of Strategic Episodes
Micro level Practices during the Practice of SISP	- The Practice of Strategic Alignment
by Senior Managers	- The Practice of Structuring the IS Function
3. Senior Managers and Associated Practitioner	- Required Skills for Senior Managers Engaged in
Groups with whom they engage during the	SISP
Practice of SISP	- The Head of IS – CEO Relationship
	- Senior Manager Support for SISP
	- Senior Managers' Engagement with Additional
	Stakeholders during the Practice of SISP
	Consultants
	Middle Managers
4. The Role of the Social Dimension during the	- The Role of Dual Skill Sets in Enabling Effective
Practice of SISP by Senior Managers	Communication
	- Informal Modes of SISP
	- The Role of Relationships

continuous evolution of its IS function and its in-house development of IS applications. At the level of the public service, the organisation was afforded a degree of financial autonomy in relation to an allowance to carry-over budget surpluses. Theme 2's focus upon meso and micro level practices revealed an organisation armed with a comprehensive range of SISP-related episodic practices in which senior managers participated. It also portrayed PS2 as an organisation in possession of enabling practices pertaining to IS strategic alignment. PS2's continual practice of refining the structure of its IS function and its incorporation of a change management component were recognised as highly successful. Focusing on senior managers and associated practitioner groups, Theme 3 presented a senior manager cohort that supported the IS function and the practice of SISP. The CEO and Head of IS formed a synergistic relationship, as did senior managers and middle managers. External consultants, who were employed to avoid stagnation and keep senior managers' practice of SISP in a state of evolution, provided facilitation. Theme 4's grounding in the social dimension of SISP highlighted the enabling role of senior managers

in possession of a dual skill set. Such a trait was found to engender effective communication amongst PS2's senior managers during SISP, foster relationships, and allow for effective informal SISP-related episodes. Viewed holistically, PS2's senior managers exhibited a robust set of SISP-enabling attributes and participated in a range of SISP-related activities that provided the foundation for how they practiced SISP.

### 5.7 Cross-case Comparison of PS1 and PS2

The current section compares each of the four themes across PS1 and PS2. Remaining cognisant of the research question posed, i.e. 'How is Strategic Information Systems Planning Practiced by Senior Managers?', similarities and points of distinction are highlighted. Explanations are proffered based on the collected data presented within each of the four themes. Given that the study is exploratory in nature and grounded in qualitative analysis, it is not the researcher's aim to statistically compare and contrast both case sites. Rather, the goal is to summarise the commonalities and discrepancies found in casework to assist in answering the research question.

# 5.7.1 Cross-case Comparison of Theme 1: The Role of Macro-level Contextual Factors during the Practice of SISP by Senior Managers

There exist a number of distinct differences across PS1 and PS2 in relation to the impact of macro-level contextual factors upon the practice of SISP by senior managers. Firstly, PS1 has been hampered by governmental restrictions in obtaining sufficient funding for the hiring of a CIO-type figure to take over as its Head of IS. This shortcoming was largely negated through PS1's hiring of an external consultant to lead the practice of SISP during the formulation phase of its 2010-2012 IS strategy. However, subsequent SISP-related practices have withered upon the consultant's cessation of collaboration with PS1's senior managers. This was not a factor for PS2 as the organisation already had a CIO of repute at the head of its IS function. This clear distinction between both case sites caused by macro-level contextual factors of an economic nature had a fundamental impact upon how PS1's senior managers practiced SISP at the meso-level. The lack of a figurehead for the IS function with the requisite skill set to lead the strategic agenda for the organisation in an on-going capacity is likely a contributing factor for the additional differences that existed between PS1 and PS2.

Whilst PS2 actively engaged with its macro-level context, particularly in regard to the European domain, PS1 played a much more muted role. This may be due to the different facets of healthcare in which they specialise, but also due to the lack of a CIO with the capabilities to look outside of the organisation to the European context. Such a distinction is unsurprising given that PS1 effectively employs a practitioner of middle manager status to head its IS function, lacking in the C-level expertise of their PS2 counterpart. This should not necessarily be looked upon as the fault of PS1's Head of IS. Rather, it is a position into which they've been placed. PS1's Head of IS openly acknowledged that a CIO-type figure would form a welcome recruitment to the organisation.

PS2 has a clear advantage over PS1 due to its self-financing organisational structure, combined with its ability to carry-over budget surpluses on an annual basis. Both of these factors are the result of allowances made at the macro-level by government. PS2 has acquired the capacity to largely source the requisite resources it needs to enact its IS strategic objectives. A clear disparity exists in comparison to PS1, with the lack of a CIO the glaring manifestation of the macro-level restrictions imposed upon the organisation. The hiring of a CIO is a fundamental need for PS1, a meso-level requirement debilitated by macro-level contextual factors. Whether such a shortcoming would be allowed to persist should the vacancy reside in what have sometimes been seen as more 'core' organisational functions such as finance, operations, or human resources is debatable. Viewing the IS function as non-core to the business is an antiquated standpoint. IS's necessity to the modern-day organisation has rapidly heightened, a fact largely recognised by PS1's senior managers.

# 5.7.2 Cross-case Comparison of Theme 2: The Role of Intra-organisational Meso and Micro level Practices during the Practice of SISP by Senior Managers

The sub-theme of strategic episodes, the primary vehicle within which the practice of SISP occurs, revealed a contrast in styles between PS1 and PS2. PS1's IS strategy for 2010-2012 was largely constructed through strategic episodes led by an external consultant. This proved a fruitful period for SISP in PS1, with senior managers actively participating in the practice and engaging with lower-level employees. The principal ongoing measure was to be meetings of the IS Council, a practice that was subsequently disbanded. The recruitment of an external consultant initially served as a proxy CIO. However, the collaborative practices established by the external consultant waned over time following the consultant's departure. This can be attributed to the IS Council's lack of a strategic focus and subsequent loss of senior manager commitment to meetings of the IS Council. Without either a CIO or appropriate external expertise to lead such episodes and

establish a strategic purpose, senior managers found the IS Council to be an ineffective use of their time. Conversely, PS2 was armed with a robust range of episodic practices that its senior managers utilised for SISP. Yearly, bi-monthly, and individual practitioner-focused episodes were conducted by formal and informal methods, and led by both internal practitioners and external consultants.

In addition to its episodic practices and establishment of an IS Council, PS1 looked to the practice of IS outsourcing as a measure to reduce costs in-line with government directives. The outsourcing of a small helpdesk was nearing completion upon the researcher's exit from fieldwork. Further attempts proved largely futile. The organisation was hampered by the shortcomings of the wider public service system, which has been quick to embrace the concept of shared services, but lacked the necessary infrastructure to empower PSOs to achieve such aspirations.

PS2 chose to practice IS-business strategic alignment as opposed to looking to outsource components of its IS function. PS2's Head of IS emerged as an obvious champion for its alignment practice. Their dual skill set encompassing both IS and business skills, combined with their fostering of a culture conducive to collaboration and integration proved key factors.

The final SISP-related practice to emerge from PS2 at the meso-level was its practice of combining its IS function with an organisation-wide change management component. The synergies accrued from the practice of strategic alignment and the integrative practices for structuring its IS function elucidates a PSO that is strategic in its IS outlook, one that is able to view itself as a single entity rather than a collation of disjointed organisational functions. The on-going combination and further refinement of IS and change management proved both novel and effective, propagating an organisational culture of transparency and trust. This unique meso-level practice has been recognised at the macro-level, with the EMA and fellow agencies adopting elements of PS2's functional design.

At the intra-organisational meso and micro levels, PS1 failed to deliver upon its 2010-2012 IS strategy's key priorities. It is pertinent that the organisation targeted strong IS leadership, business-IS strategic alignment, and IS-enabled change. Whilst listed as priorities for its IS strategy, they are important for the current study as they represent key variables for the practice of SISP by senior managers. Comparatively, PS2 is an organisation in possession of a CIO-type Head of IS who effectively led their function, undertook a multitude of activities to align the IS function with the wider business, and incorporated a change management component with the IS function. For the current

study's exploration into how SISP is practiced by senior managers, PS1 stumbled across core parameters where PS2 strived.

Whilst not the explicit focus of the current study, PS1's senior managers' post 2010-2012 practice of SISP seems to have regressed from some of the more positive steps it had taken. Appearing to reside solely with the Head of IS and featuring little collaboration with the CEO and fellow senior managers, the benefits accrued from the temporary recruitment of the external consultant for 2010-2012 have been foregone, if not entirely forgotten. The external consultant effectively acted as a proxy to the absent CIO-type Head of IS, largely fulfilling that role and negating the absence of such a practitioner. The SISP-related collaborative practices for senior managers instilled into PS1 by the external consultant were formative steps that ultimately floundered over time. Yet, having been denied support from Government for the hiring of a CIO-type Head of IS, the researcher believes that returning to the practices employed for the 2010-2012 IS strategy, primarily in the form of hiring suitable external expertise, would prove beneficial. Whilst the importance of recruiting a Head of IS remains crucial for a sustained commitment to the practice of SISP in PS1, the hiring of appropriate external expertise provides a valuable interim solution. This example highlights the somewhat transitory nature of SISP-related practices by senior managers, representing the fluctuations that may exist over time (Whittington, 2006).

# 5.7.3 Cross-case Comparison of Theme 3: Senior Managers and Associated Practitioner Groups with whom they engage during the Practice of SISP

In terms of the traits recognised as being essential to senior managers practicing SISP, there exists uniformity across PS1 and PS2. Interviewees from both organisations identified the ability to effectively communicate and to look outside of organisational boundaries at more macro-level factors as crucial. The need for a comprehensive understanding of the technical nuances associated with IS was not recognised as being significant at senior manager level.

Divergence existed where interviewees discussed the relationship between their CEO and Head of IS, and the subsequent impact it had upon senior managers' practice of SISP. PS1's Head of IS does not assume a position on the organisation's TMT. A poor relationship between both practitioners was evident, a reason identified for the aforementioned exclusion. With the disbandment of the IS Council as the researcher concluded fieldwork, there existed no forum for PS1's senior managers to episodically meet and practice SISP. This is in stark contrast to PS2, in which its Head of IS was an integral member of senior management and enjoyed a strong relationship with their CEO.

Indeed, the topic of the Head of IS's omission from PS1's TMT was replaced by the high level of support the Head of IS and their function received from the senior manager cohort in PS2. Whilst disjointedness existed across functions in PS1, there was a sense of integration in PS2. The trait of senior management support was owing to the IS function consistently delivering upon its objectives combined with a Head of IS who was widely respected both inside and outside the organisation.

The final sub-theme concerned additional stakeholder groups with whom senior managers engaged during the practice of SISP. A significant divergence existed between PS1 and PS2. PS1 viewed its IS suppliers as having a role in the practice of SISP. This was due to the high-level of power PS1's suppliers held. The health-critical nature of PS1's business coupled with the largely be-spoke composition of its key IS rendered it significantly weakened in its dealings with suppliers. Macro-level attempts from government to strengthen its bodies' position in supplier negotiations through shared services and collective bargaining initiatives proved unsuccessful.

The remaining two stakeholder groups, i.e. external consultants and middle managers, were widely discussed across both case sites. However, differences existed as to how they were engaged by senior managers. PS1's interviewees portrayed competing viewpoints on external consultants, with the dissenting voices questioning their added value to the practice of SISP. The conflict of opinion was attributable to personal differences between individual consultants employed. The 2010-2012 IS strategy was driven by a single external consultant who garnered positive feedback. Consultants who engaged with the subsequently formed IS Council did not receive an equitable level of approval. Therefore, the choice of consultant/consulting house emerges as a key finding. In PS2, the consultancy houses employed were familiar with the organisation. Whilst close working ties with individual consultants was not a trait of PS2's consultant engagement, it established relationships built upon trust and the delivery of results. Subsequently, a hugely positive picture of consultants prevailed, driven by a CEO who constantly strove for fresh ideas and a CIO capable of effectively integrating external expertise into the organisation.

The final stakeholder group associated with the practice of SISP was that of middle managers. Again, differences existed across both case sites. PS1 featured a middle manager cohort largely disillusioned with SISP due to their predominant exclusion from the practice. The organisation's initial engagement with an external consultant for the planning of the 2010-2012 IS strategy bore results and was seen as a positive integrative

step for harnessing middle management's expertise. This was viewed as the only such occasion when middle managers were actively involved in SISP. Conversely, PS2 featured a mobilised group of middle managers that played an active role in SISP. Largely facilitated by external consultants, middle managers in PS2 found themselves working in an organisation exhibiting a culture of inclusiveness. The positive culture was primarily driven by the CEO and Head of IS, but was also embraced by fellow senior managers.

Whilst PS1's issues with IS suppliers may be viewed as an environmental circumstance, the positioning of its Head of IS outside of its TMT, its fractious CEO-Head of IS relationship, and its under-utilisation of middle managers are symptoms of an organisation enduring rather than remedying fundamental issues for the practice of SISP. Influential external expertise provided temporary assistance during which time such shortcomings were alleviated. However, measures taken to establish more collaborative practices for SISP subsided without the external practitioner's oversight. In PS2, there existed congruence in the sub-themes discussed under Theme 3. This unified view was exemplified in the boundary-spanning, communication-focused skill sets of its senior managers, the harmonious relationship between its CEO and Head of IS, a senior manager cohort supportive of their Head of IS and IS function, its effective utilisation of trusted external consultants, and its empowerment of a skilled middle manager practitioner group.

# 5.7.4 Cross-case Comparison of Theme 4: The Role of the Social Dimension during the Practice of SISP by Senior Managers

PS1 and PS2 are in stark contrast to one another in relation to Theme 4. PS1 was found to exhibit multiple shortcomings in relation to the social dimension of its practice of SISP. A litany of reasons were proffered by interviewees, but a coagulation formed around three broad areas of deficiency: the Head of IS not being a member of the TMT, the evident chasm between PS1's senior and middle management levels, and the lack of opportunities for informal modes of SISP to take place. Whilst PS1 has attempted to create boundary-spanning positions at the middle manager level, it is telling of a much deeper social problem that it has not been able to fill the gulf of having no IS representation on its TMT.

PS2 excels under Theme 4 through its cultivation of a dual skill set amongst its practitioners, the establishment of an organisational culture conducive to cordial, open communication, the development of a functional structure that combines IS and change management into a single, cohesive unit, and the fostering of relationships at macro and meso levels. The leadership of both the CEO and Head of IS primarily drove such traits.

Both practitioners led by example, engendering buy-in through their own individual praxis. This range of socially empowering attributes bolstered inter-functional and extraorganisational communication. In PS2's case, the results were evident, whether manifested through the success of its in-house created IS application that quickly established itself as a European standard, or its collaborative approach to intra-organisational SISP during which the wider organisational goals took precedence over functional-level objectives.

Having explored the role of the social dimension during the practice of SISP by senior managers in both PS1 and PS2, its inherently complex nature became apparent. There exists no single magic bullet to remedy the shortcomings evident in PS1, although a number of glaring issues were present. A sustained commitment from senior managers across the explored dimensions is required. Open communication, the fostering of strong, enduring relationships, and a cohort of senior-level practitioners in possession of a dual skill set are traits requiring time to cultivate and expertise to master. Whilst PS2 prided itself on a culture of open communication and collaboration, PS1 was mired in a vicious circle of poor correspondence across silo-like organisational functions.

#### 5.7.5 Concluding Comments on the Cross-Case Comparison of PS1 and PS2

The purpose of the current section is to highlight similarities and points of distinction between PS1 and PS2. Given that the study is qualitative in nature adopting a case-based approach with an inherent SAP perspective, the researcher does not wish to present a quantitative, analytical break down that eschews the dominant logic underpinning the study. As a result, the cross-case comparison provides a broad overview of both case sites, drawing attention to congruencies and deviations between PS1 and PS2. Such an approach remains loyal to the exploratory nature of the research. All four themes were present across both organisations, yet inherent differences existed between each.

# 5.8 The Study's Findings Relative to the Extant SISP Literature

Table 5.4 provides a broad overview of the study's findings as they relate to the extant SISP literature. The researcher has retained uniformity of approach by returning to the core topics used to review the SISP literature located in Chapter 3, i.e. practice, praxis, practitioner, a levels perspective, and outcomes. Each core topic has been divided into specified sub-topics. The topics and sub-topics have been distilled into three broad categories, i.e. 'Confirms', 'Extends', or 'Novel'. The 'Confirms' category contains those findings that replicate what is already known in the SISP literature. Entries into the

**Table 5.4 The Study's Findings Relative to the Extant SISP Literature** 

Relationship to Literature	Topic	Sub-topic
	Practice	An exploration into an organisational practice confirms the extant focus of SISP literature (Mirchandani and Lederer, 2012)
	Practitioner	- A focus upon the senior manager practitioner group (Mithas et al., 2011)
		- The role of the Head of IS is largely confirmed, inclusive of their need to possess a dual skill set (Peppard, 2010)
		- The criticality of the CEO-Head of IS relationship (Johnson and Lederer, 2007)
		- The importance of the rank of the Head of IS (Raghunathan and Raghunathan, 1989b)
Praxis  Practitioner  A Levels Perspective  Outcomes	Answers explicit calls for more research into the social dimension of SISP (Peppard et al., 2014)	
	Practitioner	- Provides a holistic view of the role of senior managers, thus countering the more fragmented (Silvius and Stoop, 2013), solely meso-level SISP literature (Bélanger and Tech, 2014)
	- Adds to the sparse literature on the role of middle managers during SISP (Leidner and Milovich, 2014)	
		- Builds upon the limited research on the role of external consultants during SISP (Bakar et al., 2010)
	The second secon	Whilst mirroring the extant literature in its primary grounding at the meso-level, the adopted SAP perspective (Whittington, 2006) adds to it by viewing SISP from a novel viewpoint
	Outcomes	The study provides a group outcome as it pertains to the senior manager practitioner group. Group outcomes, e.g. Henfridsson and Lind (2014), represent the second lowest number of studies (15) in the conducted review
Praxis  Practiti  A Leve	Practice	Answers explicit calls for a holistic exploration of the practice of SISP (Peppard et al., 2014) rather than specific components or goals of SISP such as strategic alignment (McLaren et al., 2011) or IS for competitive advantage (Okpattah et al., 2014)
	Praxis	Responds to literature highlighting the need for new methodologies that can focus upon the social dimension of SISP (Cecez-Kecmanovic et al., 2014)
	Practitioner	Though ancillary, the study empirically discovered the pivotal role of external consultants during SISP and the various forms such a role may take, i.e. leader (PS1) vs. confirmatory (PS2).
	A Levels Perspective	- The SISP literature fails to recognise senior manager activity beyond the boundaries of the meso-level (Bélanger and Tech, 2014). Thus, the multi-level approach employed is novel
		- The identified intra and inter-level linkages form a unique finding from the study due to prior research being focussed solely upon the meso-level, e.g. Pita et al., (2009)

'Extend' category represent findings that build upon extant knowledge through broadening or deepening a particular aspect of existing research. Finally, the 'Novel' category highlights those findings wholly unique to the current study, thus representing scholarly avenues to which the current study adds its greatest value.

### 5.9 Concluding Comments on the Case Studies of PS1 and PS2

Due to both case sites residing within the public service healthcare domain, the current chapter began with an elucidation of the broad macro-level context in which PS1 and PS2 are situated. Subsequently, detailed case findings were provided. The case findings were distilled into four themes that emerged from the researcher's coding strategy as detailed in Chapter 4.

A comparison of both organisations and the study's findings relative to the extant SISP literature concluded the chapter. A combination of the case findings and cross-case comparison resulted in the development of a conceptual framework, employed to answer the study's research question. Chapter 6's aim is a precise detailing of the devised conceptual framework, with an inherent bias towards grounding its core elements directly in the collected data.

# Chapter 6 - The Development of a Conceptual Framework

#### 6.1 Introduction

The primary goal of this chapter is to elucidate the conceptual framework that has been developed to answer the research question posed. Its emergent nature is congruent with the conduct of research into a phenomenon that is theoretically under-developed, which in this instance is the practice of SISP by senior managers in PSOs. Siggelkow (2007: 21) asserts that "If only limited theoretical knowledge exists concerning a particular phenomenon, an inductive research strategy that lets theory emerge from the data can be a valuable starting point".

The researcher employed the rich data to establish clear linkages between the case studies in Chapter 5 and the generated theory found here in Chapter 6. It is an approach that fits with the chosen research approach, i.e. the removal of abstraction so as to uncover the actual 'doing' of SISP. To quote Eisenhardt and Graebner (2007: 25); "The central notion is to use cases as the basis from which to develop theory inductively. The theory is emergent in the sense that it is situated in and developed by recognising patterns of relationships among constructs within and across cases and their underlying logical arguments."

After a recap of the research question and research approach is provided in section 6.2, each of the conceptual framework's constructs will be introduced and detailed in sections 6.3 and 6.4. The constructs will be operationalised through examples of realised praxis uncovered during casework. Subsequently, section 6.5 compares the conceptual framework to extant literature in the research domain to which the study is making its contribution, i.e. SISP. Comparisons with extant literature are an essential feature of theory building from case-based research (Eisenhardt, 1989). The chapter concludes with closing comments on the conceptual framework.

# 6.2 A Recap: The Research Question and the Research Approach

To refresh, the current study aims to answer the following research question:

"How is Strategic Information Systems Planning Practiced by Senior Managers?"

It is the researcher's aspiration to present a unified approach to the study's conduct. The case study methodology was employed, using a SAP lens as a tool to assist in a focused strategy for data collection and analysis. At each step clear linkages between the researcher's activities and their logical connection to answering the research question have been established. The enduring thread of the employed SAP perspective has proven pervasive throughout. Chapter 2 featured a review of the extant SAP literature, before Chapter 3's casting of a SAP lens upon the SISP literature. Chapter 4 extolled the merits of employing a case study design with a SAP perspective into a synergistic research approach, before describing how the methodology unfolded over the course of the study. Chapter 5 provided detailed case studies for both of the featured organisations, out of which emerged four core themes.

Returning to the research question, it is a 'how-type' question. The researcher captured how the practice being explored, i.e. SISP, was practiced by practitioners, i.e. senior managers, by way of an empirical investigation into the realised praxis uncovered during extensive engagement with two PSOs. Congruence with a SAP perspective was further established through the identification of levels of activity, specifically macro, meso, and micro realms. Inter-level linkages were evident in the current study, with senior managers found to be pivotal links in this regard. Their engagement with the extraorganisational field and intra-organisational context were crucial components in how they practiced SISP. For the current study, SISP is a practice that occurs at an organisational or meso-level, and thus finds itself at the nexus of macro-level, extra-organisational contextual factors and intra-organisational meso and micro level practices.

# 6.3 The Emergence of a Conceptual Framework

Theory building is espoused to begin with the selection of a suitable guiding theory (Walsham, 1995a). Due to the pervasive nature of the adopted SAP lens, Whittington's (2006) framework assumed such a role. Its choice proved congruent with Pan and Tan's (2011: 168) selection criteria of it being "at the appropriate level of analysis, insightful, and whose concepts and propositions represent a close fit with the empirical reality".

Having employed a case-based, qualitative research approach using a SAP lens, the genesis of the conceptual framework can be traced to the cycles of coding as guided by the

adopted coding technique (Maykut and Morehouse, 1994) detailed in Chapter 4. Its product was four themes that encapsulate the practice of SISP by senior managers in PSOs:

**Theme 1**: The Role of Macro-level Contextual Factors during the Practice of SISP by Senior Managers

**Theme 2**: The Role of Intra-organisational Meso and Micro level Practices during the Practice of SISP by Senior Managers

**Theme 3**: Senior Managers and Associated Practitioner Groups with whom they engage during the Practice of SISP

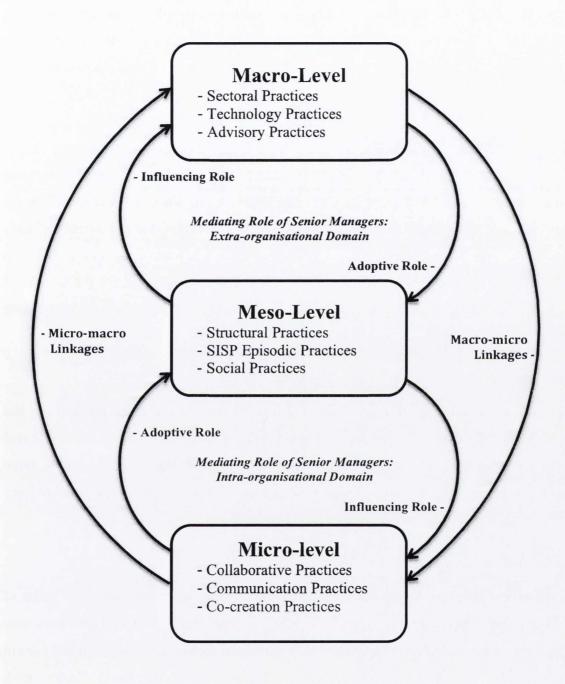
**Theme 4**: The Role of the Social Dimension during the Practice of SISP by Senior Managers

The fruit of the researcher's work, from literature reviews, to methodological choices, to data collection and analysis is Figure 6.1's conceptual framework. It represents a multi-level perspective on the practice of SISP by senior managers. The researcher deemed the inclusion of verticality an important dimension of the framework. Hence, it incorporates a delineated representation of the four emergent themes in the form of three distinct categories of practice at each of macro, meso, and micro levels. Theme 1's topic exploring the role of macro-level contextual factors during the practice of SISP by senior managers is represented by Sectoral and Technology Practices located at the macro-level. Theme 2's meso and micro level practices are included in the form of both Structural and SISP Episodic Practices at the meso-level, and Collaborative practices at the micro-level. The associated practitioner groups with whom senior managers engage of Theme 3 are encapsulated in the Advisory Practices located at the macro-level and the Co-creation Practices at the micro-level. Finally, Theme 4's focus upon the role of the social dimension during SISP is represented by Social Practices at the meso-level and Communication Practices at the micro-level. The framework places an emphasis upon the role of senior managers not only at the meso-level, but also their mediating role between the meso-level and both the macro and micro levels. Senior managers' boundary spanning praxis will largely determine how Sectoral, Technology, and Advisory Practices are adopted from the macro-level, and how Collaborative, Communication, and Co-creation Practices from the micro-level are transformed into realised praxis during their practice of SISP.

### 6.3.1 The Inclusion of an Integral Conceptual Construct: Inter-level linkages

The narration of both the PS1 and PS2 case studies and subsequent cross-case comparison resulted in the emergence of an integral construct. As the researcher conceptually mapped the study's core constructs during the process of theory generation, it

Figure 6.1 - A Multi-level Perspective on the Practice of SISP by Senior Managers



became obvious that themes 1-4 possess pervasive boundaries, with inherent linkages existing between levels of practice, i.e. macro, meso, and micro levels. Interviewees made persistent reference to their inter-related nature, thus rendering it an essential element of the topic of investigation. As a result, the researcher deemed it crucial to the answering of the research question. The construct of inter-level linkages is visually incorporated into the conceptual framework by the arrows linking the meso-level to both the macro and micro levels, and also by the arrows linking the macro and micro levels.

### 6.4 The Conceptual Framework Explained

The purpose of this section is to detail each component of the emergent conceptual framework. It consists of four sections: the first three sections detail the three levels in the form of macro, meso, and micro levels. Each level is further delineated into each of their three distinct bundles of practices as elucidated in Figure 6.1. Intra-level linkages between the identified bundles of practices are described. The final section details the inter-level linkages. It is the researcher's goal to explicitly explain each of these sections, concluding with an example of their realised praxis uncovered during the empirical investigation.

#### 6.4.1 The Macro-level Realm and its Associated Practices

Returning to Jarzabkowski and Spee (2009), the macro-level pertains to the institutional field, explaining activity within a specific industry or sector. Practices located at the macro-level emanate from the extra-organisational field. For the current study, three bundles of practices in the form of Sectoral Practices, Technology Practices, and Advisory Practices were identified. A detailing of each now follows:

#### 6.4.1.1 Sectoral Practices

Sectoral practices refer to those practices that tend to be ensconced in the realm of governmental policy. For European Union (EU) member states, sectoral practices may have their origins in policies formulated at this broader European-level. With the current study residing in the public service domain, the conceptual framework depicts such practices as affecting how senior managers practice SISP from both a monetary and resourcing perspective. In this regard, prevailing economic conditions play a significant role in how impactful a role Sectoral Practices assume during SISP. During times of economic downturn, the availability of resources to public service bodies is restricted. Subsequent financial restrictions can impact how senior managers practice SISP. The

possibility exists for public service recruitment embargoes to render organisations unable to hire optimum levels of the requisite personnel, be it in the form of senior managers, middle managers, or external expertise. During times of economic prosper, such limitations are unlikely to have as significant an impact upon how senior managers practice SISP. Thus, the evolving nature of macro-level Sectoral Practices over time and the extent of their impact upon SISP at the meso-level are highlighted.

Realised Praxis: Due to the current study's focus upon SISP occurring at a time of unfavourable economic conditions, Sectoral Practices were found to have a largely restrictive impact upon how senior managers practiced SISP. This was particularly true for PS1's senior managers. The organisation was unable to recruit a new CIO-type Head of IS due to financial impediments. Whilst PS2 operated under similar restrictions, the organisation's near wholly self-financing disposition saw it granted the capability to carry-over annual budget surpluses. Both of these realised instances of praxis reveal the tangible impact that Sectoral Practices may have upon how SISP is practiced by senior managers.

#### 6.4.1.2 Technology Practices

Similar to Sectoral Practices, Technology Practices emanate from governmental policies, but in this instance as they pertain specifically to the IS domain. Due to the study's focus upon the practice of SISP by senior managers, the explicit segregation of Technology Practices from Sectoral Practices was deemed an appropriate delineation. Once again, the origins of Technology Practices may reside in European-level policies for those PSOs that are located within the EU. Technology Practices in the public service domain possess the capability of shifting PSOs towards the adoption and subsequent use of a particular IS-related initiative. Examples of Technology Practices could include government policies proposing that its organisations commence the practice of utilising cloud computing services. Circulars detailing timelines, processes, and best practices are then distributed to PSOs. Over time, the practice of utilising cloud-based strategies, primarily as a means to cut costs, may become a norm or 'practice' should it be successfully enacted. Such practices hold the capability of directly affecting an IS strategy's broad objectives, which can have a subsequent influence upon how an organisation's senior managers practice SISP. The broad objectives of Technology Practices can mirror those of their Sectoral counterparts, i.e. at a time of adverse economic conditions, both bundles of practices may represent a proclivity towards reducing costs.

Realised Praxis: PS1's senior managers expressed an interest in the practice of shared services, meeting with the Centre for Management and Organisation Development

(CMOD) in an attempt to ascertain the options that were available to the organisation. The Department of Justice amongst others was highlighted as hosting services. However, it transpired that there existed very little infrastructural capability to successfully enact a realised practice of shared services. PS1's senior managers discovered that whilst a server may be offered in a particular department, they would still be required to manage the server, effectively rendering the practice of little use to the organisation. In this example of realised praxis, we learn that for a Technology Practice to move from the macro to the meso-level, there must exist an adequate back-end support network to facilitate traction.

#### 6.4.1.3 Advisory Practices

Advisory Practices pertain to the use of extra-organisational expertise that may be employed to facilitate and assist senior managers as they practice SISP. Their macro-level origins lie in Advisory Practices' ability to shape SISP across industries or sectors. Advisory Practices are primarily represented in the form of external consultants or consultancy houses. External consultants import a range of practices and methodologies to the host PSO's practice of SISP. They liaise with senior managers and oftentimes practitioners from lower levels of the organisational hierarchy. Advisory Practices may be employed for the purposes of establishing the very practice of SISP within a PSO, as facilitators to the practice of SISP, or as a means of verification, i.e. the use of an established consultancy house during the planning phase of an IS strategy lends it credence. There exists value in this latter dimension of Advisory Practices given the benefits of establishing transparency for organisations operating within the public service. It may also negate the possibility of groupthink establishing a foundation amongst the senior manager cohort, providing a fresh perspective on established organisational competencies, deficiencies, and objectives. The ability of senior managers to not only incorporate Advisory Practices, but also locate those external consultants or consultancy houses that form a synergistic fit with their organisation, prove to be integral dimensions of the practice of SISP.

Realised Praxis: PS2's internal IS capabilities and practice of SISP were largely held in high esteem by its practitioners. A possible reason for this is the organisation's continued adoption of Advisory Practices in the form of the employment of a consultancy house for its 2011-2015 IS strategy. In so doing, the organisation has evolved and avoided the stagnation its CEO identified as a possible outcome from non-engagement with external expertise. The adopted Advisory Practices are signalled in PS2's 2011-2015 IS strategy. A rigorous approach was employed, engaging a wide range of intra-organisational

practitioners following a stringent methodology. The lack of resistance to Advisory Practices found amongst PS2's senior managers portrayed a set of intra-organisational practitioners that eschewed an insular approach to SISP, instead recognising the value in employing external consultants during their practice of SISP.

#### 6.4.1.4 Concluding Comments on the Macro-level Realm and its Associated Practices

The macro-level realm and its associated practices of Sectoral, Technology, and Advisory Practices form key aspects of how senior managers in PSOs practice SISP. Sectoral Practices are primarily associated with issues of financing and resourcing. As a result, the prevailing economic climate can play a significant role in how much of an impact they have upon SISP at the level of the organisation. Technology Practices are devised in governmental initiatives as they pertain specifically to IS. The benefit attached to their adoption is intrinsically linked to the extent of their development. Both Sectoral and Technology practices may be driven by policies originating from the wider European context. Finally, Advisory Practices are primarily ensconced in external consultants or consultancy houses. Their employment is often seen as an exercise in validation for PSOs, thus lending transparency to the practice. A key dimension of the conceptual framework is the mediating role played by senior managers between the meso-level practice of SISP and practices from the macro-level realm. How particular financial constraints, IS initiatives, or external acumen are subsumed and adopted by the organisation largely falls within the remit of senior managers, with their ability to do so having a considerable effect upon the meso-level practice of SISP.

#### 6.4.2 The Meso-level Realm and its Associated Practices

The meso-level realm incorporates practices that occur at the organisational level (Jarzabkowski and Spee, 2009). Three categories of practice are located at the meso-level in the form of Structural Practices, SISP Episodic Practices, and Social Practices. An explication of each now follows:

#### 6.4.2.1 Structural Practices

Structural Practices, as they relate to how senior managers practice SISP, concern the continuous refinement of an organisation's IS functional structure. They may require senior managers to look beyond rigid functional boundaries so as to best integrate IS with the wider organisation. Consequently, Structural Practices form a capable tool to assist organisations looking to improve IS-business strategic alignment (Kearns and Sabherwal,

2007; Preston and Karahanna, 2009a, 2009b) and the social dimension of SISP (Avgerou and McGrath, 2007; Silva and Hirschheim, 2007). At a basic level, Structural Practices pertain to the positioning of the IS function and its Head of IS within the organisation, i.e. whether or not IS are represented on the top management team. More complex Structural Practices may encapsulate the very structure of the IS function itself. Combining the IS function with an additional, boundary-spanning component such as a project management office embellishes the function with a natural alignment mechanism, creating crossfunctional engagement and interactions on an on-going basis. Structural Practices can be largely dependent upon whether or not an organisation is in possession of a Head of IS with capabilities that move beyond a solely techno-centric grounding, in addition to a CEO and wider senior manager cohort with the acumen to envision the potential benefits such Structural Practices may accrue. Over time, Structural Practices may be refined or expanded upon through the use of Advisory Practices and engagement with external consultants.

Realised Praxis: PS2's senior managers actively engaged in Structural Practices that not only resulted in the IS function and its Head of IS acquiring an equitable status with their related functions and functional heads, but saw the organisation continually build upon a unique IS structure that incorporated a change management component. The boundary-spanning nature of its change management component facilitated IS-business interactions, which subsequently assisted IS-centric initiatives inclusive of the practice of SISP. The Head of IS was widely respected by their peers for a history of consistently delivering upon both IS and change management projects. Over time, Structural Practices have continued to be employed in PS2, with the addition of a project management office added as a core component of its 2011-2015 IS strategy.

#### 6.4.2.2 SISP Episodic Practices

Strategic episodes form an explicit component of Whittington's (2006) framework. To recap, strategic episodes are oftentimes the most visible forum to view the realised work of strategising, "for it is through episodes that organisations are able to routinely suspend their normal routine structures of discourse, communication and hierarchy, and so create the opportunity for reflexive strategic practice" (Hendry and Seidl, 2002: 176). Consequently, SISP Episodic Practices may rightfully be viewed as forming the fulcrum of SISP activity, for it is within their boundaries that the majority of strategic IS activity occurs. They may manifest either as formalised meetings or more informal gatherings of practitioners. They can be led or facilitated by either internal practitioners or external

consultants. Senior managers must formulate a suitable range of SISP Episodic Practices that will enable the work of IS strategising to occur, possibly turning to external consultants for assistance in devising such a schedule. How frequently should SISP episodes be held, which internal practitioners should participate, should external consultants be involved in the process, where would SISP episodes be best located, i.e. onsite or off-site, and are there appropriate organisational mechanisms in place to facilitate informal SISP episodes are some of the most pertinent questions for which senior managers need to establish clarity. SISP Episodic Practices may fluctuate over time depending on the prevailing IS strategic requirements of the organisation, i.e. it is likely that the SISP Episodic Practices in which senior managers engage will differ from the period of a defined IS strategy's formulation to the times during which it is being monitored, amended, or steered through its life cycle. They are also likely to differ should a pressing IS concern of a strategic nature emerge, requiring senior manager intervention.

Realised Praxis: PS1's senior managers' SISP Episodic Practices for the organisation's 2010-2012 IS strategy were predominantly devised and facilitated by a single external consultant. Interviews were conducted with senior managers in addition to disparate organisational practitioners, as were focus group sessions and collaborative working sessions held with key personnel. Each meeting or SISP episode formed the context from which the 2010-2012 IS strategy ultimately emerged. Returning to the concept of SISP Episodic Practices varying over time, the organisation established its IS Council as a bi-monthly SISP episode with a range of responsibilities including strategic oversight. Over the lifecycle of the 2010-2012 IS strategy, this particular form of SISP episode was ultimately disbanded, highlighting the transient nature of SISP Episodic Practices.

#### 6.4.2.3 Social Practices

The social dimension of SISP and its related Social Practices are of particular importance due to the disparate organisational backgrounds of the senior managers involved (Avgerou and McGrath, 2007). The ability to both communicate and foster relationships amongst senior managers is a pivotal aspect of Social Practices. An enabling tool in this regard is the cultivation of dual skill sets amongst senior managers. In relation to SISP, the requirement for senior managers to have an in-depth knowledge of the technical intricacies of a particular system is secondary to an understanding of how IS fits within the wider meso-level realm and an ability to relate the organisational-level to prevailing macro-level conditions. It is here that synergies may be found through the use of

Structural Practices. The incorporation of a change management and/or project management office under the remit of the IS function naturally lends itself to increased social interaction between the IS function and its associated functions. It can foster communication and relationships across the organisation and so facilitate Social Practices such as the bolstering of dual skill sets amongst senior managers. Within the senior manager cohort, the relationship between the CEO and Head of IS forms an integral social dimension. A breakdown in communication between these two pivotal figures for the practice of SISP may lead to adverse consequences for the IS function, the Head of IS, and the practice of SISP. Conversely, a healthy working relationship between both parties can imbue the practice of SISP with senior manager support, an equitable position for the Head of IS amongst their senior manager peers, and an increased propensity for senior managers to acquire a dual skill set to assist their practice of SISP.

Realised Praxis: The PS2 case study exhibited a robust set of Social Practices that were utilised by its senior managers during the practice of SISP. The aforementioned Structural Practices used by the organisation enabled an ease of communication amongst its senior managers. An open door policy was employed, facilitating informal modes of social interaction. PS2's Head of IS actively encouraged social engagement amongst IS and wider organisational personnel. The Head of IS nurtured their own dual skill set over time so that they were able to effectively interact with their fellow senior colleagues and relate IS matters to disparate organisational practitioners. PS2's Head of IS formed a healthy relationship with their CEO. A proven record of achievement and consistent delivery of results were contributing factors to this bond, leading to both a supportive CEO and wider senior manager cohort.

#### 6.4.2.4 Concluding Comments on the Meso-level Realm and its Associated Practices

The meso-level realm and its associated practices of Structural, SISP Episodic, and Social Practices represent key dimensions of SISP as practiced by senior managers in PSOs. Structural Practices are ensconced in the design and refinement of an organisation's IS function over time. It also encapsulates more rudimentary matters inclusive of the Head of IS's reporting relationships. SISP Episodic Practices form the primary vehicle by which the actual work of IS strategising occurs. The role of external consultants, the composition of intra-organisational attendees, and the frequency and form of SISP Episodic Practices each form crucial dimensions that need to be established by senior managers. The transient and malleable nature of SISP Episodic Practices is apparent when viewing how senior managers may reconfigure practices depending upon the particular IS strategic

requirements at a particular time. Finally, Social Practices enable communication and the fostering of relationships amongst senior managers. Due to the diverse organisational backgrounds of those involved in the practice of SISP, they garner an important role. The fostering of dual skill sets amongst senior managers is one such practice, as is the cultivation of a healthy working relationship between an organisation's CEO and Head of IS.

#### 6.4.3 The Micro-level Realm and its Associated Practices

The micro-level realm incorporates practices that occur below the organisational-level, usually transpiring within functions and incorporating organisational employees below senior manager level. There exist three distinct categories of practices at the micro-level, them being Collaborative Practices, Communication Practices, and Co-creation Practices. Each practice will now be elaborated upon.

#### 6.4.3.1 Collaborative Practices

The purpose of Collaborative Practices as they relate to the practice of SISP by senior managers is to create forums for senior managers and lower level, intraorganisational practitioners to come together on SISP-related matters. Consequently,
parallels may be drawn with SISP Episodic Practices at the meso-level, i.e. Collaborative
Practices form the fulcrum of where the actual 'work' of SISP-related matters occurs
between senior and predominantly middle layers of management. Due to SISP largely
taking place at the meso-level as practiced by senior managers, these micro-level
Collaborative Practices effectively form the interface of middle managers' participation in
SISP. Senior managers must decide how to integrate middle managers into their practice of
SISP. This task may be assisted or facilitated by the intervention of external consultants
who can incorporate middle managers into focus groups, working sessions, or interview
sessions. On-going Collaborative Practices can be established so as to ensure that middle
managers continue to play a role in SISP-related matters. Such Collaborative Practices may
take the form of periodic working sessions that allow middle managers and senior
managers to engage with one another.

**Realised Praxis:** For PS1's 2010-2012 IS strategy, Collaborative Practices were driven by the employed external consultant. Focus group sessions and integrative working sessions provided forums for senior and middle manager engagement, whilst an extensive interviewing phase also incorporated a disparate range of middle managers into the process. The transient nature of Collaborative Practices is highlighted by the subsequent

lack of such practices upon the external consultant's exit from PS1. Middle manager disillusionment with their lack of interaction with senior managers was extensive, with senior managers being viewed as an exclusive cohort with whom SISP-related dialogue proved negligible.

#### 6.4.3.2 Communication Practices

With the remit of Collaborative Practices residing in the development of modes for senior and middle managers to engage with one another, i.e. the vehicles by which such collaboration may transpire, Communication Practices are concerned with softer skills that enable effective interaction. The importance of the social dimension of SISP has been foretold in prior sections of this thesis. Therefore, parallels may be drawn between Communication Practices at the micro-level and Social Practices at the meso-level. It has been described that SISP activity amongst senior managers at the meso-level does not necessarily require those practitioners to have an in-depth understanding of the technical nuances of IS. However, such technical expertise has been suggested as being an important facet of the remit of middle managers. Middle managers need to be able to communicate with their senior manager counterparts on matters pertaining to SISP. This may relate to IS middle management conveying IS specifications to senior managers, or indeed middle managers from disparate organisational functions communicating how IS relates to their particular function. The concept of a dual skill set is once again pertinent in this regard, with middle managers in possession of an ability to see beyond their functional boundaries and convey SISP-related matters in a broader, organisational context proving of value. Linking to the concept of strategic alignment and its ability to foster communication across functions, the possible role of Structural Practices in facilitating communication both formally and via more informal modes at the micro-level becomes apparent.

Realised Praxis: PS2's Head of IS reflected on the benefits for the IS practitioner to add the IS component to their skill set after a grounding in a more general business discipline as opposed to the reverse sequencing. Career progression to the more senior ranks of management was opined to be easier by following such logic. The requirement for IS to be relatable to contexts beyond the IS function proved to be an enduring theme for SISP across management levels. PS2's Head of IS encouraged social interaction and communication amongst IS middle management and practitioners emanating from the wider business. It is in contrast to the much more siloed functions discovered in PS1, in which little to no Communication Practices were engaged barring sporadic informal interaction amongst a limited number of middle managers.

#### 6.4.3.3 Co-creation Practices

Co-creation Practices concern those practices that are targeted at leveraging the expertise and potential that resides within the middle layers of management for SISP-related matters. Whilst the importance of middle managers to the strategy formation process has been recognised, particularly through their ability to link senior management and the bottom levels of an organisation, they also possess the ability to alter the strategic direction of an organisation via their own individual or collective praxis (Lavarda et al., 2010). Co-creation Practices are dependent upon Collaborative and Communication Practices at the micro-level, and Structural Practices at the meso-level to enable middle managers and senior managers to effectively create tangible outputs that may positively impact upon the practice of SISP. The technical knowledge inherent in IS middle management presents an opportunity for senior managers to cultivate organisational IS capabilities. To do so, vehicles must be created for co-creation to happen, communication channels should ideally be open and flexible, and the functional design of the organisation should facilitate senior-middle manager engagement.

Realised Praxis: From the PS2 case study located in Chapter 5, it is apparent that the organisation was in possession of a robust range of Collaborative, Communication, and Structural Practices. The organisation had a highly experienced IS manager, who subsequently assumed a more boundary-spanning role within the function. This individual, intra-organisational middle manager was responsible for the development of an IS application that rapidly became established as an industry standard at the European-level. Application subscriptions provided an additional source of revenue for PS2, with the organisation's reputation at the macro-level being bolstered. PS2's Head of IS formed a close working relationship with this particular middle manager, who was recognised by interviewees as being a highly capable practitioner in both the IS and wider organisational domains.

### 6.4.3.4 Concluding Comments on the Micro-level Realm and its Associated Practices

The micro-level realm and its associated practices of Collaborative, Communication, and Co-creation Practices represent core aspects of the meso-level practice of SISP by senior managers. With the micro-level realm's practices inextricably linked to senior managers' incorporation of middle management into their practice of SISP, they represent an opportunity for senior managers to harness a key organisational resource. Collaborative Practices are concerned with creating forums for senior and middle managers to engage and interact, effectively mirroring SISP Episodic Practices at the meso-level but on a lower

organisational scale. Communication Practices are ensconced in facilitating effective social engagement amongst each respective practitioner group, with a dual skill set being highlighted as a valuable asset for middle managers participating in Communication Practices with senior managers on SISP-related matters. Finally, Co-creation Practices are premised on the production of tangible SISP-affecting outputs that are directly relatable to the praxis of middle managers, once again facilitated by senior management. Practices located at the micro-level realm are highly dependent upon established practices at the meso-level to enable their creation and subsequent assimilation.

#### 6.4.4 The Inter-level Linkages Between Realms of Practice

Three realms of practice were identified and are represented in the conceptual framework in the form of macro, meso, and micro levels. In addition, the propensity for intra-level linkages to exist between Sectoral, Technology, and Advisory Practices at the macro-level, Structural, SISP Episodic, and Social Practices at the meso-level, and Collaborative, Communication, and Co-creation Practices at the micro-level were each described. A further defining feature of the conceptual framework is the inter-level linkages represented by the connecting arrows between levels. It is senior managers who play a mediating role between the meso-level and both the macro, extra-organisational domain and the micro, intra-organisational domain. How they choose to either adopt or influence practices emanating from the macro and micro realms plays a significant role in how senior managers practice SISP. An explication of these linkages now follows.

#### 6.4.4.1 Linking the Meso-level to the Macro-level, Extra-organisational Domain

The meso-level practice of SISP by senior managers is the focus of the current study. Yet, the role of macro-level practices in the form of Sectoral, Technology, and Advisory Practices have a significant influence upon how senior managers practice SISP.

The downward arrow from the macro-level to the meso-level represents the adoptive role of senior managers and how Sectoral, Technology, and Advisory Practices may be subsumed into the meso-level practice of SISP. For example, it is senior managers who decide how financial constraints derived from Sectoral Practices may ultimately impact upon SISP. Whilst such practices may be legislatively enforced, senior managers can mitigate how they transpire in practice at the level of the organisation. Similarly, senior managers may be empowered to either adopt or reject particular IS initiatives to emanate from Technology Practices. They may view a Technology Practice such as the use of shared services as being either a suitable avenue for reducing costs, or an unnecessary risk

due to a possible loss of direct managerial control. From an Advisory Practices standpoint, senior managers are largely responsible for whether or not external expertise is incorporated into their practice of SISP. Not only do senior managers need to ascertain if the employment of external consultants is appropriate, they must then decide on the selection of a suitable consultancy house that best matches their SISP requirements.

The upward arrow from the meso-level to the macro-level represents the influencing role of senior managers and the potential impact that the identified Structural, SISP Episodic, and Social Practices at the meso-level may have upon the macro-level realm. For PSO senior managers, the wider national context and beyond can be shaped by their meso-level practices. Particular Structural, SISP Episodic, or Social Practices at the organisational-level hold the potential to be adopted and established over time at the macro-level as distinct practices in their own right. Consequently, what once formed a meso-level practice may become a macro-level practice that shapes a particular industry or market. It is the occurrence of such a phenomenon that embodies the practice-praxis duality foretold in Chapter 2's review of the SAP literature.

Realised Praxis: Turning first to the adoptive role of senior managers represented by the downward macro-meso arrow, Advisory practices proved prevalent in both PS1 and PS2's practice of SISP. External consultants were discovered to play an integral role in shaping meso-level SISP Episodic Practices in each organisation. For PS1 in particular, the single external consultant employed by senior managers was largely responsible for driving this practice. Focus groups and collaborative working sessions incorporated a range of organisational practitioners, as did an extensive interviewing process. In addition, the external consultant facilitated the establishment of PS1's IS Council as an on-going SISP Episodic Practice.

For the influencing role of senior managers and the upward arrow representing mesomacro linkages, an explicit example resides in the recognition PS2's Structural Practices garnered at the European level. Frequent reference was made by interviewees of the high regard in which the organisation's IS functional structure was held, with a range of fellow EU member organisations identified as having adopted an IS functional design premised on PS2's structure. It was affirmed that the European Medicines Agency had looked to adopt an IS functional design incorporating more integrative, organisation-spanning components by virtue of the Structural Practices employed by PS2's senior managers.

#### 6.4.4.2 Linking the Meso-level to the Micro-level, Intra-organisational Domain

Whilst the prior section elucidated linkages between the meso-level and the extraorganisational field, the current section pertaining to linkages between the meso and micro levels demonstrates how the practice of SISP by senior managers may either adopt or influence intra-organisational practices located below the organisational level. Specifically, micro-level practices are identified as Collaborative, Communication, and Co-creation Practices. Each micro-level practice predominantly incorporates middle managers into the practice of SISP.

The upward arrow from the micro-level to the meso-level represents the adoptive role of senior managers in how Collaborative, Communication, and Co-creation Practices are incorporated into the practice SISP. Alternatively, it may be viewed as a representation of how the key organisational resource of middle managers may participate in SISP. The middle manager cohort has been rightly viewed as the link between the lower levels of the organisation and the upper echelons of management (Lavarda et al., 2010). The incorporation of the middle layer of management's knowledge and expertise potentially forms an integral component of the practice of SISP by senior managers. Collaborative practices represent the platform for middle managers to engage with their senior manager counterparts on SISP-related matters, affording them forums to contribute to the practice of SISP. Communication Practices facilitate effective social interaction between senior and middle managers so as to best leverage the potential furnished by Collaborative Practices. Finally, Co-creation Practices engender the accrual of tangible outputs from senior manager engagement with middle managers at the micro-level.

The downward arrow from the meso-level to the micro-level portrays the influencing role of senior managers in forming linkages between Structural, SISP Episodic, and Social Practices and the micro-level domain. A trickle-down effect is present in this regard. Structural practices at an organisational-level tend to have consequent ramifications for lower organisational rungs. The Structural Practice of incorporating a change management component with the IS function represents an opportunity for middle managers from disparate organisational functions to engage in SISP-related activity. SISP Episodic Practices at the meso-level may potentially include lower-level organisational employees. Through facilitation by external consultants, focus groups and collaborative working sessions can encompass middle manager participation. Similarly, Social Practices at the meso-level may be disseminated by senior managers to the middle layers of management. Practices that encourage the cultivation of dual skill sets amongst senior managers could be

extended to lower managerial ranks. It is senior managers who assume a mediating role in the extent to which Structural, SISP Episodic, and Social Practices permeate the praxis of lower-level practitioners.

Realised Praxis: From an upward micro-meso perspective and the adoptive role of senior managers therein, PS2 displayed a range of micro-level Collaborative Practices that enabled middle managers to engage with senior managers on an on-going basis. Periodic review sessions were devised, affording middle managers a vehicle by which to participate in SISP-related matters. Communication Practices that armed middle managers with a wider organisational perspective facilitated more informal, social interaction.

Looking at meso-micro linkages and the influencing role of senior managers, the PS1 case study vividly portrayed the impact that SISP Episodic Practices at the meso-level can have in garnering the participation of lower levels of management. Along with senior managers, the external consultant employed by PS1 to collaborate during the planning of its 2010-2012 IS strategy proved a pivotal figure in this regard, enabling this meso-level practice to constitute the input of middle managers into the wider practice of SISP.

#### 6.4.4.3 Linking the Macro-level to the Micro-level

The linkages between the macro and micro levels represented by the connecting arrows may be viewed as having an indirect impact upon how senior managers practice SISP at the meso-level. Due to the indirect influence of this construct and its exclusion of the meso-level realm within which the current study is primarily located, the linkages were not as prominent as those found in either of the meso-macro or meso-micro dimensions of the framework. An explication of these linkages is now provided.

The downward arrow from the macro-level to the micro-level represents the adoption of Sectoral, Technology, and Advisory Practices into the micro-level realm. Forming a somewhat tempered representation of the macro-meso linkages, financial impositions accruing from Sectoral practices materialise on a smaller scale at the micro-level. Similarly, macro-level decisions pertaining to IS initiatives emanating from Technology Practices may filter down and impact upon the micro-level and middle manager practices therein. Finally, Advisory Practices can move beyond meso-level boundaries to encapsulate middle manager working groups, subsequently impacting upon SISP-related micro-level practices.

The upward arrow linking the micro-level to the macro-level highlights how Collaborative, Communication, and Co-creation Practices may influence practices within

the macro-level realm. Similar to extant parallels being drawn between macro-meso and macro-micro realms, so too may comparisons be made between the linkages connecting micro-meso and micro-macro levels. Due to micro-level practices occurring below the organisational level, their propensity to transcend directly to the macro-level is less conspicuous than meso-level Structural, SISP Episodic, and Social Practices. Yet, linkages can and do exist. Collaborative and Communication Practices provide the foundations for Co-creation Practices in particular to impact upon macro-level practices.

Realised Praxis: Turning first to downward macro-micro linkages, PS2's middle managers expressed their cognisance of wider macro-level strategies and initiatives. For working groups operating at the micro-level, middle managers confirmed that both EU and EMA strategies influenced their praxis during such Collaborative Practices. PS1's middle managers also referenced an awareness of macro-level Sectoral Practices, describing a cautionary approach to the financial aspects of their working sessions due to economic impositions.

A stark example of upward micro-macro linkages was uncovered in the PS2 case study. An in-house application developed by a prominent middle manager resulted in its ultimate adoption at the European-level, rapidly becoming an industry standard as subscriptions increased on an exponential basis. This may be viewed as a Co-creation Practice at the micro-level directly influencing Technology Practices at the macro-level.

#### 6.4.4.4 Concluding Comments on the Inter-level Linkages Between Realms of Practice

For the current study, the linkages between Structural, SISP Episodic, and Social Practices at the meso-level with the macro-level's Sectoral, Technology, and Advisory Practices and the micro-level's Collaborative, Communication, and Co-creation Practices are most pertinent. It has been demonstrated how such linkages may transpire, coupled with examples of realised praxis from the conducted empirical investigation. With senior managers forming the practitioner group under exploration, their mediating role between the meso-level and both macro and micro levels forms an integral component of the conceptual framework presented in Figure 6.1. The detailed influencing and adoptive roles of senior managers can significantly impact how they practice SISP at the meso-level. The direct linkages between macro and micro level practices have also been described and elaborated upon. Whilst assuming a more indirect role for the study's topic of investigation, their inclusion is yet appropriate.

The key dimension of the conceptual framework's linkages is their vivid characterisation of the inter-level dynamics between the identified practices located at macro, meso, and micro levels. The interconnected nature of the nine identified practices provides a compelling portrayal of the organic complexity associated with the practice of SISP by senior managers.

# 6.5 The Conceptual Framework Relative to Extant Literature

The framework presented in Figure 6.1 conceptually represents how senior managers practice SISP. It has been asserted that "tying the emergent theory to existing literature enhances the internal validity, generalisability, and theoretical level of theory building from case study research" (Eisenhardt, 1989: 545). Consequently, the purpose of the following section is to compare the conceptual framework to the existing literature in the research domain to which the study is making its contribution. In this instance, the contribution is being made to the SISP domain, so it is here that attention will be focused. Whilst an in-depth review of the SISP literature is located in Chapters 3, the current section takes an explicit view on the framework and its constructs relevant to the extant knowledge in the domain. Areas of both congruence and deviation are signalled, with representative sources used for illustrative purposes.

In drawing comparisons with the SISP domain, a return to the research question proved an appropriate commencement point. The core components of the research question are the senior manager practitioner group, its inherent SAP dimension, and the practice of SISP. In addition, the study has been contextualised to the public service realm. The conceptual framework captures how senior managers practice SISP not only at the mesolevel, but also their mediating role in inter-level linkages with the macro-level public service context and the micro-level intra-organisational field. Consequently, the concept of a levels perspective provides an additional topic on which comparisons can be drawn between the SISP literature and the conceptual framework. The current section will be ensconced in making such comparisons across the dimensions of practice, praxis, practitioners (inclusive of senior managers and associated practitioner groups), the concept of levels and their inter-linkages, and the public service context.

Before returning to the reviewed SISP literature located in Chapter 3, the conceptual work of Galliers (2004; 2006; 2011) shares a number of commonalities with the current study's framework and is thus worthy of comparison. Galliers' work is not grounded in

empiricism nor is it focussed specifically upon the planning phase of IS strategising. Rather, it is predicated upon IS strategy at large and has been developed from the wider IS literature. It features a number of constructs similar to those that appear in Figure 6.1. In particular, the author's devised IS strategising framework employs the socio-technical nature of IS as an integral concept in its construction. Additionally, both intra and extraorganisational contexts are delineated, with linkages between intra-organisational components visually incorporated into the model. However, the current study's framework distinguishes itself by being ensconced in an in-depth empirical investigation into the 'doing' of the planning phase of IS strategising by senior managers. It features nine specific practices located across macro, meso, and micro levels. With the study's principal focus being upon the senior manager practitioner group, it is senior managers' mediating role both within and across levels that proves a key finding.

#### 6.5.1 Practice

Returning to Jarzabkowski and Spee's (2009) model that was adopted to review the SISP literature, the dominant practice of SISP falls under the 'organisational practices' category. From the 175 practices identified in the 153 empirical studies, organisational practices were most prevalent, featuring in 119 studies. Chapter 3 elucidated the enduring nature of organisational practices across the decades. McFarlan's (1971) organisational practices were concerned with how the IS function may benefit from the insight and experience of the wider organisation's planning department to assist in the practice of SISP. Teo and King (1996) assessed organisational practices of an alignment nature. The practice of drawing upon organisational core competencies as an IS strategy is developed is the organisational practice explored by Duhan et al. (2001). Continuing to the current decade, Mirchandani and Lederer's (2012) proposition of situational analysis as an organisational practice to be employed for SISP in uncertain environmental contexts forms yet another of the aforementioned fragments of the practice of SISP so prevalent in the literature set. The current study may be contrasted with the extant empirical studies in that it explores the wider practice of SISP itself, thus viewing it from a more holistic standpoint and targeting a shortcoming identified in the literature: "we just do not adequately know how strategising takes place" (Peppard et al., 2014: 6). It is such an encompassing view that forms its primary distinguishing component when compared to the extant literature, which has been demonstrated as presenting a disjointed portrayal of the domain's core practice.

#### 6.5.2 Praxis

The praxis component of the current study was the realised activity uncovered during the empirical investigation. It formed the foundation for the development of Figure 6.1's conceptual framework. Once again, the current study is investigating the 'core' of the research domain, but is doing so from a unique perspective. Whereas Chapter 3 represented a synergistic review of the SISP literature due to the use of a SAP lens, the empirical component of the study realises the benefits that may be accrued from the actual application of such a perspective to realised praxis.

With praxis referring to the "vast social enterprise of day-to-day activity" (Campbell-Hunt, 2007: 794), the social component of the study gained prominence. The SISP literature sporadically recognises the importance of its social dimension. Avgerou and McGrath (2007) cite the social dimension of SISP as being particularly important due to the diverse backgrounds of those involved. The current study produced findings that proved such an assertion true. The senior managers and practitioner groups with whom they engaged during the practice of SISP represented a hugely diverse population. Roepke et al. (2000) recognise the social complexities involved in their study of 3M's IS development of a leadership capability in its people. In their research into the process of strategic information systems implementation, Silva and Hirschheim (2007) posit that not only should the technical aspects be of concern, but also the social dynamics of an organisation. IS, by its very definition, is the coming together of people with hardware and software. However, the importance of the social dimension of SISP is not matched by a commensurate quantity of rich empirical studies conducted in the SISP research domain (Peppard et al., 2014). Thus, the multi-level perspective upon senior managers' practice of SISP builds upon the extant literature, with particular emphasis on social activities at the meso-level in the form of Social Practices, at the micro-level as represented by Communication Practices, coupled with the inherent linkages that exist therein. The adopted SAP lens has proven beneficial in studying the social component of the practice of SISP by senior managers. The novel methodological approach employed answers calls from literature pertaining to the concept of the sociomateriality of IS for new methodologies inclusive of "practice-oriented scholarship" (Cecez-Kecmanovic et al., 2014: 826).

#### 6.5.3 Practitioner

The third 'P' associated with the SAP lens is that of practitioners. Due to their centrality to the study's topic of investigation, senior managers form the central focus of

the current section. Aside from senior managers, two additional practitioner groups were found to impact upon the practice of SISP. External consultants emanating from the macro-level, extra-organisational realm and middle managers from the micro-level, intra-organisational context were discovered to play significant roles in the study's empirical investigation. The current study does not aim to make stand-alone claims as to the role of the external consultant and middle manager practitioner groups in their practice of SISP. The same sentiment holds true for the Head of IS as an individual, intra-organisational practitioner. Instead, they were solely explored in the context of how they were engaged by senior managers. Yet, the investigation did uncover insights of merit. Senior managers played a mediating role in regard to the extent of each practitioner/practitioner group's participation in the practice of SISP.

#### 6.5.3.1 Senior managers

Returning to Chapter 3's review of the SISP literature, practitioners were segmented into three distinct categories as per Jarzabkowski and Spee's (2009) framework. 138 studies featured aggregate, intra-organisational practitioners, with the remaining 15 exploring individual, intra-organisational practitioners. The SISP literature's proclivity towards the former is mirrored by the current study's focus upon the senior manager practitioner group. A myriad of studies persist across the decades pertaining to senior managers and various SISP-related activities, inclusive of; senior manager support of IS initiatives (Lacity et al., 1997; Wexelblat and Srinivasan, 1999); their role in the SISP-related activity of IS-business strategic alignment (Dutta, 1996; Preston and Karahanna, 2009b); or various aspects of senior managers' participatory activity during SISP (Basu et al., 2002; Pita et al., 2009). Further fragmentary evidence of senior managers' practice of SISP appears, incorporating the requirement for senior managers to create conditions conducive to the development of IS infrastructure and management capabilities (Mithas et al., 2011) and their commitment to SISP as a key determinant of IS success (Silvius and Stoop, 2013).

However, upon reviewing the SISP literature, the researcher was struck by the rather disjointed manner in which the activity or praxis of senior managers in the field's core topic is represented. A more holistic viewpoint on senior managers was found lacking, as was an integrative framework that married the mediatory dimension of senior managers' activity between levels to their practice of SISP. The extant literature predominantly fails to explicitly recognise senior manager activity beyond the boundaries of the meso-level (Bélanger and Tech, 2014). Thus, the evident gap in the extant literature relates to the lack

of studies exploring the 'how' (Peppard et al., 2014) of the practice of SISP by senior managers in a more encompassing sense. It was this gap that proved the primary motivator for the current research. The presented study encapsulates a range of pertinent practices across three realms of practice and the role of senior managers therein, focusing upon the 'doing' of SISP as engendered by the adopted SAP lens.

#### 6.5.3.2 External Consultants

External consultants played an integral role in both the PS1 and PS2 case studies. In PS1, the single external consultant drove SISP-related practices that ultimately led to the organisation's first formalised IS strategy. Despite the study's focus upon senior managers, the insights gleaned from empirical enquiry add to the sparse research on external consultants within the extant SISP literature (Bakar et al., 2010; Beath, 1991; King and Teo, 1996; Powell and Dent-Micallef, 1997; Sutherland and Remenyi, 1995; Teubner, 2007), inclusive of Beath's (1991) work on the IS champion and the possible supporting role of external consultants, Teubner's (2007) exploration of SISP in the financial services industry and the guiding role of consultants therein, and Bakar et al.'s (2010) research linking external consultancy expertise to SISP success.

The current study adds to the body of knowledge through an empirically grounded study that uncovered the realised praxis of external consultants in two PSOs. The criticality of their role during senior managers' practice of SISP was evident in both case sites. For PS1 in particular, the single external consultant employed was largely responsible for the organisation's entire SISP practice, engaging with a wide range of stakeholders and introducing various practices, e.g. the SISP Episodic Practice of the IS Council. A more confirmatory role was evident in PS2, with external consultants employed to not only challenge existing approaches, but also act as a verification measure for the practice of SISP. It is this inherent focus upon the 'doing' of SISP that forms the novel dimension of the study's insights into external consultants. The conceptualised Advisory Practices at the macro-level realm and their associated linkages encapsulate the role of external consultants during the practice of SISP by senior managers.

#### 6.5.3.3 Middle Managers

Similarly, the role of middle managers remains clouded in the SISP domain, which may be attributable to its preoccupation with senior managers. It has been previously posited that a possible explanation for this shortcoming is a lack of specificity in case-based research concerning the practitioners involved. Yet, despite middle managers' role in

more generalised strategic planning practices being widely explored (Lavarda et al., 2010; Raghu Raman, 2009; Wooldridge and Floyd, 1990; Wooldridge et al., 2008), the SISP domain remains deficient in such studies. Leidner and Milovich's (2014) work forms a recent study that has placed middle managers in a more central role for investigation purposes, focusing on their awareness of, and involvement in IS strategy.

The current study indirectly adds to the body of knowledge on middle managers in the SISP domain. It views middle managers as a key organisational resource that can contribute to senior managers' practice of SISP, but which may not always be leveraged to its maximum potential as was evidenced in PS1. The study's multi-level framework allowed the researcher to encapsulate the praxis of middle managers due to its inclusion of the micro, sub-organisational-level and the Collaborative, Communication, and Cocreation Practices identified therein. It is at this more micro-level realm where middle managers primarily function, with the shortage of middle manager-centric studies a negative consequence of the strictly meso-level focus of the extant SISP literature. The example from the PS2 case study in which a middle manager's praxis was linked to the macro-level domain presents a novel, though ancillary finding from casework. The role of middle managers during the practice of SISP is conceptually ensconced in the framework's micro-level practices of Collaborative, Communication, and Co-creation Practices, and in both the micro-meso and micro-macro level linkages.

# 6.5.3.4 The Head of IS

The current study reiterates findings from prior research that highlight the criticality for an organisation's Head of IS to possess a dual skill set encompassing IS and wider business acumen. Examples of such studies include Lederer and Mendelow's (1987) exploration of the Head of IS's difficulties in understanding senior managers' objectives, Applegate and Elam's (1992) identification of the the growing need for an organisation's Head of IS to possess broader organisational knowledge, and Peppard's (2010) insights into the Head of IS's expectation management capabilities and their methods for educating their fellow senior managers. The study also mirrors the extant literature's identification of the criticality of the Head of IS's relationship with their CEO (Feeny et al., 1992; Johnson and Lederer, 2003, 2007). Raghunathan and Raghunathan's (1989) work on the relationship between the rank of the Head of IS and the practice of SISP is supported by the current investigation when comparisons are made between PS1's practice of SISP and that of PS2, with the former organisation lacking IS representation on its top management team. PS2's Head of IS assumed a position of parity with their fellow senior managers,

acting as a key member of senior management. Whilst mirroring extant literature, each of these comparisons may be looked upon as possessing a novel dimension due to their inherent SAP perspective.

Similar to the researcher's assertions on the role of external consultants and middle managers during SISP, the current study does not attempt to delineate individual senior managers from one another. The researcher uncovered insights into instances of an individual practioner's praxis during casework. However, such instances form an ancillary rather than core dimension of the study. Vigilence to the research question posed remained constant throughout the duration of the study.

#### 6.5.4 The Concept of Levels and their Inter-linkages

The concept of levels, represented by macro, meso, and micro realms, forms an integral component of the study's conceptual framework. In Chapter 3's review of the SISP literature, a stark finding was that all of the reviewed 153 empirical studies reside at the meso-level, supporting claims that IS research oftentimes doesn't acknowledge its multi-level nature (Bélanger and Tech, 2014). Whilst comprehensible due to SISP's remit being primarily located at the level of the organisation, it was surprising to find that no research within the domain explicitly focused upon either macro or micro levels. Possible reasons for this anomaly were proffered, inclusive of the difficulty associated with gaining the requisite access for exploring such phenomena, particularly at the macro-level. Basu et al.'s (2002) and Mithas et al.'s (2011) studies exemplify this meso-level propensity. The former focuses upon the impact of senior manager involvement on SISP (meso-level), whilst the latter explores the praxis of senior managers in the development of an organisational (meso-level) IS infrastructure. The researcher views this concentration of the SISP literature at the meso-level as a positive correlation with the current study. The investigation presented does not eschew the propensity for SISP research to be conducted at the meso-level. Whilst the current study reaffirms this concentration, it does so by means of a novel perspective through the use of a SAP lens. The objective of the current study is to uncover the 'core' of SISP by answering the research question, i.e. how it is actually practiced by senior managers. Despite the large number of studies residing within the meso-level's remit, it is the researcher's belief that a more holistic answer to this fundamental question remains largely unanswered.

Yet, as has been elucidated in both Chapter 5's case narratives and the current Chapter's conceptual framework, a multi-level perspective engendered by the chosen SAP perspective (Jarzabkowski and Spee, 2009) was required to uncover the practice of SISP

by senior managers. The impact of Sectoral, Technology, and Advisory Practices at the macro-level and Collaborative, Communication, and Co-creation Practices at the micro-level proved significant. Whilst the current research does indeed reside at the meso-level, it makes explicit that the practice of SISP does not occupy a meso-level vacuum devoid of inter-level linkages. It is here that the adopted SAP lens has added value to the SISP literature. An explicit levels perspective unearthed the commonality of intra and inter-level linkages, and indeed the mediating role of senior managers therein. The SISP literature has yet to make such empirically grounded linkages. Baskerville and Myers' (2009) work on fashion waves in IS could be viewed as pertaining to the influences of macro-level practices upon organisational or meso-level practices. However, the paper represents a top-down approach. Whilst the authors propose that fashions should either be fostered or dampened through collaboration between practice and academia, it is very much an abstract concept lacking empirical exploration. Thus, a point of divergence between the current study and the stock of extant knowledge incumbent in the SISP domain is underscored.

#### 6.5.5 The Public Service Context

The current study was executed in the public service domain due to the evident lack of such studies combined with the access the researcher was able to attain. The chosen case sites allowed a degree of access that may not have been attainable in organisations located in the private sector, a crucial factor in a SAP-based study. There have been enduring calls from the SISP domain for more research set in a public service context (Rocheleau, 2007; Rubin, 1986). Studies delineating sectoral differences across the public and private sectors (Nutt, 1999), differences in senior managers' characteristics in the public and private sectors (Arroba and Wedgwood-Oppenheim, 1994), and the role of strategic planning as an important tool in PSOs (Ugboro et al., 2011) emanate from related research disciplines.

A number of SISP-related studies from the current decade have been carried out within a public service context such as Bakar et al.'s (2010) work in evaluating SISP performance in Malaysian government agencies, Abraham and Junglas' (2011) work situated in a public healthcare organisation and Steventon et al.'s (2012) research set in a local government body. Yet, a shortage pervades the extant literature. The current study adds to the limited number of such studies. Specifically, the conceptual framework's Sectoral and Technology Practices at the macro-level encompass SISP-affecting practices as they pertain specifically to organisations located within the public service realm.

#### 6.5.6 Concluding Comments on Comparisons with the Extant Literature

A comparison of the current study with the extant SISP literature yielded interesting results. The researcher concluded that the literature portrays a somewhat disjointed representation of the domain's core activity, rendering the research question largely unanswered. The prior sections have demonstrated that the study achieves more than simply building upon what is already known. Sections 6.5.1, 6.5.2, and 6.5.3 each highlight how the adopted SAP lens has enabled the researcher to augment what may be viewed as the 'core' of the SISP domain, i.e. the practice of SISP, realised praxis, and practitioners constituted as senior managers, in novel ways.

Figure 6.1 presents a more holistic perspective upon SISP as practiced by senior managers than is currently found in the extant literature. The study's focus upon the aggregate, intra-organisational practitioner group of senior managers is commensurate with the SISP literature's propensity for studying such practitioners. Yet, the researcher discovered the stock of knowledge to be inconclusive, with the current study offering a more transparent viewpoint upon how senior managers practice SISP. In addition, the study's conceptual framework vividly portrays the adopted levels perspective and the mediating role of senior managers between levels and their associated bundles of practices. Such a construct was found lacking in the extant empirical work. Whilst senior managers are central to the topic of investigation, insights into additional practitioners were accrued, specifically as they relate to senior managers' practice of SISP. The treatment of external consultants and middle managers proved rather superfluous in the SISP literature, with the current study adding to the body of knowledge on each practitioner group. The role of the Head of IS during SISP was largely affirmed.

From section 6.5.4's focus upon a levels perspective, the current study follows the dominant trend of SISP research to reside at the meso-level. Yet, Figure 6.1's conceptual framework elucidates the linkages that exist between the meso-level and its associated practices of Structural, SISP Episodic, and Social Practices with Sectoral, Technology, and Advisory Practices at the macro-level and Collaborative, Communication, and Co-creation Practices at the micro-level. It also encapsulates the influencing and adoptive roles played by senior managers therein. In addition, macro-micro level linkages are illustrated. It is such inter-level linkages that were found lacking in the extant SISP literature. Finally, section 6.5.5 describes how the public service context in which the current study has been executed answers explicit calls for more SISP research featuring PSOs. The rigorous manner in which the investigation was executed combined with the rich case narratives of

PS1 and PS2 provide meaningful contributions to this under-developed component of the SISP literature.

# 6.6 Concluding Comments on the Study's Conceptual Framework

The purpose of the current chapter is to detail the conceptual framework developed for answering the research question posed. The primary goal was making clear the linkages between the case narratives located in Chapter 5 and the generated conceptual framework in Figure 6.1. By adopting a SAP lens for the conduct of the current study, the framework effectively represents SISP as practice, further refined to a senior manager perspective and contextualised to the public service domain. Each of the framework's constructs has been discussed in detail, as have the inter-level linkages that exist between the macro, meso, and micro level realms.

Comparing the conceptual framework with the SISP literature to which it is making its contribution revealed research areas that have been reinforced by the study, in addition to sub-topics that add a novel dimension. The study represents a holistic viewpoint on how SISP is practiced by senior managers in PSOs, countering the rather disjointed nature of extant research in the field.

# **Chapter 7 - Conclusions and Implications of the Study**

#### 7.1 Introduction

Chapter 6 presented the conceptual framework detailing the practice of SISP by senior managers. It emerged from the analysis of the collected data described in Chapter 5's case narratives of PS1 and PS2 that were executed using the research approach elucidated in Chapter 4. Each of the framework's components were intrinsically linked to the data so as to represent what transpired 'in practice' in the two employed case sites, thus removing a level of abstraction to uncover the realised praxis of senior managers. The framework was then compared to the SISP literature located in Chapter 3, with points of both convergence and distinction highlighted and elaborated upon.

The current chapter encompasses the researcher's reflections upon a range of key dimensions. Specifically, the study's contribution to knowledge is outlined in section 7.2, before its implications for theory and practice are described in sections 7.3 and 7.4 respectively. Section 7.5 describes the identified limitations of the study, before a comprehensive spectrum of avenues for further empirical enquiry is delineated in section 7.6. The chapter, and indeed the thesis, is brought to a close with the researcher's concluding comments in section 7.7.

# 7.2 The Study's Contribution to Knowledge

The current study set out to answer the research question: 'How is Strategic Information Systems Planning Practiced by Senior Managers?' It was deemed critical to remain faithful to the case data when building theory (Hoon, 2013). Thus, the resultant conceptual framework encapsulates the core findings of the data collection and analysis process. Chapter 5's case narratives and Chapter 6's conceptual framework are supported by empirical findings so as to reveal what happened 'in practice', focusing on the 'doing' of IS strategising (Peppard et al., 2014). The study makes a number of pertinent contributions to knowledge in its associated research domain of SISP that are now discussed.

# 7.2.1 A Novel Conceptual Framework Representing the Practice of SISP by Senior Managers

At a fundamental level, the study contributes a novel conceptual framework that represents the practice of SISP by senior managers in PSOs. A comprehensive framework of this nature is lacking in the literature. As highlighted, the SISP literature is characterised by a rather disjointed representation of its core practice, a trait that pervades the wider IS literature (Galliers, 1999). The empirically grounded conceptual framework presented in Figure 6.1 integrates a disparate array of constructs so as to portray a holistic perspective upon the study's topic of enquiry. Nine distinct practices were identified: Sectoral, Technology, and Advisory Practices at the macro-level, Structural, SISP Episodic, and Social Practices at the meso-level, and Collaborative, Communication, and Co-creation Practices at the micro-level. The framework incorporates verticality in the form of the three realms of practice, with the interconnections between realms represented by their inter-linkages. The researcher views Figure 6.1's conceptual framework as a unique, substantial contribution of the current study, answering the researcher question posed through its comprehensive representation of the practice of SISP by senior managers.

## 7.2.2 The Development of a Levels Perspective on SISP

The study reveals that the practice of SISP by senior managers is not restricted to a siloed, organisational-level activity. The incorporation of levels of practice revealed two-way linkages between meso-level Structural, SISP Episodic, and Social Practices with Structural, Technology, and Advisory Practices at the macro-level and Collaborative, Communication, and Co-creation Practices at the micro-level. Indirect linkages were also uncovered between macro and micro levels. The conceptual framework elucidates the boundary-spanning role of senior managers between the meso-level and both the extraorganisational field and intra-organisational context. Thus, the study answers explicit calls for research located within the IS domain to recognise its oftentimes multi-level nature. It eschews the shortcomings associated with a more myopic research approach, consequently bolstering the robustness of the research design, the validity of the research's findings, and embracing the opportunity to provide novel research contributions (Bélanger and Tech, 2014).

# 7.2.3 The Wedding of the SISP and SAP Research Domains

The conceptual framework represents a novel wedding of the SISP and SAP research domains. Timely calls emanating from the SISP literature for research exploiting the

Information Systems Strategy-SAP joint agenda (Teubner, 2013; Whittington, 2014) have engendered the current study with relevancy to its field of research. The employed SAP perspective formed a lens through which data collection and analysis was conducted. It ingrained the study with a focus upon those elements deemed crucial to the practice of SISP, proving beneficial to the researcher during the conduct of the empirical investigation (Hughes and McDonagh, 2014a). Meso and micro level intra-organisational practices were explored and detailed, as were their linkages to the macro-level realm in addition to the role of strategy practitioners therein (Vaara and Whittington, 2012). As has been described at an earlier juncture, practice-based studies have permeated a diverse range of related research disciplines, included amongst which are works into leadership as practice (Raelin, 2011), organisational change as practice (Jansson, 2013), accountancy as practice (Kornberger and Carter, 2010), business ethics as practice (Clegg et al., 2007) and marketing as practice (Browne et al., 2014). Most pertinent has been the recent wave of studies emanating from the IS strategy domain that incorporate a SAP perspective (Arvidsson et al., 2014; Henfridsson and Lind, 2014; Huang et al., 2014; Leonard and Higson, 2014), adding support to the relevancy of the current study's coupling of the SISP and SAP research domains.

#### 7.2.4 A Novel Review of the SISP Literature

The casting of a SAP lens resulted in a fresh perspective on the SISP literature, revealing the empirical core of the research domain, i.e. meso-level praxis by aggregate, intra-organisational practitioners. The core constructs upon which SAP is anchored, namely practice, praxis, and practitioners were employed as a framework by which the literature was distilled. Specifically, Jarzabkowski and Spee's (2009) classification system was adopted, enabling a more systematic approach to the review (Paré et al., 2015). It also allowed for the literature to be segregated on a levels basis, vividly portraying the meso-level bias of empirical studies in the SISP domain. A myriad of rich, under-researched domains were identified, pointing the way forward towards a rich agenda for further enquiry. The core elements of the SAP domain were identified and shown to be widely present in the SISP literature. It ultimately resulted in a novel review of the SISP literature (Hughes and McDonagh, 2014b) as presented in Chapter 3.

### 7.2.5 A Holistic View on the Role of Senior Managers during SISP

The current study explores how senior managers practice SISP. Forming a recurrent theme, the extant literature treats the role of senior managers during SISP in a fragmentary manner. This empirical investigation forms a more aggregated, cohesive representation of how this pivotal intra-organisational practitioner group practices SISP, countering the more nuanced proclivities of the extant studies (Hasan and Lampitsi, 1995; Raghunathan and Raghunathan, 1988; Silvius and Stoop, 2013). In addition, it broadens the scope of senior managers' praxis during SISP to encapsulate not only meso-level practices in the form of Structural, SISP Episodic, and Social Practices, but also their mediating adoptive and influencing roles with Sectoral, Technology, and Advisory Practices at the macro-level and Collaborative, Communication, and Co-creation Practices at the micro-level. This recognition of the boundary spanning, inter-level praxis of senior managers during SISP provides a fresh perspective on their role in this challenging, core organisational practice (Mirchandani and Lederer, 2014; Stace et al., 2012).

#### 7.2.6 A Contextualisation of SISP to the Public Service Domain

The investigation is contextualised to the public service domain, thus answering enduring calls from within the SISP literature for more research set in a public service context (Rocheleau, 2007; Rubin, 1986). The emergent Sectoral and Technology Practices at the macro-level place a specified emphasis upon practices unique to the public service realm. SISP-affecting Sectoral Practices in the form of governmental budgetary reductions and recruitment embargoes, coupled with Technology Practices pertaining to IS initiatives in the form of cloud computing and shared services, encapsulate distinct facets of the public service context. Their direct effect on Structural, SISP Episodic, and Social Practices at the meso-level coupled with their more indirect relationship with Integration, Communication, and Co-creation Practices at the micro-level have been elucidated by the rich case narratives of two PSOs. As such, the conceptual framework brings a novel dimension to the SISP literature in its theorisation of related bundles of practices that can influence the practice of SISP by senior managers in a defined public service setting.

#### 7.2.7 Concluding Comments on the Study's Contribution to the SISP Domain

Figure 6.1's conceptual framework provides a novel theoretical representation of how SISP is practiced by senior managers in PSOs. It develops a levels perspective on SISP across macro, meso, and micro realms. A marrying of the SISP and SAP research domains was engendered by the chosen methodological approach. One of the key outcomes from the adoption of a SAP perspective was the production of a unique review of the SISP literature, effectively forming a lens through which the literature was delineated. The study has provided a more holistic view on the role of senior managers during their

practice of SISP, moving beyond the organisational level to encapsulate their mediating role between both the macro and micro levels. Finally, the study is contextualised to the under-researched public service domain, offering novel insights specific to this sector. The researcher is satisfied that the study has proven of merit, representing a substantial contribution to knowledge in its research domain of SISP across a range of research topics.

# 7.3 Implications for Theory

A rigorous review of the SISP literature revealed that no prior research had been conducted into the chosen research topic, with the extant literature highlighting a requirement for more research into IS strategising behaviour (Earl 1993; Teubner 2013) in PSOs (Rocheleau, 2007; Rubin, 1986). The substantive theory representing SISP as practice is applicable to the aggregate, intra-organisational practitioner group of senior managers. Whilst not as generalisable as formal theory, the conceptual framework represents a building block towards a more formalised theory for the practice of SISP. Substantive theory proves applicable to similar contexts, so the scope of the generated framework moves beyond the boundaries of senior managers in Irish PSOs to similar domains of action.

For the SISP domain, the study's theoretical contribution is Figure 6.1's conceptual framework representing the practice of SISP by senior managers. An understanding of this fundamental organisational practice is of value for a range of reasons. As stated, the ability to formulate an effective IS strategy is viewed as a key factor in improving organisational performance (Leidner et al. 2011; Okpattah et al. 2014). It is viewed as a critical challenge for management (Mirchandani and Lederer, 2014) and an enabler of wider business strategy (Preston and Karahanna, 2006). Despite its evident importance, little empirical enquiry of a more holistic nature has been undertaken on this topic. The framework's incorporation of the construct of levels (Jarzabkowski and Spee, 2009) is novel within the SISP domain. Whilst the study is primarily located at the meso-level, a sole focus upon the meso-level would not capture the practice of SISP's inherent complexity. Thus, the framework's multi-level design consisting of macro, meso, and micro realms provides a comprehensive theoretical representation of the topic of investigation, highlighting the mediating role of senior managers between levels. Senior managers move beyond their immediate meso or organisational level to assume adoptive and influencing roles with their macro-level context and its associated Sectoral, Technology, and Advisory Practices, and their sub-organisational or micro-level and its inherent Collaborative, Communication, and Co-creation Practices. The framework incorporates senior managers' engagement with additional stakeholder groups in the form of extra-organisational consultants and intra-organisational middle managers. With its multi-level design, the conceptual framework provides a holistic representation of the practice of SISP by senior managers.

For the SAP domain, the generated theoretical framework builds upon Whittington's (2002; 2006) theory of SAP. It also adopts Jarzabkowski and Spee's (2009) delineation of levels. Due to it being a relatively nascent research domain, the majority of SAP literature resides in the philosophical realm, with a mere 52 out of the 114 reviewed papers featuring an empirical component. The current study's theoretical framework is grounded in empiricism, thus adding credence to its academic value. An additional theoretical contribution of the study to the SAP domain is its further elucidation of the applicability of a practice-based perspective to a related research discipline, similar to studies exploring leadership as practice (Carroll et al., 2008; Raelin, 2011), organisational change as practice (Jansson, 2013), accountancy as practice (Kornberger and Carter, 2010), business ethics as practice (Clegg et al., 2007) and marketing as practice (Browne et al., 2014). The current study's specified SAP-based perspective is commensurate with the recently heralded SAP-IS strategy joint agenda (Whittington, 2014).

# 7.4 Implications for Practice

For practice, SISP has proven a significant managerial concern. It has assumed a position of prominence in management agendas in recent decades largely due to the proliferation of IS (Teubner, 2013). IS strategy has become a cornerstone of business positioning and processes (Stace et al., 2012). With 87% of business leaders believing IS to be critical to their business (Chen et al., 2010), IS strategy has ranked within the top five IS concerns for management (Luftman and Ben-Zvi, 2011). Whilst the study is first and foremost located in the realm of academia, the framework has the potential to navigate to the domain of practice and counter some of the more negative commentary concerning the fervent rigour vs. relevance debate. The argument centres on whether or not IS research can maintain its academic rigour whilst still possessing relevancy for practice (Peppard et al. 2014; Baskerville and Myers 2009). The researcher believes that the incorporation of a SAP perspective into the research design imbued the study with an affinity to practice whilst also benefitting from the rigorous empirical tools afforded by the case study approach.

The generated substantive theory is highly applicable to the research context of the public service domain and senior managers' practice of SISP therein. As such, the framework has the potential to be employed as a conceptual tool. It can allow senior managers to map the core practices of Sectoral, Technology, and Advisory Practices within their macro-level environment. At the meso-level, Structural, SISP Episodic, and Social Practices are key practices to be ascertained. The more micro-level, sub-organisational practices of Collaborative, Communication, and Co-creation Practices represent further elements to be evaluated. The empirical investigation provides a view of the practice of SISP by senior managers through a SAP lens and so reveals the 'doing' or realised work of senior managers 'in practice'. The conceptual framework is empirically grounded, and thus may be viewed as bereft of some of the more abstract features of academic works lacking such a focus.

The framework makes a substantial contribution to the community of practice in the Irish public service context. Specifically, the role of macro-level Sectoral and Technology Practices highlight the requirement for governments to make greater efforts to fully realise their advocated practices. The impact of governmental restrictions upon recruitment and funding was starkly highlighted during casework, as was the contrast in budget autonomy afforded to each of the featured PSOs. Early adopters of Technology Practices such as cloud computing, shared services, and eGovernment may encounter infrastructural deficiencies, leading to an inability to fully incorporate such practices into their organisation.

The research findings confirmed the critical roles of disparate practitioners involved in the practice of SISP. From a resourcing perspective, Advisory Practices and their associated external consultants returned varying results. This finding has implications for the recruitment of such practitioners. The benefits of leveraging the inherent expertise of the intra-organisational practitioner group of middle managers were also highlighted. The role of Collaborative, Communication, and Co-creation Practices proves crucial for the incorporation of middle managers into SISP. A Head of IS in possession of a dual skill set that encapsulates both business and IS acumen (Stephens et al. 1995; Gottschalk, 2002) has become a necessity, and thus eschews the more archaic view of the Head of IS as a rigidly techno-centric individual (Applegate and Elam, 1992). The abilities to work across organisational functions, facilitate interaction amongst senior managers, and actively participate in wider business strategising are key traits of the modern CIO-type Head of IS.

It is here that the enabling role of meso-level Structural, SISP Episodic, and Social Practices is prominent.

# 7.5 Limitations of the Study

The researcher is satisfied with the design, execution, and findings of the current study. However, it was deemed important to highlight the research's limitations.

Firstly, the study was undertaken by a relatively novice researcher lacking experience in conducting research of this scope and nature. Whilst the researcher has previous experience in conducting an empirical study for the completion of a Masters dissertation, the scale of the current study dwarfs all prior academic endeavours. However, a Ph.D. is unique by its very nature, and sufficient experience in executing a study of the magnitude befitting a Ph.D. is oftentimes an unrealistic pre-requisite. The researcher embraced the challenge and became immersed in the academic realms of philosophy, methodology, and theory, contextualising the study to the domains of SAP and SISP in which an inherent interest was further cultivated.

The study features a relatively small number of cases (two), the recruitment of which was defined by the devised case selection criteria. Each case resides within the same sector of the public service, i.e. healthcare. A larger number of cases across varying research domains could have improved the study on the grounds of imbuing greater generalisability. However, it is the researcher's belief that two cases strike the optimum balance between having the necessary breadth from which to build credible theory and also allowing for the depth to pursue rich data on account of the exploratory nature of the research. A review of the SAP literature revealed that studies of this nature have a strong tendency to feature either a single or a small number of case studies. Given that two cases would be employed, a replication logic (Yin, 2009) was deemed appropriate for investigation into an under-explored phenomenon. Subsequently, the healthcare domain provided suitable candidate organisations. From a theoretical standpoint it was neither the researcher's goal, nor was it feasible for the completion of this doctoral thesis, to produce a formal theory for the practice of SISP by senior managers in PSOs. Rather, the generated substantive theory is suitable for the exploratory nature of the study, forming a foundation upon which further research may be built.

The study chose to rely upon interview data, documentation, archival records, and physical artefacts (Yin, 1994), thus excluding participant and direct observations. The

researcher is cognisant that participant and direct observations could have proved beneficial to the study. Indeed, observational approaches are oftentimes espoused within the theoretical literature for SAP-based studies (Chia and MacKay, 2007; Fenton and Langley, 2011; Jarzabkowski et al., 2007; Miettinen et al., 2010; Rasche and Chia, 2009; Whittington, 2004). However, the frequency of observation-based studies does not match the goodwill expressed towards their suitability, a discrepancy most likely borne out of the inherent difficulties associated with conducting such projects. For the current study, this also proved true due to difficulties in the obtainment of the requisite access and concerns regarding the completion of the project within the allocated timeframe. In addition, a possible issue for studies incorporating participant observation techniques is that a researcher's presence may bias or skew discussions due to the possibly sensitive nature of the material.

Balogun et al. (2003) elucidate the array of theoretical alternatives and methodological choices that await researchers who undertake a study of strategising. Indeed, boundaries between such decisions are often difficult to define. Being a SAP-based study located within the SISP domain, the researcher encountered the reality of a relatively nascent SAP literature set largely biased towards theoretical rather than empirical works (62 v. 52). As such, there did not exist a wealth of material from which to draw upon in terms of an established set of methods for researching the strategic practice of SISP. Theoretically, it has been suggested that ethnography could prove the optimal approach. However, such claims were not supported by the undertaken empirical studies, with the case study methodology accounting for 42 out of the 52 papers compared to just 9 ethnographic studies. Once again, the difficulties in undertaking an ethnographic study could be surmised as a possible reason, in addition to the strengths and flexibility afforded by a case-based approach. The researcher's adoption of a SAP lens for the conduct of casework was an additional tool employed to further refine the focus of the study to the phenomenon under investigation.

The wider study was conducted over a relatively short period of time so as to conform to the guidelines of completing a Ph.D. on a full-time basis. The study explores the practice of SISP by senior managers in two case sites relative to IS strategies covering periods of three (PS1) and five (PS2) years respectively. The ability to trace the practice of SISP in real-time could have proved beneficial, as would an allowance to expand the study's timeframe to explore prior SISP practices as they pertained to earlier IS strategies. The time limitation imposed by the regulations as set forth by the researcher's University

rendered such scope an unrealistic objective. In addition, a longitudinal study would naturally move the research towards a process-focused project (Van De Ven, 1992; Langley, 2007). One of the distinguishing features of a SAP-based study is to effectively go inside the process to uncover the more nuanced, micro activities the practice entails. This naturally requires a more in-depth approach to a shorter timeframe.

In terms of the chosen literature sets reviewed, the decision was guided primarily by the research question. The boundaries and time constraints associated with the successful completion of a Ph.D. thesis were also factored into literary considerations. Subsequently, the SAP and SISP bodies of literature were deemed most appropriate. It is possible that expanding the literature further could have proved beneficial. The wider literature on practice (Wittgenstein, 1951; Heidegger, 1962; Giddens, 1976; Bourdieu, 1990) beyond that featured in the SAP domain could have proven a worthy inclusion, as could an expansion of the SISP literature into the wider IS domain (Chen et al., 2010). In addition, given the study's context of the public service, it may have benefitted from further exploration of literature pertaining to strategising in the public service domain. However, the research makes its primary contribution to the SISP domain and was largely aided by the adopted SAP perspective that pervades the study. The researcher did include an overview of the theoretical underpinnings of the SAP domain in Chapter 2. The researcher also conducted a separate review of literature pertaining to senior managers and IS of a more generalised nature during the earlier stages of the research, a task that played a formative role in the construction of the research question. Finally, relevant literature pertaining to characteristics of the public service domain were consulted and reviewed (Andrews et al., 2005; Andrews et al., 2007, 2009, 2011; Boyne and Walker, 2010; Boyne, 2002; Meier et al., 2006; Palfrey et al., 2006; Poister and Streib, 1994; Poister and Streib, 1999; Poister, 2010; Ugboro et al., 2011), with a particular emphasis placed upon such research in the SISP and SAP literature sets (Bakar et al., 2010; Hasan and Lampitsi, 1995; Hoon, 2007; Lavarda et al., 2010). Ultimately, given the aforementioned constraints, the researcher is satisfied that the correct decisions were made and the most appropriate literature was reviewed for the current study.

# 7.6 Avenues for Further Enquiry

The researcher has identified a range of possible areas that could fuel further enquiry. The section opens with a portrayal of the fundamental alterations that could be made to the very design of the current study, with disparate approaches posited as lending alternative

perspectives on the research's topic of enquiry. The section then focuses upon the five key research topics that the researcher deems most appropriate for prioritisation, effectively forming a strategic agenda for building and extending upon the current study.

# 7.6.1 Furthering the Research from a Research Design Perspective

The current study's focus is narrowly defined to an exploration of the practice of SISP by senior managers in PSOs. Such delineations are oftentimes a feature of academic research pertaining to the obtainment of the award of a Ph.D. The research was undertaken from the researcher's interpretivist standpoint through the use of a case study approach adopting a SAP lens. Whilst a detailed breakdown of the avenues for further enquiry specific to the devised conceptual framework and its particular constructs are featured in subsequent sections, more foundational approaches to furthering the research from a design perspective are presented here.

Philosophically, the researcher's interpretivist standpoint was intrinsically linked to the framing of the research question and the subsequent choice of methodology. Returning to Orlikowski and Baroudi's (1991) three-fold paradigmatic classification of positivism, interpretivism, and the critical paradigm, research located in either of the positivist or critical paradigms could provide a fresh perspective on the study's topic of investigation. The theory may be refined or extended through a positivist philosophy's more quantitative underpinnings (Guba and Lincoln, 1994) or the more emancipatory nature of critical IS research (Myers and Klein, 2011).

Conceptually, the scope of the current study is confined to the senior manager practitioner group. The study could be extended further through empirical endeavours focused specifically upon additional practitioner groups as they practice SISP. The key roles played by the external consultant and middle manager practitioner groups have been recognised in the current study despite not being an explicit focus, as have the roles of the individual senior manager practitioners of the CEO and Head of IS. Additional perspectives are a natural step in the refinement or extension of a theory as it moves towards the status of becoming a formal theory.

Methodologically, the researcher's case study approach was deemed most appropriate for answering the research question. The adoption of a SAP lens brought a more precisely defined focus to the empirical enquiry. However, valuable findings may also be accrued through the employment of alternative methodologies. The suitability of an ethnographic study has already been described, with its capability of immersing the

researcher into the lives of those practitioners under investigation (Sanday, 1979) proving beneficial. A more collaborative approach in the form of an action research project in which the researcher would partner with practitioners in the cogeneration of knowledge (Coghlan, 2011) holds merit. A process approach's longitudinal timeframe and focus upon "the sequences of incidents, activities, and stages that unfold over the duration of a central subject's existence" (Van de Ven, 1992: 179), and the grounded theory methodology's "systematic set of procedures to develop an inductively derived grounded theory about a phenomenon" (Strauss and Corbin 1990: 24) could also produce compelling additions to the generated theory.

From a situational perspective, the study's scope could be extended geographically to PSOs in countries other than Ireland. Points of similarity and distinction between PSOs in Europe and beyond could prove compelling additions to the theory. In addition, the situational scope of the study may be furthered through a focus upon Irish PSOs in sectors other than healthcare. Valuable research contexts could also take the form of organisations located in the Irish private sector, the private sector internationally, or indeed NGOs and charitable organisations. The incorporation of the employed levels perspective in the form of macro, meso, and micro realms with such disparate contexts could garner insightful findings for further theoretical development.

The current study features an explicit focus upon the planning phase of IS strategising, the propriety of which has been highlighted at numerous junctures throughout this thesis. Whilst forming an inherently distinct research path to that undertaken by the researcher, the linking of SISP to IS strategy implementation could prove a fruitful research stream. As was evidenced during the conduct of casework, the input of practitioners into SISP is not always matched by a similar input to IS strategy implementation. Carefully crafted strategic objectives can be ignored, with their only realised manifestation coming in the IS strategy document itself. An exploration linking the planning and implementation phases could prove a worthwhile endeavour. The high failure rates associated with IS projects (Eveleens and Verhoef, 2010) lends credence to the merit of the conduct of such research.

Finally, a review of the research's codebook reveals a wealth of non-core constructs that merit explicit exploration. The discarding of such a rich resource of empirically grounded material would form a wasted opportunity. The conceptual framework's constructs emerged from the application of Maykut and Morehouse's (1994) rigorous coding technique consisting of nine distinct phases. During the coding process key

categories emerged from the collected data which formed the theoretical basis for the generated conceptual framework. Those categories deemed non-essential to the answering of the research question yet still in possession of academic merit could be reviewed. The outcome from such an undertaking would be a wealth of potential avenues for further investigation.

## 7.6.2 An Exploration of SISP-related Practices at the Macro-level

The macro-level practices of Sectoral, Technology, and Advisory Practices played a key role in shaping how senior managers practiced SISP at the meso or organisational level in the featured case studies. A wealth of secondary materials in addition to the collected primary data verified the significance of their role. An explicit focus upon the macro-level realm would prove a research topic of merit. The current study provides a solid foundation upon which such a research programme could be built. In particular, the researcher holds a keen interest in further exploration of how macro-level Technology Practices, e.g. a government-led initiative towards the utilisation of cloud computing services, are strategically planned at the macro-level. An examination of the practitioners who practice SISP at this level would also form a particularly interesting stream of study. The final priority topic within a research agenda focused upon the macro-level would investigate Advisory Practices and the consultants who advocate them. Given the central role external consultants played in the current study, a programme of study explicitly investigating such practices and the practitioners who enact them would prove of merit.

#### 7.6.3 An Exploration of SISP-related Practices at the Meso-level

Primary data collection highlighted SISP-related meso-level practices as being integral to the practice by senior managers. The three meso-level practices uncovered were conceptualised as Structural, SISP Episodic, and Social Practices. Direct linkages have been made between each of these practices and realised praxis in the employed case studies. The researcher deems the meso-level to be a particularly fruitful realm for further academic enquiry. In particular, the identified Structural Practices form a worthwhile investigatory proposition, specifically in relation to how they may shape senior managers' practice of SISP. The PS2 case study provided insight into the significant effects of a unique functional design upon SISP. From the PS1 case study, a related research stream identified as holding promise pertains to the exclusion of an organisation's Head of IS from its top management team, effectively downgrading the Head of IS's status amongst their senior manager peers. The subsequent effect this has on the practice of SISP could

result in findings of interest as they pertain to organisational hierarchies and the positioning of the Head of IS therein.

# 7.6.4 An Exploration of SISP-related Practices at the Micro-level

The current study discovered that the micro-level realm plays a significant role in the practice of SISP by senior managers. Collaborative, Communication, and Co-creation Practices constitute the conceptualised micro-level practices. Such practices are intrinsically linked to the praxis of the middle manager practitioner group. The unlocking of middle managers' expertise and the fostering of their competencies were uncovered as key activities for senior managers during empirical investigation. Senior managers within PS1 expressed a desire to look outside the boundaries of the senior manager cohort so as to leverage the key resources found in the lower ranks of their organisation, yet were largely unsuccessful at doing so. PS2 was found to exploit its inherent intra-organisational competencies, with its Head of IS encouraging engagement at this level. The researcher has identified the role of IS middle managers in SISP-related activity at the micro-level as being a research topic of value. In addition, an exploration of the particular activities of the Head of IS at the micro-level would prove of merit, with an emphasis on their realised praxis to maximise the skill sets inherent in an organisation's middle layer of management.

#### 7.6.5 The Inter-level Linkages Between Realms of Practices

The conceptual framework makes explicit the inter-level linkages that exist between the identified macro, meso, and micro realms and the adoptive and influencing roles of senior managers therein. The researcher has provided examples of such realised praxis from each of the employed case studies. The linkages between the meso and macro levels, and the meso and micro levels, are central to the current study. The identified macro-micro linkages also hold value, but proved more ancillary in nature to the practice of SISP at the organisational level. The exploration of each of these linkages would provide a rich resource for further empirical investigation, and would specifically add to the dearth of studies in both the SISP and wider IS domains employing a multi-level perspective (Bélanger and Tech, 2014). Of particular interest within this topic of enquiry would be an investigation into the how the identified Sectoral, Technology, and Advisory Practices at the macro-level and Collaborative, Communication, and Co-creation Practices at the micro-level are subsumed into the meso-level practice of SISP.

#### 7.6.6 The Role of the Social Dimension during the Practice of SISP

A pervasive theme throughout primary data collection was the importance of the social dimension to the practice of SISP by senior managers. Whilst it was explored as part of the wider study, the researcher views this construct as a rich avenue for further empirical enquiry. The social dimension of SISP extends beyond the meso-level interaction amongst senior managers to the macro-level context and senior managers' social engagements with consultants and policy-makers. It may also be expanded to include the micro-level realm and senior managers' interactions with intra-organisational middle managers. The extant literature does not feature a wealth studies into the social aspect of SISP (Peppard et al., 2014). Certainly, its representation is not commensurate to the integral role it was discovered to have played in the case studies of PS1 and PS2. The researcher has identified the social interactions between senior and middle managers as being a particularly rich topic for further exploration. How social engagements are enacted between these two layers of management is worthy of explicit empirical attention. In addition, the researcher views informal SISP-related social engagements as being a prosperous area of enquiry that lends itself to a SAP-based study. Such an investigation poses a methodological challenge, placing a significant burden on the researcher to gain the requisite access to investigate informal social phenomena. However, it offers an avenue to incorporate an ethnographic dimension into the research methodology, an approach widely lauded within the prescriptive SAP literature (Fenton and Langley, 2011; Jarzabkowski et al., 2007; Miettinen et al., 2010; Whittington, 2004).

# 7.6.7 Concluding Comments on Avenues for Further Enquiry

The aim of the current section is to delineate areas that could be further explored through empirical investigation. The ultimate remit of this study resides at the meso-level and how intra-organisational senior manager practitioners practice SISP. It was discovered that the identified macro, meso, and micro level practices, inter-level linkages between practices, and the social dimension of SISP all play key roles therein. An opportunity exists for studies focused explicitly on particular dimensions of each of these constructs as evidenced in the proposed research topics. The identified avenues for further enquiry represent a rich strategic agenda for building and elaborating upon the current research.

# 7.7 Concluding Comments

The study's disciplinary boundaries locate the investigation in the wider field of IS. Specifically, its contribution is being made to the SISP domain. IS at large, and SISP in particular, have proven enduring and increasingly important organisational facets for practitioners and academics alike. Much of the academic writings have presented a detachment from the realities of practice. The current study's exploration of the practice of SISP by senior managers aims to fill an evident gap identified in the literature. Both academic and practice-based assertions provide a compelling case for the conduct of an investigation into the chosen research topic.

The use of the case study approach adopting a SAP lens was selected as the optimal methodology for answering the research question. It proved a timely choice due to recent publications pointing to a return to practice as a means for narrowing the gap between SISP research and practice itself. The adoption of a SAP lens was conceptualised as a tool by which an unwanted level of abstraction could be removed from casework by focusing upon the practice being undertaken, i.e. SISP, the realised activity uncovered through casework in the form of praxis, and the primary practitioners involved represented by senior managers. The resultant framework proves to be a holistic conceptualisation of the practice of SISP by senior managers. The researcher is satisfied with the outcome of the study and that the reality of what occurred 'in practice' in the two featured case studies has been effectively uncovered and explored.

Ultimately, the study's investigation into a shortcoming of the SISP research domain, its presentation of a rigorously executed empirical enquiry conforming to the requisite academic standards, its relevancy to practice aided by the adoption of a pervasive SAP lens, and the production of a novel conceptual framework represent a significant contribution to knowledge and a justification for the conduct of the research.

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## Appendix I: Classification of the Reviewed SAP Literature

Author(s)	Year	Source	Journal/Book Title	Content Analysis	Methodology	Sector	Geographic Location	Unit of Analysis
Wittgenstein	1951	Book	Philosophical Investigations					
Heidegger	1962	Book	Being and Time					
Giddens	1976	Book	New Rules of Sociological Method					AL DE
Giddens	1979	Book	Central Problems in Social Theory					
Foucault	1980	Book	Power/Knowledge: Selected Interviews and Other Writings 1972-1977					
Giddens	1984	Book	The Constitution of Society					
MacIntyre	1985	Book	After Virtue					
de Certeau	1988	Book	The Practice of Everyday Life					
Bourdieu	1990	Book	The Logic of Practice		3			
Mintzberg	1990	Journal	Harvard Business Review	Empirical	Case Study - Multiple	Mixed	Mixed	Mixed
Whittington	1996	Journal	Long Range Planning	Conceptual	Manple			
Oakes et al.	1998	Journal	Administrative Science Quarterly	Empirical	Case Study - Single	Public	North America	Mixed
Hendry	2000	Journal	Journal of Management Studies	Conceptual	Single		America	
Luhmann	2000	Book	Organisation und Entscheidung					
Whittington	2001	Journal	Paper for MIT Seminar	Conceptual				
Reckwitz	2002	Journal	European Journal of Social Theory	Conceptual				
Whittington	2002	Journal	Academy of Management Proceedings	Conceptual				
Hendry & Seidl	2003	Journal	Journal of Management Studies	Conceptual				
Jarzabkowski	2003	Journal	Journal of Management Studies	Empirical	Case Study - Multiple	Public	Europe	Senior Managers
Johnson et al.	2003	Journal	Journal of Management Studies	Conceptual				
Maitlis & Lawrence	2003	Journal	Journal of Management Studies	Empirical	Case Study - Single	Public	Europe	Mixed
Regner	2003	Journal	Journal of Management Studies	Empirical	Ethnography	Private	Europe	Mixed
Salvato	2003	Journal	Journal of Management Studies	Empirical	Case Study - Multiple	Private	Europe	Mixed
Samra- fredericks	2003	Journal	Journal of Management Studies	Empirical	Ethnography	Private	Europe	Senior Managers
Whittington	2003	Journal	Strategic Organization	Conceptual				
Chia	2004	Journal	European Management Review	Conceptual				
Clegg et al.	2004	Journal	European Management Review	Conceptual				
Dopfer et al.	2004	Journal	Journal of Evolutionary Economics	Conceptual				
Jarzabkowski	2004	Journal	Organization Studies	Conceptual				

Whittington	2004	Journal	European Management Review	Conceptual				H M. W.
Beech & Johnson	2005	Journal	Journal of Organizational Change Management	Empirical	Case Study - Single	Private	Europe	Mixed
Burgi et al.	2005	Journal	Journal of Management Inquiry	Empirical	Case Study - Single	Private	Europe	Senior Manager
Hafsi & Thomas	2005	Journal	European Management Journal	Conceptual				
Oliver & Burgi	2005	Journal	4th International Critical Management Studies Conference	Empirical	Case Study - Single	Private	Europe	Senior Manager
Chia	2006	Journal	Organization Studies	Conceptual				
Contu & Willmott	2006	Journal	Organization Studies	Conceptual				
Hodgkinson & Wright	2006	Journal	Organization Studies	Conceptual				
Hutzschenreu ter & Kleindienst	2006	Journal	Journal of Management	Conceptual				
Jarzabkowski & Fenton	2006	Journal	Long Range Planning	Empirical	Case Study - Multiple	Mixed	Europe	Mixed
Jarzabkowski & Seidl	2006	Journal	AIM Research Working Paper Series	Empirical	Case Study - Multiple	Public	Europe	Mixed
Jarzabkowski & Wilson	2006	Journal	European Management Journal	Conceptual				
Whittington	2006	Journal	Organization Studies	Conceptual			BFT 6	
Whittington	2006	Journal	Organization Studies	Conceptual				
Whittington et al.	2006	Journal	Long Range Planning	Empirical	Case Study - Multiple	Mixed	Europe	Senior Manager
Campbell- Hunt	2007	Journal	Human Relations	Conceptual				- Transger
Chia & MacKay	2007	Journal	Human Relations	Conceptual				
Gunn & Williams	2007	Journal	Strategic Change	Empirical	Survey	Mixed	Europe	Senior Managers
Hoon	2007	Journal	Human Relations	Empirical	Case Study - Single	Public	Europe	Mixed
Jarzabkowski et al.	2007	Journal	Human Relations	Conceptual				
Johnson et al.	2007	Book						<b>3</b> L
Kaplan	2007	Journal	Academy of Management Review	Conceptual				
Lounsbury & Crumley	2007	Journal	Organization Studies	Empirical	Case Study - Single	Private	North America	Mixed
Palmer & O'Kane	2007	Journal	Journal of Economic Geography	Conceptual				
Paroutis & Pettigrew	2007	Journal	Human Relations	Empirical	Case Study - Single	Private	Europe	Mixed
Whittington	2007	Journal	Organization Studies	Conceptual				
Carroll et al.	2008	Journal	Leadership	Conceptual				
Carter et al.	2008	Journal	Strategic Organization	Conceptual				
Jarzabkowski	2008	Journal	Academy of Management Journal	Empirical	Case Study - Multiple	Public	Europe	Senior Managers
Jarzabkowski & Seidl	2008	Journal	Organization Studies	Empirical	Case Study - Multiple	Public	Europe	Mixed
Jarzabkowski & Whitington	2008	Journal	Strategic Organization	Conceptual				
Regner	2008	Journal	Human Relations	Conceptual	1 1 1 m 3			
Statler et al.	2008	Journal	Scandinavian Journal of	Empirical	Case Study - Single	Private	Europe	Senior Managers

			Management					
Whittington & Cailluet	2008	Journal	Long Range Planning	Conceptual				
Barge	2009	Journal	Communication Studies	Empirical	Ethnography	Private	Europe	Senior Managers
Bouty & Gomez	2009	Journal	EESEC	Empirical	Ethnography	Private	Europe	Mixed
Bouty & Gomez	2009	Journal	ESSEC	Empirical	Ethnography	Private	Europe	Mixed
Elliott & Macpherson	2009	Journal	OLKC Conference	Empirical	Case Study - Single	Public	Europe	Senior Manager
Geiger	2009	Journal	Management Learning	Conceptual				
Jarzabkowski & Balogun	2009	Journal	Journal of Management Studies	Empirical	Case Study - Single	Private	Europe	Mixed
Jarzabkowski & Spee	2009	Journal	International Journal of Management Reviews	Conceptual				
Rasche & Chia	2009	Journal	Organization Studies	Conceptual				
Simpson	2009	Journal	Organization Studies	Conceptual				
Carter et al.	2010	Journal	Accounting, Auditing & Accountability Journal	Conceptual				
Corradi et al.	2010	Journal	Management Learning	Conceptual				
Golsorkhi et al. (Eds)	2010	Book	Cambridge Handbook of Strategy as Practice					
Hendry et al.	2010	Journal	Long Range Planning	Empirical	Case Study - Multiple	Mixed	Australasia	Senior Manager
Jarratt & Stiles	2010	Journal	British Journal of Management	Empirical	Case Study - Multiple	Private	Europe	Senior Manager
Johnson et al.	2010	Journal	Organization Studies	Empirical	Case Study - Multiple	Private	Europe	Senior Manager
Lanzara	2010	Journal	Organization Studies	Empirical	Case Study - Multiple	Public	Europe	Mixed
Lavarda et al.	2010	Journal	RAE	Empirical	Case Study - Single	Public	Europe	Middle Managers
Llewellyn & Spence	2010	Journal	Organization Studies	Empirical	Ethnography	Private	Europe	Mixed
Miettinen et al.	2010	Journal	Organization Studies	Conceptual				
Nicolini	2010	Journal	Organization Studies	Empirical	Case Study - Single	Public	Europe	Mixed
Nordqvist & Melin	2010	Journal	Journal of Family Business Strategy	Empirical	Case Study - Multiple	Private	Europe	Mixed
Sandberg & Dall'Alba	2010	Journal	Organization Studies	Conceptual				
Venkateswara n & Prabhu	2010	Journal	The Electronic Journal of Business Research Methods	Conceptual				
Bartunek et al.	2011	Journal	The Academy of Management Annals	Empirical	Case Study - Multiple	Mixed	North America	Mixed
Brown and Lewis	2011	Journal	Organization Studies	Empirical	Case Study - Single	Private	Europe	Mixed
Deslandes	2011	Journal	Electronic Journal of Business Ethics and Organization Studies	Conceptual				
Feldman & Orlikowski	2011	Journal	Organization Science	Conceptual	1/1/19			
Fenton & Langley	2011	Journal	Organization Studies	Conceptual				
Floyd et al.	2011	Journal	Journal of Management Studies	Conceptual				
Gomez & Bouty	2011	Journal	Organization Studies	Empirical	Case Study - Single	Private	Europe	Mixed
Kornberger & Clegg	2011	Journal	Strategic Organization	Empirical	Case Study - Single	Public	Australasia	Senior Managers
Lavarda et al.	2011	Journal	European Business Review	Empirical	Case Study - Single	Private	Europe	Mixed

Mathieu & Chen	2011	Journal	Journal of Management	Conceptual				
Pandza	2011	Journal	Journal of Management Studies	Empirical	Case Study - Single	Private	Europe	Mixed
Sandberg & Tsoukas	2011	Journal	Academy of Management Review	Conceptual				
Spee & Jarzabkowski	2011	Journal	Organization Studies	Empirical	Ethnography	Public	Europe	Mixed
Splitter & Seidl	2011	Journal	The Journal of Applied Behavioral Science	Conceptual			Marie N	
Whittington	2011	Journal	Accounting, Organizations and Society	Conceptual				
Whittington et al.	2011	Journal	British Journal of Management	Conceptual				
Modell	2012	Journal	Management Accounting Research	Empirical	Case Study - Single	Public	Europe	Mixed
Vaara & Whittington	2012	Journal	The Academy of Management Annals	Conceptual				
Brown & Thompson	2013	Journal	Business History	Conceptual				
Jarzabkowski et al.	2013	Journal	European Management Journal	Empirical	Case Study - Single	Private	Europe	Mixed
Kaplan & Orlikowski	2013	Journal	Organization Science	Empirical	Case Study - Multiple	Private	North America	Mixed
Kozlowski et al.	2013	Journal	Organizational Research Methods	Conceptual				
Rouleau	2013	Journal	Management (France)	Conceptual				
Sarpong et al.	2013	Journal	European Management Journal	Empirical	Case Study - Multiple	Private	Europe	Middle Managers
Suddaby et al.	2013	Journal	Strategic Organization	Conceptual				
Balogun et al.	2014	Journal	Journal of Management Studies	Conceptual				
Bromily & Rau	2014	Journal	Strategic Management Journal	Conceptual				
Hardy & Hardy	2014	Journal	Journal of Management Studies	Empirical	Case Study - Single	Private	Europe	Mixed
Hardy & Thomas	2014	Journal	Journal of Management Studies	Empirical	Case Study - Single	Private	Europe	Mixed
Herepath	2014	Journal	Organization Studies	Empirical	Case Study - Single	Public	Europe	Senior Managers
Huang et al.	2014	Journal	Journal of Strategic Information Systems	Empirical	Case Study - Single	Private	Australasia	Mixed
Hughes & McDonagh	2014	Journal	British Academy of Management Proceedings 2014	Conceptual				
Jarventie- Thesleff et al.	2014	Journal	International Journal on Media Management	Empirical	Case Study - Multiple	Private	Europe	Mixed
Kwon et al.	2014	Journal	Journal of Management Studies	Empirical	Ethnography	Private	Australasia	Senior Managers
Leonard & Higson	2014	Journal	Journal of Strategic Information Systems	Empirical	Case Study - Multiple	Public	Europe	Mixed
Liu & Maitlis	2014	Journal	Journal of Management Studies	Empirical	Ethnography	Private	North America	Senior Managers
Peppard et al.	2014	Journal	Journal of Strategic Information Systems	Conceptual				
Seidl & Whittington	2014	Journal	Organization Studies	Conceptual				
Whittington	2014	Journal	Journal of Strategic Information Systems Planning	Conceptual				

Jarzabkowski	2015	Journal	Strategic	Conceptual		
& Kaplan			Management			
			Journal			

## Appendix II: Classification of the Reviewed SISP Literature

Author	Decade	Source Classification	Typology	Methodology	Practice	Outcome
Gorry & Morton (1971)	1970s	Conceptual			Comment of	
Henderson & West (1979)	1970s	Empirical	Е	Case study (single)	Organisational practices	Organisational outcomes
King (1978)	1970s	Conceptual		(single)		
Lyles (1979)	1970s	Empirical	E	Case study	Organisational	Organisationa
McFarlan (1971)	1970s	Empirical	Е	(single) Case study (multiple)	Organisational practices & Group practices	Organisationa outcomes
Rockart (1979)	1970s	Conceptual			Group practices	
Zani (1970)	1970s	Conceptual				11-11-1
Boynton & Zmud (1984)	1980s	Empirical	Е	Case study (multiple)	Organisational practices	Organisationa outcomes
Boynton & Zmud (1987)	1980s	Conceptual				
Brancheau & Wetherbe (1987)	1980s	Empirical	Е	Survey	Group practices	Institutional outcomes
Dansker et al. (1987)	1980s	Conceptual				
Davenport at al. (1989)	1980s	Conceptual				
Earl (1989)	1980s	Conceptual				
Henderson & Sifonis (1988)	1980s	Empirical	Е	Case study (single)	Organisational practices	Organisationa outcomes
Henderson et al. (1987)	1980s	Empirical	Е	Case study (single)	Organisational practices	Organisationa outcomes
Highsmith (1981)	1980s	Empirical	Е	Case study (single)	Organisational practices	Organisational outcomes
Ives & Learmonth (1984)	1980s	Empirical	E	Survey	Organisational practices	Organisationa outcomes
Karimi (1983)	1980s	Conceptual			practices	Cutcomes
King (1985)	1980s	Conceptual				
Kottemann & Konsynski (1984)	1980s	Conceptual				
Lederer & Mendelow (1987)	1980s	Empirical	В	Qualitative approach	Individual practices	Individual outcomes & Organisational outcomes
Lederer & Mendelow (1988)	1980s	Empirical	В	Qualitative approach	Individual practices	Individual outcomes
Lederer & Mendelow (1989)	1980s	Empirical	Е	Qualitative approach	Organisational practices & Group practices	Organisational outcomes
Lederer & Sethi (1988)	1980s	Empirical	Е	Survey	Organisational practices & Group practices	Organisational outcomes
McFarlan (1984)	1980s	Conceptual				
Pyburn (1983)	1980s	Empirical	Е	Case study (multiple)	Organisational practices	Organisational outcomes
Rackoff et al. (1985)	1980s	Empirical	Е	Case study (single)	Organisational practices	Organisational outcomes
Raghunathan & Raghunathan (1988)	1980s	Empirical	Е	Survey	Group practices	Organisational outcomes
Raghunathan & Raghunathan (1989a)	1980s	Empirical	Е	Survey	Group practices	Group outcomes
Raghunathan & Raghunathan (1989b)	1980s	Empirical	В	Survey	Organisational practices	Organisational outcomes
Rocheleau (1987)	1980s	Conceptual				
Rubin (1986)	1980s	Conceptual				
Selig (1982)	1980s	Empirical	Е	Case study (multiple)	Organisational practices	Organisational outcomes
Shank et al. (1985)	1980s	Empirical	Е	Case study (single)	Organisational practices	Organisational outcomes
Singleton et al. (1988)	1980s	Empirical	Е	Case study (single)	Organisational practices	Organisational outcomes & Group

						outcomes
Venkatraman (1985)	1980s	Conceptual				
Andreu & Ciborra (1996)	1990s	Empirical	Е	Case study (multiple)	Organisational practices	Organisationa outcomes
Angell (1990)	1990s	Conceptual				
Applegate & Elam (1992)	1990s	Empirical	В	Mixed methods	Organisational practices & Individual practices	Individual outcomes
Apte et al. (1990)	1990s	Empirical	Е	Case study (single)	Organisational practices & Group practices	Organisationa outcomes
Avison et al. (1999)	1990s	Empirical	Е	Case study (multiple)	Organisational practices	Organisationa outcomes & Individual outcomes
Bacon (1991)	1990s	Empirical	Е	Qualitative approach	Organisational practices & Group practices	Organisationa outcomes
Bacon (1992)	1990s	Empirical	Е	Survey	Organisational practices	Organisationa outcomes
Baker (1995)	1990s	Conceptual				
Barua et al. (1991)	1990s	Empirical	Е	Quantitative approach	Organisational practices	Organisationa outcomes
Beath (1991)	1990s	Empirical	В	Case study (multiple)	Individual practices	Organisationa outcomes & Individual outcomes
Bensaou & Earl (1998)	1990s	Conceptual				Cuttomes
Bergeron et al. (1991)	1990s	Empirical	Е	Qualitative approach	Organisational practices	Organisationa outcomes
Brown & Magill (1994)	1990s	Empirical	Е	Mixed methods	Organisational practices	Organisationa outcomes
Brynjolfsson (1992)	1990s	Conceptual				
Burn (1993)	1990s	Empirical	Е	Qualitative approach	Organisational practices	Organisationa outcomes
Byrd et al. (1995)	1990s	Empirical	Е	Case study (single)	Organisational practices & Group practices	Organisationa outcomes
Cerpa & Verner (1998)	1990s	Empirical	Е	Case study (single)	Organisational practices	Organisationa outcomes
Chan et al. (1997)	1990s	Empirical	Е	Survey	Organisational practices	Organisationa outcomes
Chan et al. (1998)	1990s	Empirical	Е	Survey	Organisational practices	Organisationa outcomes
Ciborra (1992)	1990s	Conceptual				
Clark et al. (1997)	1990s	Empirical	Е	Case study (single)	Organisational practices	Organisationa outcomes
Clemons (1990)	1990s	Conceptual				
Clemons & Weber (1997)	1990s	Conceptual				
Currie & Willcocks (1996)	1990s	Empirical	Е	Case study (single)	Organisational practices & Group practices	Organisationa outcomes
Das et al. (1991)	1990s	Conceptual				
Dennis et al. (1997)	1990s	Empirical	Е	Mixed methods	Group practices	Organisationa outcomes
Doherty et al. (1999)	1990s	Empirical	Е	Survey	Organisational practices	Organisationa outcomes
Dutta (1996)	1990s	Empirical	Е	Case study (multiple)	Organisational practices & Group practices	Organisationa outcomes
Earl (1993)	1990s	Empirical	Е	Mixed methods	Group practices	Organisationa outcomes
Earl & Feeny (1994)	1990s	Conceptual		A Viet Co		
Emery (1990)	1990s	Conceptual				
Emery (1991)	1990s	Conceptual				
Floyd & Wooldridge (1990)	1990s	Empirical	Е	Mixed methods	Organisational practices	Institutional outcomes

Fuller-Love and Cooper (1996)	1990s	Empirical	Е	Case study (single)	Organisational practices	Organisational outcomes & Group outcomes
Galliers (1991)	1990s	Conceptual				Outcomes
Galliers (1999)	1990s	Conceptual				
Gottschalk (1999)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Hasan & Lampitsi (1995)	1990s	Empirical	Е	Case study (multiple)	Group practices	Organisational outcomes & Group outcomes
Hatten & Hatten (1997)	1990s	Conceptual				
Henderson & Cooprider (1990)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Jarvenpaa & Ives (1990)	1990s	Empirical	В	Quantitative approach	Individual practices	Individual outcomes
Karimi & Konsynski (1991)	1990s	Conceptual				
Kettinger et al. 1994	1990s	Empirical	Е	Qualitative approach	Organisational practices	Organisational outcomes
Kim & Michelman (1990)	1990s	Empirical	Е	Case study (multiple)	Organisational practices	Institutional outcomes
King & Teo (1997)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
King & Teo (1996)	1990s	Empirical	Е	Survey	Organisational practices & Group practices	Organisational outcomes
Kivijarvi & Saarinen (1995)	1990s	Empirical	E	Mixed methods	Organisational practices	Organisational outcomes
Kovacevic & Majluf (1993)	1990s	Conceptual				
Lacity & Hirschheim (1995)	1990s	Empirical	Е	Case study (multiple)	Group practices	Organisational outcomes & Group outcomes
Lacity et al. (1997)	1990s	Empirical	Е	Case study (single)	Organisational practices & Group practices	Organisational outcomes
Lederer & Hannu (1996)	1990s	Conceptual				
Lederer & Sethi (1992)	1990s	Empirical	Е	Survey	Group practices	Organisational outcomes
Lederer & Sethi (1996)	1990s	Empirical	В	Survey	Individual practices	Organisational outcomes & Individual outcomes
Levy et al. (1999)	1990s	Conceptual	Е	Case study (multiple)	Organisational practices	Organisational outcomes
Li & Ye (1999)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
McKenney et al. (1997)	1990s	Empirical	Е	Case study (single)	Organisational practices & Group practices	Organisational outcomes
Mentzas (1997)	1990s	Empirical	E	Case study (single)	Group practices	Group outcomes
Min et al. (1999)	1990s	Empirical	E	Case study (single)	Organisational practices	Organisational outcomes
Niederman et al. (1991)	1990s	Empirical	E	Survey	Organisational practices	Organisational outcomes
Orlikowski & Baroudi (1991)	1990s	Conceptual				
Powell & Dent-Micallef (1997)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes & Group outcomes
Premkumar & King (1992)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Premkumar & King (1994)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Reich (1996)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Sabherwal & King (1995)	1990s	Empirical	Е	Survey	Group practices	Organisational outcomes
Sabherwal & Kirs (1994)	1990s	Empirical	Е	Survey	Group practices	Organisational

						outcomes
Segars et al. (1998)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Segars & Grover (1996)	1990s	Empirical	Е	Qualitative approach	Organisational practices	Organisational outcomes
Segars & Grover (1998)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Segars & Grover (1999)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Smits & Poel (1996)	1990s	Empirical	Е	Case study (multiple)	Organisational practices	Organisational outcomes
Sutherland & Remenyi (1995)	1990s	Empirical	Е	Case study (single)	Organisational practices	Organisational outcomes
Teo & Ang (1999)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Teo & King (1996)	1990s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Teo & King (1997)	1990s	Empirical	Е	Survey	Organisational practices & Individual practices	Organisational outcomes & Individual outcomes
Thong et al. (1996)	1990s	Empirical	Е	Survey	Group practices	Organisational outcomes
Watson (1990)	1990s	Empirical	В	Mixed methods	Individual practices	Individual outcomes
Wexelblat & Srinivasan	1990s	Empirical	Е	Case study (single)	Group practices	Organisational outcomes
Wilcocks & Smith (1995)	1990s	Empirical	Е	Case study (multiple)	Organisational practices	Organisational outcomes
Wilson (1991)	1990s	Empirical	Е	Mixed methods	Organisational practices	Organisational outcomes
Zviran (1990)	1990s	Empirical	E	Mixed methods	Organisational practices	Organisational outcomes
Akmanligil & Palvia	2000s	Empirical	Е	Case study	Organisational	Organisational
(2004) Antoniou & Ansoff (2004)	2000s	Conceptual		(multiple)	practices	outcomes
Avgerou & McGrath (2007)	2000s	Empirical	Е	Case study (single)	Organisational practices	Organisational outcomes
Avison et al. (2008)	2000s	Conceptual		(single)	practices	outcomes
Baskerville & Myers (2009)	2000s	Conceptual				
Basu et al. (2002)	2000s	Empirical	Е	Survey	Organisational practices & Group practices	Organisational outcomes & Group outcomes
Brown (2004)	2000s	Conceptual				outcomes
Cao & Schniederjans (2004)	2000s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Cegielski et al. (2005)	2000s	Empirical	В	Mixed methods	Individual practices	Individual outcomes
Chan (2002)	2000s	Empirical	Е	Case study	Organisational practices	Organisational
Chari et al. (2008)	2000s	Empirical	Е	(multiple) Quantitative	Organisational	Organisational
Chen & Hirschheim (2004)	2000s	Conceptual		approach	practices	outcomes
Choe (2003)	2000s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Croteau & Bergeron (2001)	2000s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Das & Van de Ven (2000)	2000s	Empirical	Е	Case study	Organisational	Organisational outcomes
Demirhan et al. (2007)	2000s	Empirical	Е	(multiple) Quantitative	Organisational	Organisational
DeSanctis (2003)	2000s	Conceptual		approach	practices	outcomes
Ouhan et al. (2001)	2000s	Empirical	Е	Qualitative approach	Organisational practices	Organisational outcomes
Earl & Feeny (2000)	2000s	Conceptual		арргоасп	practices	outcomes
Enns et al. (2003)	2000s	Empirical	В	Mixed methods	Individual practices	Individual outcomes
Galliers (2003)	2000s	Conceptual		methods	practices	Cateonies
Galliers (2004)	2000s	Conceptual				F/10 14 - 5

Galliers (2006)	2000s	Conceptual	H			
Galliers and Leidner	2000s	Conceptual	1 7			
(2003) Grover & Segars (2005)	2000s	Empirical	E	Survey	Organisational	Organisationa
Hahn et al. (2009)	2000s	Empirical	E	Quantitative	Organisational	Organisationa
Hidding (2001)	2000s	Conceptual	1	approach	practices	outcomes
Kanungo et al. (2001)	2000s	Empirical	Е	Mixed	Organisational	Organisationa
Kim et al. (2000)	2000s	Empirical	E	Case study	Organisational	Organisationa
Ko at al. (2005)	2000s	Empirical	Е	(single) Survey	practices Organisational practices & Group practices	Organisationa outcomes & Group
Krogh (2009)	2000s	Conceptual				outcomes
Levy & Powell (2000)	2000s	Empirical	E	Case study (multiple)	Organisational practices	Organisational outcomes
Lyytinen & Newman (2008)	2000s	Conceptual		(multiple)	practices	outcomes
Mingers (2001)	2000s	Conceptual				
Newkirk & Lederer (2006)	2000s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Newkirk et al. (2003)	2000s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Newkirk et al. (2008)	2000s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Nielson et al. (2008)	2000s	Empirical	E	Survey	Organisational	Organisational
Nolan & McFarlan (2005)	2000s	Conceptual			practices	outcomes
Oh & Pinsonnault (2007)	2000s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Palvia et al. (2007)	2000s	Conceptual			practices	outcomes
Peppard & Breu (2003)	2000s	Conceptual				
Peppard & Ward (2004)	2000s	Conceptual				
Philip (2007)	2000s	Empirical	Е	Case study (multiple)	Organisational practices	Organisational outcomes
Piccoli & Ives (2005)	2000s	Conceptual				
Pita et al. (2009)	2000s	Empirical	Е	Survey	Organisational practices & Group practices	Organisational outcomes
Porter (2001)	2000s	Conceptual			Group practices	
Preston & Karahanna (2006)	2000s	Empirical	Е	Survey	Group practices & Individual practices	Group outcomes & Individual outcomes
Preston & Karahanna (2009a)	2000s	Empirical	Е	Survey	Group practices & Individual practices	Organisational outcomes
Preston & Karahanna (2009b)	2000s	Empirical	Е	Mixed methods	Group practices & Individual practices	Organisational outcomes
Ragu-Nathan et al. (2001)	2000s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Ragu-Nathan et al. (2004)	2000s	Empirical	Е	Survey	Group practices	Organisational outcomes
Rai et al. (2009)	2000s	Empirical	Е	Quantitative	Organisational	Organisational
Ranganathan & Sethi (2002)	2000s	Empirical	Е	approach Survey	Organisational practices	Organisational outcomes
Robey (2003)	2000s	Conceptual			practices	Catconics
Roepke et al. (2000)	2000s	Empirical	Е	Case study (single)	Organisational practices & Individual practices	Organisational outcomes & Group outcomes
Rubin (1986)	2000s	Empirical	E	Survey	Organisational practices	Organisational outcomes
Sabherwal et al. (2001)	2000s	Empirical	Е	Case study (multiple)	Organisational practices	Organisational outcomes

Salmela & Spil (2002)	2000s	Empirical	E	Qualitative approach	Organisational practices	Organisational outcomes
Sambamurthy et al. (2003)	2000s	Conceptual		арргоисп	practices	Cateomes
Shin (2001)	2000s	Empirical	Е	Survey	Organisational	Organisational
Sidorova et al. (2008)	2000s	Conceptual			practices	outcomes
Silva & Hirschheim (2007)	2000s	Empirical	Е	Case study	Organisational	Organisational
Stiles (2001)	2000s	Empirical	E	(single) Mixed	Group practices	outcomes Group
				methods		outcomes
Teubner (2007)	2000s	Empirical	E	Case study (single)	Organisational practices & Individual practices	Institutional outcomes & Individual outcomes
Tippins & Sohi (2003)	2000s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Vessey et al. (2002)	2000s	Conceptual		** J	practices	Cutcomes
Wade & Hullad (2004)	2000s	Conceptual				
Wang & Tai (2003)	2000s	Empirical	Е	Survey	Organisational	Organisational
Ward & Peppard (2002)	2000s	Conceptual			practices	outcomes
Weill et al. (2002)	2000s	Empirical	Е	Mixed	Organisational	Organisational
Williams et al. (2009)	2000s	Conceptual		methods	practices	outcomes
Young & Jordan (2008)	2000s	Empirical	Е	Case study	Group practices	Organisational
Abu Bakar et al. (2014)	2010s	Empirical	Е	(multiple) Survey	Organisational	Organisational
Arvidsson et al. (2014)	2010s	Empirical	Е	Case study	Organisational	Organisational
Bakar et al. (2010)	2010s	Empirical	E	(single) Survey	practices Organisational	outcomes Organisational
					practices	outcomes
Baptista et al. (2010)	2010s	Empirical	Е	Case study (single)	Organisational practices	Organisational outcomes
Bechor et al. (2010)	2010s	Empirical	Е	Survey	Organisational practices	Organisational outcomes
Belanger & Tech (2014)	2010s	Conceptual				
Benitez-Amado & Perez- Arostegui (2010)	2010s	Conceptual				
Bloch et al. (2012)	2010s	Conceptual			120000000	
Buhl et al. (2012)	2010s	Conceptual				
Cecez-Kecmanovic et al.	2010s	Conceptual				
(2014) Cetindamar & Pala (2011)	2010s	Empirical	В	Survey	Individual practices	Organisational outcomes & Individual outcomes
Chen et al. (2010)	2010s	Conceptual				
Clemons et al. (2011)	2010s	Conceptual				
Dasgupta et al. (2011)	2010s	Conceptual				
Eng & Luff (2011)	2010s	Conceptual				
Gable (2010)	2010s	Conceptual				
Galliers (2011)	2010s	Conceptual				
Galliers et al. (2012)	2010s	Conceptual				
Henfridsson & Lind (2014)	2010s	Empirical	Е	Case study	Group practices	Group outcomes
Hirschheim & Klein	2010s	Conceptual		(single)		outcomes
(2012) Huang et al. (2014)	2010s	Empirical	E	Case study	Organisational	Organisational
Jukic & Jukic (2010)	2010s	Empirical	E	(single) Case study	Organisational	Organisational
				(single)	practices	outcomes
Karpovsky & Galliers (2015)	2010s	Conceptual				

						Individual outcomes
Leidner et al. (2011)	2010s	Empirical	Е	Survey	Organisational practices	Organisationa outcomes
Leonard & Higson (2014)	2010s	Empirical	Е	Case study (multiple)	Organisational practices	Organisationa outcomes
Luftman & Ben-Zvi (2011)	2010s	Empirical	В	Survey	Organisational practices	Institutional outcomes
Luftman & Derksen (2014)	2010s	Empirical	Е	Survey	Individual practices	Individual outcomes
McLaren et al. (2011)	2010s	Empirical	Е	Case study (multiple)	Organisational practices	Organisationa outcomes
Merali et al. (2012)	2010s	Conceptual				
Mirchandani & Lederer (2012)	2010s	Empirical	Е	Survey	Organisational practices	Organisationa outcomes
Mirchandani & Lederer (2014a)	2010s	Empirical	В	Survey	Individual practices	Organisationa outcomes
Mirchandani & Lederer (2014b)	2010s	Empirical	Е	Survey	Organisational practices	Organisationa outcomes
Mithas et al. (2011)	2010s	Empirical	Е	Quantitative approach	Organisational practices & Group practices	Organisationa outcomes
Okpattah et al. (2014)	2010s	Empirical	Е	Survey	Organisational practices	Organisationa outcomes
Pare et al. (2015)	2010s	Conceptual				
Peppard (2010)	2010s	Empirical	В	Qualitative approach	Individual practices	Organisational outcomes & Individual outcomes
Peppard et al. (2014)	2010s	Conceptual				
Petter et al. (2012)	2010s	Conceptual				
Polites & Karahanna (2013)	2010s	Conceptual		THE .	THE STATE OF	HAT KATAN
Schryen (2013)	2010s	Conceptual				
Silvius & Stoop (2013)	2010s	Empirical	Е	Case study (multiple)	Organisational practices	Organisational outcomes & Group outcomes
Stace et al. (2012)	2010s	Empirical	Е	Qualitative approach	Organisational practices	Organisational outcomes
Stein et al. (2013)	2010s	Empirical	В	Case study (single)	Individual practices	Individual outcomes
Tanriverdi et al. (2010)	2010s	Conceptual				
Taylor et al. (2010)	2010s	Conceptual				
Teubner (2013)	2010s	Conceptual				
Thompson (2012)	2010s	Conceptual				
Ward (2012)	2010s	Conceptual	4 50 70			
Watson et al. (2011)	2010s	Empirical	Е	Case study (multiple)	Organisational practices	Organisational outcomes
Whittington (2014)	2010s	Conceptual				

### Appendix III: Initial List of Interview Questions for Senior Managers

#### **Practice**

What influence, if any, does the wider public service have on IS strategy-making endeavours within your organisation?

Have there been any attempts by government to introduce specific strategy-making practices which have impacted upon IS strategy-making within your organisation? How much freedom do you have to pursue strategic initiatives outside of the constraints of government oversight?

Are there any particular influences upon your strategy-making endeavours as a result of your being located within the healthcare sector?

What do you believe to be the biggest constraints, if any, to your ability to participate in IS strategy-making effectively?

Have there been any changes in recent years as to how IS strategising takes place within your organisation? If so, what are they and how did this change manifest?

Does there exist any formal strategic episodes in the form of quarterly meetings, away-days, etc. that are either exclusively or partially focused on IS strategy-making activities?

From where does strategically relevant IS information flow?

#### Praxis

Are IS strategic activities organised and if so how and by whom?

Where does the work of IS strategising actually take place?

How do you get to do the work of IS strategising, i.e. allocated time, ad-hoc, etc.?

What are the activities (if any) in which you engage that comprise IS strategy-making endeavours?

Are there any procedures or diagnostic tools or artefacts in existence within the organisation to assist with IS strategy-making activities, e.g. SWOT? If so, how are they actually used in practice?

How is consensus reached when it comes to deciding upon a particular IS strategic initiative?

Aside from pre-arranged 'episodes' such as monthly/quarterly IS strategy meetings, are there more daily/mundane/seemingly inconsequential activities in which you participate that have any correlation to IS strategy-making?

Are there any specific performance metrics for IS strategic activities?

How are the products of IS strategising communicated and consumed?

#### **Practitioner**

How did you get to be in a position to strategise as it pertains to IS, i.e. career path, etc.?

What do you believe are the skills required for strategising in relation to IS and how are they attained?

Who leads the IS strategy agenda within the organisation?

How do you view the role of the CIO/most senior IS executive during IS strategy-making activities?

Who are the other actors (internal or external) who participate in IS strategy-making activities?

How could your ability to participate in IS strategy-making be improved?

Do you view any particular senior managers (by function) as being particularly dominant when it comes to IS strategising?

Do you view any particular senior managers (by function) as being particularly aloof/disinterested when it comes to matters pertaining to IS strategy-making?

Do you have any further comments or reflections on the role of senior managers in the practice of IS strategy-making within the organisation?

# Appendix IV: Interview Protocol and Protection of Research Participants

**Research Project**: 'Applying a Practice Lens to Strategic Information Systems Planning: A Senior Management Perspective'.

Researcher: Mr. Jeffrey Hughes, Ph.D. Candidate.

- 1. The identity of all participants and organisations will be protected by the use of pseudonyms for each of the participants and each of the host organisations. No material will refer to either the name of the participant or the host organisation. Thus, there will be confidentiality of both the individual and organisation.
- 2. Recordings of the interviews will contain no reference to the identity of the participant or organisation, and will refer to the host organisations as organisation 1 and 2, and to interviewees as interviewee 1, 2, 3, etc. After data collection is complete, organisations and participants will be given pseudonyms so that the identity of participants will not be known to other participants in the study.
- 3. Only the researcher, Mr. Jeffrey Hughes, will know the identities of participants. Mr. Hughes will enter into a confidentiality agreement with all participants of the study, undertaking to ensure the identity of participants is protected at all times.
- 4. Any records pertaining to the identities of participants will be secured in a data encrypted system, where only the principal investigator, Mr. Jeffrey Hughes, is permitted access.
- 5. It is important for all participants to note that participation is voluntary and that participants are free to withdraw from the research at any time.

Should you have any queries or concerns please do not hesitate to contact me directly at 0858001912 or hughesj3@tcd.ie.

## Appendix V: Confidentiality Agreement for Transcription Services

I,, transcriptionist individually and on behalf of
(name of business if applicable) agree to maintain full
confidentiality in regards to any and all audio files and documentation received from
Jeffrey Hughes related to the project entitled 'Applying a Practice Lens to Strategic
Information Systems Planning: A Senior Management Perspective'.
Furthermore, I agree:
1. To hold in strictest confidence the identity of any individual that may be inadvertently
revealed during the transcription of recorded interviews, or in any associated documents.
2. To not make copies of any audio recordings or computerised files of the transcribed
interviews unless specifically requested to do so by Jeffrey Hughes.
3. To store all study-related audio files and materials on a password-protected computer
that is kept in a safe, secure location.
4. To delete, upon completion of the work, all electronic and document files relating to the
research project from my computer's hard drive and back-up device.
I am aware that I can be held legally liable for any breach of this confidentiality agreement
and for any harm incurred by individuals if I disclose identifiable information contained in
the audio files and/or files to which I have access.
Transcriber's name (printed):
Transcriber's signature:
Date:
Researcher's contact details:
Jeffrey Hughes
PhD Candidate
School of Business
Trinity College Dublin