Technology and Access to Justice

A research report by Trinity FLAC
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According to the Pringle Report on Civil Legal Aid and Advice, the main impediments preventing low income individuals from accessing legal services are the cost of legal services, the lack of awareness on the part of such individuals of the relevance of the law to problems they encounter and the psychological or cultural barrier that can exist between socially deprived individuals and the legal profession. Although that report is now more than forty years old, this analysis still remains valid for contemporary Irish society.

However one significant change in the legal environment in the intervening period throws up new issues for consideration in this context. I refer to the growing use of information technology by legal practitioners which has been given added impetus in the past six months by the COVID-19 pandemic as increasing resort has been had to online hearings and meetings. On the one hand, this development presents an additional barrier to accessing justice for those sections of the population who do not have ready access to digital technology. But on the other hand, information technology may also make legal services and resources more accessible to the general population.

In this very informative and wide ranging report, members of TCD Free Legal Advice Centres Ltd examine the impact of technology on efforts to enhance access to justice. The topics covered include an analysis of barriers to justice, the impact of technology on access to justice, human rights and vulnerable communities, the ethics of legal technology and how such technology is regulated by EU law. The report also contains a comparative examination of the use of information technology in eleven different legal jurisdictions, including Ireland. The report’s penultimate chapter sets out a road map for integrating information technology into the Irish legal system and the report concludes with a number of interesting findings and recommendations. In particular, it notes that while IT can improve access to justice overall by reducing legal costs, accelerating the court process, improving accessibility, eliminating unnecessary communication, providing legal education and improving clients’ understanding of the legal process, a ‘digital divide’ that disproportionately affects people from low socioeconomic backgrounds can cut them off from these benefits. The report calls for government investment in legal technology, noting that Not-for-Profits are less willing to embrace technology because of a lack of funding. The report also recommends integrating ICT (Information Communication Technology) into legal training.
When the Free Legal Advice Centres Ltd. (FLAC) was established in April 1969, one of its objectives was to improve the training of law students by giving them an opportunity to engage in clinical legal work. Countless numbers of Trinity law students have volunteered with FLAC since its inception and in 1991, the Trinity branch of the organisation was formally recognised as a College society. TCD FLAC facilitates access to justice through its legal advice clinic but also through its research and campaigning work addressing the legal, social and political needs of disadvantaged sections of our society. This year, TCD FLAC, under the inspiring leadership of Ciara McLoughlin, co-ordinated the work of more than sixty law students to produce this excellent and very timely report on the impact of technology on the ongoing struggle to enhance access to justice. Through this and its other activities, TCD FLAC promotes one of the original objectives of its parent organisation by enhancing the learning experience of its members but more significantly it also makes a very real contribution to the promotion of social justice in Ireland.

Gerry Whyte
Trinity College Dublin
INTRODUCTION

The COVID-19 pandemic has challenged every aspect of daily life and normality, and the justice system is no exception. Government restrictions and safety measures put pressure on the legal sector to change the way it delivers services. The pandemic pushed to the fore a question which the Irish legal sector needed to address anyway, namely, how may IT be used to facilitate justice? This report set out to examine technology’s potential to make the law more accessible for those who need legal support.

The Irish legal system, renowned for its traditional and archaic ways, lags behind leading jurisdictions’ use of technology. In response to the pandemic, the Irish legal sector had no other choice but to embrace technology, catapulting it into the 21st century. Chief Justice Frank Clarke noted that the Courts Service has “developed five years in the past five months”.¹ The modernisation of the Irish legal sector has a multitude of benefits for practitioners and clients alike. However, the question remains as to whether this accelerated development is too much, too soon. With the existence of a digital divide, the most vulnerable people in our society could be further marginalised. This report seeks to provide a balanced account of the benefits and drawbacks that technology can have on the justice system. It is hoped that technology is further integrated into the justice system, with particular efforts being made to include and support vulnerable communities.

Chapter 1 examines the existing barriers to justice in Ireland with a particular focus on vulnerable groups. Chapter 2 provides an overview of how technology is a double-edged sword; it has the potential to improve aspects of justice while impeding others. Chapter 3 focuses on the impact technology has on human rights, in particular how IT can bolster the constitutional guarantees of fairness of procedure and trials ‘in due course’ of law, if implemented correctly. Chapter 4 identifies vulnerable communities in our society and analyses the positive and negative effects legal technologies will have on their ability to access justice. Chapter 5 discusses the current developments in artificial intelligence and the legal quandaries associated with its use. Chapter 6 looks at the ethical issues that arise when integrating technology into the Irish legal system. Chapter 7 provides a comprehensive overview of the impact that EU law has on Member States’ use of legal technology. Chapters

8-17 provide a comparative analysis of global IT developments in 10 jurisdictions, and their effects on access to justice. Chapter 18 analyses the use of IT in the Irish legal system, with a focus on Ireland’s response to COVID-19. The final chapter provides a roadmap for integrating IT across various aspects of the Irish legal system to promote access to justice.

I want to thank all those who were involved in the publication of this report. I am incredibly grateful to Gerry Whyte for his guidance and for providing a range of resources to help get this project up and running. I would like to thank Síofra Carlin, Legal Research Officer of Trinity FLAC, for her work during the editing stages. I would further like to thank Séamus Small, Treasurer of Trinity FLAC, for his continued support and assistance during all stages of the project. Finally, this report would not have been possible without the hard work, critical-thinking and dedication of our research team. I am so grateful for having the opportunity to work with an amazing team of 67 researchers. They each put an incredible amount of time and research into their submissions, which are an absolute credit to them. Sincere congratulations to all!

Ciara McLoughlin
Chairperson, Trinity FLAC
CONCLUSIONS

- The main barriers to justice in Ireland are the high-cost of legal services, complexity of procedure, and social, psychological and cultural exclusion.

- Technology has the potential to both facilitate and impede access to justice.

- This research indicates that IT will improve access to justice overall by reducing legal costs, accelerating the court process, improving accessibility, eliminating unnecessary communication, providing legal education and improving clients’ understanding thereby reducing stress.

- A ‘digital divide’ exists which disproportionately affects people from low socioeconomic backgrounds. Efforts must be made to ensure marginalised groups are not further excluded from the justice system. Unequal access to technology can lead to unequal access to justice.

- New technologies have the potential to aid vulnerable groups. However, the success of this will depend on government policies and legal professionals’ willingness to adopt technological solutions.

- Law-firms can use technology to provide higher quality services at a lower price. Private practices must change the way they provide services to meet the demands of clients and lawyers alike.

- Commercial firms are more willing to embrace technology than Not-For-Profits due to a lack of funding. Although initial purchase of software and hardware is expensive, it will have huge cost and time benefits for legal aid centres.

- It is recommended that Ireland opt for a technology-integrated legal aid model. Technology will not replace the need for lawyers or face-to-face services. IT should be used to complement the existing justice system.

- There is a need for government investment in legal technology. Countries such as Singapore and France have made significant advancements in legal technology due to government incentives and institutional investments in tech companies.

- AI reduces legal costs and increases work efficiency by completing automated and routine tasks for legal professionals. It is too early to predict whether AI will assume the roles of legal advisor and judge across all legal matters. AI’s development must be regulated, as there are significant concerns in terms of accountability, professional
competence, privacy breaches and the potential for bias.

- A wealth of knowledge and guidance can be gained from other jurisdictions. Ireland’s archaic legal system is resistant to change. Modern legal systems, like China and Estonia, are more willing to embrace technology, as there is no long tradition of public service provision.

- Institutional change is affected through education. This report recommends integrating ICT into legal training and ensuring lawyers are familiar with concepts such as data protection and privacy.

- It is recommended that an ethical duty on lawyers to keep pace with technological advancement should be recognised, as in the United States.

- The Irish legal sector have accelerated their use of IT in response to the COVID-19 pandemic. Although Ireland’s response was notably slower than other EU countries due to having a smaller technological ‘base’ and a lack of legislative framework.

- Europe is a global leader in digital regulation. This research discusses the EU’s success in collecting digital taxes, enforcing stringent privacy standards, funding anti-competitive practices, and pursuing a pan-European, ethical digital single market.

- It is submitted that both digital strategy and access to justice could be improved across the Member States if they are encouraged to actively consider legal technology when developing new legislation.
Chapter 1: Barriers to Justice

Demilade Adeniran, Emilie Oudart Kate Nolan, Madeeha Akhar, Radka Hodalova.
“You can have great laws and great judges and fine lawyers, but if the system doesn’t reasonably allow people to access it, then it isn’t really much use,” - Clarke CJ.2

Access to the Irish legal system is impeded by a significant number of institutional and societal barriers, many of which disproportionately impact groups that are already isolated and marginalised within society. This chapter will identify some of these barriers, which are rooted in financial, institutional and social issues, and also shed light on some of the groups most affected by this lack of access.

In Part I, the high costs of Irish legal services and litigation will be examined, with an additional focus on the inadequacies of the current civil legal aid system.

In Part II, the barriers to accessing justice for personal litigants will be examined, with a focus on the complexity of the courts system.

In Part III, the social and psychological barriers to justice will be considered, including how poverty, a lack of legal knowledge and low levels of trust in authorities can impact on access to justice.

In Part IV, the barriers experienced by children and young people will be examined, which are namely, difficulty accessing legal advice or information, and the inability to participate in the decision-making process in court cases which concern them.

In Part V, there will be an examination of the barriers to accessing justice faced by homeless people, with a focus on the effects of the Civil Legal Aid Act 1995.

In Part VI, the barriers faced by persons with disabilities will be considered, including the structural, procedural, societal and physical obstacles they can encounter.

In Part VII, the barriers affecting prisoners will be briefly examined.

I. Cost of Legal Service and Inadequacies of the Legal Aid System

The high cost of litigation in Ireland coupled with the inadequacy of both the criminal and civil legal aid schemes constitutes a significant barrier to accessing justice in Ireland. The Irish litigation system has consistently been ambiguous and uncertain in relation to the costs of both contentious and non-contentious business. This is clearly seen in the April 2019 amendment to the Rules of the Superior Courts 1986 to 2019, which replaced the pre-2002 prices of various legal services with a mere “discretionary” price range. This ambiguity, combined with the intricacies of “party and party” and “solicitor and client” costs, means that it can be very difficult for a potential litigant to know if they are getting value for money when embarking on what is normally a lengthy (and therefore expensive) process from initial consultation to final judgment.

Cost of Legal Services

It has been widely acknowledged in the media that Irish legal professionals are notoriously reluctant to disclose their annual earnings, a disclosure which would at least in part outline the overall costs of litigation. In the UK legal magazine The Lawyer, Ireland was described as the “least transparent jurisdiction in Europe” in terms of data collection on this issue. Furthermore, the Troika explicitly identified legal costs in Ireland as an area for reform during the 2012 bailout, and Clare Daly noted in the Dáil in 2016 that this was the sole demand of the Troika that had not been satisfied by the Irish government since the bail-out. It is clear, therefore, that there is substantial demand from a wide variety of sectors for the reform of legal costs in Ireland.

Whilst there is some recourse available to the aggrieved client who may feel that their bill at the end of litigation is unnecessarily high, the process of examining the bill through the Taxing Master can further extend what was undoubtedly an already-convoluted process and the

5 ‘Legal costs challenged: Scale of fees are a barrier to justice’ The Irish Examiner (Cork, 2 March 2015); Shane Phelan, ‘Caveat emptor: The soaring cost of legal services’ The Irish Independent (Dublin, 15 October 2017).
6 ‘Caveat emptor: The soaring cost of legal services’ The Irish Independent (Dublin, 15 October 2017).
further time and expense of this may serve to obscure the citizen’s access to justice instead of promoting it. Furthermore, the burden of proof is on the client to show that the prices charged are unreasonable\(^9\), which can be difficult to prove given the lack of concrete guidance as to the “going rate” of solicitor fees for contentious and non-contentious business. As all court fees are now marked as discretionary, it can be difficult to ascertain where the line is drawn between these necessary fees and the solicitors’ “instruction fee”, a fee which was initially created “due to the low level of the fees prescribed for individual items”\(^{10}\).

However, the requirement under the 1994 Amendment Act\(^{11}\) that the solicitor presents their client with a bill of written charges prior to commencing proceedings goes some way towards de-mystifying the process of legal costs, as it at the very least gives the client a rough idea of a budget. It is submitted that the legislation should proceed further in this area and present guidelines for all areas of costs, both “party and party” and “solicitor and client”.

Civil Legal Aid Scheme

The civil and criminal legal aid schemes purport to assist those citizens of limited means who either actively seek to litigate or must defend themselves against a criminal charge. For brevity, only the civil legal aid scheme will be discussed in this section. There have been a number of research papers published by FLAC and similar organisations on the inadequacies of the civil legal aid scheme in Ireland and, despite the historic nature of some of these papers\(^{12}\), many of the issues raised in them have still not been addressed. It is noted in the 2005 FLAC research paper\(^{13}\) that a client may still end up repaying the entire costs of the litigation over time\(^{14}\); a clear violation of the basic principles of a legal aid scheme and is a deterrent to potential litigants with low-to-moderate income levels. Furthermore, the means test to determine eligibility for civil legal aid is so prohibitive as to be almost unworkable. Under the Civil Legal Aid Regulations 2006, an applicant’s disposable income must be below €18,000, less allowable deductions such as rent or mortgage payments up to €667 per month.\(^{15}\) Given that the average


\(^{11}\) Solicitors (Amendment) Act 1994 s 68(1).


\(^{13}\) ibid.

\(^{14}\) ibid 3.

industrial wage in Ireland in 2019 was €40,283\textsuperscript{16}, it is clear that most potential litigants in Ireland can never hope to qualify for civil legal aid. With the vast majority of citizens essentially locked out of any meaningful or lengthy litigation as a result- even where such litigation has a good chance of success- it is clear that the civil legal aid scheme as it currently stands is not serving the average citizen and therefore it must be re-examined.

Conclusion

It is evident that Ireland’s legal system as it stands can only be easily accessed by “paupers or millionaires”\textsuperscript{17} as a direct result of the unclear, arbitrary costs of various legal services from initial solicitor appointment through to litigation. As the vast majority of potential litigants fall into neither of the aforementioned categories, it is clear that the cost of legal services in Ireland constitutes a significant barrier to accessing justice for the vast majority of citizens. Aside from the complex nature of the costing system, the current system of legal aid for civil matters is similarly inadequate, with the overly restrictive means test in particular serving to obscure rather than enhance access to justice for the ordinary citizen. Furthermore, the pending recession as a result of the COVID-19 pandemic undoubtedly foretells a stagnation in funding for the civil legal aid scheme, if not an outright reduction. It is highly likely that a wide range of litigants will seek to bring civil cases against various government institutions on grounds both directly and indirectly linked to the handling of the pandemic, and it is vital that these litigants are not denied “easy access to the Fountain Head of Justice”\textsuperscript{18} on the sole basis that the costs of such litigation are so prohibitive as to discourage any attempt to hold such institutions to account.

II. Complexity of the Courts System for Personal Litigants

In Ireland, people are entitled to represent themselves in court. Sometimes litigants may choose to do this if they are unhappy with their representation but most often, the reason why it occurs


\textsuperscript{17} Shane Phelan, ‘Legal costs to face cap under justice review’ \textit{The Irish Independent} (Dublin, 16 February 2018).

is because they have no other choice. Chief executive of FLAC, Eilis Barry, explains that ‘in many instances, [people] fall between the two stools of being ineligible for civil legal aid, which has a very low income threshold, while still not being able to afford a solicitor.’ It is difficult to establish exactly how many personal litigants there are, as the Courts Service does not report on these figures. However, one study conducted in 2019, shows a low level of legal representation in mortgage cases; ‘only a quarter of borrowers had any listed legal representation, while 7% of borrowers represented themselves.’

People who represent themselves in court (also referred to as litigants in person, personal litigants or lay litigants), face challenges to accessing justice. It can be challenging for someone with no legal knowledge to navigate the complex courts system and to effectively represent themselves. There are several judgements of the Supreme Court which refer to ‘the difficulties faced by litigants in person in court proceedings.’ In Klohn v An Bórd Pleanála and in O’Shea v Butler the judges refer to the difficulty of self-representation. Eilis Barry describes the challenges faced by lay litigants in the following manner; ‘the organisation of the courts, as well as legal and procedural rules on standing, costs, delays, class actions, multi-party actions and other practical obstacles may restrict the ability of people…from making or defending claims.’ She also attests that these problems are ‘not theoretical or abstract,’ as FLAC is contacted daily ‘by individuals who are trying to navigate the court system without legal representation and who struggle with inaccessible court forms, procedures and language.’

It should also be noted that in this jurisdiction, there is a lack of research being carried out on how the Irish Courts System impacts access to justice for lay litigants. An important study on

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25 ibid.
this topic has recently been conducted in Northern Ireland.\textsuperscript{26} The findings in this study seem to parallel much of what is already being argued as taking place in Ireland. The findings highlight that ‘individuals who self-represent are not accepted as legitimate court users, with little access to support or information on court procedures and the law affecting their cases.’\textsuperscript{27} The findings also show that ‘there was a lack of information and advice on what was expected, with limited access to guidance on the practical and procedural issues involved in taking or defending a case.’\textsuperscript{28}

\section*{III. Social and Psychological Barriers to Justice}

Social and psychological barriers to justice include poverty, a lack of legal knowledge, trust in the justice system and social norms. These barriers prevent citizens from attempting to access the justice system or from considering recourse to the justice system to resolve an issue. While specific data for Ireland on each of these barriers is often sparse, international studies and studies from other jurisdictions can aid our understanding of how these barriers operate. It is concerning to note that those facing these types of barriers will also find institutional barriers the most difficult to overcome.\textsuperscript{29}

The Pringle Committee identified the ‘psychological barrier’, which refers to the intimidating nature of the legal world to those from socially underprivileged backgrounds, and the barrier posed by a lack of knowledge regarding legal services.\textsuperscript{30} While the Pringle Committee’s report was published over forty years ago, more recent studies have recognised similar barriers to justice.\textsuperscript{31} A study in Ballymun, Co. Dublin in 2002 and 2003 identified the intimidating nature of the legal system as an obstacle to accessing justice.\textsuperscript{32} Furthermore, a survey of clients of the Citizens Information Board found that 33\% of respondents who had faced legal issues had not

\textsuperscript{26} Gráinne McKeever and others, \textit{Litigants in person in Northern Ireland: barriers to legal participation} (Ulster University 2018).
\textsuperscript{28} ibid.
\textsuperscript{30} Committee on Civil Legal Aid and Advice, ‘Report of the Committee on Civil Legal Aid and Advice’ (Prl 6862, 1978), 38-39.
\textsuperscript{32} Sue Gogan ‘Law from a Community Perspective: Unmet Legal Need in Ballymun’ (2005), 15.
taken any action.\textsuperscript{33} The reasons for this included lack of knowledge regarding legal rights (among 21\% of respondents), believing any actions would be futile (18\% of respondents), and not knowing how to go about resolving the issue (approximately 14\% of respondents). Ryan points out that these figures convey a sense of powerlessness felt by many respondents vis-à-vis the justice system.\textsuperscript{34} This is particularly concerning in light of that data suggesting that those with lower education, unstable employment status or household tenure are more likely to be vulnerable to legal issues.\textsuperscript{35}

Poverty

Poverty itself is recognised as both a cause and a result of a lack of access to justice.\textsuperscript{36} Moreover, it tends to be associated with low education levels and a lack of access to information leading to a lack of awareness, disenfranchisement, discrimination and stigmatisation. Those from socio-economically disadvantaged backgrounds may also struggle to access formal resources if they face difficulties in transportation or communication.\textsuperscript{37} Those in lower income groups face other barriers specific to their socio-economic background. For example, it may be more difficult or costly to get time off work to meet with lawyers.\textsuperscript{38}

Lack of Knowledge on Legal Issues

Part of the social and psychological barriers to justice faced can stem from a lack of knowledge regarding legal issues. The OECD reports that on average across OECD countries, 40\% of people consider they are informed on their right to legal aid and 41\% on what steps to take if they need to go to court.\textsuperscript{39} These figures highlight that significant proportions of these populations lack the knowledge required to access the justice system. Similarly, a

\textsuperscript{34} ibid.
\textsuperscript{35} ibid.
Eurobarometer study found that 54% of those surveyed in Ireland consider themselves to have a low or very low level of information about the justice system.\(^{40}\)

A person’s education level is often a significant determinant of his awareness of his legal rights.\(^{41}\) Moreover, a study based in Indiana, USA, found that a lack of knowledge regarding the justice system was found most commonly among low-income groups.\(^{42}\) This had a number of impacts, such as being unaware of whether an issue is justiciable or whether a lawyer is required, being unable to self-represent and being unaware of the availability of legal aid or the type of legal aid needed. Thus, these barriers impede attempts to access the justice system.

However, the study also found that those in low income groups who do seek legal help can face further barriers. For example, there may be a lack of understanding of paperwork, such as forms and contracts, including application forms for legal aid.\(^{43}\) Moreover, 20% of those surveyed failed to seek legal advice in a timely manner or did not follow through, for example by failing to provide necessary information or not attending meetings.

Information on the legal system is an important factor also in determining trust in the justice system. Those with greater amounts of information are more likely to trust the justice system.\(^{44}\)

Social Norms and Trust

Social norms and the level of social trust vary across societies and can impact on access to justice. Social norms regarding what is deemed acceptable in a community may influence whether a person has recourse to the justice system. This has been reported in other jurisdictions in the example of domestic abuse survivors seeking help from legal services, where those who live in communities in which abuse is considered socially acceptable may be less inclined to seek legal help.\(^{45}\)

\(^{43}\) ibid.
Trust in the justice system is crucial to trust in public institutions overall. However, more specifically, a lack of trust in the judicial system can act as a barrier to justice as citizens are less likely to engage with the justice system and use the courts to resolve disputes. There appears to be a general decline in trust in the justice system in Ireland. However, distrust in the justice system is more likely to manifest among those who have suffered discrimination or abuse by state authority. Indeed, those in disadvantaged or marginalised communities tend to show lower levels of trust in public authorities overall. For example, a 2007 police survey found that while 81% of the general population was satisfied with the police, that figure fell to 52% among the Travelling community. This appears to be attributed to the more intrusive style of policing in disadvantaged communities which can damage public trust in the police. However, it should be noted that trust in the justice system is overall higher in Ireland than the EU average, with just over 50% of Eurobarometer survey respondents in Ireland reporting that they tend to trust the justice system.

IV. Barriers Faced by Children and Young People

Children and young people in Ireland routinely experience barriers to accessing justice. These barriers include; difficulty accessing legal advice or information and the inability to participate in the decision-making process in court cases which concern them.

The Children’s Rights Alliance reports that ‘accessing legal advice or getting legal information can be a difficult and daunting task for children, young people and their families, especially those in vulnerable situations.’ They further report that children’s rights under Irish law are not being respected, an issue ‘exacerbated by the fact that a lot of young people and their parents do not know enough about their rights or know where to go for help when they feel

48 ibid.
their rights are being denied.’\textsuperscript{53} In fact, the top query which the Children’s Rights Alliance Helpline has received from children was in relation to ‘children knowing their rights and where to find information specific to their rights.’\textsuperscript{54}

Another issue in relation to children’s access to justice, is that children cannot participate in the decision-making process as much as they should be able to. In a children’s rights audit of Irish law, Siobhan Phelan submits that despite progress ‘in relation to the obligation to hear children and to have regard to their views in decisions affecting them, there remain significant identifiable gaps in certain areas of the law.’\textsuperscript{55} She further argues that the State has failed to provide effective mechanisms whereby the constitutional right of the child to be heard and have their wishes considered is vindicated.\textsuperscript{56} In the context of child care proceedings, the IDEA Project has conducted a survey of Irish practitioners' views on children's participation in these types of proceedings. Based on this survey, it was evident that ‘children are routinely excluded from the decision-making process, in what may be some of the most significant decisions to affect their lives.’\textsuperscript{57} Additionally, the Children’s Rights Alliance attests that they ‘often hear from young people who feel that their opinion has not been taken into account in family law court proceedings.’\textsuperscript{58}

\textbf{V. Barriers Faced by Homeless People}

Another category of people that faces barriers to accessing justice are those that are homeless or facing homelessness. Many people involved in litigation regarding housing issues with low incomes are eligible for Legal Aid based on the means test. However, ‘the Civil Legal Aid Act 1995\textsuperscript{59} specifically excludes Legal Aid being granted in “disputes concerning rights and

\textsuperscript{53} ibid.
\textsuperscript{54} ibid 4.
\textsuperscript{56} ibid.
\textsuperscript{57} Dr Elaine O'Callaghan, Dr Conor O'Mahony and Dr Kenneth Burns, ‘There is nothing as effective as hearing the lived experience of the child : Practitioners' Views on Children's Participation in Child Care Cases in Ireland’ (2019) 22(1) I.J.F.L 2.
\textsuperscript{59} Civil Legal Aid Act 1995, s 28(9)(a)(ii).
interests in or over land’." The Mercy Law Resource Centre submits that despite the availability of some exemptions to the exclusion, ‘there does not appear to be a coherent Legal Aid Board policy on exactly what matters relating to housing it can and cannot take on. This leaves many people from low income backgrounds unable to afford a private solicitor and in many instances without legal representation with regards to housing matters.’

The issue of inadequate access to justice for homeless people in Ireland is further worsened by the ‘rapid and unprecedented rise in homelessness over the past five years;’ with ‘10,262 individuals experiencing homelessness in February 2019, including 3,784 children.’ It has been reported that as the housing crisis escalated, the need for legal services increased. For example, the Mercy Law Resource Centre provided free legal aid for 1,381 vulnerable people affected by homelessness in 2018.

VI. Barriers Affecting Persons with Disabilities

In a paper funded by the National Disability Authority, various barriers to justice were identified as facing people with disabilities. As there is societally a lack of understanding and awareness of disabilities, people with disabilities can find themselves at risk of having to navigate the legal system without appropriate support and of being denied appropriate legal remedies due to prejudicial behaviours of legal professionals and members of the police. These barriers are described as occurring in three stages: when reporting a crime; going to trial as a witness; and the post-trial experience. In these stages structural, procedural and societal barriers prevent people with disabilities from accessing the justice system in full.

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61 ibid.


63 ibid.


Structurally, government organisations and authorities fail to communicate the impairments of disabled persons with one another or with support organisations who are equipped to provide disabled persons with the resources and advice that they need. Procedural barriers, on the other hand, occur during the processes through which justice is delivered, such as reporting a crime to the police or giving evidence whether in the police station or in the courthouse. The adversarial nature of our legal system is important here, as orality plays a primary role that benefits witnesses who are able to articulate their point concisely and coherently. Research has shown that people with intellectual disabilities or who are deaf have their competence and credibility called into question. These two difficulties outlined thus far are permeated by a third which is that of societal attitudes and understanding of disabilities. In a study carried out in Australia, it was found that reports of sexual assault made by women with intellectual disabilities were often not pursued by the police, who were doubtful that the courts could deliver outcomes capable of protecting disabled women who are viewed as being particularly vulnerable and whose credibility would be called into question when acting as witnesses. Such assumptions of vulnerability made on the status of having a disability prevented such women from being provided effective police protection and having their cases pursued. Such prejudice of disabilities expands further than the police, as legal professionals often lack the knowledge of how to work with people with clients with disabilities and what legal concerns such clients often have.

A further hindrance to the accessibility of justice for disabled persons lies in the more mundane reality of physical access to courtrooms in the form of ramps or chairlifts, and suitable technology such as induction loops for those who require hearing aids. Included in these physical barriers are the difficulties posed by an inability to communicate important information to people with disabilities, such as a lack of legal training for lawyers on how to use sign language or the provision of materials for blind people.

The UN Development Program outlined the importance of legal awareness as the “foundation for fighting injustice.” Legal information is often not available to disabled persons in an

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68 Access to Justice: Practice Note, United Nations Development Programme (Sept. 3,
accessible format, depriving many of information on the legal system and how it operates and information as to their own rights. The Irish Constitution, for example, is not available in an Easy Read format and so it like many other important sources of legal information for citizens are inaccessible to persons with intellectual disabilities.

In Ireland the situation is muddled by a lack of clear data, as a key issue with tackling the barriers to justice faced by persons with disabilities is the collection of data. Few organisations track and collect data on persons with disabilities who interact with the legal system, making it difficult to adequately identify and address the barriers faced by such persons.

VII. Barriers Affecting Prisoners

Professor Mary Rogan outlines the barriers to justice facing prisoners as lying in cuts to legal aid and the opaque nature of decision making by prison authorities.69 As the Ombudsman in Ireland does not extend to prisoners, a prisoner seeking temporary release or permission for a banned visitor to visit them must appeal the decision through judicial review. Thus, due to cuts to legal aid, Rogan argues that prisoners do not have access to a scheme of legal aid to challenge such decisions on access to visits and rehabilitative schemes. Further, she notes that the Inspector of prisons has criticised the fact that prisoners are often denied the opportunity to present their case orally and to rebut evidence of others when these decisions are being made. She notes that such an unsatisfactory complaints mechanism is particularly dangerous given that it is done so far beyond the public gaze. Compounding this danger are delays into the investigation of deaths of prisoners and citing the case of Gary Douch, she argues that these delays and failures to investigate thoroughly imperil access to justice and the opportunity to learn from previous failings.70 With regards to accessing courts, she argues that the decision of Brady v Haughton71 which established a prisoner is entitled to be present at their hearing is not a very well-known ruling and as such prisoners are not aware of all of their rights to access justice.

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70 ibid.
71 Brady v Haughton [2005] IESC 54.
Conclusion

“In our conception of democracy it is fundamental that every person should stand equal before the law. If this is to be so, he must have effective access to the machinery of law enforcement...” – annual speech of the President of the Law Society 1968.\footnote{102 I.L.T & S.J. 371-2.}

Several of the same barriers to justice that existed when this speech was made in 1968 still exist today. The high cost of legal services coupled with the complexity of the legal system to a litigant seeking to self-represent essentially acts as a deterrent to pursuing a legal remedy for a civil wrong. Furthermore, the alienation of low-income and low-education social groups as a result of poverty, a lack of knowledge and a traditional distrust of the legal system serves to further impede access to both cost- and time-efficient legal advice and remedies. Finally, through an examination of vulnerable societal groups such as young people, the homeless population and prisoners it has been made clear that future solutions to the aforementioned barriers to justice must be appropriately adapted to the unique needs of each of these groups in order to ensure that these groups do not continue to be left behind.
Chapter 2: How IT Can Facilitate/Impede Access to Justice

Campbell Whyte, Emily Coffey, Hugh Gallagher, Michael-John Gillen
This chapter will analyse how IT may facilitate and impede access to justice, with specific sub-focuses on the fields of user experience, big data and discrimination, and environmental justice.

I. Technology: Enhancing Accessing to Justice

If access to justice is to be defined as ‘effective access to legal information, early advice, representation, legal aid and the courts, as well as to a fair system of redress, effective remedies and just outcomes’, then this section shall analyse the potential technological mechanisms through which these elements can be enhanced. The primary barriers to justice these technological mechanisms shall seek to overcome are the prohibitive costs of legal services, and the arguable inaccessibility of legal information. It shall also examine potential improvements to empower those accessing justice and address specific barriers experienced by minority groups such as migrants.

In the interests of clarity, the following research is divided into three categories; improvement, automation and transformation. Improvement explores how technology might enhance access to justice in a traditional legal setting, with minimal change to the practice of law or the role of legal professionals. Automation explores the potential minimisation of the role of legal professionals, looking at how legal services, such as legal writing, can be performed by machines while preserving some core elements of legal practice, such as representation in court. Transformation considers how technology can fundamentally alter the administration of justice including the potential elimination of legal professionals and physical courts.

**Improvement**

Accessible Legal Information

Legal information is remote and alien to the public, as is compellingly illustrated by the British Public Legal Education Network’s research that, of the 10,000 nationally representative surveyed people, nearly two-thirds do not know their rights and almost 70% have no knowledge of basic legal processes. It is apparent that legal information is inaccessible but this barrier to

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73 Joint Committee on Justice and Equality Deb 27 November 2019.
justice could be mitigated by technology. Through the consolidation and provision of legal information in an accessible and user-friendly format, those seeking to access justice can be empowered to make informed decisions in relation to their potential legal issues. For example, New York City housing tech non-profit JustFix maintains an online learning centre to centralize tenant advice, offering detailed information on key areas of tenant’s rights, methods of redress, and even provides tools to initiate legal proceedings if necessary.\(^75\) This particular model highlights the potential for online databases to effectively support individual’s accessing legal information and potentially early advice, two key elements necessary for access to justice. In theory this model could be transposed to areas of Irish law relating to housing, family, asylum, immigration, employment, debt and social welfare disputes, as they have been flagged as key areas for access to justice activity both included and excluded from the scope of the Irish legal aid system.\(^76\) These tech-based solutions could empower the public and drastically enhance the accessibility of legal information.

Connecting individuals with legal service providers

An emergent use of technology in legal practice and access to justice activism, is the use of apps, websites and similar platforms to connect individuals in need, with effective legal support. The most prominent usage appears to be identifying legal service providers based on an individual’s location and need. For example, through tech non-profit AsylumConnect’s website LGBTQ+ asylum seekers can input their location and need (e.g., help with their asylum application) and they will be provided with a list of verified LGBTQ+ and immigrant friendly legal practitioners and organisations that can assist them within the area.\(^77\) Similarly Eviction Free NYC assists individuals determining their eligibility for legal aid and connects them with nearby legal service providers and housing organisations.\(^78\) Through conducting a basic needs

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\(^76\) Access to Justice: A Right or a Privilege? A Blueprint for Civil Legal Aid in Ireland, (Free Legal Advice Centres 2005); Court Service of Ireland, Annual Report (2019).


assessment and geographical search, online platforms such as this can prove instrumental in ensuring individuals receive early, appropriate and effective legal support, thereby enhancing access to justice activity.

Technology is also used to connect individuals to legal practitioners online for advice. Virtual legal advice clinics in particular are rising in popularity, such as the ABA Free Legal Answers website where qualifying users can post their civil legal question and legal professional volunteers, authorized to provide pro bono assistance, can log in to answer questions and provide legal information and advice online. This style of online consultation could potentially be an avenue for free legal advice centres to pursue due to its accessibility and flexibility, as opposed to in-person clinics.

Additionally while a potentially low-tech option, text messaging has been flagged as an accessible method of communication, particularly for those with limited access to internet or other forms of technology, furthermore it has been asserted that ‘if the legal industry could adopt the use of text messaging in a widespread way ... it would also streamline the way people across socioeconomic statuses receive legal guidance.’ This simple development could be yet another avenue through which technology can make justice more accessible.

Translation and Interpretation Services

Without effective communication, all elements of access to justice are grossly undermined. As such translation and interpretation services are crucial in facilitating access to justice. However, in light of the recent concerns expressed by the Law Society of Ireland, the role of translators and interpreters in the Irish Courts has come under increased scrutiny. Additionally, there are

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claims an ‘end of interpreters’ is looming due to technological advancement.\textsuperscript{82} Hence it is worth considering how technology might further improve this key step in facilitating access to justice.

Machine translation, a form of computer-automated translation, has emerged as one of the primary possibilities for replacing human interpreters and translators. Concerns have been raised that courts cannot simply rely on this automated method of translation and expect to get a product that is legally accurate, that ‘there is a vast gulf between a draft quality translation of a text, sufficient to enable the reader to grasp its general meaning, and an accurate, faithful and idiomatic rendition provided by a professional’.\textsuperscript{83} However, in India the Supreme Court Vidhik Anuvaad Software (SUVAS), a machine learning tool trained by artificial intelligence for translating Supreme Court judgments, has been introduced and shows promise for accessible beyond the original language of the respective case.\textsuperscript{84} Attention has also been drawn to videoconferencing, Skype, Zoom, and similar technologies as less radical solutions to be used for remote interpretation and bilingual assistance.\textsuperscript{85} There are lingering concerns here as fears surrounding challenges with simultaneous interpretation and the lack of personal contact that could potentially compromise the accuracy of the translation and the trust and confidence of the individual availing of the services in the legal process.\textsuperscript{86} These technological mechanisms could be crucial in ensuring effective access to justice for the minorities in our population whose primary languages are not English or Irish.

\textbf{Automation}

\textit{Technology-enabled frontlines}

In the UK Law Society’s recent publication ‘Technology, Access to Justice and the Rule of Law’ it was identified that technologically enabled frontline services for clients or service users...
could be used for legal empowerment through public legal education, information and advice, which could prove a bolstering move for access to justice activity.\(^{87}\)

As opposed to reaching human personnel upon making contact with a legal service provider, the individual instead engages with artificial intelligence and predictive technology powered chatbots, which simulate human conversation through voice commands, text chats or both. These chatbots obtain relevant information from the individual and offer information on legal issues connected to the case, and related matters. For example, LawBot, a chatbot covering 26 criminal offences seeks to help people understand how the law applies to their situation, takes the user through a series of questions, helps identify a matching offence they may be experiencing such as harassment, and drafts an editable letter to law enforcement or legal service providers to progress the case.\(^{88}\) This excellently illustrates how a chatbot can conduct an initial consultation with a user, consolidate the relevant information on their issue, analyse the matter and compile relevant legal information to them as they seek legal advice and aid. Additionally through the use of AI and predictive analytics the chatbot could analyse the probability of success for a given case, to potentially avoid costly litigation and encourage the user to seek alternate methods of redress or resolution, or give insights into how they could enhance their case in court.\(^{89}\) Given their clear potential efficacy and cost effectiveness, with a Bain & Company study pertaining to mobile banking estimating each mobile chatbot interaction incurs a variable cost of 10 cents compared to a $4 cost incurred by speaking to a call-centre agent, it is clear that these technologically enabled frontlines can be a strong tool to facilitate access to justice.\(^{90}\)

**Legal Writing and Document Filing**

As has been previously outlined, chatbots can be powerful technological tools in the initial stages of a legal proceeding or in a consultation or as a public legal education device. However,

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\(^{87}\) ‘Technology, Access to Justice and the Rule of Law: Is technology the key to unlocking access to justice innovation?’ (*The Law Society*, 16 September 2019).


\(^{89}\) Alison Wilkinson ‘How AI is revolutionising legal research’ (*Kira Systems* 13 April 2020)  [accessed 12 July 2020](https://kirasystems.com/blog/how-ai-is-revolutionizing-legal-research/).

chatbots can also prove beneficial in substantive legal practice through the automation of legal writing and document filing. With document automation technology, legal practices and organisations may turn legal documents into accessible web-based questionnaires that can be used to generate the forms they need, such as those involved in debt collection, asylum, and transgender name changes.

The most renowned example of this is Joshua Browder’s DoNotPay, a free legal chatbot service, which has overturned over 200,000 parking fines in London and New York and processed over 3,000 emergency housing applications. Furthermore DoNotPay has recently expanded to include a chatbot on the Facebook Messenger platform, which assists refugees with immigration applications and asylum support applications internationally.91 In this particular field, the chatbot asks a series of questions and using the responses, determines the right application form, whether the refugee is eligible for asylum protection, and then requests the necessary information and auto-fills the appropriate application form.92 Similarly in Australia, through a partnership with a law firm, the Refugee Advice and Casework Service (RACS) has developed a document automation platform to automate and support asylum seeker applications.93 This enabled the NGO to handle a higher volume of asylum seeker applications quickly and efficiently, thereby illustrating how this technology can bolster the work of NGOs working in legal settings where they may struggle with strained resources. Additionally in the United States groups such as the Colorado Name Change Project and Florida Justice Technology Center have used document automation to create free websites that help those undergoing a gender transition to legally change their names and gender markers.94 Users fill out questionnaires on these sites and have the necessary forms automatically generated while also receiving step-by-step guidance on how to file the name-change applications and solve other related issues.

92 ibid.
94 ibid.
In short, document automation can be a powerful tool in the legal struggles related to social justice issues and therefore within access to justice.

Legal research
Machine learning is revolutionising legal research. Through AI’s potential to continually grow and improve through experience and exposure to new knowledge and commands, it has begun replacing the less advanced pre-programmed search engines previously relied upon in legal research. Through natural language processing AI can bypass the need for hyperspecificity in searches instead interpreting the search to locate relevant information and avoid producing innumerable irrelevant results containing passably related buzzwords. This allows AI legal research tools to obtain the true meaning of the query and enhance the efficiency and efficacy of those conducting research. In a common law jurisdiction such as Ireland this will prove indispensable for locating relevant precedents for use in a legal dispute. Additionally, it is estimated that AI tools allowed researchers to conduct research 24.5 percent faster than practitioners using traditional legal research.

This could prove indispensable for the work of pro bono legal services or free legal advice clinics as it will reduce the time needed to conduct comprehensive research for clients. Moreover, it will allow practitioners encountering legal issues they are unfamiliar with to undertake extensive research and to understand the matter fully in order to support those using the legal service. Hence it is plainly apparent how legal research technology might enhance access to justice for those availing of these services.

Transformation
Online Courts
Due to the COVID-19 pandemic restrictions, legal professionals have begun re-evaluating the idea of online courts, largely to digitally replicate traditional court systems but also to examine the ideas Richard Susskind presented in his work, ‘Online Courts and the Future of Justice’.

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96 ibid.
Within this is the idea that online courts are by nature more accessible, allowing for reduced legal costs, minimised wait times, more flexible scheduling, and overall will enhance access to justice.

Internationally, there has been a surge in the use of virtual and remote hearings, video links for the provision of evidence, electronic filing and similar mechanisms to simulate the workings of a physical courts service as closely as possible.98 In Ireland, where the Court Service has been more hesitant to move online,99 there has noticeably been reduced waiting periods for cases to be heard and a vast reduction in the time necessary to comprehensively conduct court business. In conjunction with this it is predicted there will be a reduction in legal fees for the users of the Court Service as Angela Denning is confident that digitalisation promises for a ‘quicker, cheaper and easier’ future for legal proceedings.100 This is indeed promising and potentially indicative that online courts or the accompanying tools may facilitate greater access to justice.

Online Judging
Currently, online courts and virtual hearings are primarily in use to replicate a physical court, although it is possible that this may evolve into ‘online judging’ wherein an asynchronous hearing system is used, where there is minimal interaction between the parties but rather direct communication and submission of evidence, documents and arguments to the judge digitally.101 Subsequently upon review and communication with both parties the judge delivers the verdict and judgement. While this idea of Susskind’s was presented he admitted it may be unsuitable for all forms of cases but explained that for ‘low-volume matters for which it is simply disproportionate to take the day off work or for lawyers to take up a court’s time to resolve relatively modest difficulties and differences’ this system could be suitable and indeed

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advantageous. This system could further enhance the elements of online courts that facilitate access to justice, as outlined in the previous subsection.

Extended Courts

When Susskind proposed online judging, he described it as one element of a two part system, the other being ‘extended courts’ which provide a range of online tools and resources to parties. These would be developed to enable the parties to understand their rights and obligations, devise arguments, compile evidence, and provide alternative avenues for dispute resolution.103 These resources and tools would be based on design thinking principles and thereby seek to empower the parties to take ownership over the proceedings, particularly the ‘low-volume matters’ previously referenced.

This would negatively impact legal professionals working in these areas by essentially eliminating the need for solicitors or barristers within them. However, it would be a tangible step towards making legal information and education accessible to the public, in addition to enabling individuals to seek legal resolutions to their issues even with the financial restraints that may have barred them from employing counsel in the past.

AI Judges and Predictive Analytics

Until now all technological transformations outlined have maintained that ultimately all authoritative decisions would be made by a human but the introduction of a technological alternative ought to be considered. While the implications of the use of artificial intelligence in a legal and social justice context are examined in depth in other areas of this publication, we can nonetheless consider how it may be advantageous to access to justice.

With the continual development of machine learning and the apparent success of China’s ‘internet courts’ it is not beyond the realm of possibility to imagine that artificial intelligence may be capable of fulfilling the role of judge.104 The possibility of a judge that is capable of

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103 ibid.
being available 24 hours a day 7 days a week is not something that can be overlooked. The potential it holds for vastly accelerating the work of the courts and ensuring that all individuals are capable of accessing a source for binding legal decisions at all times is immense. If implemented in conjunction with the operations of an ‘extended court’ it could in theory eliminate the need for legal professionals in a court setting, thereby vastly reducing the costs of all disputes heard on these platforms.

In theory this introduction could ensure more effective access to the courts and further enhance the workings of our current ‘fair system of redress, effective remedies and just outcomes’. Thereby tangibly facilitating access to justice.

Conclusion

‘More people in the world now have access to the internet than access to justice.’\textsuperscript{105} This is not acceptable, and while there is no true ‘silver bullet’ to solve this issue, technology will inevitably form part of the necessary solution. While other sections of this publication outline difficulties with regards implementation and the negative consequences of technology for justice in a more general sense, the potential applications outlined in the above research compellingly, although non-exhaustively, illustrate the role technology has to play in enhancing access to justice. Collectively they demonstrate how technological mechanisms can be used to empower those seeking to access justice, reduce the costs of accessing justice, increase the efficiency of the systems through which people access justice, and overall facilitate access to justice.

II. A user-focussed perspective.

Technology has the potential to facilitate access to justice. However, it must be developed with all users in mind. This section will focus on the way in which a user’s experience of technology may impede or facilitate their access to justice. “Users” include potential litigants, law firm employees, access to justice services, members of the justice system and those merely seeking legal information. Usability and accessibility are key factors in how encouraged users feel to use legal technology and IT in general, and this depends on its complexity and user-perception

of its complexity. On the other hand, legal technology’s fragmentation (the development of new technologies, that are incompatible with existing technology and require the development of further technology to co-exist and interact with the pre-existing technology) and duplication (the development of multiples of the technology with the same purpose) can have neither a positive nor negative effect, as duplication inherently leads to confusion, which cannot be viewed as facilitating a user’s access to justice.

User Trust/Perception

Use of MyLawBC, a site providing free legal aid and information services in British Columbia, doubled when personal information, such as a Zip Code or Postcode, was no longer collected from users.106 The increase in users suggests that the perceived untrustworthiness of legal technology may impede access to justice and the following section, Big Data as a Tool of Discrimination, shows that people have cause to feel uneasy when disclosing personal information. As a corollary, a user’s positive perception of, or trust in technology may facilitate his/her access to justice. A more positive perception of and heightened trust in technology may be engendered through transparency regarding the company’s digital practices, through the company’s use of digital security and by allowing customers to set data collection preferences, which the company is shown to respect.107 Transparency may be achieved by setting out terms and conditions in an accessible and understandable manner and by clarifying the methods involved in automated decision-making. Regarding automated decisions, Deloitte employees noted that, ‘[t]he black box nature of machine learning (i.e., the opacity around how the software arrives at a decision) can lead to confusion and scepticism among customers…’ Therefore, the use of explainable artificial intelligence, AI whose reasoning may be explained to users, should be favoured to give customers peace of mind.108 Similarly, the digital security measures that a company has in place, such as the use of multifactor authentication, digital biometrics and the possibility to personalise ‘suspicious activity alerts’, may instil trust in users. Finally,

108 Ibid.
the control and knowledge that the prospective user will have concerning his/her data is likely to increase trust in that technology.109

Confusion

Users may be similarly deterred due to confusion stemming from the ‘duplication of innovations and the fragmentation of their application.’110 The UK Law Society noted that multiple organisations possess extremely similar ‘legal aid eligibility calculators’.111 They found that the presence of multiple similar pathways dissuaded respondents from seeking further legal redress. Respondents were particularly ‘confused’, ‘stressed’ and ‘disenfranchised’ when different pathways proffered ‘conflicting solutions’.112 If the duplication of legal technology prevents access to justice via the deterrence of potential litigants, it is clear that single pathways are preferable and could better facilitate access to justice. Unfortunately, it is unlikely that common pathways will be implemented, as each company wishes to have a unique product for their customers.

Of course, there are ways in which technology may prevent user-confusion and thus facilitate their access to justice. The use of easy-to-navigate graphical user interfaces (GUIs) is one example. A GUI is one of three types of user interfaces that a user may encounter when using a computer, the others being command-line interfaces and menu driven interfaces. GUIs are by far the easiest to use and the most accessible. They are thus suited to the less technologically adept, with icons and audio indicators being used instead of text. Conscious decisions on the company’s side to promote the ease with which users use the website prevent user confusion and thus, facilitate access to justice in the legal technology sphere.

109 ibid.
111 ibid.
112 ibid. p 18.
Self-Represented Litigants

In theory legal technology improves self-represented litigants’ (SRLs) access to justice.\footnote{Court Technology Advisory Committee for the Judicial Council of California, Advancing Access to Justice Through Technology, Guiding Principles for California Judicial Branch Initiatives (CTAC 15 – 2012) <http://www.courts.ca.gov/documents/jc-20120831-itema.pdf> accessed 18 June 2020.} The presence of legal technology promotes inclusivity by making the law more comprehensive and widely available. Legal technologies such as Rechtwijzer and MyLawBC provides SRLs with a cost- and time-effective route to justice by providing information and advice for free.\footnote{For further information on these technologies see chapters 9 and 10.} However, unequal access to technology may impede or delay a user’s access to justice. Though there is a dearth of information pertaining to the numbers of SRLs in Ireland, approximately 43% of Californian litigants are self-represented according to the Judicial Council of California’s Court Statistics Report 2016.\footnote{For further information on these technologies see chapters 9 and 10.} As the California Technology Advisory Committee for the Judicial Council of California noted, SRLs are most likely to use public terminals, such as internet cafés and libraries when accessing the public courts system.\footnote{For further information on these technologies see chapters 9 and 10.} Apart from the possible privacy ramifications of such a location, users will not be able to access software-based legal technology, as software downloads are prohibited on most public computers. Furthermore, any pdf downloads are deleted at the end of a session which, in DLR libraries only lasts fifty minutes.\footnote{For further information on these technologies see chapters 9 and 10.} Computers automatically delete any downloads or newly created files at the end of this period and time extensions are subject to availability. Some programs do not change the computer’s software themselves but require other software such as Adobe to view files or run parts of the program. For example, online applications to the Legal Aid Board of Ireland require Adobe formatting.\footnote{For further information on these technologies see chapters 9 and 10.} Legal technology, such as Rechtwijzer, a Dutch Online Dispute Resolution platform, is now for the most part internet-based, but there are still applications which require pdf or software downloads. MyLawBC information publications and Irish Legal Aid forms require downloading.\footnote{For further information on these technologies see chapters 9 and 10.} Conversely, MyLawBC’s chat services are fully web-based, as are Irish Courts’ forms, which require copying and pasting into Word Documents, but do not require downloading.\footnote{For further information on these technologies see chapters 9 and 10.} The inclusion or requirement of software downloads in legal technology aimed at lay users can act as a barrier to justice. Ultimately, self-represented litigants’ access to justice can only be enabled by technology if they have proper access to the necessary equipment.
Costs

As noted above, legal technology and technology in general may financially facilitate users’ access to justice by providing a cheaper and more efficient alternative to costly lawyer-based litigation. However, the cost of running public legal technology may impede access to justice for users.

Technology may indirectly impede a user’s access to justice by being too expensive to run properly. Per Steven Hynes in the New Law Journal, the inability of government-owned legal technology to generate sufficient funding may impede users’ access to justice as a result of system errors or glitches.121 If the system glitches, users may be deterred, they may receive the wrong advice, or they may lose interest. To make the system, site or application run smoothly, continuous tweaking and revision is needed. Hynes noted that ‘commercially developed apps are continuously updated to make minor improvements and deal with small things that go wrong.’ The article claims that governments prefer to “fire and forget”, meaning that the constant maintenance of a site is financially unattractive to them and that they would prefer a product that once launched would need no further upkeep. Updates are fundamental to technology and thus, this idea is incompatible with digital systems. Legal technology may impede access to justice due to simple technical errors, for which there is no financially viable solution available to the government or public organisation.

119 See for example the International Protection Application Form at <https://www.legalaidboard.ie/en/our-services/>. 
120 See for example the Landlord and Tenant Civil Bill at <http://www.courts.ie/rules.nsf/0f9632235a96242e80256d2b0045bb5c/1ec01016ffe7a71f80256f24005ec2dd?OpenDocument>. 
Future issues

Currently, if a person cannot use online pathways, they are able to use in-person, traditional alternatives. However, should legal technology become the main medium of providing court judgements or legal advice, these people would not have this choice. Though it is unlikely that this should ever come to fruition, Professor Smith’s recent comment suggests otherwise.\textsuperscript{122} He called for a mandatory ‘dual-running period’ of online and traditional courts of five to ten years or until it could be shown that the online courts could cater to the needs of the ‘digitally excluded’. However, this may still marginalise the digitally excluded, as the traditional court’s cessation of existence and the supremacy of legal technology over its traditional counterpart would impede access to justice for those with special needs, for older users, for impoverished users, \textit{inter alia}.

Conclusion

From a user-focused perspective, legal technology may impede and facilitate access to justice. To prevent the deterrence of users and thus, the prevention of their access to justice, technology developers should consider building the company’s trustworthiness and reputation, avoiding duplicating and fragmenting pre-existing technology, using user-friendly interfaces, testing program’s compatibility with public computers and keeping running costs to a minimum.

III. Big Data as a tool of Discrimination

It is also worth considering how technology, and big data in particular can impede access to justice. The amount of our personal data that exists online today is astonishing, and perhaps the most frightening element is that so much of it exists without our knowledge, by virtue of data transfers and our own forgetfulness and/or apathy. For the most part, our primary concerns about our online data would be the invasion of privacy and the potential for hacking and fraud. One might reasonably think that discrimination, being the result of conscious actions and human-instituted policies, has no significant intersection with these questions of data and privacy. However, numerous studies have made it clear that the potential of big data to

discriminate is a threat to equal access and social justice in 2020. This section will briefly set out how discrimination arises in big data, providing some examples, before analysing more closely the human practices that allow this.

**How does discrimination in Big Data manifest?**

Discrimination arising from big data presents itself in many forms. It can arise quasi-accidentally, completely devoid of human intent, or it can arise as a result of flawed human-created algorithms. This article will analyse the discrimination that arises from big data as caused by the digital divide, services and search engines.

The Digital Divide

As big data and mobile devices play an ever-larger role in our life, big data may exacerbate the effect of the digital divide, whereby those who do not have access to technology and Internet are further marginalised and excluded. One example of this is the Street Bump app in Boston. This smartphone app collected GPS coordinates from cars to analyse road conditions and report back to the Public Works Department. The team soon realised that as the elderly and poor are less likely to have smartphones in their cars, the app might serve to redirect the Public Works Department to parts of the city with wealthier and younger populations over lower-income areas in equal or greater need. There are however more concerning examples of the discriminatory effects of big data engendered without direct human input. A very similar effect arose in Brussels\(^\text{123}\). Even though the use of technology in access to transportation services or medical care may make lives easier, it is foreseeable that these pathways are developed at the cost of more traditional means of service. This almost necessarily excludes the marginalised. Furthermore, if people on the wrong side of the digital divide aren’t considered in big data, their needs aren’t considered either. The digital divide may also widen the economic gap between poor and rich countries, as those in rich countries gain access to more efficient ways of working.

Perfect personalisation

In the age of perfect personalisation, tailored search results and advertisements, algorithms have learned how to either match search results to the biases of the searcher or direct vulnerable

groups towards different search results. For example, a study found that “web searches involving black-identifying names (e.g., “Jermaine”) were more likely to display ads with the word “arrest” in them than searches with white-identifying names (e.g., “Geoffrey”).”\textsuperscript{124} Targeted ads are another example of the negative effects of this perfect personalisation: the elderly, those with gambling habits and the poor are excellent targets for gambling ads or ads for risky loans.\textsuperscript{125} Algorithms make this targeting possible in a way that it was not previously. It is difficult to say how much of this is intentional and how much of this is algorithm error, but this evidence generates concerns that big data has the potential to use the effect of personalisation to entrench attitudes against marginalised groups. One might also foresee perfect personalisation being used to perpetuate discrimination by showing different search results for housing searches and employment opportunities to different groups.

**Surveillance against vulnerable groups:**

There are also concrete examples of big data being used to engage in surveillance against marginalised groups. For example, in Chicago, the police engage in predictive logic and analytics with the citizens of the city, and researchers “can predict [citizens’] likelihood of being a victim or perpetrator of gun violence using big data metrics, including place of residence, social associations (e.g., past experience with victims of gun violence and gang connections), and age”.\textsuperscript{126} The Los Angeles Police Department has also used big data and predictive analytics for citizen surveillance, to the extent that people who have never had any encounters with law enforcement are included in police databases.\textsuperscript{127} This direct state surveillance has clear consequences for personal liberties and the interactions one has with law enforcement: for example, greater surveillance may lead to more interactions with law enforcement and harsher sentencing. Furthermore, it only reinforces existing police biases and stereotyping: the groups most likely to be targeted by this are already those who have disproportionate encounters with police. Policing is not the only area in which surveillance of and discrimination against vulnerable groups is practiced: the Australian Customs and Border


\textsuperscript{125} Newell S, Marabelli M, ‘Strategic opportunities (and challenges) of algorithmic decision-making: a call for action on the long-term societal effects of ‘datification’, 24(1) J Strategic Inf Syst. 2015: 3–14.


Protection Service worked with IBM to create a predictive analytics system to identify “high-risk” travellers.\textsuperscript{128} This will invariably work to ingrain attitudes against groups that are already subject to disproportionate surveillance and suspicion. The idea of being victims of analytics we can’t control, and of being placed on a “no-fly” list on the basis of these analytics, goes against ethics of non-discrimination, autonomy and fair procedure.

**Causes of big data’s discriminatory practices**

Big data can clearly be used to inappropriately filter results for job applications, loan applications, police databases, to name a few examples. However, two further ways in which big data can be used to perpetuate discrimination in a more insidious manner merit closer analysis.

**Masking**

One way that voluntary discrimination based directly on sensitive data arises is via the practice of masking: intentional discrimination disguised as unintentional discrimination. In this case, it applies to humans who use technology as a shield between them and the discriminatory impact of their actions. For example, “a prejudiced decision maker could skew the training data or pick proxies for protected classes with the intent of generating discriminatory results.”\textsuperscript{129} Indeed, the use of proxies-data points, such as post codes, that act as predictive substitutes for more sensitive data points, such as race- is said by some to be “the most common form of masking”.\textsuperscript{130} This has the power to do tremendous harm. For example, employers and other decision-makers might use proxies and data analysis to construct a portrait of an applicant and discriminate on the basis of a sensitive data point while being able to legitimately claim that as they did not have access to that information, they could not have considered it in their decision-making.


\textsuperscript{130} ibid.
Inherited bias

It is also worth noting that algorithms learn from the data they are presented with and often inherit human bias. This is partially a result of the incorrect use of big data: where it works on pure predictive statistics, it ends up predicting that members of groups who have historically been treated as not creditworthy will continue to be so, and that those who have historically faced employment discrimination will continue not to get jobs.\(^{131}\) Humans must still set target variables, outcomes of interests and class labels\(^ {132}\), and “when the training data is contaminated (for instance because it discriminates against a particular group), the classifier [data-mining algorithm] will learn to classify in a biased way, strengthening discriminatory effects.”\(^ {133}\) It would be unrealistic to expect technology to produce non-discriminatory results from discriminatory samples, which is why it is crucial to carefully oversee the data fed into algorithms to avoid this effect.

Conclusion

Though this research is primarily from the United States, a lot of it has clear implications for Ireland. A digital divide created by an increased reliance on technology as well as perfect personalisation in search results could both arise in technology used in Ireland, and any Irish resident who travels abroad should fear greater surveillance in customs. Moreover, the discriminatory faults observed in algorithms affect Irish citizens where Irish citizens allow companies who use these algorithms to process their data, and the same faults could foreseeably affect algorithms constructed and employed by Irish companies.

This is only a small illustration of the multiple ways in which big data can be used as a tool of discrimination and, instead of being a great equaliser, perpetuate existing injustice. One solution to this is transparency. For example, Hildebrandt and Koops argued that greater transparency in data processing is more valuable to consumers than privacy restrictions, as it gives the consumer greater consumer knowledge and power over who controls and processes

their data and what data exists about them online. Another possible solution to this is human oversight: some authors have commented that “part of being a responsible data scientist is knowing how and when to involve human experts in the decision making process”\textsuperscript{135}, and that human oversight improves objectivity and flexibility in the modification of algorithms. On the whole, it is clear that legal and technological skills are needed to push back against the harmful consequences of Big Data for social justice and equal access in our society.

### IV. Climate and environmental justice

Climate Change is a defining issue of our time. While environmental and climate change law alongside sustainability practice is a relatively novel area, it is also impacted by the question of access to justice. This section, in recognition of the probable threats on a domestic and global level, will focus on the novel area of the role that IT has in facilitating and impeding access to environmental justice. This section will draw on the broader impacts as outlined earlier in this chapter while outlining the legal regime around access to environmental justice and finally the direct way in which IT facilitates and impedes environmental justice.

Climate justice is a term used for framing climate change as an ethical and political issue, rather than one that is purely environmental or physical in nature. This is done by relating the effects of climate change to concepts of justice, particularly environmental justice and social justice.\textsuperscript{136} In this section environmental justice is to be understood as inequality in the distribution of the burdens and the benefits of environmental ‘bads’ and ‘goods’ (i.e. negative consequences or derivatives of production, distribution, consumption, and disposal versus clean air, clean water, landscape, green transport infrastructure (footpaths, cycleways, greenways, etc.), public parks, urban parks, rivers, mountains, forests, and beaches)) and the civil and political processes that allow for participation, and decision making.\textsuperscript{137}

[1] The legal regime concerning access to environmental justice

(a) International Law

Law and policy for ensuring environmental protection rely heavily on governments and public authorities. Key components of governance mechanisms concerning the implementation of environmental legislation refer to transparency and public participation. The full engagement of public administration and civil society in the environmental policy making process is clearly perceived as the main purpose of the Aarhus Convention on Access to Information, Public Participation in Decision – Making and Access to Justice in Environmental Matters.\(^\text{138}\)

The Aarhus Convention adopts a rights-based approach under three broad themes or ‘pillars’ and guarantees right of: (a) access to information; (b) public participation in decision-making and (c) access to justice in environmental matters. Article 9 of the Aarhus Convention requires that adequate review procedures are in place to safeguard the rights granted by the other pillars of the Convention and under national law.

Art. 9(1) – concerns access to review procedure for any person whose request for environmental information has been ignored, refused or inadequately answered.

Art. 9(2) – concerns access to review procedure for members of the public concerned to challenge substantive or procedural legality of decisions, acts or omissions subject to public participation provisions of Art. 6.

Art. 9(3) – concerns access to administrative or judicial procedures for members of the public to challenge other acts or omissions which contravene provisions of national law relating to the environment.

Art. 9(4) – review procedure shall provide adequate and effective remedies and be fair, equitable, timely and not prohibitively expensive.

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Finally, Art. 9(5) – information to be provided to the public on access to review procedures and establishment of assistance mechanisms to remove or reduce financial and other barriers to access to justice to be considered.

(b) European Union Law

The Aarhus Convention is implemented in the European Community and supported by the following four EU Directives:

1. **2003/4/EC Public Access to Environmental Information**
   The objectives of this Directive are to guarantee the right of access to environmental information and to set up the basic terms and conditions of, and practical arrangements for, its exercise; and to ensure that environmental information is progressively made available and disseminated to the public in order to achieve the widest possible systematic availability and dissemination of environmental information to the public. To this end, the use of computer telecommunication and/or electronic technology, where available, shall be promoted.

2. **2003/35/EC Public Participation and access to justice**;
   The objective of this Directive is to contribute to the implementation of the obligations arising under the Aarhus Convention, in particular by:
   (a) providing for public participation in drawing up certain plans and programmes related to the environment;
   (b) improving the public participation and providing for provisions on access to justice within Council Directives 85/337/EEC and 96/61/EC.

3. **2003/98/EC Re-use of Public Sector Information**
   This Directive establishes a minimum set of rules governing the re-use and the practical means of facilitating reuse of existing documents held by public sector bodies of the Member States. There are, however, some exemptions, for instance, documents held by cultural establishments; museums, libraries, archives, orchestras, operas, ballets and theatres. According to the Directive, citizens or companies do not have to prove a particular interest under the access regime to obtain access to the documents
4. **2007/2/EC Infrastructure for Spatial Information in the European Community**

In May 2007, a major recent development entered into force establishing an infrastructure for spatial information in Europe to support Community environmental policies, and policies or activities which may have an impact on the environment. The Directive requires that common Implementing Rules (IR) are adopted in a number of specific areas such as: Metadata, Data Specifications, Network Services, Data and Service Sharing and Monitoring and Reporting.

(c) Irish Law

2003/4/EC and 2003/35/EC have both been successfully implemented in Ireland. Prior to the ratification of the Aarhus Convention, Ireland had to ensure that all the provisions of the Convention were implemented in national law. Over 60 pieces of legislation have been used to implement the Aarhus Convention in Ireland. The Government has prepared an Implementation Table outlining the transposition, or implementation measures, adopted in Ireland. The table is intended to be a reference guide and it is not a legal document.

Additional measures have since been enacted in addition to those listed in the Implementation Table. These are listed below:

- S.I. No. 137/2013 - Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations 201;
- S.I. No. 283/2013 - Environmental Protection Agency (Integrated Pollution Control) (Licensing) Regulations 2013;

[2] **The role that IT plays in facilitating environmental and climate justice**

Public Participation in environmental affairs is a key component in considering the efficacy of access to environmental justice. Through the use of IT for environmental matters, the public
can be informed about the general condition of the environment. Furthermore, IT can be used as a way of regular communication between government and citizens. In accordance with the principle of transparency, government bodies are obliged to provide an adequate way for the public to have an insight into their operations. In addition, the authorized person is responsible for the accuracy of this information and for providing public access within a reasonable timeframe. Finally, the application of IT in environmental matters can promote public participation in environmental decision-making. If there was an effective legal framework, the public would be able to participate in procedures, such as environmental impact assessments, by submitting their opinions as e-documents or through online surveys. This will become even more important in the era of COVID-19.

The development of the Internet as an information technology has been significant to the availability of and access to environmental information and justice, although its overall effect is still uncertain.\textsuperscript{139} Proponents argue that its potential to overcome impediments to information access will grow as information becomes more user-friendly.\textsuperscript{140} An equally likely scenario, based on past experiences with more additional information resource access, is that any inequality in accessing information using the Internet may lead to increased social polarization.\textsuperscript{141} The Internet is, after all, a technological artefact that has been adopted by the core bureaucracies entrenched in what Giddens calls the "expert systems" that have come to dominate environmental conditions in the late twentieth century.\textsuperscript{142}

However, IT can be effective in facilitating access to environmental justice. Citizens who can sit at a computer terminal in the comfort of their home, office or community centre, who can read and respond to proposals and who can get answers to technical and complex questions, are more likely to participate in the process than those who must go to physical meetings and participate in discussions. Increasing electronic capabilities leads to meaningful public participation in environmental cleanup decision-making.

IT also gives citizens the opportunity to engage in environmental matters through community technology and environmental hubs. Improved community-based public participation can be accomplished through access to computers and Internet, exposure to environmental cleanup information, and access to available technical assistance. With computer access, citizens can benefit from unique Internet-based information sources and from valuable computer-based information systems and models. This can be achieved by setting up local authority and national or NGO community hubs with access to computers and the internet. This enables community groups to access all aspects of national and international policy and regulations as well as the vast array of environmental information available on the Internet. Within these community hubs, there is an opportunity to conduct training workshops that consist of computer-based research, Internet research, geographic information systems, risk assessment, and other subject matter. In addition, there is also an identified opportunity to establish a series of training classes to enable community residents to use computer-based tools and the Internet as information and communication resources and to present other workshops and forums relevant to public participation efforts in environmental matters.

Such partnerships can work with towns and community groups to fully develop the community centres as tools for information gathering, capacity building and public participation in the following areas: Basic Computer Skills Training, Internet Research, Access to Toxic Release Inventory Data, Chemical Impact Analysis, Risk Assessments, Use of Geographic Information Systems for Community Decision-making and the use of E-mail to Communicate with Decision-makers.

Environmental professionals can work with such community orientated hubs to provide assistance to communities through the Internet and provide technical assistance when it comes to environmental matters to ensure that community stakeholders receive the best technical assistance available. With access to relevant environmental information, reliable and trusted technical assistance, and appropriate environmental decision-makers, community stakeholders should be in a position to ensure that environmental decisions are made in the best interests of the community. The ultimate goal of this effort is to give community groups the tools they need to participate more effectively in environmental decision-making.

[3] The role that IT plays in impeding environmental and climate justice
The key consideration around technology impeding access to environmental justice concerns the question of equitable access to technology in traditionally disenfranchised societal groups, neighbourhoods or communities.

The adoption of information technologies such as the Internet has positive implications for low-income and minority urban residents and the community-based organizations working in these neighbourhoods. However, long-standing inequalities in resource access (including information access) between more affluent and less affluent communities raises issues of environmental justice if the adoption of these technologies creates disproportionate access to environmental information. This poses a problem for those seeking to overcome environmental inequities, as they have been manifesting in urban neighbourhoods and are at the core of the problem that community engagement projects support. Therefore, the two main impediments of technology in access to environmental justice revolve around equitable access to services and to technology.

There are many obstacles that exist which can prevent traditionally disenfranchised neighbourhoods or communities from accessing environmental information and using it effectively. These obstacles include uncertainty about what information is available or where to obtain it; lack of access to information technologies, infrastructure, and hardware, inadequate formal education and experience to understand the data; and absence of the skills needed to process data into knowledge, which is the basis for effective participation.\textsuperscript{143} Gaining physical access to internet-based information is not enough to overcome the paradox of the internet as an information-rationing mechanism. The technology has to be made community-centric and supported by an educational infrastructure that teaches people how to understand environmental data and utilise their knowledge effectively during the public participation process in environmental matters. Such schemes also have to be designed in such a way as to evaluate progress and identify areas for future improvement. Furthermore, in absence of effective community-based education, new technologies can alienate people who are not able or keen to embrace them.

Finally, an additional impediment is that even in an era of increasing access to the Internet and mobile telephone technologies, vast populations around the globe have limited effective access. The populations captured through crowdsourced big data around environmental issues are not representative and exclude many people, particularly marginalized and vulnerable groups who are most likely to suffer from environmental risks and exposures.

**Conclusion**

It is clear that legal technology may facilitate and impede access to justice. On the other hand, it is unclear as to whether future developments in legal technology will serve to further the facilitation of or further the impediment to access to justice. As it stands, the facilitation of access to justice offsets the existing impediments however, the pendulum could swing either way, as has been demonstrated in this section. Initially we examined the myriad applications of technology in a legal context to proactively promote access to justice. In the ‘user-experience’ section, we saw that a surplus of information can confuse users, while in the environment section, information provided via the Internet is shown as a facilitator to accessing justice. Similarly, legal technology may engender and inhibit trust. In the first section, distrust in legal technology was shown to be a great deterrent to users, as they did not wish to surrender their personal information and thus, ended their justice journey. The following section, which describes Big Data, shows that the people who distrust technology have reason to do so. Similarly, the cost of technology may increase or decrease access to justice. In the introductory section, the cost of legal technology was seen to impede its efficacy, as the owners were unable to resolve any technical problems as a result of a lack of funding. A similar financial situation was seen in section two, where an app disproportionately helped those in more affluent neighbourhoods i.e. those who could afford smartphones. Communities without internet, usually poorer communities, are not accommodated for by legal technology. The cost of technology may be both a facilitator and an impediment, but it is clear that like most technology, the price will eventually decrease when the production increases, though this will still do little for those in disadvantaged or remote communities. Technology may break down barriers to justice but, it may also create these barriers. Therefore, technology may both impede and facilitate access to justice to varying degrees. Its future development will decide whether it shall favour the former or the latter.
Chapter 3: Case Study: The Impact of Legal Technology on Human Rights

Alannah Crowley, Emma Murphy, Robert Morgan, Sadhbh Kelly
This chapter analyses the effects that legal technology may have on human rights, namely the right to access to justice. Section one examines the potential implications of legal technology on Ireland's domestic and International human rights obligations, with a focus on the right to a fair trial, and within that, adequate facilities. Following this, section two explores two implications in detail: the right to a jury trial and legal technology; and legal representation and legal technology. Firstly, the question of whether the right to a jury trial is one that can be waived and whether legal technology can appropriately facilitate such a right is explored, while considering insights gained from recent COVID-19 related adaptations. Secondly, the possible impacts of legal technology upon the right to legal representation in Ireland are discussed. In the final section, the ways in which legal technology can improve public legal education, and how legal awareness is essential in the realisation of the right to access to justice, are analysed.

Access to justice as a fundamental human right

Access to justice has been defined by the United Nations Development Programme (UNDP) as ‘the ability of people to seek and obtain a remedy through formal or informal institutions of justice, and in conformity with human rights standards’. It is ‘a fundamental human right, as well as a key means to defend other rights’, and, consequently, it is no surprise that target 16.3 of the Sustainable Development Goals (SDGs) is to ‘promote the rule of law at the national and international levels, and ensure equal access to justice for all’.

The UNDP has identified the capacities necessary for access to justice to be achieved as ‘legal protection’, ‘legal awareness’, ‘legal aid counsel’, ‘adjudication’, 'enforcement' and 'oversight'. Together, they aim to ensure recognition and awareness of rights, including the 'right to seek redress', both within the justice system and the general population, to provide for the protection of rights and the ability to pursue justice, all in a transparent manner.

Access to justice is therefore inextricably linked to several of our most valuable rights. For example, the Constitution of the Irish state 'guarantees in its laws to respect, and, as far as

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145 ibid p14.
148 ibid.
practicable, by its laws to defend and vindicate the personal rights of the citizen'; the justice system, and equal access to it, is essential for this.\textsuperscript{149}

Human rights and legal technology

As Hammergren notes, 'while access to justice and legal empowerment are ends in themselves, they are also the means to attaining other goals such as the reduction of poverty, the guaranteeing of individual rights, legal certainty, security against crimes and government abuse, and the reform of laws and legal procedures'.\textsuperscript{150} It is therefore apparent that any impact on access to justice, which will inevitably result from the introduction of legal technology, will affect the individual rights it facilitates, and \textit{vice versa}, such as components of the right to a fair trial.

The right to a fair trial is provided for in Article 6 of the European Convention on Human Rights (ECHR), Article 47 of the Charter of Fundamental Rights of the European Union (CFR), and Article 14 of the International Covenant on Civil and Political Rights (ICCPR). Not all aspects of this right are equally likely to be impacted by the use of, or conversion to, legal technology, nor does each text share every component of this right. The ECHR and the ICCPR both include the right 'to have adequate time and facilities for the preparation of [ones] defence', as well as the right 'to be informed promptly' in a language that one understands.\textsuperscript{151} The ECHR and the ICCPR afford the right to legal representation, by oneself, by a chosen person, or through legal aid, as does the CFR, albeit in slightly different language.\textsuperscript{152}

Given that legal technology largely depends on internet access, should legal technology be introduced into Ireland in any capacity? Ireland's internet facilities remain unequal due to both physical access difficulties and varying technological capabilities, and as a result, access to the part, or parts, of the justice system that legal technology may facilitate would also be unequal

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unless these barriers to equal access were effectively mitigated.

I. Potential impacts on human rights – the right to adequate facilities within the right to a fair trial

Digital divides, which exist due to a number of factors, may impact the extent to which legal technology could facilitate the right to adequate facilities in Ireland.

As Roger Smith notes, people with low-incomes find technology disproportionately inaccessible.\textsuperscript{153} Although in March 2020 in Ireland the household internet connection rate was 93%,\textsuperscript{154} 11% of people had never even used the internet just one year prior (2019).\textsuperscript{155} 57% of those without household access in 2019 gave lack of availability of broadband as their reason.\textsuperscript{156} 52% said this was because they did not need the internet,\textsuperscript{157} while 42% gave ‘lack of skills’ as the reason.\textsuperscript{158} Regarding the submission of official forms online, 24% of internet users had another person do it on their behalf,\textsuperscript{159} and 10% ’said that they found the process too complicated and cited lack of skills or knowledge’.\textsuperscript{160}

While ‘in developed countries[’] studies, a lack of internet skills was found to be the primary cause of the digital divide, especially for older people\textsuperscript{161} it is apparent that barriers to technology relate not only to competency, but also to willingness, as ‘decades of research

\textsuperscript{156} ibid.
\textsuperscript{157} ibid.
\textsuperscript{158} ibid.
\textsuperscript{159} ibid.
\textsuperscript{160} ibid.
confirm that older people have a lack of interest in learning computer skills and a fear of computers’. 162 Should legal technology be introduced into Ireland, a foreseeable side effect may be an increase in willingness, and subsequently a possible increase in technological competency. In the event that the introduction of legal technology generates an increased focus on increasing ICT skills among the elderly, ‘consistent findings suggest specific teaching practices and supportive learning environments do encourage older people to use ICT and, increasingly, to continue to use them’. 163

Access to technology is also affected by disability; while little difference was found between disabled and non-disabled individuals in the 16-24-year-old age group in the UK regarding usage, 164 people with visual impairments, in particular those who left school before ICT formed part of mainstream education, or are less educated, are more likely to be computer illiterate. 165 However, ‘older people with age-related hearing loss may be able to communicate more effectively through internet use’, 166 and so legal technology may be positioned to positively impact this group in particular from the outset.

Although at this point in time one can only speculate about the form, or forms, that legal technology may take in the Irish justice system, these are some of the factors that may impact the extent to which legal technology can facilitate the enjoyment of human rights, with the right to a fair trial being just one of them. The barriers which currently exist in relation to access to technology, and therefore access to justice through legal technology, are surmountable. Potential strategies to mitigate digital exclusions in relation to both competency and physical access may include increasing technological education for the elderly and making technology more affordable in terms of broadband and devices.

163 ibid.
II. Access to Justice, Legal Technology and Jury Trials.

The right to a fair trial is a cornerstone of the administration of justice. Article 38.1 of the Irish Constitution and Article 6 of the European Convention on Human Rights enumerate the principle that no person shall be tried on any criminal charge save in due course of law. A crucial element of this principle at the forefront of the intersection between this right, legal technology and the COVID-19 pandemic, is the trying of a criminal charge with a jury. In People v O’Shea\textsuperscript{167}, Walsh J stated that ‘jury trial in criminal cases, which is made mandatory by the Constitution save in exceptions provided for, is a most valuable safeguard for the liberties of the citizen’\textsuperscript{168}.

Therefore, as governments worldwide reckon with solutions to ensure the continuation of the administration of justice, this short contribution analyses the options available to governments while respecting the right to a fair trial- in particular whether trial by jury on any criminal charge, a crucial element of a fair trial, is a right that needs to be vindicated and how the state can carry out its obligation in this regard. This piece analyses whether jury trial is a right that can be waived in current circumstances. If not, the options around legal technology are discussed and analysed.

The right to a jury trial?

As far back as 1852, the legal theorist Lysander Spooner argued that in the absence of a jury to judge the whole case “the jury will be mere puppets in the hands of the government; and the trial will be, in reality, a trial by the government, and not a 'trial by the country’”\textsuperscript{169} Following on, in Ireland, a critical element of the criminal justice system is that ‘no person shall be tried on any criminal charge without a jury’, as per Article 38(5) of the Irish Constitution, unless it is a minor offence triable in the District Court, Special Criminal Court or a military offence before a military tribunal. In O’Callaghan v Attorney General\textsuperscript{170}, Flaherty J stated that the ‘essential feature of a jury trial is to interpose, between the accused and the prosecution, people who will bring their experience and common sense to bear on resolving the issue of the guilt or innocence of the accused’\textsuperscript{171}.

\textsuperscript{167} People v O’Shea [1982] IR 384 (SC).
\textsuperscript{168} ibid, [83].
\textsuperscript{170} O’Callaghan v Attorney General [1993] 2 IR 17.
\textsuperscript{171} ibid, [25]
Therefore, given the important and historical role juries play in the administration of justice, recent discussion has focused on whether Article 38.1 is a right or an imperative. According to O’Malley, ‘the essential question is whether jury trial under Article 38.5 is to be interpreted as an imperative or a right, if it is a right, it can probably be waived; if it is an imperative it probably cannot’\textsuperscript{172}. In other jurisdictions it appears that jury trial has taken the form of a constitutionally protected right that can be invoked. The sixth amendment to the US Constitution provides that ‘In all criminal prosecutions, the accused shall enjoy the right (emphasis added) to a speedy and public trial.’, and in Canada, section 11 of the Charter of Rights and Freedoms states “Any person charged with an offence has the right to the benefit of trial by jury”. In contrast with Australia and Ireland, however, Article 80 of the Australian Constitution provides that ‘trial shall be by jury...’, while in Ireland ‘no person shall be tried...without a jury’.

As such, in the absence of a definitive ruling by Irish courts as to whether jury trial is a right an accused can consensually waive, any decision to halt jury trials, in the absence of legislation by the new government, may be open to constitutional challenge\textsuperscript{173}. Secondly, even if legislation is implemented to temporarily suspend jury trials, it is not inconceivable that such legislation may be referred to the Supreme Court by the President, under Article 26 of the Constitution. Therefore, the following section explores alternatives in confronting the problems regarding the continuation of jury trials.

The option of legal technology

Following the first remote hearing of the Supreme Court on 20 April, the Chief Justice, in a statement published by the Courts Service, stated that ‘while such hearings are likely to prove suitable for most if not all cases in this court and many in the Court of Appeal, it must be acknowledged that different considerations apply in trial courts’\textsuperscript{174}. A subsequent report released by the Bar Council of Ireland in June analysed the issue of criminal jury trial during the COVID-19 pandemic. Although the report recognises the need for increasing use of ICT in the jury process, it must be ‘balanced with the rights of victims to have access to the criminal justice system and to the rights of accused persons to criminal justice and a fair and reasonably

\textsuperscript{172} Tom O’Malley, ‘Can Jury Trial Be Waived’ (Irish Legal News, 14 May 2020).
\textsuperscript{173} Colm Keena, ‘Bar Council looking into idea of ordinary crimes being tried in non jury courts’ The Irish Times (Dublin, 6 May 2020).
expeditious trial\textsuperscript{175}, thus requiring the need for ‘creative and flexible’\textsuperscript{176} solutions in ensuring the continuation of jury trials in a safe manner.

Firstly, the report recommended enhancing the procedure around summoning and selecting the jury through increasing use of ICT, in order to avoid a large number of people gathered in the courtroom. Secondly, the report recommends the introduction of legislation by the new government to commence preliminary trial hearings, in order ‘front load legal issues which would be decided in advance of jury participation by a judge who will then hear the trial before a jury’\textsuperscript{177}. Although these issues may enhance the procedures around jury selection, it is clear that the Bar Council of Ireland do not recommend the implementation of non-jury trials nor move jury trials to a remote setting, thus recommending creative ways to avoid any of the constitutional or human rights problems mentioned.

Analysis of legal technology and jury trials
Faced with a lesser of two evils, it appears that to move jury trials online creates more problems than it purports to solve. Firstly, according to research around the effectiveness of remote hearings conducted by the British NGO Transform Justice, ‘most lawyers have always been opposed to virtual justice on principle and for practical reasons. They worry that their clients cannot communicate their best evidence on a video screen, and thus that justice outcomes may be prejudiced’\textsuperscript{178}. Secondly, as highlighted in a recent discussion paper published by the Scottish Government, even before the logistical problems of securing video links for every juror and ensuring all parties can communicate to court are solved, a core principle of jury service ‘that once a jury is empanelled no communication with any person outside the jury is permitted regarding the trial’\textsuperscript{179} is at risk if trials are conducted remotely. This is despite evidence that technology can facilitate a full mock jury trial online as shown in June by British

\begin{footnotesize}
\begin{itemize}
\item [\textsuperscript{176}] ibid.
\item [\textsuperscript{177}] ibid, [53].
\end{itemize}
\end{footnotesize}
organisation JUSTICE\textsuperscript{180}, a trial that ‘went remarkably well from a technical point of view’\textsuperscript{181}. Although it is beyond the scope of this report, other discussions in this jurisdiction point towards social distancing in alternative venues and possibly reducing the size of the jury as possible long-term solutions.

The Right to Legal Representation and Assistance

The right to legal representation and assistance is one that is enshrined by the Irish Constitution in Articles 38 and 40.3, acting as a ‘guarantee to the citizen of basic fairness of procedures’.\textsuperscript{182} It is widely recognized and even further clarified by the UN Human Rights Council to be essential to the ‘principle of equality between parties’.\textsuperscript{183} It is fundamental to criminal proceedings, although legal representation and assistance is not an absolute right applicable in every case. The factors to be considered in making an overall assessment of whether fairness requires its engagement are:\textsuperscript{184}

\begin{itemize}
  \item the nature of decision-making body,
  \item the consequences to the individual in the event of an adverse decision,
  \item the factual complexity of the case and
  \item whether any points of law are likely to arise.
\end{itemize}

The Effect of Legal Technology on the Right to Legal Representation

With such a high degree of formality and safeguards, the right to legal representation can become an epicentre of expense and inefficiency for court and state procedures. This is a primary reason for the courts reluctance to allow its applicability in administrative and quasi-judicial decision-making, although some debate has been raised in this area recently.\textsuperscript{185} With the implementation of a greater range of legal tech facilities, such as guided pathways,

\begin{footnotesize}

\textsuperscript{181} Tom O’Malley, ‘The Virtual Jury Trial Experiment’ (\textit{Irish Legal News}, 25 June 2020)


\textsuperscript{183} UN Human Rights Committee (HRC), General comment no. 32 §13, 23 August 2007, CCPR/C/GC/32.


\textsuperscript{185} McKelvey v Iarnròd Êireann [2019] IESC 79.
\end{footnotesize}
automated documents, online submissions and virtual communication between parties, a vast amount of the repetitive and mundane court procedures will be removed from the desks of courtroom staff.

This will in turn enable court resources to provide a more effective service for citizens who may prefer not to avail of online options. The UK has had success in this area already with websites such as, ‘Money Claim Online’ offering users the option to submit a claim request virtually and pay the court fee whenever they choose without the usual impediments of working hours, postage delays, etc. This cut the average turnaround for registering a claim from 15 days to 3.\textsuperscript{186}

Xhibit (eXchanging Hearing Information by Internet Technology) is an application that encourages greater efficiency and effective use of courtrooms, particularly in criminal proceedings. By automatic issuing of pre-sentence report requests, continuous updating of the Police National Computer and distribution of information via info portals, emails, phones, and fax, it reduces the number of hearings adjourned and ensures that all are updated of relevant events.\textsuperscript{187}

The clear reduction of delays, the increased level of personalized interaction available at the user’s convenience 24/7 and overall accessibility of the law will dramatically boost public trust in our justice system across all communities. In putting such information back into the hands of the people, it gives citizens assurance that the justice system is for the people and not just for the benefit of a professional elite.

This right to legal representation is not merely a right to be represented, but a right to be represented by a solicitor of one’s own choice.\textsuperscript{188} The key word of ‘choice’ is an element that many justice systems struggle to provide to its citizens, at least in a practical sense. Information must be provided to citizens so an ‘informed choice’ can be made. In medical negligence cases


\textsuperscript{187} ibid.

\textsuperscript{188} Ward v Minister for Justice and Equality [2017] IEHC 656. [54] (Baker J.)
for example, a patient’s consent to a particular treatment is not valid simply because they have choices, only when they are provided with the relevant knowledge and necessary understanding of the issue, upon which an informed decision can be made, may they proceed.

Encouraging development and usage of legal technology in law promotes a more user focused profession rather than a lawyer focused one. Resources such as Lawyer.ie, FLAC.ie and Citizensinformation.ie, provide a platform for the user to understand their legal issue, research the law surrounding it and recognize the steps needed to reach a solution. Supplying the public with the tools to navigate through their case with ease and quickly find the answers to their questions will offer the public invaluable insight into what representation they require. These websites use a mixture of their own advice and explanations, as well as displaying useful external links for further study. It will also give citizens the confidence to explore some alternative cheaper options that may suffice such as mediators, or even to represent themselves during the process.

The American legal service, ‘Alacrity’, adds structure to this process, allowing for pricing comparisons between firms and displaying data collected from previous users on topics such as the firm’s ability to stay on budget, evaluations on their prices and the service provided. In the UK, CLS Direct Website (Community Legal Service) has become a cornerstone in citizen-centric services, focused on increasing understanding of the law and the possible remedies available to the individual. It provides free access to information and directories of quality marked solicitors and agencies, updated nightly, available in multiple languages and has made adaptations enabling this access to include those with sight impairments. By making clients more aware of their needs and choices, they are then able to demand more from their lawyer. They can adopt a business partner approach in terms of negotiating to receive better value for their money. Legal technology in its ability to provide a hub of information, experience and advice will make the legal process more efficient, lower the expenses of representation and create greater transparency in the services provided by law firms.
Impediments to Legal Tech Innovation

An experience in the justice system is for many a once in a lifetime, often one that is very daunting when faced with alien and complex legal procedures and language designed by and for lawyers.189 Many online legal services aimed at the public address this issue, summarizing and translating the law into layman terms. That being said, its machinery touches the lives of many citizens, organizations and professions who must all balance the need for efficiency in speed and expense, against its effectiveness to ensure justice is done and perceived to be so.

There is a lot of resistance to make the move to an online environment primarily from law firms themselves. With better informed clients demanding more from their services, the billable hour is often a target. It is very difficult to change the culture that has built around the billable hour which remains financially beneficial for these firms. For this reason, it has proven more important in relation to small changes in the direction to greater innovation, that an emphasis is placed on clients being more educated about what they are asking for when speaking to a solicitor.

There are also difficulties in relation to ‘Digital Divides’, as discussed above, often according to factors such as age, income and education.190 Studies in the UK have found that over one third of the population do not use the internet or are uncomfortable to do so.191 This trait will likely decline in the future on account of the younger generation maturing in this ‘second machine age’, however this is not certain to address the problem. A digital life does not equate to digital literacy and there is a surprising inability to identify the best forms of assistance online within this community of people. This behaviour can be changed through a more focused IT education, and better advertising of existing resources, which many struggle to achieve due to a lack of funding.

Public Legal Education, Access to Justice and Human Rights

Access to justice is a fundamental human right that goes far beyond ensuring an individual can access the courts or have legal representation. Educating the public about the legal system an

190 ibid.
191 ibid.
legal issues is a key component of realising the right to access justice. Within the United Nations, access to justice has featured heavily in the 2030 Agenda for Sustainable Development (United Nations 2015). The United Nation Development Programme delineates five capacities that are required to realise access to justice - legal protection; legal awareness; legal aid counsel adjudication; enforcement and oversight. Hence it is clear that legal awareness is one of the key aspects of realising access to justice. The following section will explore the ways in which public legal education schemes can enhance access to justice by helping people to understand a complex legal system and by increasing public awareness of issues such as legal aid. This section will place particular emphasis on the way in which public legal education schemes can reach an even wider audience by utilising technology and IT.

What is Public Legal Education?
Public legal education 'is an umbrella term used to describe targeted initiatives promoting public awareness and understanding of individual rights, the law and the legal system.'\(^{192}\) Public legal education is not legal advice in the traditional sense but instead involves helping people to enhance their legal knowledge in a broad sense. This will in turn help people to identify legal issues in their daily lives. Public legal education has a number of aims which include: 'spreading awareness of legal procedures and approaches to problems, helping individuals and groups to understand and exercise their legal rights and obligations, demystifying the law and supporting the autonomy of groups to pursue other forms of social action.'\(^{193}\)

Public Legal Education and Access to Justice
Public Legal Education is paramount to realising the right to access justice. Many people struggle to comprehend their legal rights and cannot afford to pay a lawyer. As funding for legal aid continues to be cut and legal reforms are happening at a rapid pace, this report argues that public legal education must become a priority for governments. Recent surveys have found that individuals often fail to recognise the legal elements of their issues and a recent finding has shown that only 11% of legal issues are accurately characterised.\(^{194}\) This means that people


\(^{193}\) Lisa Wintersteiger, Legal Needs, Legal Capability and The Role of Public Legal Education (Law for Life 2015).

\(^{194}\) ibid.
are restricted when it comes to accessing appropriate help.

Public Legal Education and Technology

Technology is an invaluable tool that enhances our ability to promulgate comprehensive and independent legal information to the public. Online, interactive tools can make complex legal issues more accessible to the general public. The legal sector in Ireland generally makes legal information available to the public in a passive way, for example, by publishing fact sheets on particular areas of law. However, this report submits that technology can be used to disseminate legal information in a way that is tailored and suited to the needs of individuals. This is because 25% of people utilise the internet in order to resolve legal issues and a lack of legal capability can seriously hinder people’s ability to find adequate assistance and information online.\(^\text{195}\) For example, in countries such as the UK and Canada, clients can access information that is relevant to their individual situation. In a post COVID-19 world where laws are constantly evolving to meet the needs of the population, it is paramount that the public have access to personalised legal information in a simple and cost-effective manner.

In British Columbia, citizens have access to a service called Ask Jes\(^\text{196}\), which uses digital technology to provide legal assistance. This service uses technology to point its users to relevant information and to give responses to users’ questions via phone or direct messages. This service can cut people’s legal costs by providing people with immediate legal assistance. Another service MyLawBC\(^\text{197}\) allows people to resolve legal issues using an interactive set of questions and answers. This service provides information to address an individual’s problem and then at the end, the service provides an action plan tailored to the individual’s situation. This website is also written in simple language and is not text heavy.

In light of the reforms to public legal education in the UK and Canada, it is clear that the Irish Government needs to give greater funding to public legal education which will in turn enhance people’s right to access justice. The government should encourage the creation of websites that

\(^{195}\) ibid.

\(^{196}\) For more information see Chapter 9 and <https://www.clicklaw.bc.ca/helpmap/service/120256>.

\(^{197}\) For more information see Chapter 9 and <https://mylawbc.com/>.
provide clear and personalised advice to individuals in an accessible way.

**Conclusion**

The global outbreak of COVID-19 will undoubtedly spark heavy development in legal technology in the world of law. Many professionals have already been required to embrace the move to online platforms during the recent months, and the knock-on effect of this will likely be increased public confidence in using them and, more importantly, increased awareness of the existence of such services. This chapter highlighted an array of the beneficial impacts legal technology can have on some of our most fundamental human rights. If implemented properly, the state will be able to fortify the constitutional guarantee of fairness of procedure and trials ‘in due course’ of law in a manner that expands its scope, accessibility and personal engagement to all communities to unprecedented levels. There are of course obstacles to overcome before such a point is reached in Ireland, and indeed some elements of the law which would not be improved by introducing technology or simply could not be replaced by virtual platforms, as doing so would diminish the justice it seeks to create. As already discussed, we cannot assume equal access to the internet, and nor can we assume the shared ability of those who have, to locate reliable information and services. The best facilities in time will prove to be those which can offer equal qualities of service at an online level and a face-to-face one, and as a result can make justice accessible to as many people as possible.
Chapter 4: Case Study: The Impact of Legal Technology on Vulnerable Groups

Ben Whyte, Caoilin Young, Isabelle Tierney, Kate Carroll
This chapter will investigate the impact of legal technology on vulnerable groups. In this context, vulnerable persons are defined as someone whose access to justice is impeded by some circumstance or condition. This chapter separates these vulnerable groups into four categories:

1. Elderly individuals
2. People with disabilities, mental incapacities or any physiological condition that affects communication, mobility or overall wellbeing.
3. Family law participants who may experience trauma and emotional distress, such as children and domestic violence victims.
4. Refugees, immigrants and non-native speakers.

These categories are considered “vulnerable” for different reasons specific to their circumstances, and the impact of technology differs between each group. For example, in domestic violence cases, witnesses are considered vulnerable in that they may be intimidated by their abuser which may hinder them going to court and giving evidence. Technology can help overcome this barrier in a number of ways, such as under Section 25 of the Domestic Violence Act 2018, whereby applicants for a domestic violence order can deliver evidence through a live television link if allowed by the court.\(^\text{198}\)

However, there are a number of implications of using technology within the justice system that create the risk of further impeding access to justice for these vulnerable groups. According to a Cambridge Pro Bono Project on Online Dispute Resolution, although ODR has a number of benefits for those living in rural areas as well as those who cannot afford costly legal representation, it may prove problematic for individuals who cannot access the technology required, such as a computer, or who do not understand the technology being used.\(^\text{199}\) This is a particular issue for elderly people as well as those in rural areas, the same users such a service is trying to aid.

Therefore, this chapter looks at how technology can play a more direct role in assisting with the four vulnerable groups in attaining legal access, as well as the possible downsides of these technological developments. We also attempt to define the different needs of the different

\(^{198}\) Domestic Violence Act 2018, s25
\(^{199}\) University of Cambridge, *A Comparative Analysis of Online Dispute Resolution For The International Legal Aid Group* (2019).
groups mentioned above and what steps could be taken in order to improve access specific to such needs.

I. Issues faced by the elderly in their access to justice

Technology is a fast-paced, constantly changing phenomenon and thus it can be difficult for older individuals who did not grow up surrounded by it. Studies have shown that access to technology is impeded to those over 65 years of age due to the cost, the lack of user-friendliness as well as a resistance to change from the individuals themselves. Additionally, the older population has a far greater percentage of disabilities, both physical and intellectual, which can impede their access to justice; according to the National Disability Authority, 30% of those over 65 have an acquired disability, and many of these can greatly hinder one’s access to justice. The Courts Service, for example, has recently stated they are unsure as to how sign and spoken language interpreters may operate remotely. Technology may be advantageous here in improving access to justice: it may allow for more interpreters to be available via video-link. However, similarly, the technology can be an impediment if it is not used as effectively: it will greatly impede the individuals’ understanding where the connection or lagging causes an unclear or incomprehensible interpretation. This will be discussed further in the next section.

If they cannot access the technology, their access to justice is consequently greatly hindered. The justice system is complex, and without the proper tools they will not be able to protect their own rights. Access to justice is highly dependent on an individual’s knowledge of how to enforce their own rights effectively, and how to access the tools to do so. Therefore, in order to ensure access to justice is not impeded for older individuals by the use of technology, the information and resources required need to be easily accessible and understandable, e.g. via a single website or online service.

II. Issues faced by people with disabilities in the judicial system

For vulnerable people such as those with physical or intellectual disabilities, the opportunity to participate is not easily accessible and thus, the right to a fair trial under Article 6 of the ECHR suffers. However, through the use of assistive technology, people with a disability can participate in the pretrial process, access proper justice through the court system and have supports in place for coping post trial. While the use of assistive technology will provide support, it is only truly effective if surrounding legal professionals are properly trained in preparation of interacting with the vulnerable person. Although between 5-10% of the Irish prison population has a learning disability, there is still a lack of coherent and adequate legal information.

Access to justice is only obtainable when our legal professionals can communicate and assist every person who seeks justice. Accessibility is not at the forefront of legal advice websites and over 70% of websites in various industries have little to no accessibility assistance measures. A 2019 study by The Solicitors Regulation Authority, found that only a third of private practicing solicitors have received training on properly communicating and supporting vulnerable people as clients.

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Using Technology to Advance the Judicial System:

Inclusivity requires individualised support for marginalised people throughout all stages of the judicial process.\textsuperscript{211} The UN Convention defines persons with disabilities as individuals who face ‘various barriers which may hinder their full and effective participation in society on an equal basis with others.’\textsuperscript{212} Currently, only 17% of people with learning disabilities in the UK report their experience of abuse to the police.\textsuperscript{213} Thus, it is vital that all people receive the opportunity to express themselves in a courtroom and the use of technology can help to remove some of these barriers.

Issues such as complex passages of text in documentation, lack of illustration and audio files on websites and browsers that do not support assistive technology all make the road to justice even further from the reach of vulnerable people.\textsuperscript{214} Ensuring legal information is not only accessible but also understandable to people with disabilities is one of the first steps towards attainable justice. In the UK, the HM Courts and Tribunals offers information on judicial services on their website. The layout and formatting for their informative text is very clear and adaptable to adjustments needed by each unique person.\textsuperscript{215}

A training programme would require modules on disability discrimination, identification of disability characteristics, communication and guidance to understanding the additional requirements of the vulnerable client.\textsuperscript{216} Alongside the in-depth research of organisations such as the Disability Federation of Ireland; training guides, DVDS and educational assessment of


\textsuperscript{212} United Nations Convention on the Rights of Persons with Disabilities, Article 1, (6 December 2006).


\textsuperscript{215} Michelle Moloney, ‘Accessible Information: Advocating the Use of Technology for Individuals with Intellectual Disability on their Path to Individualised Services,’ Technological University Dublin, (2012).

those working with persons with a disability are insured to be accurate and inclusive of all type of disabilities. This could be incorporated into future legal university courses. The need for such training has been noted by the EHRC, which recently made a statement which urged that disability training for lawyers should be compulsorily.217

In order for technology to be successfully used to overcome barriers to justice for persons with disabilities, it is essential that legal professionals understand how to use assistive technology correctly. As Julian Young reminds us that “Judges, court service staff and lawyers are trained in law, not information technology.”218 If equipment is not working correctly, solicitors cannot assist their clients promptly, halting the trial process. In order to expect the justice system to respond confidently to new technology, technical skills are required and training for new devices is required. Training programs can be created using Irish Technology companies such as FreedomTech who specialise in assistive technology, lobby government officials to ensure every person with a disability has access to technology for educational purposes and to provide a better quality of life. This company also runs a community hub to discuss the relationship between technology and topics such as smart homes, disability rights, education and employment.219

Incorrect cross examination approaches are another major issue faced by people with disabilities.220 Cross examination involves “shifting the suspect from confident to hopeless and persuading the suspect that the benefits of compliance outweigh the costs of denial.”221 This is an outdated and unsuitable approach. It was stated in the case of R v Lubemba222, that “if justice is to be done to the vulnerable witness and also the accused, a radical departure from the

222 R. v Lubemba (Cokesix) and JP [2014] EWCA Crim 2064; [2015] 1 Cr. App. R. 12 (CA (Crim Div))
traditional style of advocacy will be necessary. Pre-trial recordings would remove obstacles such as suggestibility in questioning and improve the quality of evidence provided by the vulnerable person. Live cross examination techniques increase anxiety and may not promote the rights of vulnerable people. Reducing the length of questioning would aid in diminishing unobtainable concentration periods. New methods such as training programs for barristers for education on cross-examination without repetition and use of obscure language should be introduced to ensure testimonies of vulnerable people are safeguarded.

Transform Justice’s Report found that 70% of court users, stated that it is difficult to recognise whether someone has a disability on video link. This increases the risk of an unfair trial as vulnerable persons needs can often be overlooked. However new video conferencing software has been developed which will provide a useful tool for criminal trials. The Hayes Ability Screening Index is a device that screens and identifies people of all ages for speech and learning disabilities. This can aid the court in making reasonable accommodations for individuals and can prevent an unfair trial. It is vital that through the promotion of technology, people with disabilities are not further isolated.

Improving Access to Justice for People with Hearing and Visual Impairments

For vulnerable people with little experience with technology, audio and visual issues can make it difficult to understand the information provided and prevents them from engaging with the justice system confidently. For the Deaf Community, live captions are a significant advancement for access to justice. Intellectual technology companies such as Skype and Google hangouts have taken the initiative to incorporate web accessibility into their designs. Since sign language interpreters work in average intervals of twenty minutes and require pauses

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in between signs, the use of such technology would make the legal process more accessible for deaf clients. The introduction of systems such as DeepASL, which translates sign language actions into English, would reduce interpreters’ workload and provide an alternative where interpreters are unavailable or experiencing internet connection issues. Users can also create custom signs for names or non-dictionary words; an aid which is especially important for children’s participation. In October 2019, Guillermo Robles succeeded in his Supreme Court case against the chain Domino’s for being unable to order a pizza from their website despite using screen-reading software on his phone for his blindness. The inaccessibility of the service impeded upon ‘access to goods and services’ under the Americans with Disabilities Act.

Under the National Disability Inclusion Strategy, it is a responsibility to ensure Court and Garda service information are supportive to all users with disabilities. Small changes such as providing audio recordings for legal documents and additional use of sign language interpreters for explanatory advice on websites will increase web accessibility and promote access to justice. A technology currently used is BrailleNote; an electronic notetaking device which uses the assistance of an experienced human reader. It adapts the size of text to fit the requirements of the person as well as change colours for the ease of vision. Furthermore, the Irish Text Relay Service uses an app to translate text into voice and vice versa to facilitate people in the Deaf community in making and receiving calls. There are training videos and explanatory notes on the ITRS website, making it accessible for people who are deaf or blind through the use of audio description, speech subtitles and an Irish Sign Language Interpreter.

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229 Domino’s Pizza v. Guillermo Robles, (No. 18-1539).


232 28 C.F.R. § 35.104 (definition of Auxiliary Aids and Services).


235 ibid.

Without proper support there are crevasses for both potential abuse and unintentional errors in relation to deaf client’s legal documentation. Technology such as Kurzweil 3000 allows text to be scanned from paper and read aloud by the software while the client can listen back. The person reading their legal documentation can then highlight important information and annotate the document.

Improving Access to Justice for People with Sensory Issues

Intense stimuli in crowded courtrooms can affect people with sensory issues; commonly associated with autism, or ADHD. Attending a hearing from home or a safe secure place via use of video link may ease the anxiety associated with a physical court hearing. UK studies have confirmed that there has been no significant difference in conviction rates when using video links rather than a physical hearing. For many people, remaining in a familiar space will likely reduce the likelihood of their disability impacting upon their court experience. Virtual hearings will remove long distance travelling; fundamental for people who face immobilisation. However, a video link may not be the correct option to ensure greater access to justice for everyone. Dissociation is common among people with autism. Transferring experiences from a standard courtroom situation into a domestic scenario can be difficult for people with intellectual disabilities. Therefore, an intermediary or trusted person should be present regardless if the testimony will be provided from a courtroom or a kitchen.

III. A FOCUS ON VULNERABLE PARTIES IN FAMILY LAW


Since its establishment, the family justice system has aimed to balance the openness associated with justice against the sensitivity required for personal family matters\(^\text{242}\). This issue of vulnerability is particularly prominent in cases involving domestic abuse victims. As the digitalisation of the justice system spreads around the globe\(^\text{243}\), the vulnerable must be protected during their journey to pursue justice. Violence of a domestic nature consists of the use or threat of physical or emotional force in an intimate relationship. An offender may abuse their victim by isolating them from friends and family, managing their access to funds, controlling their travel and reducing their means of communication\(^\text{244}\). All of these aforementioned tactics of controlling a partner or ex-partner limits a victim’s ability to access justice and legal advice, hence leaving them vulnerable to continued abuse.

Two developing aspects of legal technology which may aid access to justice for a vulnerable complainant include:

1. The use of online platforms to seek out legal advice
2. The use of alternative methods for a witness to ‘take the stand’ at trial

**Legal Aid via Video Conferencing**

Due to the private and controlling nature of this kind of abuse, victims will often have very little time alone in order to seek information or help\(^\text{245}\). A legal service in Victoria, Australia has attempted to tackle this barrier to justice by establishing their ‘Link Virtual Outreach’ project\(^\text{246}\). This uses video conferencing technology, like Skype, to enable victims to obtain real time legal advice from lawyers. The use of technology in this project has facilitated an increased reach of over 20% and has helped some of the most isolated women in this region to

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obtain consultations with legal professionals\textsuperscript{247}. In addition to creating a highly flexible service for women suffering from domestic abuse, Skype’s cost-effective technology\textsuperscript{248} provides a solution to the issue of the inadequate availability of legal aid in the area\textsuperscript{249}. The visual and personal elements of Skype have helped lawyers to create private, secure and sincere connections with their clients\textsuperscript{250}.

However, it should be noted that using online platforms to conduct consultations with victims cannot replace real life practitioner-client interaction completely\textsuperscript{251}. These developments also do not take into account the trauma which victims may have experienced as a result of abuse from their partner or ex-partner through the use of technology\textsuperscript{252}. The constant development of technology has presented abusers with a new way of tormenting their victims. This particular type of repeated abuse is termed as ‘cyber-violence’\textsuperscript{253}. Being subjected to cyber-violence may deter a victim from seeking help online due to their past trauma with online platforms.

**Live Video Link Evidence v Pre-Recorded Evidence**

Under the Domestic Violence Act introduced in 2018\textsuperscript{254}, victims of domestic violence can now give evidence through the use of a live video link. This decision is subject to the discretion of the court. While this allowance has aided victims in their pursuit for justice by aiming to reduce the danger of intimidation by the offender, it has been proposed that presenting a recording of a victim’s initial interview with law enforcement may increase the value of the evidence\textsuperscript{255}. This recording could prove to be more compelling than a written statement, which can be


\textsuperscript{248} Legal Service Victoria for the Senate Finance and Public Administration Committee, *Domestic Violence in Australia* (August 2014) 14.

\textsuperscript{249} ibid 10.

\textsuperscript{250} Legal Service Victoria for the Senate Finance and Public Administration Committee, *Domestic Violence in Australia* (August 2014) 14.

\textsuperscript{251} Tarzia L, Deepthi I, Thrower E and Hegarty K, “‘Technology Doesn't Judge You”: Young Australian Women’s Views on Using the Internet and Smartphones to Address Intimate Partner Violence’ (2017) Journal of Technology in Human Services, 35(3), 199–218.

\textsuperscript{252} Caulfield L, ‘Lifting the "accessibility" bar on tech safety’ (2015) DVRCV Advocate, No. 2, Spring/Summer, 43–45.

\textsuperscript{253} Hadeel Al-Alosi, ‘Fighting fire with fire: Exploring the potential of technology to help victims combat intimate partner violence’ (2020) Aggression and Violent Behaviour Volume 52, May-June 2020.

\textsuperscript{254} Domestic Violence Act 2018, s25.

viewed as an unreliable and lacking source of evidence by prosecuting teams. The visual aspect to this recording would succeed in capturing the demeanour of the interviewee by displaying physical injuries and increase the potential of a witness to accurately remember the events which occurred. This option to view a victim post-assault may help with issues of credibility as abusers will often depict a victim’s account as exaggerated or false. This approach to the delivery of a victim’s evidence would reduce the need for a victim to take the stand in front of their abuser which may help in reducing the risk of additional traumatisation. Without the pressure on a victim to present their evidence by physically attending court, the number of retractions of statements may decrease as fear is one of the most common motivations for a victim to withdraw from the legal process. In addition to pre-recording witness statements, the Rape Crisis Network Ireland has advised a piloting programme of pre-recorded cross examinations for vulnerable witnesses.

However, using a victim’s interview with law enforcement as evidence may prove to be counterintuitive. Presenting a video of this nature could produce false expectations among a jury or judge. The court may anticipate visible signs of abuse and if they fail to see their expectations materialise, the impact of a victim’s statement may be diminished. Another challenge which exists in relation to this method of presenting evidence is the hearsay rule. In

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256 ibid.
257 ibid.
order for an interview of this nature to be introduced in court, an exception to the rule that a statement made by someone other than the person who is presenting oral evidence is inadmissible, must be introduced. Otherwise, this evidence cannot be relied upon in court.

Concluding Remarks
While these aforementioned technological developments can help to improve access to justice in the area of family law, the success of their use depends on the willingness of legal professionals to adopt it and incorporate it into their services. Practitioners can and should use video conferencing as a means of conducting initial consultations with vulnerable clients, but this should not be seen as a substitute for in-person consultations. In addition to this, the option of presenting pre-recorded evidence would reduce requests for the retraction of statements as well as increasing the quantity of successful prosecutions. Legal technology should not be seen as the ‘silver bullet’ which will make justice more accessible, but as a support for the vulnerable during the legal process.

IV. A Focus on Access for Refugees

Refugees rights have come to the fore recently. Direct provision and a misunderstanding of refugee needs by disinterested politicians has created a seriously concerning human rights issue according to the Irish Human Rights Commission. One reason for this development is the incognizance of three key issues:

- Processing of persons,
- Appreciation of personhood and,
• Integration to society.

Access to justice includes not just legal access, but procedural and cultural roadblocks that strain legal resources that could be used elsewhere. This section will argue that integrating smartphones into the refugee process can help overcome these issues.

A large amount of refugees today originated from countries such as Syria and Venezuela.270 These countries prior to their collapse had a developed cellular system and a high degree of smartphone ownership.271 The assumption that many refugees have access to smartphones is supported by a RAND report on refugees’ access to technology, which notes that “of all refugee households, 71 percent have a mobile phone.” 272

Smartphones can improve access to justice for refugees in two ways:

1. Developing an app like SecureDrop which is operated by Freedom for the Press Association. A user-friendly version would give those considering leaving their country the chance to upload documents securely without the fear of being discovered.

2. They empower refugees to integrate with their host countries social network space, as well as keep in contact with family. Further, this gives them an opportunity to air any injustices they encounter in the refugee process and to attract attention to violations of their rights.

Those in direct provision can struggle to prove their stories. Many are smuggled in using fake documents or arrive with none.273 The presence of their authentic documents may endanger

them.\textsuperscript{274} This creates a backlog of applicants and a system designed to scrutinise rather than accommodate.

The creation of a system that allows refugees to upload documents at any stage may be helpful. Refugees would identify themselves and provide documents more easily. In Ireland, a backlog has developed with authorities taking an average of 10 to 15 months, even up to 12 years for some cases.\textsuperscript{275} The financial strain of extensive investigation and cross referencing would be lessened by encouraging a reciprocal relationship between state and asylum seeker.\textsuperscript{276}

Giving all incoming refugees access to smartphones and classes on technology would complement the above measure. It allows refugees to contact family and friends at home either to corroborate stories or provide evidence of identity in other ways. Furthermore, when refugees are in direct provision, they are separated from general society. This institutional ostracization creates the perfect environment for injustice to occur.\textsuperscript{277}

Refugees can use tech to publicly highlight their conditions. Trusting a centralised institution to handle persons who likely do not speak the host language, do not understand the host countries’ culture, and are not aware of cultural norms has resulted in a deficient system.\textsuperscript{278} One way to fix this is by “airing out the curtains” with the help of those within in the system. This approach is more pragmatic than traditional translation-based aid. It is cheaper, will attract pro-bono legal aid, and provides a dynamic open space to educate the public. Social media’s

\begin{footnotesize}
\begin{itemize}
\item[274]\textsuperscript{274} For an example where the ethic designation on an identity card could spell the difference between life and death see: Peter Gwin, ‘Revisiting the Rwandan Genocide: Hutu or Tutsi?’ National Geographic (Online, 5 April 2014) <https://www.nationalgeographic.com/photography/proof/2014/04/05/revisiting-the-rwandan-genocide-hutu-or-tutsi/> accessed 28 June 2020.
\item[275]\textsuperscript{275} Juno McEnroe, ‘Figures reveal nearly 1,000 asylum seekers waiting over four years to be processed’ The Irish Examiner (Dublin, 20 November 2019) <https://www.irishexaminer.com/figures-reveal-nearly-1000-asylum-seekers-waiting-over-four-years-to-be-processed-965504.html> accessed 28 June 2020.
\item[277]\textsuperscript{277} For an insight into how these dynamics practically operate please see: John Lonergan, The Governor (1st edt, Penguin Books 2010).
\end{itemize}
\end{footnotesize}
translation systems can provide easy conversion of what an asylum seeker may say and can be used to raise awareness of human rights abuses in the refugee process.

How Would This Operate?

There are practical roadblocks to both services. Identification aids are limited by ease of use, scope, and security. Smartphone adoption and integration is limited by the financial resources and foresight of the state. A smartphone is cheap, state funding of projects notoriously is not.279

Identification Aiding Tech functions like this:

1. An asylum seeker uploads the required file and the contents transfer to a remote server.
2. This server would be “flushed” daily, transferring any accumulated files to a local network drive.
3. This drive would link to the international community’s asylum processing networks.
4. The asylum seeker receives a series of words to memorise.
5. They provide to their eventual host country.
6. The host country with this information can access the original documents.

This process ensures the asylum seeker remains in control of their data and protects them from harm from any evidence or documents they may otherwise carry with them escaping. This system would require copious initial funding and an informational campaign headed by a body like the UN. Practically, smaller countries would find this system unfeasible. However, the EU may find it useful, as they have their Eurodac system.280

Incorporating smartphones into the refugee application process in Ireland is more easily done:

1. Bulk supplies of cheap smartphones are distributed to those who do not have them in direct provision centres across Ireland.
2. Cellular service is provided through a tendering process for bulk packages.
3. Each asylum seeker is then taught how to:
   a. Use language learning apps such as Duolingo,
   b. Access local social media,
   c. And provide themselves with general tools they can use stand up for their rights.

279 Jennifer Bray, Martin Wall, ‘Fresh delays and millions in extra costs for children’s hospital revealed’ The Irish Times (Dublin, 24 Jan 2020).
This system is cheap, requiring a few introductory classes and is self-maintaining. While it could be left for those in direct provision to provide themselves with such things, efforts such as this go a long way to creating good faith, and a feeling of independence. It is these two things that engender an environment conducive to justice.

Conclusions
Access to justice in the refugee process is about more than translation work or legal aid. Aid to asylum seekers often focuses on what we can do to help them whereas we should emphasise the ability for refugees to help themselves. The use of technology to coordinate groups of refugees amongst themselves has been prevalent for years.\textsuperscript{281} It is time that we incorporate these existing methods into our own systems to create greater access to justice overall.

Conclusion
This chapter has highlighted how technology can vastly improve access to justice for each of the vulnerable groups discussed, and yet also hinder the access of others. It appears that although technology can, on the whole, greatly improve access to justice to the aforementioned vulnerable groups, this success will be vastly dependant on the “human element” of the judicial process - i.e., the willingness of legal professionals to use said technology.

The following conclusions can be made:

- Accessibility, particularly towards those with disabilities, is currently limited and needs to be put at the forefront of the judicial sphere. Technology can improve accessibility by providing services that can help with communication and other barriers, but further training is needed to complement this assistive technology, particularly within both the judicial system as well as an Garda Síochana.

- Legal technology would greatly aid access to justice in family law circumstances by providing alternative methods for a witness to provide evidence at trial. Currently the options

are too limited, such as how video-link evidence under Section 25 of the Domestic Violence Act 2018 can only be used in civil cases. Once again, their success is dependent on the willingness of the legal professionals to adopt and use these technologies.

- Regarding refugees and those who may experience language barriers, there is a focus on what we can do to help them, however, more emphasis needs to be placed on how we can teach them to help themselves – i.e. to understand the technology and therefore be able to use it whenever it is required. This will be a difficult task as it involves a systematic change of how legal aid is distributed.

As a final remark, it is worth noting that access to justice has six essential elements: the legal framework, the legal knowledge of individuals, representation, access to justice institutions (the courts etc.), fair procedure and an enforceable solution. Only four (knowledge, representation, access to institutions and fair procedure) contain a technological solution to the barriers vulnerable people face, and even then, there is a reliance on legal professionals to implement them. In order for vulnerable groups to have full and supported access to justice, all of these elements need to be changed, and technology will not be the only solution to an institutionalised problem.

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Chapter 5: Case Study: Artificial Intelligence

Eolann Davis, Jacob Maguire, Ross Malervy, Rowan Kelleher
Artificial intelligence (AI) is defined as ‘technologies with the ability to perform tasks that would otherwise require human intelligence, such as visual perception, speech recognition, and language translation.’ The continued use of AI in the legal sector augurs well in promoting access to justice within our society. Its introduction has liberated lawyers from the profession’s more tedious task work such as document discovery, which previously necessitated ‘a small army of lawyers’ and a significant time investment, but now can be undertaken rapidly and with greater degrees of accuracy through natural language processing and machine learning. It has also found a foothold in the courtrooms of some jurisdictions, with countries such as the Netherlands opting for ‘e-courts’ to dispense with small debt proceedings under the supervision of ‘robotic judges’. In short, AI has proven its capacity to release lawyers from more menial work and enabled a realignment of resources and focus towards more prosocial objectives - such as pro bono casework. However, these advantages also arrive with significant costs, and this section will analyse some of the major advantages and concerns in implementing AI across the legal sector. It will begin by examining the benefits of introducing AI, which can broadly be categorized as the increased efficiency and cost-savings that automation of legal advice would deliver, and how this may allow greater access to legal services. It will then examine some of the concerns AI raises, beginning with the ethical hurdles for lawyers to overcome in the areas of accountability and competency to avoid mistrust and disillusionment with legal processes. It will then highlight the potential for AI perpetuating systemic bias, as well as the privacy concerns this technology raises.

I. Lowering costs through automation

It is well attested that legal services are often prohibitively expensive for many would-be litigants. This primarily affects socioeconomically disadvantaged people and those unable to

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284 Benjamin Alarie, Anthony Niblett and Albert Yoon, ‘How Artificial Intelligence will Affect the Practice of Law’ (2018) 68 The University of Toronto Law Journal 106, 117


qualify for legal aid. This section will focus on the potential for artificial intelligence to reduce legal fees via automation.

Moore’s Law dictates that computer processing speeds are doubling roughly every two years. It is therefore not outside the realm of possibility that Computer Scientists may soon create AI or AGI (artificial general intelligence) that will outperform humans at virtually any task. AGI, is a hypothesised form of technology that will not only be able to outperform humans at a variety of tasks, but will also be able to teach itself innumerable skills, possibly at a much quicker speed than humans. While this is currently science fiction, recent developments in ‘deep learning algorithms’ and potential breakthroughs in Quantum computing could revolutionise the speed and flexibility of current computers and AI.

These improvements to AI will benefit all industries, and the legal sector is no exception. IBM UK and Ireland has recently collaborated with the Royal Marsden Hospital to unveil an AI programme called ‘Ask Maisie’ that will aid and interact with front line hospital staff by providing automated information relating to COVID-19. This follows developments in ‘Natural Language Processing’ which allows AI to understand, process and respond to human language.

It is clear how improvements in NLP and automation could benefit the legal industry. Legal services are notoriously slow, archaic and expensive. Case law is conducive to machine intelligence, and several industry practices such as drafting and monitoring contracts, litigation prediction (discussed below) and research may become automated, cheaper and more

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287 For further discussion see Naveen Joshi’s article in Forbes Magazine discussing the near possibility of achieving AGI. <https://www.forbes.com/sites/cognitiveworld/2019/06/10/how-far-are-we-from-achieving-artificial-general-intelligence/#3eb7ce4f6dc4> (accessed 7 July 2020).

288 ibid.


efficient. Indeed, a recent survey by LexisNexis has found that use of legal analytics by firms has doubled from 2017 and this shift in increased reliance on technological resources and increased automation in law firms has been exacerbated by COVID-19.

While not qualifying as ‘AI’, Compost has recently devised technology that automates the process for drafting legal briefings. This technology also allows lawyers to use NLP technology to find relevant phrases in case law.

Similarly, the potential for NLP to aid legal services has already been noted by John Nay in a 2018 paper which discusses machine learning for legal services. Nay notes that NLP could potentially analyse legal texts and organise them by language sentiment (like versus love, hate versus dislike), by topic, or any other relevant assortment of facts or law. Nay showcases an example by organising US presidents by particularly environmental key words. This technology could potentially filter the varied languages of policy makers, judges or other legal figures to analyse similarities and differences in various judgements and the development of case law. NLP may also benefit lawyers in finding and organising legal documents and in a hypothesized example demonstrated by Nay, analysing certain words to gauge the likelihood of legislation being enacted (such as Medicare in the US congress).

Such technology, as standard AI, can only generate or search information as instructed by a lawyer within certain parameters but may prove an invaluable tool for assorting case law. NLP, combined with developments in online dispute technology (discussed in chapters 14 and 15) may shift the current legal industry away from office suite tools and automate ‘grunt’ work such as document drafting, but this is still far removed from an AGI technology that could assess and shape case law or submit substantive legal work. Law, as a product of human

292 ibid.
295 ibid.
297 ibid 14-15.
298 ibid 22.
299 ibid 27.
socialisation is inevitably a normative, social activity rather than a purely positive, scientific one.

While not strictly ‘AI’, projects such as the Co-operative Legal Services (CLS) in the UK or the Rechtswijzer in the Netherlands\(^{300}\) have previously attempted increasing automation and digitalisation in legal services to mixed results. Roger Smith, a researcher into the digital delivery of legal services to people on low incomes, has rightly noted that these technological services, while short of AI, have a crucial role in expanding legal services to those who would traditionally lack the means to access them.\(^{301}\)

These services were designed to decrease fees by DIY, online approaches or in the case of the Rechtswijzer, helping claimants draft documents that would be reviewed for judges. In this sense, they fall short of a true AI approach to legal services but developments in online formats may certainly speed up the conventional legal process. As Roger Smith noted, elements in certain jurisdictions, such as the Civil Resolution Tribunal in British Columbia are becoming more receptive to online courts.\(^{302}\) This development is welcome, and is being seen in this jurisdiction in certain circumstances due to COVID-19 although again, this falls short of true ‘automation’.

Smith identifies five areas in which technology can reduce costs and increase access for those who would otherwise be unable to access legal services: widely available legal portals, document creation, ease of communication with clients, increased business or marketisation of legal services and online ‘expert services’ similar to those databases discussed above to aid lawyers.\(^{303}\) In another talk, Mr. Smith has also addressed how such digital legal services may help self-represented litigants save money on legal services or allow lay people access to previously esoteric areas of the law, particularly for small cases.\(^{304}\) Online legal platforms such

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\(^{300}\) Speech by Roger Smith to the International Legal Aid Group, June 2019 entitled ‘Law, and Technology and Access to justice: Where are we now?’ Available at: \(<\text{http://internationallegalaidgroup.org/images/miscdocs/Conference_Papers/Mr_Roger_Smith_-_Session_5.pdf}>\)

\(^{301}\) ibid 6.


\(^{303}\) ibid 10.

as Rechtswijzer have features designed to narrow down dispute areas, actively seeking to narrow litigation and decrease billable hours.\textsuperscript{305}

There is obviously a danger of services having misleading or fallacious information, which may be mitigated by setting standards and being user oriented.\textsuperscript{306} NLP technology may increase to a point where lawyers can generate automatic answers to particular legal questions\textsuperscript{307} which could potentially automate legal queries and create ‘chatbots’ for potential litigants. The potential cost savings to acquire knowledge that would previously require meeting a solicitor are self-evident.

II. Ethical Concerns

Accountability

The assumption of professional responsibility by lawyers in the provision of legal services is an essential and commonly held principle across jurisdictions.\textsuperscript{308} Its existence safeguards confidentiality, avoids conflicts of interest and most importantly ensures a client has been adequately informed.\textsuperscript{309} It is this latter aspect which AI threatens. Under a traditional lawyer-client relationship, delineating responsibility is relatively straightforward as lawyers issue advice based upon legal precedent and reasoning alongside their professional intuition while clients take in this information and then make informed decisions.

However, AI has rendered this relationship more opaque with the advent of ‘distributed agency’.\textsuperscript{310} This term refers to the diffusion of accountability in AI usage due to the increasingly complex interactions between various actors, such as software developers, vendors and end-users,\textsuperscript{311} engaged in the process of designing and supplying AI. Such diffusion

\begin{footnotesize}
\textsuperscript{305} Speech by Roger Smith to the International Legal Aid Group, June 2019 entitled ‘Law, and Technology and Access to justice: Where are we now?’ Available at: <http://internationallegalaidgroup.org/images/miscdocs/Conference_Papers/Mr_Roger_Smith_-_Session_5.pdf> Pg. 9.

\textsuperscript{306} ibid 13.


\textsuperscript{308} For example; Law Society of Ireland, ‘A Guide to Good Professional Conduct for Solicitors’ (3rd edn, Law Society of Ireland, Oct 2013)


\textsuperscript{310} Mariarosaria Taddeo and Luciano Floridi, ‘How AI can be a Force for Good’ (2018) 361 Science 751, 752.

\textsuperscript{311} ibid.
\end{footnotesize}
can lead to a ‘responsibility gap’ wherein apportioning liability if the AI malfunctions becomes almost an impossibility. As Scherer notes, the original designers may exempt themselves from liability by contending that they could not have foreseen how the AI would develop in response to legal data or how it would be applied by a lawyer. But this situation overburdens lawyers with liability who may have little choice in deciding whether or not to utilise an AI system due to ‘siloing’ and large hierarchies within law firms or what data the AI will utilise. Rather than promoting accountability this may encourage its evasion, as individual lawyers eschew deeper understanding of AI and instead lapse into ‘automation bias’- blind trust in the infallibility of autonomous systems - for fear that it may lead to further exposure.

To avoid such outcomes, regulation is needed to enforce accountability amongst actors. Such regulations should not operate under the illusions that zero errors will occur, but merely attempt to avoid situations where algorithms are blamed solely, and no parties are accountable. Multiple NGOs, tech companies and interest groups have issued ethical codes and have attempted to delineate responsibility, but no legal or regulatory regimes have been introduced. Instead, a governing model of accountability involving all key stakeholders can ensure irresponsible design and use is deterred and apportion liability for undesirable outcomes.

Competence

Professional competence is another ethical consideration for the legal sector in adapting AI. Across jurisdictions, it remains a core tenet of codes of conduct to ensure that clients receive the best possible legal advice, which upholds the reputation and quality standards of the legal profession.

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profession as a whole. However, the advent of AI into the provision of such advice has the potential to undermine this aspiration. Central to the lawyer-client relationship is the ability of the professional to explain in understandable terms the meaning and implications of legal advice.

This practice may become more opaque when advice is arrived at through AI processes, for example, under Technology Assisted Review (TAR). TAR systems utilise machine learning to select legal precedent and documentation which it deems relevant to the lawyer’s information request. However, TAR (like other AI systems) cannot readily provide a rationale for its selections because its ‘artificial neural networks’ (ANN) is programmed only to interact with and comprehend its datasets - this limitation is known as the ‘black box problem’. Not only can this impair a lawyer’s ability to explain their reasoning to a client, but attempts by AI to do so may be fruitless as legal professionals lack the specialist technical knowledge to understand such responses or the system’s shortcomings. This discrepancy is termed by the OECD Working Party on Competition and Regulation as ‘information asymmetries’ wherein those reliant upon technological systems are increasingly unable to assess its quality.

Countries have made efforts to mitigate this issue by amending competence provisions within their codes of conduct, such as the American Bar Association’s incorporation of a ‘technological competence’ clause within their ‘Model Rules of Professional Conduct’. But without practical computational education for the legal professionals this may prove a broad, ill-defined and unfair burden of liability. Avoiding the use of AI may also not be an option. In


the Ontario Supreme Court case of Cass, the Court capped a personal injury award on the basis that AI could have been used to reduce legal costs.\textsuperscript{325} Indeed, it may be submitted that a lawyer, acting in their client’s best interests, has an ethical obligation to utilise AI over human processes if the former proves to be more efficient or accurate.\textsuperscript{326}

\section*{III. Entrenching Systemic Bias}

A key advantage that algorithmic decision-making is perceived to have over human decision-making is a greater level of fairness and rationality. Humans are influenced by a myriad of conscious and unconscious biases, whereas the reliance on pure data by AI generates immediate connotations of objectivity and impartiality.\textsuperscript{327} While this may eventually be achieved as the technology improves, the current standard of AI is highly susceptible to inheriting the biases it promises to eliminate,\textsuperscript{328} and any defence of the objectivity of AI rests on the flawed assumption that completely objective data can be obtained.\textsuperscript{329}

In terms of promoting access to justice, the risk of historical bias being galvanised through the application of algorithmic decision-making throughout the criminal justice system is clear, and some worrying instances of this have already emerged. In this regard, AI could serve as a barrier to accessing justice rather than a facilitator.

One study conducted by the Human Rights Data and Analysis Group replicated Predpol, one of the most popular predictive policing algorithmic programmes in the US, and tested its performance by feeding it data on drug users across the entire city of Oakland.\textsuperscript{330} The algorithm consistently predicted more crime in areas with higher black and non-white populations, despite the number of drug users being relatively dispersed across the city. If the algorithm were completely adhered to, it would lead to black residents of Oakland being policed at roughly twice the rate of whites, and non-whites being policed at one and a half times the rate

\begin{itemize}
\item \textsuperscript{325} Cass v 1410088 Ontario Inc. [2018] ONSC 6959, [34].
\item \textsuperscript{326} Andrew Arruda, ‘An Ethical Obligation to Use Artificial Intelligence? An Examination of the Use of Artificial Intelligence in Law and the Model Rules of Professional Accountability’ (2017) 40 American Journal of Trial Advocacy 443.
\item \textsuperscript{327} Pauline T Kim, ‘Data-Driven Discrimination at Work’ (2017) 58 William and Mary Law Review 857 871.
\item \textsuperscript{330} See Kristian Lum and William Isaac, To Predict and Serve?, SIGNIFICANCE MAG., Oct. 2016, 15.
\end{itemize}
of whites,\textsuperscript{331} leading the authors to conclude that the programme reinforced existing racial discrimination within the police. This was because the algorithm was developed using historical data that had been skewed through decades of over-policing these same majority black neighbourhoods. The study also noted how dangerously self-perpetuating this cycle was, as a greater police presence in these areas generated more negative enforcement actions such as arrests and citations. These actions would serve as metrics confirming that the algorithm was correct in its predictions and encouraging it to send police there in future. \textsuperscript{332} Similarly, risk assessment software used to predict the likelihood of recidivism amongst felons when issuing sentencing guidelines was shown to overestimate the risk posed by black people and underestimate the risk posed by white people.\textsuperscript{333}

These studies provide a cautionary tale that the presence of bias in the initial dataset the algorithm is developed with will generate predictions that are subject to the same biases. In many cases, machine learning algorithms are unaware and unable to adjust for institutional biases embedded in the data. The risks posed by AI as part of predictive policing strategies are abundantly clear, and failure to understand the limitations of data risks galvanising historical discrimination rather than dismantling it.\textsuperscript{334}

\textbf{IV. Privacy}

As with all new technology, artificial intelligence comes with concerns surrounding data subjects’ privacy. The European Union’s General Data Protection Regulation has made some developments in this area, most notably under Article 22. With increases in automated decision making there is considerable concern over data subjects’ private information. The primary data protection concern surrounding AI is the transparency of the data collected during automated processing and what it is being used for.

\textsuperscript{331} ibid 15.
\textsuperscript{332} ibid
General Data Protection Regulation, Article 22

In general, the GDPR is silent on artificial intelligence, however, Article 22 provides for automated decision making. This accounts for AI and other bots. Article 22(1) states that ‘the data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her.’

According to GDPR, personal data is ‘any information relating to an identified or identifiable natural person.’ As will be discussed in the above section, if more than the necessary amount of personal data is collected this could lead to profiling and discrimination. One of the major differences between Article 22 and Article 15 of the EC Data Protection Directive Article 1995, which Article 22 is largely based on, is that the GDPR applies to all EU countries, and unlike directives, ‘requires no enabling legislation to take effect.’

However, Article 22 is not without its limitations. For example, one of the exceptions to Article 22(1) is when the data subject has given ‘explicit consent.’ In most cases, data controllers can escape liability because data subjects agree to privacy consent notices without reading them fully, if at all. Given the complexity of the algorithms used, it is unclear what level of understanding is necessary for a data subject to consent the use of their data by AI. Wrigley notes that there has been much debate surrounding ‘how far data subjects can actually be “informed” given the complicated nature of data processing.’

As mentioned above, Article 22 resembles Article 15 of the 1995 EC DPD. Bygrave identified that there was a ‘significant problem from a data protection perspective in one of the assumptions’ underlying Article 15(2)(a). The assumption was that a request to enter a formal contract would never be an issue for the person who requested it. This problematic assumption still seems to exist in Article 22(2)(a) which notes that Article 22(1) will not apply.

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335 General Data Protection Regulation, Article 22(1).
336 General Data Protection Regulation, Article 4.
338 General Data Protection Regulation, Article 22(2)(c).
where the decision ‘is necessary for entering into, or performance of, a contract.’ Furthermore, Article 22 protects data subjects when processing occurs but is silent on the collection of the data subjects’ information.

General Data Protection Regulation, Articles 13-15

Articles 13-15 of the GDPR provide that ‘data subjects have the right to access information collected about them, and also requires data processors to ensure data subjects are notified about the data collected.’ The algorithmic decision making of artificial intelligence makes it difficult for data subjects to know when their data privacy rights are being infringed. Requiring data collectors to notify data subjects when their information is being collected and explaining the logic involved does more to protect the subjects’ privacy. Article 13, which outlines the information the data controller must provide, explicitly makes reference to the point when the data is collected. Although these provisions do not deal with AI exclusively, they are still applicable and serve as the primary privacy protections afforded to data subjects.

As the law currently stands, there is little regulation specifically on AI when it comes to data protection. Foale notes that since ‘the GDPR already represented a sweeping change to data protection law, it is unlikely that we will see any significant changes in the immediate future.’ Furthermore, the GDPR was the only major development in this area of law since the Data Protection Directive over two decades before it. However, while there aren’t many provisions that deal with AI exclusively, this technology is still subject to the general principles of GDPR and more general articles like Articles 13-15. If there are to be developments in AI data protection, it will likely be aimed at making the algorithms more accessible for data subjects. According to Foale, efforts to create ‘explainable AI’ should be incentivised by regulation.

**Conclusion**

This section has examined the advantages offered by artificial intelligence as well as the

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342 Naomi Foale, ‘Back to the Future: How Well Equipped is Irish Employment Equality Law to Adapt to Artificial Intelligence’ 23(1) Trinity College Law Review 191

343 ibid 195.
concerns it raises as a tool to promote access to justice. All in all, it has the potential to improve the efficiency of the legal sector, and with that legal services may become accessible for those who would traditionally have faced significant barriers to access. If the technology continues to improve as is forecasted, it is reasonable to predict that the use of AI to predict, or indeed decide on contentious matters will proliferate. It is too early to say for certain whether AI will assume the roles of legal advisor and judge across all legal matters, but it would require both a standard of AI- artificial general intelligence- that is currently only theoretical, and for concurrent solutions to the myriad of issues the use of this technology generates. Given the transformative force of this technology, a reasoned and comprehensive regime needs to be developed, to settle the dilemmas in terms of accountability, professional competence, the potential for bias, and privacy, that AI in its current form generates.
Chapter 6: The Ethics of Legal Technology

Blake Stephens, Carrie O’Kelly, Clara Golden, Eleni O’Dwyer
This section approaches the ethics of legal technology from several perspectives. Part one analyses the legal implications of technological developments, including their impact on privacy laws. Part two examines the ethical duty of lawyers to maintain technological competence in an increasingly technology-orientated world. Part three provides a critical analysis of the European Ethical Charter on the use of Artificial Intelligence in judicial systems and their environment, and the Convention for the Protection of Individuals with regard to automatic processing of personal data.

I. Legal Implications of Technological Decisions

Technological developments have had an overwhelming effect on the nature of the legal field, with the law struggling to keep up with technological change in many respects. This is amplified by the fact that the problems presented by technological decisions are not limited to any one form of technology or any one legal area.

Broader Implications on the Legal Field

The rise of technology has had far-reaching implications on the legal world; diversifying work, creating new areas of practice, and broadening the scope of legal problems. However, there are undoubtedly challenges posed by widespread technological advances. Technological developments have the potential to undermine interests and values that the law seeks to protect. As a result, governments may be compelled to block or restrict the use of a form of technology to protect traditional values or settle moral arguments about the making of a technological decision.

As the scope of technological decisions is ever growing, new realms of liability emerge. In the context of modern technologies such as artificial intelligence, the question arises as to the ability of a legal institution or law firm to have liability imposed on it for work carried out by

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a machine. Consequently, it is not only the technological decisions of clients that are at issue, but also the internal decisions made in law firms with respect to technologies adopted. Law firms must ensure that they are sufficiently cautious around employing various forms of technology in terms of managing and protecting client data.\(^{348}\)

**Legal Uncertainty as a result of Technological Advancements**

New technology often generates uncertainty as to the application of existing law. Such legal uncertainty is notably prevalent in the context of technologies that enable new forms of conduct, as this type of technological decision is most likely to have a direct impact on law. This is the case in the context of technological decisions made around medical technologies such as *in vitro* fertilisation, which made possible the existence of two ‘mothers’ of the embryo in question (a woman providing an ovum, as well as a woman carrying the embryo). In the event of a custody dispute, a law giving custody of said child to its ‘mother’ inevitably becomes uncertain.\(^{349}\)

Similarly, in the context of computer-generated works, the determination of an ‘author’ for legal purposes becomes uncertain.\(^{350}\) As such, the advancement of new technologies has the ability to render existing legal rules uncertain, while also requiring the development of new laws.

Furthermore, technological change has the potential to render laws obsolete. The law should not be static in its attitude towards technology, since “law must be contemporary to be viable.”\(^{351}\) Failure on the law’s part to act and advance with technological decisions can lead to the law falling behind the times, thus becoming obsolete.

**Implications of Technological Decisions on Privacy Laws**

The technological transformation of the world has had overarching implications on the security of data. Privacy laws are a major consideration, as there has been a searing increase in the


frequency and severity of cyberattacks against company data. These privacy law considerations are amplified by ransomware attacks such as that on one of the world’s largest law firms, DLA Piper, in 2017. High-profile cyber-attacks such as this provide cause for concern around the movement of sensitive documents and client data to cloud-based or otherwise remote systems, and as such, security measures adopted by a firm can be an important technological factor for a client in deciding which law firm to trust with their data.

The most notable recent attempt to control technological decisions is the European Union’s General Data Protection Regulation (GDPR), requiring Member States’ governments to tighten controls on privacy breaches and cyber-attacks. However, in this technological age, the legal sector as a whole is tested on a constant basis, requiring a balance to be sought between regulation and privacy on one hand, and freedom and access to information on the other.

Conclusion
In conclusion, as technological advances are made, the legal sector must race to keep up with technology, or risk laws becoming obsolete. In order to remain relevant and necessary, the law must adapt in conjunction with technological developments. As such, law and technology must enter into symbiosis with one another, one constantly moving towards a common footing with the other.

II. Ethical Duty of Lawyers in relation to Technological Competence
The ever-growing role of technology in all aspects of life inevitably corresponds with a heightened focus on technology in the legal sphere. As legal technology becomes increasingly widespread, the question arises as to whether lawyers have an ethical duty to remain conversant with such technology.

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353 ‘DLA Piper still struggling with Petya cyber attack’ (Financial Times, 6 July 17) <www.ft.com/content/1b5f863a-624c-11e7-91a7-502f7ee26895> accessed 30 June 2020.
355 Regulation (EU) 2016/679 (General Data Protection Regulation).
Requirement of Technological Competence

Some jurisdictions, such as the USA, are explicit in requiring their lawyers to possess a certain standard of technological competence. In 2012, the American Bar Association, as a result of a recommendation by the Commission on Ethics 20/20, modified Rule 1.1 of the Model Rules of Professional Conduct which now states that ‘To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology…’. The Commission on Ethics 20/20 were, however, careful to note that lawyers have always had an ethical duty to ensure competence regarding relevant technologies. This is significant given that Ireland does not have any written rule regarding the ethical duty of maintaining technological competence as a lawyer. While there is a dearth of materials discussing any such duty, that is not necessarily to say that an ethical duty to ensure technological competence does not exist. Pursuant to the Law Society of Ireland’s Guide to Good Professional Conduct for Solicitors, a solicitor is required to ‘keep his knowledge and skill up to date on a continuing basis during the whole of his professional career’ to ‘ensure that clients receive a competent professional service based on current developments in legislation and practice’. Given the increasingly prevalent role of technology in all aspects of daily life, this section of the Law Society’s Guide could be interpreted to suggest that in light of the increasing role of legal technology in serving clients, lawyers have an ethical duty to maintain technological competence for the benefit of their clients. Similarly, the Code of Conduct for the Bar of Ireland states that it is the duty of barristers ‘to provide a competent and professional standard of work and service to each client’.

Lawyers have an ethical duty to serve the needs of their clients to the best of their ability. Technological competence on the part of lawyers appears to be increasingly intrinsic to satisfying this duty. The growing centrality of technological competence to properly serving

358 ibid 10.
360 ibid.
the needs of clients suggests that lawyers have an ethical duty to stay abreast of technological advancements to continue to meet these needs.

**What Does an Ethical Duty to Maintain Technological Competence Involve?**

While there is little discussion in Ireland as to what this duty involves, in the US, there has been much more focus on what this ethical duty warrants. American academics have been clear that a duty of technological competence does not necessarily require lawyers to become an expert in all legal technology. A major part of this duty involves lawyers having enough awareness to know when they are out of their depth and need to seek help from those with the requisite skills.361

In line with this viewpoint, both the Law Society’s Guide to Good Professional Conduct for Solicitors, and the Law Library’s Code of Conduct for the Bar of Ireland contain provisions stating that a lawyer should not handle a matter which the lawyer knows or ought to know he or she is not competent to handle.362 In such situations, the lawyer should liaise with a competent party. Given the growing importance of legal technology, lawyers may find themselves increasingly unable to serve the needs of clients in the absence of technological competency. In order to satisfy the professional codes of conduct for both solicitors and barristers, it could be said that lawyers have an ethical duty to be technologically competent in order to meet the requisite overall competency standards for legal practice and successfully serve clients.

**Duty of Confidentiality**

Pursuant to discussion in the US, the ethical duty to maintain technological competency also requires lawyers to take reasonable steps to understand how technology may affect their profession.363 The duty of technological competence in lawyers is related to other well-established duties. As the role of legal technology in the day-to-day work of lawyers grows, the core principles of the profession must remain intact. The duty of confidentiality is expressly

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provided for in both the Law Society’s Guide to Good Professional Conduct for Solicitors, and the Law Library’s Code of Conduct for the Bar of Ireland. It is central to a lawyer’s work, although ensuring that the duty of confidentiality is maintained may be more challenging where legal technology is involved. While the use of legal technology has many benefits, threats are also posed regarding cybersecurity and inadvertent disclosure. Technologically competent lawyers reduce the risk of such breaches of confidentiality arising from user error.

If a lawyer lacks knowledge regarding the security of technology used in practice, the risk of unauthorised disclosure of confidential client information is a significant concern. In the absence of technological competence in a largely technology-orientated world, lawyers risk the ‘inadvertent violation of other ethical obligations’ such as the well-established duty to preserve client confidentiality. In order to ensure that confidentiality is not breached, an understanding of how relevant technology works is vital. Accordingly, lawyers have an ethical duty to ensure they are technologically competent in order to best serve the needs of their clients and avoid the potential breach of other ethical duties.

Conclusion

In order for lawyers to continue to meet the needs of clients in a technological world, there is an ethical duty to keep pace with technological advancement. Although this ethical duty has been explored much more substantially in other jurisdictions such as the US, Irish lawyers must recognise this duty if they are to successfully serve clients in the legal technological revolution, pursuant to the requisite high standards.

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365 ibid.
366 “The Irish Times View on Technology in the Legal Sector: Going Digital – At Last” The Irish Times (Dublin, 20 April 2020).
III. Impact of EU/International Law on the Ethics of Legal Technology

European Ethical Charter on the use of Artificial Intelligence in judicial systems and their environment 2018.

This charter was adopted by the CEPEJ of the Council of Europe.\textsuperscript{367} ‘Intended for public and private stakeholders responsible for the design and deployment of artificial intelligence’, it aims to guide legislators.\textsuperscript{368} It warns that AI must be used ‘responsibly, with due regard for the fundamental rights of individuals as set forth in the European Convention on Human Rights and the Convention on the Protection of Personal Data’.\textsuperscript{369}

The first principle of the Charter is the ‘principle of respect for fundamental rights.’ The second principle is the ‘principle of non-discrimination’ aiming to ‘prevent the development or intensification of any discrimination’ to protect the rights of citizens under Article 21 of the European Declaration of Human Rights. The third principle deals with quality and security and the fourth principle is the principle of ‘transparency, impartiality and fairness’ it aims to ‘make data processing methods accessible and understandable.’\textsuperscript{370}

In terms of fundamental rights, the use of legal technology cannot undermine the right of access to a judge and the right to a fair trial. From the design phase to the production of AI it should be ensured that these fundamental rights are respected.\textsuperscript{371}

In terms of transparency, it must be remembered that these tools may have legal consequences and the capacity to ‘significantly affect people’s lives.’\textsuperscript{372} Transparency and access to the design process must be balanced with the protection of ‘trade secrets’. The Council of Europe’s MSI-NET study put forward an interesting approach to this: “The provision of entire algorithms


\textsuperscript{368} European Ethical Charter on the use of Artificial Intelligence in Judicial Systems and their Environment 2018 p. 5.

\textsuperscript{369} ibid.

\textsuperscript{370} ibid p. 7.

\textsuperscript{371} ibid p. 8.

\textsuperscript{372} ibid p. 11.
or the underlying software code to the public is an unlikely solution in this context, as private companies regard their algorithm as key proprietary software that is protected. However, there may be a possibility of demanding that key subsets of information about the algorithms be provided to the public'.

Furthermore, IBM Global Business Services created a software to increase accountability around the use of AI and the decisions made by the technology. It allows companies to minimise the bias of these technologies by monitoring them closely. In a Forbes interview the company stated that: ‘by measuring IBM’s predicted decisions against the actual decisions taken by an AI program, including the weight it gives and the confidence it has on that decision, the software can theoretically figure out whether the algorithm is biased and determine the cause of that bias.

The fifth principle of the Charter sets out the need for professionals in the justice system to be able to ‘review judicial decisions’ and other data. It explains that ‘the user must be informed in clear and understandable language whether or not the solutions offered by the artificial intelligence tools are binding, of the different options available, and that s/he has the right to legal advice and the right to access a court. S/he must also be clearly informed of any prior processing of a case by artificial intelligence before or during a judicial process and have the right to object, so that his/her case can be heard directly by a court within the meaning of Article 6 of the ECHR.’ These aspects demonstrate the importance of ensuring that this technology does not infringe upon people’s rights. It also states that when a new system is developed a ‘computer literacy programme for users’ should be implemented.

Essentially, this Charter emphasises the need for constant reassessment of the use of legal technology in judicial systems and provides a checklist for evaluating processing methods of AI in terms of their compatibility with the Charter. While the Charter is helpful in providing a broad outlook on the issue and indicates the main steps to be taken in terms of ensuring that the use of AI in our judicial systems is ethical, it’s guidelines are largely general and would require a great deal of further specification in order to ensure that the principles set out are protected.

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374 Charles-Towers Clark ‘Can We Make Artificial Intelligence Accountable?’ Forbes September 19, 2019.
376 ibid p. 77.
Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data

This Convention was entered into force on the 1st of November 1985.\textsuperscript{377} It is a ‘binding international instrument which protects the individual against abuses which may accompany the collection and processing of personal data.’\textsuperscript{378} ‘It outlaws the processing of "sensitive" data on a person's race, politics, health, religion, sexual life, criminal record, etc., in the absence of proper legal safeguards.’\textsuperscript{379} These rights can only be restricted ‘when overriding interests are at stake.’\textsuperscript{380}

Article 1 sets out the objective and purpose of the Convention: ‘to protect every individual, whatever his or her nationality or residence, with regard to the processing of their personal data, thereby contributing to respect for his or her human rights and fundamental freedoms, and in particular the right to privacy.’\textsuperscript{381}

The use of technology in the justice system undoubtedly involves the processing of data. Article 9 1(a) of this Convention states that: ‘Every individual shall have a right: not to be subject to a decision significantly affecting him or her based solely on an automated processing of data without having his or her views taken into consideration.’ Therefore, this Article has implications upon the use of technology in the justice system. For example, if a judicial decision is being processed by a ‘robot judge’ this may prevent a person’s views from being ‘taken into consideration.’ However, Paragraph 2 of this Article states that this shall not apply ‘if the decisions is authorised by a law to which the controller is subject.’\textsuperscript{382} Therefore, in order for this personal data to be processed, the processing of this data must become the law of the state. Article 11 states that an exception to Article 9 occurs when it ‘constitutes a necessary and proportionate measure in a democratic society for... the impartiality and independence of the judiciary or the prevention, investigation and prosecution of criminal offences and the execution of criminal penalties.’\textsuperscript{383} Therefore, it would seem that the use of technology in the

\textsuperscript{378} ibid.
\textsuperscript{379} ibid.
\textsuperscript{380} ibid.
\textsuperscript{381} Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data Article 1.
\textsuperscript{382} Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data Article 9.
\textsuperscript{383} Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data Article 11.
justice system would be exempt from this rule, however, how broad-ranging this exception is seems to be up to the individual government to decide.

**Conclusion**

This section has dealt with the ethical responses to legal technology through a variety of viewpoints. It explored the legal implications of technological decisions. The legal uncertainty that can result from technological advancement was analysed, in addition to the ethical duty of lawyers to remain technologically competent in a world increasingly driven by technology. Finally, the European Ethical Charter on the use of Artificial Intelligence in judicial systems and their environment and the Convention for the Protection of Individuals with regard to automatic processing of personal data were also examined.
Chapter 7: The Impact of EU Law on Legal Technology
Conor Courtney, James Redmond, Rachel Guerin, Róisín de Bhaldraithe
Technology and innovation are vital in assisting the rapid growth of a European Digital Single Market that aims to remain competitive on a global scale. As multinational tech giants continue to invest and inhabit a central role in the growth of the EU, it is fundamental that the rights of European citizens are protected and respected. Over the past five years, Europe has maintained its position as a global leader in digital regulation by collecting digital taxes, enforcing stringent privacy standards, funding anti-competitive practices, and pursuing a pan-European, ethical digital single market.

This section of the publication will examine:

1. The European Data Strategy
2. ‘Shaping Europe’s Digital Future’ strategy report
3. The White Paper on Artificial Intelligence
4. The EU Open Data Directive
5. The General Data Protection Regulation (GDPR)
6. The EU e-Privacy Regulation
7. The EU Cybersecurity Act
8. The Connecting Europe Facility
9. Intellectual Property Law
10. The Copyright Directive

European Strategy for Data

In February 2020, the European Commission published the Communication on the European Strategy for Data. This ambitious strategy outlines the key actions necessary to make the EU the ‘most attractive, most secure and most dynamic data-agile economy in the world’\(^{384}\). Europe’s data strategy is premised upon the core European values and fundamental rights and aims to create a transparent, fair and ethical Single Digital Market based upon the conviction that the human being is and should remain at the centre\(^{385}\). It outlines the strategy for policy


\(^{385}\) COM 2020 (66) final, sec 3.
measures and investments to develop and grow the data economy over the next five years through ‘key actions’, centred around four pillars. These four pillars cover A) A cross-sectoral governance framework for data access and use, B) Enablers: Investments in data by private actors and strengthening Europe’s capabilities for hosting, processing and using data to create economic and societal value, C) Competences: Empowering individuals to take control of the personal data that they generate, and investing in data literacy skills and in SMEs and start-ups, and finally D) Common European data spaces in strategic economic sectors and domains of public interest. The aim is to create a genuine single European data space where actors such as businesses and public sector bodies will have open access to publicly generated data that is routinely regulated across all European Member States.

The policy measures and investments proposed in this Communication will allow businesses, such as an Irish online legal advice platform, access to ever-increasing amounts of data so that they can develop and build their online service at a faster and more efficient pace while abiding by stringent rules and enforcement mechanisms. Directed by the four aforementioned pillars, Irish start-ups and SMEs will be granted funding and will attract investment as part of this Data Strategy to ensure their legal technology services incorporate greater productivity to excel in competitive markets, while also securing benefits for the European citizenry.

‘Shaping Europe’s Digital Future’ strategy report

The Commission is developing a digital transformation strategy that will benefit the population of Europe. To achieve this digital transformation, the European Commission published a communication, ‘Shaping Europe’s Digital Future’, on 19 February 2020. The three key objectives which the Commission shall focus on to ensure a digital transformation of Europe are: (i) Technology that works for the people, (ii) a fair and competitive economy; and (iii) an open, democratic and sustainable society.

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386 COM 2020 (66) final, sec 1.
387 COM 2020 (66) final, sec 1.
(i)  **Technology that Works for the People**

To ensure a shared benefit of technological change and transformation for Member States; citizens, academia, civil society, financial institutions, businesses and social enterprises, the Commission has proposed a number of actions:

(a) A Digital Education Action Plan to promote digital literacy across all levels of education;
(b) An enhanced framework for those working in the platform and digital economies;
(c) A reinforced EU governments interoperability strategy to ensure coordination and common standards for secure and borderless public sector data flows and services;
(d) A European cybersecurity strategy, including the establishment of a joint Cybersecurity unit;
(e) Ensuring 5G and 6G with fibre connectivity across the Member States, through investment;
(f) Building and deploying cutting-edge joint digital capacities in the areas of AI, cyber, super and quantum computing, quantum communication and blockchain.

(ii)  **A Fair and Competitive Economy**

The Commission proposes to establish a European single market for data and ensure competition laws remain adequate for the digital world. To achieve this, the Commission aims to:

(a) Create a European Data Strategy to make Europe a global leader in the data economy, establish legislative framework for data governance and the possible implementation of a Data Act;
(b) Evaluate and review the fitness of EU competition law for the digital age;
(c) Ensure that large platforms do not inhibit access to the market by new businesses;
(d) Provide a strategy towards an integrated EU payments market that supports pan-European digital payment services;
(e) Publish a Communication on Business Taxation for the 21st century, having regard to the OECD’s previous developments;
(f) Establish a Consumer Agenda, which will assist consumers to make informed choices and play an active role in the digital transformation.

390 ibid 3.
391 ibid 4.
(iii) **An Open, Democratic and Sustainable Society**

The Commission notes “people are entitled to technology that they can trust”. Therefore, to ensure an accountable, transparent and open digital services industry within Europe, the Commission proposes:

(a) New and revised rules to deepen the Internal Market for Digital Services, as part of the proposed Digital Services Act, to increase and harmonise the responsibilities of online platforms and information service providers and reinforce oversight;

(b) To introduce a universally accepted public electronic identity (eID);

(c) A Media and audio-visual plan to support the digital transformation and competitiveness of media, whilst ensuring quality content;

(d) A European Democracy Action Plan to improve the resilience of democratic systems to address the threats of external intervention in EU elections;

(e) To develop a digital model of Earth to improve Europe’s environmental prediction and crisis management capabilities;

(f) To introduce a circular electronics initiative to ensure effective recycling; and

(g) The promotion of electronic health records based on a common European exchange format to give citizens secure access to and exchange of health data across the EU.

**White Paper on Artificial Intelligence**


The EU aims to invest more than €20 billion per year over the next decade in AI. Mark MacCarthy and Kenneth Propp, both professors at Georgetown Law School, state the key takeaways are that the EU plans to: pursue a harmonised approach to AI across the EU in order

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393 Ibid 5.
to avoid divergent Member State requirements and use access to the EU market as a lever to spread the EU’s approach to AI regulation across the globe”. 396

Allen states “new regulations are proposed for ‘high risk’ AI applications only. To be deemed ‘high risk’, an AI application must be used in a high-risk sector (e.g. healthcare, transport, energy) and must also have a function or use that is likely to give rise to significant risk”. 397

The Commission proposes, as a result of the high risk some AI applications may pose to the public and society in general, that prior conformity assessments would be performed to verify and ensure that mandatory requirements outlined below have been complied with. 398

The Commission recommends the following mandatory legal requirements should apply, 399 where an application is deemed to be ‘high risk’:

(i)  *Training Data* – Where it comes to the data used to train AI systems, the EU’s values and rules are to be respected, specifically in relation to safety and existing legislative rules for the protection of fundamental rights. The requirements should ensure such AI products are safe, do not lead to discrimination and that personal data and privacy are protected.

(ii)  *Keeping of Records and Data* – Accurate records regarding the date used to train and test the AI systems should be kept. In justified cases, the data sets themselves should be retained and information used to build, test and validate the AI system should be retained.

(iii)  *Information* – Adequate information should be provided to ensure transparency regarding the use of high-risk AI systems. Information should be provided regarding the AI system’s capabilities and limitations relating to the purpose for which the systems are intended, the conditions required for the system to function, and the


399 ibid p.18.
expected accuracy of the system. Citizens should also be informed of when they are interacting with an AI system and not a human being.

(iv) **Robustness** – There should be an ex-ante assessment of the risks associated with the AI application. There should be requirements regarding the accuracy and robustness of the AI system. A requirement that outcomes are reproducible and that the AI system can adequately deal with errors or inconsistencies. Furthermore, a requirement ensuring that AI systems are resilient against over attacks and subtle attacks attempting to manipulate the algorithm/data.

(v) **Human Oversight** – The appropriate involvement of human beings, with human oversight being subject to the individual AI system, its uses and effects. The Commission suggests the AI system does not become effective unless it has been previously reviewed by a person; the output of the AI system becomes immediately effective, but subject to human intervention where appropriate; human monitoring of the AI system and the ability to intervene in real time; and humans influencing the design face of AI systems, to impose operation constraints where the AI system becomes defective.

MacCarthy and Propp suggest the use of AI may complicate product safety laws by making it difficult to identify whether the AI technology was the cause of the harm in whole or in part and therefore, affecting injured parties’ pursuit of compensation. The Commission proposes “each obligation should be addressed to the actor(s) who is (are) best placed to address any potential risks”, for example developers. Furthermore, where a product contains defective software or other digital features, strict liability should be imposed.

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EU Open Data Directive

The Open Data Directive\(^{403}\) is part of the European Commission’s Digital Single Market strategy that focuses on open data and the re-use of public sector information. It was adopted and published on 20th June 2019 and is to be implemented by Member States by 16th July 2021\(^{404}\). This Directive\(^ {405}\) will focus on generating value for the economy and society through the re-use of public sector information, also known as government data, which refers to all data that public sector bodies produce, collect and pay for. This will create a common data space for all institutions and agencies within the EU and is built upon two pillars of the internal single market: transparency and accountability\(^ {406}\). The Directive introduces the concept of high value data sets, the free availability of which will be highly beneficial to the EU society and economy, in particular for SMEs and startups who wish to enter the market\(^ {407}\).

In addition to this Directive, the European Commission has been funding the European Data Portal\(^ {408}\) since 2015. This platform harvests the metadata from public data portals across EU Member States, amassing the public sector information to make it available for EU institutions and agencies who can access the shared data for re-use. Member States are required to develop policies for open access to publicly-funded research data while EU-wide harmonised rules on re-use will be applied to all data which is made accessible via repositories such as the European Data Portal. Therefore, an online legal advice service needs to ensure it shares any public sector information with the European Commission in line with policies developed by the Irish government regarding the sharing and re-use of public sector data.

General Data Protection Regulations (GDPR).

GDPR stands as one of the fundamental updates to the EU position on IT and legal technology in recent years. This is because its introduction ensured that data users could be protected


\(^{405}\) Directive (EU) 2019/1024, point 13, 14.


internationally and could be certain of their rights. By harmonising data protection regulations, GDPR attempted to ensure consistency in a regional framework.

Accessibility is a cornerstone of GDPR. We see this in three main ways. Firstly, GDPR ensures that data subjects can seek information held by corporations and state bodies through data access requests, and these must normally be responded to within one month.\footnote{General Data Protection Regulations, Art.12(3).} Secondly, the GDPR framework removed the fee that some Member States had in place for filing a data access request.\footnote{ibid, Art.15(3).} Making this process free, except for administrative fees, makes filing a data request more accessible for those in low socio-economic positions. Finally, GDPR supports the right to rectification of incorrect information and the right to be forgotten, and in doing so it ties an IT system together with individual legal rights.\footnote{ibid, Art.17.}

In evaluating whether these regulations have supported or suppressed accessible legal rights, it is useful to consider a statistical perspective. Amanda Lathia notes that, “Since the GDPR rules were introduced in May 2018, data subject access requests (DSARs) have been on the rise. The ICO reports that data protection complaints from the public have gone up: 41,000 since May 2018, compared with 21,000 for the preceding year”.\footnote{Amanda Lathia, ‘DSARS – what organisations can look forward to’, (Hunters Law, August 15 2019) <https://www.hunterslaw.com/amanda-lathia-and-polly-atkins-discuss-uk-businesses-coping-with-data-subject-access-requests-since-gdpr-was-introduced-in-gdpr-report/> accessed 28 June 2020.} Clearly, these technology law introductions have influenced the accessibility rights of data subjects.

In 2019, the Open Rights Group collected data relating to the extent of GDPR being used as a tool to support data subjects’ rights. Here, the graphs below indicate that the mechanisms under GDPR were used to both lodge complaints and to highlight breaches of data protection rights to the relevant Data Protection Authorities.\footnote{Open Rights Group, ‘GDPR in Numbers’, (GDPR Today, 25 March 2019) <https://www.gdprtoday.org/gdpr-in-numbers-4/> accessed 28 June 2020.}
Graph: The number of complaints submitted to the DPAs. Lawsuits filed with courts are not included.

Graph: The number of data breach notifications submitted to Data Protection Authorities by businesses or other organisations, pursuant to Article 33 of the GDPR.

In this way, GDPR, and its connection with both legal rights and IT technology, works to promote accessibility, through timeframes, complaints procedures, and a free application process.
EU e-Privacy Regulation

The EU e-Privacy Regulation (ePR)\textsuperscript{414} was proposed in 2017 by the European Data Protection Board (EDPB), concerning the respect for private life and the protection of personal data in electronic communications and to repeal the outdated 2002 e-Privacy Directive\textsuperscript{415}. The objective of the ePR is to create a pan-EU harmonisation of pre-existing national provisions which is required to ensure an ‘equivalent level of protection of fundamental rights and freedoms, and in particular the right to privacy and confidentiality, with respect to the processing of personal data in the electronic communication sector.’ It is also to ensure the free movement of personal data and of the free movement and availability of electronic communication equipment and services within the European Community\textsuperscript{416}. The ePR is \textit{lex specialis} to the General Data Protection Regulation (GDPR)\textsuperscript{417} of 2017, informally known as the cookies law, and aims to ‘particularise and complement’ it with respect to the processing of personal data in the electronic communication sector\textsuperscript{418}.

Since the proposal in 2017, the ePR has been revised on several occasions, the most recent of which was published by the EU Council Presidency in February 2020. This revised draft outlined several substantial amendments to the Regulation, introducing the possibility to rely on the “legitimate interest” ground to (1) process electronic communications’ metadata, and (2) place cookies or similar technologies on end-users’ terminals, however these will be subject to specific conditions and safeguards\textsuperscript{419}. However, negotiations regarding the updated ePR have been deadlocked for some time and the future of this Regulation is uncertain\textsuperscript{420}. That being said, if the ePR is implemented in the future, it will affect online legal advice services as

\begin{footnotesize}
\begin{enumerate}
\item COM 2017 (010) final, art 1.2.
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\end{footnotesize}
it applies not only to natural persons as does the GDPR, but also to legal persons i.e. corporations. Until then, the rules across the EU will vary on a country to country basis and companies will have to check their compliance accordingly\textsuperscript{421}.

EU Cybersecurity Act

A key element to EU e-Privacy regulation comes through the EU Cybersecurity Act, which came into force on the 27\textsuperscript{th} June 2019, and will be fully applicable within the EU from the 28\textsuperscript{th} June 2021. The aim of this legislation is to revamp and strengthen the EU Agency for cybersecurity (ENISA). It accomplishes this by establishing an EU-wide cybersecurity certification framework for digital products, services and processes.

The European Commission notes that, under the new act, ENISA builds on its current position as secretariat of the national Computer Security Incidents Response Teams (CSIRTs) Network, established by the Directive on security of network and information systems (NIS Directive).\textsuperscript{422} It does this through several activities, including its role in setting up and maintaining the European cybersecurity certification framework, through the preparation of the technical grounds for specific certification schemes. Further, ENISA will be responsible for informing the public about the certification schemes, as well as the already issued certificates through a dedicated website. In that way, this legal instrument will ensure greater transparency online, through a certification programme which will be accessible to the public.

ENISA will also be tasked with increasing, “operational cooperation at EU level”\textsuperscript{423}. This may come in many forms, such as helping EU Member States who request EINSA to deal with cybersecurity incidents, and by encouraging EU collaboration in situations of large-scale cross border cyber-attacks.

\textsuperscript{421} ibid.


\textsuperscript{423} ibid.
The benefit to this approach is twofold. Firstly, citizens are offered transparency as to the security of specific products and services. Secondly, vendors and providers of such goods and services gain a competitive advantage through satisfying the criteria for more secure digital solutions. In this way, IT, technology law, and EU frameworks work alongside one another, in order to encourage transparency relating to cyber security, and accessibility to digitally secure goods and services.

Connecting Europe Facility (CEF)

CEF is an EU funding programme which aims to support the European Commission’s goals relating to sustainable, inclusive, and smart growth under the EU’s ‘Europe 2020 Strategy’ objectives. From 2014-2020, this project sought to contribute to competitiveness and a transition towards climate neutrality, through a budget of €30.5 billion in the energy and climate policy sectors.

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An important aspect of the CEF for improving access to justice is its WiFi4EU initiative. This programme hopes to support the creation of free high-quality internet access across the EU to citizens and visitors. This will be provided through Wi-Fi hotspots in public spaces such as parks, public squares, administrations, public libraries, hospitals, etc. The benefit of this is that it would support the accessibility of online legal resources, particularly for those who are travelling and those who do not have access to free Wi-Fi systems. Digital exclusion is a major issue in the dialogue regarding IT and legal accessibility. The major issues with digital exclusion come from an inability to use legal technology, such as websites and computers, or due to a lack of access to technology, such as smartphones or computers. However, creating a free regional Wi-Fi system would be a positive step in forwarding digital inclusion, and would thus be instrumental in promoting access to legal services through IT means.

**Intellectual Property Law and The Copyright Directive**

Intellectual property law protects intangible assets such as patents, copyright, trademarks and trade secrets. The European Commission’s aim in the context of IP is to harmonise the law in order to erode barriers to trade and industry and provide fair protection of IP rights across the board. IP is important to protect as it fuels competition and innovation within today’s society where ideas and processes have become arguably more valuable than tangible property.

**Copyright Law**

A significant area of IP law within the EU framework is copyright which is protected through a number of directives and regulations, most notably, the Copyright Term Directive, the

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426 ibid, p.60.
427 Nick Hilborne, ‘Susskind clashes with MPs on digital exclusion’ (Legal Futures, 26 June 2019) <https://www.legalfutures.co.uk/latest-news/susskind-clashes-with-mps-on-digital-exclusion> accessed 28 June 2020, “90% of adults in the UK last year had recently used the internet and a further 5% were 'proxy users’, helped by children or grandchildren”.
Information Society Directive\textsuperscript{430} and the Directive on Copyright in the Digital Single Market (the Copyright Directive).\textsuperscript{431}

It has been argued that the InfoSoc Directive failed in its aim to harmonise copyright law as Member States could choose which exceptions they wished to implement and in what manner.\textsuperscript{432} Consequently, the divergence in the law between states was only deepened.

\textit{The Copyright Directive}

This lack of harmonisation was then tackled through the Copyright Directive which took effect in 2019 and must be implemented by Member States by the 7\textsuperscript{th} of June 2021. This directive provides a necessary overhaul of the law, demanded by the rapidly evolving nature of technology and the internet, which renders a 20-year-old directive no longer fit for purpose.

The directive, however, was met with criticism and shrouded in controversy throughout the legislative process. Two articles, in particular, stimulated significant debate. Article 15 which creates a “neighbouring press publishers” right, will allow press publishers to receive remuneration for the online exploitation of their works by news aggregators\textsuperscript{433} and Article 17 which makes content-sharing platforms liable for copyright violations on their platforms, which will, in practice, require these platforms to implement restrictive upload filters.

The driving aims behind the directive were to harmonize the law in order to further the Digital Single Market strategy and to protect the rights of authors and creators. These are legitimate aims, but they have come at a cost, many feel it is an unjust restriction on the freedom of the internet. Article 15 may make things difficult to find through the internet. Article 17 will likely result in the takedown of lawful content along with the legitimate copyright violations, as well as drastically altering the user experience on huge platforms like YouTube. Smaller platforms

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who cannot financially meet their responsibilities under the directive could cease to exist, imperilling ‘the future of information diversity and media pluralism in Europe.’

The directive also potentially clashes with the Charter of Fundamental Rights which provides for the right to freedom of expression, including the right to ‘receive and impart information and ideas without interference by public authority and regardless of frontiers.’ Speaking on Article 17 and freedom of expression, UN human rights expert David Kaye contends, ‘such sweeping pressure for pre-publication filtering is neither a necessary nor proportionate response to copyright infringement online.’

The directive may have adverse effects on access to justice for the modern individual who looks to the internet for their information. We should aim to continue to educate and inform the general public on law through accessible and understandable mediums and the restriction of content-sharing and knowledge transfer is not conducive to this. For example, one billion hours of video are viewed daily on YouTube, a huge share of this content is educational, political or informative. It is not unthinkable that Article 17 could prevent billions of hours of educational content from ever reaching internet users. Some smaller platforms where people exchange information, for example forums, may also be endangered by this article.

The directive could also have an impact on the development of legal tech itself. Education and research are absolutely necessary to advance legal tech and although the directive allows for exceptions within both these areas, they are not absolute and may stymie innovation and increase legal uncertainty. For example, there is an exception for text and data mining for the purpose of scientific research by research organisations, however, only an organisation operating on a ‘not for profit basis or…pursuant to a public interest mission’ can be classified as a research organisation. A similar limitation applies to the digital and cross-border teaching.

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439 ibid, Art 2(1).
activities exception\textsuperscript{440} where a ‘non-commercial purpose’\textsuperscript{441} must be achieved. The lines between commercial and non-commercial or profit and not-for-profit can be blurred, for example, where a PhD student is sponsored by a commercial company or university research is being part-funded by a pharmaceutical company.\textsuperscript{442} Member States will inevitably have varying interpretations of these concepts, which could create issues for cross-border research or research in states which interpret the exceptions strictly.

\textbf{Conclusion}

The speed with which the EU is developing its Digital Single Market strategy is admirable and there is no doubt it is on its way to becoming one of the most digitally connected communities in the world. It is contended that both digital strategy and access to justice could be improved across the Member States if they are encouraged to actively consider legal technology when developing new legislation. Specific points that were found to be relevant to legal technology in this section were;

- The European Data Strategy gives legal tech platforms an opportunity to access more data than ever before.
- A road map of the EU’s strategy can be found in the ‘Shaping Europe’s Digital Future’ report.
- Artificial intelligence has the potential to transform the digital world and legal tech but its development must be closely regulated to subdue ethical concerns.
- Legal tech platforms must ensure that they make public data available on platforms such as the European Data Portal as part of the EU Open Data Directive.
- The EU E-Privacy proposal is to potentially be implemented in the future and so it is important for legal tech platforms to be aware of the obligations it will encompass.
- GDPR itself has improved access to justice for data subjects by creating an efficient and inexpensive complaints procedure.
- The EU Cybersecurity Act increases transparency relating to cyber security and therefore the accessibility of online goods and services for users.

\textsuperscript{440} ibid, Art 5.
\textsuperscript{441} ibid, Art 5(1).
The Connecting Europe Facility, particularly the WiFi4EU initiative is tackling digital exclusion and consequently promoting digital legal accessibility.
Chapter 8: Comparative Analysis of Global IT Developments and their Effects on Access to Justice: England and Wales

Emily Tierney, Laura O’Sullivan, Louise Cabot, Saoirse Enright
“It has become appallingly obvious that our technology has exceeded our humanity.”

Access to justice is a fundamental element of the rule of law, a functioning democracy and social inclusion. To ensure that this right is adequately safeguarded, the state is required to facilitate organisations who require support to provide access to high-quality legal advice that is both timely and affordable. The economic crisis of 2008 coupled with the introduction of the Legal Aid, Sentencing and Punishment of Offenders Act 2012 negatively impacted UK austerity resulting in funding cuts to legal aid, forcing half of all the law centres and agencies offering free legal advice in England and Wales to close. Consequently, many people were unable to access legal advice which voided their right to access justice. Such events have been a driving force for the adoption of technology to provide adequate measures to ensure sufficient access to justice and the vindication of one’s basic human rights. However, technology is not a cure for all ills because accessing justice by way of technology is rather nuanced in the face of barriers. This is reflected in the 11 million adults in the UK who lack basic digital skills and the all-time low level of trust citizens have placed in government data use which stands at an abysmal figure of 27%. Nevertheless, technology is an important tool that may bridge the gap for many persons with unmet legal needs and who should thus become the prime concern when implementing an innovation strategy rooted in technology in organisations to make the justice system more accessible.

The legal profession in England and Wales is to an extent playing catch-up with the world of technology. However, increasing efforts to deliver greater access to justice demanded by clients through higher productivity and a lower cost of delivery have as of late been witnessed. This is explicit in recent levels of innovation powered by technology and led by strategy in the form

443 Albert Einstein.
445 See generally Access Denied? LASPO 4 years on: A Law Society review (The Law Society of England and Wales, 2017). “LASPO was an ambitious piece of legislation, overhauling the legal aid system alongside a range of other reforms to the justice system. Many of the changes were controversial, and generated often heated opposition from social justice organisations and the legal sector, including the Law Society” in Access Denied? LASPO 4 years on: A Law Society review (The Law Society of England and Wales, 2017) at 2.
446 In 2013-14 there were 94 local areas with law centres or agencies offering free legal services, the Ministry of Justice has confirmed. By this year, 2019-20, the number had fallen to just 47 in Technology, Access to Justice and the Rule of Law: Is technology the key to unlocking access to justice innovation? (The Law Society of England and Wales, 2019) at 7.
447 World Economic Forum (IPSOS, 2019).
of smart forms and assisted complete forms, mobile applications, advice applications and chatbots. As such, Part I of this chapter aims to examine what information technology and applications are available in the aforementioned areas. Part II will analyse their sufficiency regarding the extent to which they have encouraged effective participation in the legal system. On an amendatory note, Part III will afford consideration to whether there is room for improvement and if so, suggestions for reform and further development of how to improve access to justice through technology will be examined. Current technological developments in countries other than England and Wales will also be briefly discussed.

I. What is currently being offered in England and Wales?

Smart forms and assisted complete forms

*CourtNav*

Technology is being utilised to simplify the court process for plaintiffs. The online application CourtNav assists litigants in filling out court forms and has been used as a way of replicating face to face consultations through the online application. Solicitor and chief of pro-bono work at Freshfields (London), Paul Yates, stated that the clear format of CourtNav “simplified things massively.” It achieves this by using a yes/no/multiple-choice system of answering questions to determine whether or not a client is, for example, eligible for legal aid.

Mobile applications

*The Hilary Meredith iAccident application*

The Hilary Meredith iAccident Application is a free service that allows users to capture and record the pertinent information required at the scene of an accident. This information is then reported to Hilary Meredith solicitors and is used to validate accident claims. The application reduces the time spent by solicitors on cases where the application can be used and allows for more time to be spent on cases where the client is unable to use the application, speeding up

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449 ibid.
the process for everyone involved. This increased access to justice is as a direct result of the application.\footnote{“Military Injuries Personal Injury - Hilary Meredith Iaccident App” (HilaryMeredithSolicitors, 2020) <https://hmsolicitors.co.uk/contact-us/hilary-meredith-app/> accessed 2 July 2020.}

\textit{Amicable divorce application}

Those in the field of Family Law in England and Wales have utilised the Information Technology sector to promote greater access to justice. The Amicable Divorce Application was established to simplify the divorce process, reduce the legal costs and to facilitate a positive outcome for both parties.\footnote{Kate Daly and Pip Wilson, “About Us Amicable Divorce” (Amicable.io, 2020) <https://amicable.io/about-amicable> accessed 19 June 2020.} The application itself is free and provides a facility for the collection and distribution of information between the separating parties. The application aims to prevent either party feeling dependent on lawyers to resolve issues such as co-parenting.

An investigative officer from the Solicitors Regulation Authority (SRA), Parbinder Tiwana, noted that; “Innovation in this sector in the form of new services or better ways of delivering existing services has the potential to deliver significant social value. ‘Amicables’ model is an example of innovative working’.”\footnote{JK v MK (E-Negotiation Ltd (trading as 'amicable') and another intervening) [2020] EWFC 2.} Mr Justice Mostyn remarked in a recent judgement that Amicable has “greatly improved access for many people”\footnote{ibid.} who would otherwise be unable to access affordable legal assistance, as a result of the removal of legal aid from divorce proceedings.

Advice applications and chatbots

\textit{inCase}

inCase has been adopted as a method for lawyers to communicate with their clients without the need for a face to face meeting.\footnote{(in-case.co.uk, 2020) <https://www.in-case.co.uk/> accessed 22 June 2020.} The application, which is available for both android and iOS devices, offers a range of features including; the secure sending of messages between lawyers and clients, the ability to use a client’s electronic signature, client feedback, identification checks, medical reports and other documents can be sent directly between lawyer and client, and finally, clients are alerted to updates in their case as they happen, reducing the number of
unnecessary direct communications between clients and lawyers. The application aims to improve efficiency and the streamlining of communications with clients.

**Sorting out Separation**

An application, in the same vein as Amicable, has been created by the UK Department of Work and Pensions named Sorting out Separation. The application offers information on legal issues related to divorce or separation and the laws surrounding visitation and contact rights to children.

**Ask A Lawyer**

Ask A Lawyer is a free internet service offered to those in England and Wales which allows users to obtain legal advice from practising solicitors. Although the site is not regulated by the Solicitors Regulation Authority, the solicitors who provide the advice work are from firms that are regulated by the SRA. However, this does mean that the advice received does not constitute a lawyer-client relationship.

**Do Not Pay**

Do Not Pay is marketed as the “World's First Robot Lawyer” and has been made available in both the United States and the United Kingdom. The free application uses “chat-bots” to process claims related to legal issues such as; appealing parking tickets, applying for visas and

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455 ibid.
green cards, fighting unfair overdraft fees and more.\(^{460}\) The application can be used in two ways. Firstly, if the user has a specific issue the application directs them toward the relevant documents and paperwork that must be filed to begin processing a claim. Secondly, if the user is unsure of the specific breach against them, the application can scan any relevant information provided by the user and then suggest what claims may be filed. Joshua Browder, Do Not Pay’s founder, has stated that the application aims to ensure that “the average person can access the law for free.”\(^{461}\)

**qLegal**

Finally, qLegal is an online service, provided by the Queen Mary University of London, which supplies free legal advice to tech start-ups on topics such as; data protection, privacy, non-disclosure agreements and intellectual property law.\(^{462}\) The advice is supplied on a one to one basis between law students and tech start-ups or entrepreneurs, enabling students to gain practical experience in the legal world during their studies.\(^{463}\)

**II. An overview of the sufficiency of IT and legal applications in England and Wales**

**Smart forms and assisted complete forms**

**CourtNav**

The success of CourtNav is apparent in its attainment of the Legal Aid Lawyer of the Year Award 2015 for Access to Justice through IT. It was granted this award as it “saves you time because the applicant has already provided gateway evidence and some details of the abuse, often doing this alongside a frontline adviser who has helped them through the process. This means you have a new client who you don’t have to triage, and you can focus on creating a strong application for them.”\(^{464}\)

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\(^{461}\) ibid.

\(^{462}\) “About Us – Qlegal” (qlegal.qmul.ac.uk) <http://www.qlegal.qmul.ac.uk/about/> accessed 23 June 2020.

\(^{463}\) See generally *qLegal The Small Print for Big Ideas* (Queen Mary University of London, 2019).

CourtNav has the innate ability to make the court process quicker and less stressful for vulnerable women as it ensures effective access to the laws from whose protection, they are entitled which is safe in the knowledge that their form content has been verified by a lawyer.

Mobile applications

*The Hilary Meredith iAccident application*

Clients who have engaged in the Hilary Meredith iAccident Application reported that:

“The iPad has made a huge difference to their lives and is great value as a rehabilitation tool and when used with the right apps has many other practical uses. It allows them to perform tasks that they may otherwise be unable to do or increases the ease and safety with which they can perform these tasks.”

*Amicable divorce application*

It was reported on 2 March 2020 that the Amicable divorce app, which has the potential to make the process of divorcing less gruelling, has helped more than 2,000 couples divorce. Given the scope that Amicable has to disrupt the divorce market, it is unsurprising that family law lawyers and judges have questioned its legality. This uncertainty was resolved by Mr Justice Mostyn in the High Court case of *JK and MK and E-Negotiation Ltd (trading as “amicable”)*, where he ruled in favour of the Amicable divorce app. He stated that “There can be no doubt that the initiative of Amicable has greatly improved access to justice, for many people effectively disenfranchised from the legal process, by the near-total withdrawal of legal aid from private family law proceedings.” Justice Mostyn went on to note that the company had a system of “red flags” which “entirely neutralises” conflict of interest risks, and it did not transgress the 2007 Act. Kate Daly founder of amicable delightfully averred that “[The] judgment highlights that amicable provides a much-needed credible alternative to traditional

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468 ibid.
adversarial services, and that couples can work together, with us, to sort things out amicably rather than fighting through lawyers where they are not needed."^{469}

However, Joanne Edwards stated that

“Whilst there are many divorce services run by those from a non-legal background, it is always prudent for people to take specialist independent legal advice before they sign off on their financial agreement. This is their one bite of the cherry and the value that lawyers add is to know the range of outcomes that a court would impose, to identify detail a couple/non-lawyer may not have thought of when reaching their agreement and to know the pitfalls in drafting to look out for.”^{470}

Accordingly, Professor Moorhead contended that amicable might not be suitable for many divorcing couples “because obviously there's some mistrust between the parties quite often.”^{471} Frances Petterson, a divorce lawyer accordingly contended that specialist divorce solicitors will always be required in complex cases.^{472}

Advice applications and chatbots

_inCase_

Following the launch of inCase, fee-earners at Aequitas Legal reported fewer clients called to enquire about general updates and the call quality increased, as clients were better educated about the personal injury claims process.^{473} Since then, the inCase platform has continually improved client satisfaction rates and made law firms more cost-effective in their service provision. It is now being used by some of the most progressive law firms in the UK across a wide scope of legal disciplines.

Paschal O’Hare Solicitors specialise in Personal Injury and their inCase app is fully integrated with their Proclaim case management system. Principal Patrick O’Hare maintained that:

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^{469} Jill Martin Wrenn, “The friends helping divorce without lawyers” (2020) _BBC News._

^{470} Monidipa Fouzder, “Judge praises lawyer-free divorce service” (2020) _The Law Society Gazette._

^{471} Jill Martin Wrenn, “The friends helping divorce without lawyers” (2020) _BBC News._

^{472} ibid.

^{473} _Capturing Technological Innovation in Legal Services_ (The Law Society of England and Wales, 2017) at 70.
“We’ve recognised long since my father first set up the practice in 1969 that technology was an important part of delivering our services. Having used inCase for nearly four years now we are delighted with the improvements we’ve seen in terms of our client satisfaction ratings and general practice efficiency. We take huge pride in delivering great customer service and our Trustpilot rating is great reflection of that.”

**Sorting out Separation**

Research was conducted between February and June 2013 which evaluated the performance of the Sorting out Separation web app since its launch in November 2012. Since the web app’s launch, it attracted 143,833 visitors. Out of these visitors, 10,872 have gone beyond the home page and out of these, 9,132 have been signposted to external organisations to get support (702 per month). Since April 2013, an optional section in the web app invited users to answer questions about themselves. Of the 3,228 customers who answered, 49% were mothers, 29% fathers, 8% children, 3% grandparents, and 11% with no children.

The research identified several areas that also required improvement in the web app. The range of potential barriers reported when using the app included a lack of empathy and a human element; limited information quality regarding the detail and correctness of information; and confidentiality and privacy risks when submitting personal information online. Although the need for more detailed and wide-ranging content and problems in accessing the web app was reported, many users also found it useful and relevant. Many users had “saved” and/or “printed” information for further reference, discussed materials with partners or other support sources, or recommended the site to others.

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475 ibid.
476 ibid.
Ask A Lawyer

In 2013, research commissioned by the Law Society found that private consumers responded enthusiastically to the Ask A Lawyer concept. They felt that it was appropriate as it was consistent with how consumers search for advice today. When faced with a legal issue, many consumers engaged in online advice before consulting a solicitor. However, small and medium enterprise users appeared more unsure and divided on the idea of Ask A Lawyer. Some felt that they had an adequate understanding of legal matters and thus would not benefit from Ask A Lawyer or that the legal matters encountered by businesses required detailed circumstances to make them suitable for this sort of interaction. Nevertheless, start-ups and new businesses did value the ability to make queries and have access to free advice around issues including protecting their intellectual property.

There is little evidence to suggest these sites dominate our generation. However, lawyer participants enjoy the ability to help individuals with basic understandings of the law. In this way, as with pro bono, participation helps to build the reputation of the profession and position solicitors as approachable sources of knowledge.

Do Not Pay

In 2016, it was reported that in the twenty-one months since the launch of the free application, there were 250,000 parking ticket appeals in both New York and London, with Do Not Pay winning 160,000 of those appeals.

qLegal

The impact of qLegal is evident in its yearly participation in community events in partnership with LawWorks to help raise funds for their charity and support the pro bono ecosystem. qLegal participated in The Great Legal Bake on 27 February 2019 and raised £261.02 for local advice agencies and charities throughout the UK in order to protect those who need it most. Daniel

Capturing Technological Innovation in Legal Services (The Law Society of England and Wales, 2017) at 73.
ibid.
Mirny, member of Lean On Me Peer Support Inc, described the consequences of qLegal as follows;

“As a small mental health non-profit, we rely on services such as qLegal to help us further our mission. We are grateful to the qLegal team and their partners for all of their help, and strongly recommend qLegal to other non-profits seeking legal counsel that is as professional and thorough as it is warm and respectful.” 483

Steven Reid from Word U Limited added to this as he opined;

“We needed advice on shareholder agreements and protecting intellectual property. These matters are too complex for the layperson to research on their own. Following the advice obtained through qLegal, we do feel more confident in our understanding of the law and it has helped us to take the project forward.” 484

III.  a. What improvements in the field of IT can be made to further the goal of securing access to justice for all?

Telecentres

In rural areas, information and communication technology centres play an important role in enabling communities with limited access to the internet to receive information on legal issues. Telecentres also seek to lessen the information gap observable in rural areas. According to Alibayagi, “the ICT centres are public places where people can use computers, the internet, and other media; get training, and obtain a variety of other communication-related services.” 485

Individuals with a low-income can thus benefit from legal aid by going to community locations. For example, Skype clinics enable legal professionals to offer their pro-bono services without requiring clients to travel or attend face-to-face meetings. There must, however, be continued coordination between ICT centres and solicitors to make the collaboration successful for the client. Using such interfaces that connect clients with legal professionals can vastly improve their social situations and wellbeing.

483 Daniel Mirny Lean On Me Peer Support, Inc in Centre for Commercial Law Studies, qLegal The Small Print for BIG IDEAS (Queen Mary University of London, 2019) at 15.
484 Steven Reid from Word U Limited ibid.
485 Amirhossein Alibaygia, Mehdi Karamidelkordib and Esmail Karamidehkordic “Effectiveness of Rural ICT Centres: A perspective from west of Iran” (2011) 3 Procedia Computer Science at 1185.
Also, there are several existing internet websites which operate as free legal advice clinics. In the USA, the American Bar Association has created the ABA Free Legal Answers site\textsuperscript{486} which enables users to “post their civil legal question to their state's website. Users will then be emailed when their question receives a response.”\textsuperscript{487} This initiative is very useful and provides low-income residents to have any specific legal questions answered by a qualified lawyer.

ICT centres can also offer specific online self-help tools on topical practice areas with pre-answered questions that would tend to be asked, including tax law or employment law. This directly influences education development and a better understanding of the law in specific areas.\textsuperscript{488} Governments should take an active role in encouraging rural and low-income communities to adopt and use ICTs.

**Television and radio enhancing legal empowerment**

ICTs also include the often-over-looked mediums television and radio which provide non-legal forms of education. The idea of integrating “legal information into popular entertainment”\textsuperscript{489} has developed in the last decades.

Radio shows can be used to broadcast and publicise the availability of legal services and community paralegals to persons who may feel intimidated by the justice institutions and its complex processes.\textsuperscript{490} For instance, in Nigeria, a radio programme was created to inform the general public and women about rights. This project was initiated by members of the International Federation of Women Lawyers (FIDA).

The use of documentary film series which are broadcast on local television stations can also address sensitive issues such as promoting gender equality and women’s empowerment.\textsuperscript{491} Additionally, film clubs can provide a platform for raising awareness and discussing sensitive issues such as gender-based violence.

\textsuperscript{487} ibid.
\textsuperscript{488} Amirhossein Alibaygia, Mehdi Karamidehkordib and Esmail Karamidehkordic “Effectiveness of Rural ICT Centres: A perspective from west of Iran” (2011) 3 Procedia Computer Science at 1185.
\textsuperscript{489} Sian Herbert, *Improving access to justice through information and communication technologies*, (GSDRC Helpdesk Research Report, 2015).
\textsuperscript{490} ibid.
\textsuperscript{491} Sian Herbert, *Improving access to justice through information and communication technologies*, (GSDRC Helpdesk Research Report, 2015) at 3.
Launching a radio or television initiative is relatively costless and can empower minorities in being proactive in claiming their rights. Furthermore, the possibility of having guest speakers from NGOs and legal experts can greatly improve the quality of the discussions.

An active social media presence by legal organisations

It may be very advantageous for legal aid organisations and self-help centres to increase their presence on social media, like Facebook, YouTube and Twitter. According to a Harvard report, “93% of organizations report some presence on a commercial social media platform.” Social media platforms are a modern avenue that can facilitate as well as amplify the outreach of legal aid organisations to low-income and minority populations. The information posted on social media contributes to bringing confidence “in a legal system that is often confusing and mistrusted.”

Self-help resources such as videos found on YouTube have become a very good means of helping underrepresented communities to understand their legal rights and complete government forms. Also, the costs required to produce videos is relatively low, especially when voice-overs and animations are used instead of hiring actors.

For example, the Northwest Justice Project, which is a publicly funded legal aid program of the State of Washington, has a main goal of justice for all low-income people in Washington. The NJP manages the WashingtonLawHelp.org website and has taken on the task to create simple instructive videos on topics such as divorce and child custody but also about more recent legal issues surrounding COVID-19. This project contributes to combating injustice that low-income individuals and communities face.

The use of social media to disseminate legal and court information and allow for questions has helped underrepresented communities to access a wide range of educational tools at no financial cost.

493 ibid.
495 For more information see playlist videos <https://www.youtube.com/playlist?list=PLelQZBERgIxEEQAAEmr1LG8W6Qs_e> accessed 1 July 2020.
III. b. Capturing technological innovation in legal services

From the UK Law Society’s Report on adapting technology to benefit and enhance legal services, it is apparent that the dominant focus has been on corporate firms and their implementation of artificial intelligence and virtual assistants to their legal processes. However, as acknowledged in Part III of the Report,

“all projects have some cost; even internal training or maintaining social media accounts requires staff time. Technology projects have start-up, maintenance and training costs that have to be addressed in order to guarantee that the project is sustainable.”496

The cost associated with the aforementioned technologies, such as their continued maintenance is something that must be given careful consideration when discussing the application of these technologies is legal aid clinics and NGOs who are working with significantly restricted funds and sources of investment compared to the corporate firms. While the report itself provides valuable insight into how the legal profession is adapting to the digital age, it also highlights the lack of focus and consideration awarded to the organisations whose aim is to make law more accessible to those in lower-income brackets.

An example of this Report being primarily focused on the corporate bubble is seen in Table 3 in Part III of the Report.497 In this table, the strategies for introducing new technologies are broken down into benefits and disadvantages. However, it is worth noting that throughout the table there was no explicit consideration into accessibility for clients, rather the focus is primarily on the monetary risk and gain associated with each strategy. If one were to apply these strategies to the model which pro-bono organisations including FLAC operates, it is clear that one of the biggest challenges that faces these organisations is funding. For commercial firms who have the advantage of being able to employ tech expertise in-house or to partner with an external tech company these options allow them to maximise the benefits that new technological innovations, such as APIs or AI, bring. When applying these models to organisations such as FLAC, it is apparent that limitations will arise as to which approach these organisations can adopt. For most NGOs perhaps the most viable approach is to buy an off-the-shelf package from one of the larger tech companies, such as Microsoft. However, this

497 ibid.
approach brings with it a number of disadvantages for example; the off-the-shelf packages available have a somewhat limited use, and the potential future problems around legacy systems. Furthermore, the question of how data will be stored and maintained provides NGO’s with another hurdle.

The Report highlights the importance the role of data plays when using technology in order to aid accessibility to law. As Grady advocates, instead of thinking about the law firm as a service provider, let us think about it as a data warehouse. Within its computer exists a tremendous amount of information about clients, behaviours, and outcomes. Furthermore, in this digital age, data is viewed as almost a form of currency, with a lot of the tech companies using their users’ data to sell to advertisers. With companies being driven to obtaining data driven insights, such as Uber and Airbnb, there is nothing to stop law firms from supporting insight-driven decision making throughout the business, as acknowledged in the Report. However, when this form of innovation is discussed with regards to legal aid organisations the question arises on whether it is ethical to essentially profit or sell a client’s data, a client who is often considered to be vulnerable. Moreover, as stated in the Report, “the next wave of innovations will gather unprecedented amounts of data from disparate systems, and weaving them together and fundamentally change the firm’s business model, its service and delivery.” With these changes comes new challenges, for legal aid services these challenges might be more hassle than they are worth. It is important to develop technological innovations that not just serve the firms implementing them, but also will protect and serve the clients whose consumption of these services in the long run supports the continuation of technological innovation. Finally, for organisations operating in the European Union, GDPR must be considered when advocating for a particular form of technology.

**Conclusion**

All things considered, in the last few years, there has been an encouraging number of mobile apps developed that seek to enable minorities and rural communities to benefit from important

501 ibid at 94.
legal services at no cost. In addition to being beneficial to the wider community, these apps help educate underrepresented minorities regarding their legal rights and further inclusivity. Nevertheless, there is continuous room for improvement and the law must adapt with advancing technology as it carries a positive effect for socio-economic shortcomings and thus for society as a whole.
Chapter 9: Comparative Analysis of Global IT Developments and their Effects on Access to Justice: British Columbia

Eoin Finnegan, Eoin Jackson, Ted Halligan
This section of the report analyses the use of technology to promote access to the legal system in British Columbia. British Columbia has openly embraced technology and relies on it to promote efficiency in civil law. This section will critique the following three core components to British Columbia’s civil system.

1. The Solution Explorer and Civil Resolution Tribunal
2. The MyLaw BC online platform
3. The Ask JES legal software

1. Solution Explorer and Civil Resolution Tribunal

The Solution Explorer could be described as the ‘crown jewel’ in British Columbia's legal technology system. It acts as a means of triaging disputes and using relevant information to consider various means of resolving small claims and tenancy issues.\(^\text{502}\) It is the first mandatory step should an applicant wish to pursue a claim with the Civil Resolution Tribunal (CRT).

The CRT was set up to encourage accessible and speedy resolution of disputes of a relatively minor nature.\(^\text{503}\) It is not a court, but rather an administrative tribunal designed to utilize electronic communication in order to prevent excessive usage of the courts to resolve disputes that could be settled via consensus mediation etc. The Tribunal uses the explorer as a ‘gatekeeper’, with the software being relied upon to assess whether disputes fall within its jurisdiction.

The Explorer itself is designed to be as simple to use as possible.\(^\text{504}\) The Explorer begins by using questionnaires in plain language to narrow down and categorise the nature of the potential claim. From there the Explorer begins to provide suggestions and methods of resolving the problem without having to resort to legal action. The Explorer however is not just equipped with the ability to provide information on these methods. It can directly create the tools needed to resolve the dispute prior to using the Tribunal. For example, it can formulate a customisable

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\(^{503}\) ibid 66.

\(^{504}\) Shannon Salter and Darin Thompson, 'Public-Centered Civil Justice Redesign: A Case Study of the British Columbia Civil Resolution Tribunal' (2016-2017) 120.
letter addressed to the potential respondent designed to encourage communication between the parties. The focus on “natural” over legal language allows the applicant to comprehend the nature of the proposals without the need to pay for professional legal advice.505 Should the Explorer not provide a satisfactory suggestion for the applicant, they are free to make a formal claim with the CRT.

The CRT expands on the foundations laid by the Explorer through the facilitation of further engagement between the parties in order to encourage a mutual resolution. This is also conducted on a generally remote basis.506 Should facilitation not prove successful, the CRT is capable of providing adjudication on the dispute, which is again conducted using technology insofar as is possible.507 An oral hearing, for example, will generally be conducted over the phone or through video conferencing. The focus remains on the user throughout this process, with technology being used to simplify and streamline what could be a complicated process of civil dispute resolution.508

The Explorer and CRT also strive to keep legal costs to a level that is accessible to the general public. The Explorer itself costs around 75 to 125 Canadian Dollars if a claim is made (subject to the nature of that claim).509 The overall costs remain around 200 Canadian Dollars, but the fact that these fees are staged means that those who resolve their disputes early on in the process benefit from a decrease in total costs.510 This has the potential to improve access to justice whilst encouraging efficiency in the resolution procedure. The incentivisation of an agreement via consensus highlights the ability of technology to act as a proponent of valuable social behaviour. Furthermore, applicants can apply for a fee waiver if they are from low income backgrounds or receive public funding. This acts as an additional means of removing the barriers faced through traditional ‘on paper’ legal procedures.

Since the inception of the Explorer over 33,000 have used it as an initial basis to consider an application.511 Of this the CRT has dealt with over 8,000 applications, with only 15% of these

505 ibid 120.
506 ibid 121.
507 ibid 123.
509 ibid 68.
510 ‘Semi-Annual Time to Trial Report of the Provincial Court of British Columbia’ (30 September 2015).
requiring adjudication. This means that only a minority of applicants had to bear the full cost of the process, and most were encouraged to resolve their dispute in a less adversarial manner. The speed of an application has also been significantly increased, with the average CRT case taking 90 days, as opposed to the 12 months it can take to even obtain a hearing in the small claims court.

Satisfaction rates amongst users is generally high. A recent survey found that 77% believed the CRT better prepared them for dispute resolution, with 71% finding that the online system was easy to use. Lower figures of satisfaction (69%) were reported when users were asked if they found the process ‘easy to understand’. This may be linked to the fact that a user is generally left to handle the process on their own without any guidance beyond the technology present. Language could also remain a barrier, though it should be noted that there is a primary focus on avoiding unnecessary jargon within the Explorer and CRT. Nevertheless, feedback does suggest that the technology has been of benefit to its users and has resolved cases in a consensus driven and positive manner.

Furthermore, it should be noted that the CRT is a tribunal and not a court. A final decision can be registered with the court for the purposes of enforcement but is not indicative of the CRT itself being a court. The Explorer acts as an alternative means of accessing justice rather than being utilised to improve access to the traditional pathway. Decisions remain open to juridical review and concerns have been noted around the publicity of proceedings and the principle of open justice.

Furthermore, the CRT often acts to negate the presence of legal representation within these proceedings. Section 20 of the CRT Act mandates that:

“A party may be represented by a lawyer or another individual with authority to bind the party in relation to the dispute if
(a) the party is a child or a person with impaired capacity,

512 ibid.
513 Semi-Annual Time to Trial Report of the Provincial Court of British Columbia’ (30 September 2015).
514 Civil Resolution Tribunal, Participant Satisfaction Survey (January 2019)
515 ibid.
(b) the rules permit the party to be represented, or
(c) the tribunal, in the interests of justice and fairness, permits the party to be represented.”

This can lead to issues in accessing justice in that representation remains subject to the whim of the Tribunal rather than the user. The approval rate for representation hovers around 76%, yet that still leaves a large percentage of cases where representation has been refused.

Overall, the Solution Explorer has proven to be a valuable means of encouraging users to access justice outside of the traditional courtroom process. The CRT uses the Explorer as a filter tool for its own work, which in turn has encouraged applicants to mediate and solve problems in a manner all parties can be satisfied with.

2. MyLawBC

MyLawBC is an online interactive platform run by Legal Aid BC that aims to help users find solutions to their legal problems. It can be found at [www.mylawbc.com](http://www.mylawbc.com). It uses two methods to help users: Guided Pathways, and Mediation and Dialogue Tools. These tools are designed to help people with a broad range of issues including family problems, child protection issues, criminal law issues and immigration queries. There is no charge for the use of this service. This service was developed by the same team that created the Rechtwijzer system in the Netherlands. This section discusses how the Guided Pathways, and Mediation and Dialogue tools work. It also briefly analyses the positive and negative aspects of these systems.

Guided Pathways

The objective of a guided pathway is to guide the service user to the correct information they need to solve their legal problem. The system works through asking questions about the individual's personal circumstances and then the problem which they are facing. It uses simple

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517 ibid 72.
English when asking these questions and explains legal terminology in plain language too. At the end of the questions it will produce relevant documentation designed to help the person. For example, if a person has missed a mortgage payment after going through the pathway it will give the individual access to the following documents: A sample demand letter that a lender’s lawyer may send, sample responses, sample affidavits, a checklist of what to mention to their lender, other possible sources of income they may be able to avail of (e.g. unemployment benefits), and information about credit counselling. There are nine pathways covered by MyLawBC, including Divorce and Separation, Abuse and Family Violence, Wills and Personal Planning, and Foreclosure.

Mediation and Dialogue tools
The Mediation tool is also referred to as the Family Resolution Centre. This is a tool designed to help separating or divorcing parents create a parenting plan with the best interests of their child in mind. It encourages the parents to negotiate together, and if necessary, there is also a professional mediator available to them at no cost. When using this system, similar to the guided pathways, one will be asked a series of questions regarding themselves and the situation they are in. Each parent then fills out a form about what they believe to be in the best interests of the child such as decision making, contact time and holidays. Once each parent has filled this out a parenting plan is created by the system which each parent can choose to accept or reject. If they cannot come to an agreement a mediator can step in to help them. Once they agree they then sign the parenting plan. The child does not appear to have any direct input in this system.

The dialogue tool is a platform which allows separating or divorcing couples to create a separation agreement which adequately addresses the family’s needs. Again, here the process begins with the individuals filling out personal information about themselves and their situation. This includes questions about what they are looking for out of a separation agreement.

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523 ibid 9.
524 ibid 4.
525 ibid 5.
and may include, for example, who keeps the house and child supports\textsuperscript{526}. Then the tool allows for the separating couple to negotiate with one another and edit a separation agreement generated upon completion of the first section. The tool allows spouses to compare each other’s answers and no clause is finalised until both agree. Both spouses are also given resources along the way to allow them to make an informed decision. Once this is done MyLawBC gives the couple instructions on how to finalise this agreement\textsuperscript{527}. If this does not work, then the service also offers a list of in-person dispute resolution services to help those who are having difficulty reaching an agreement\textsuperscript{528}.

Analysis

There are many positives to this system which help to increase access to justice. It is easier to access a computer than a courtroom, or other mediation service\textsuperscript{529}. It is also a free service which helps to remove financial barriers to advice and problem resolution. The success of this service can be seen through its increasing number of users from 20,000 in 2016\textsuperscript{530} to 166,000 by August 2019\textsuperscript{531}.

The Guided Pathways lower the barriers to justice as it is a free service offered in plain English. One way it lowers barriers is through creating individualised documents, which removes any difficulties a person may have in drafting such a document. Through giving sample affidavits, it can help to provide certainty so a person who is not experienced in the legal system knows what to expect.

The mediation and dialogue pathways, again by virtue of being free, will be helpful to families on low incomes. The Mediation tool which includes access to a free mediator will be particularly helpful if an impasse is reached. One major fault of this system though is that it is possible to not include the child directly in discussions. This could be particularly problematic as it overshadows the voice of the child. Oftentimes children themselves are best placed to know what their own best interests are.

\textsuperscript{526} ibid 7.
\textsuperscript{527} ibid 7.
\textsuperscript{528} ibid 8.
\textsuperscript{529} The International Legal Aid Group, ‘A Comparative Analysis of Online Dispute Resolution’ (2019) 65.
\textsuperscript{531} Legal Services Society British Columbia, MyLawBC Communication Kit (2019) 16.
However as with any online service there are certain barriers. Their system requires a certain amount of technological literacy to use. You must be able to find your way to the website and then navigate it, some people may find this difficult. It also requires access to a computer and a stable internet connection; this may be difficult for low income and rural households. Overall, the system increases access to justice. Despite the technological barriers it is not mandatory to use and is helpful to those who can access it.

3. ASK JES

Ask JES is a service providing legal help since 2013. It was set up by the Justice Education Society (JES) to improve the legal competence of the residents of British Columbia. This service was set up in response to the question of how technology may be used to satisfy one’s legal needs to a level which everyone is entitled to. Ask JES has diversified its range of services since it began back in 2013 and continues to raise the standards of legal help in British Columbia in an easy and accessible way. This aspect of accessibility is crucial in the approach to a service of this kind, in an effort to increase the link between technology and the legal world, and progress in a way which attracts British Columbians. From getting legal information through live chats and answering queries almost instantly, Ask JES has taken advantage of the current era in a way which helps technology act as a medium through which justice may be achieved, or even help it come to fruition.

Services provided

The services provided by Ask JES and advancements in technology have developed simultaneously, with modern technology providing new possibilities for access to justice. Initially, Ask JES was a limited service, initiated to provide answers for free, only in relation to civil law and excluding family law. This was originally available on two websites providing court information, providing users with support such as a guided ‘video-based virtual assistant’ to show people how to access information. It also took advantage of live chats,

534 ibid.
allowing users to ask legal questions through weekdays from 11am to 2pm, and during hours outside of these, one can submit questions through email.535

This helpful yet limited service allowed for a change in the legal sector in British Columbia. It recognised the positive uses of technology and capitalised on an efficient way to provide legal help to members of a society which is at the forefront of technological advancements. This sense of familiarity and comfort that arose from the use of technology, linked with law, no doubt had a positive effect on people’s approach to asking legal questions and pursuing legal action in this region.

Since 2013, the services provided by Ask JES have only grown. In 2016, the service began to include all issues, from housing to family law.536 This inclusion of everyday legal issues could only be met with a positive response, providing users with the ability to cut their legal costs without having to sacrifice a standard of legal care. The legal assistance provided by Ask JES only further catapults the relationship between technology and access to justice, bridging the gap between people and their legal issues, through technology.

Ask JES has recognised technology as an effective way to provide legal help and has developed their services greatly since 2013. Firstly, the service has been made available through a ‘toll free phone number’537, along with being on numerous different legal websites since 2017. Also, users are now able to use a live chat service, asking questions more easily from their phone, and there are over 150 Legal Help Guides and over 90 videos which can be accessed.538 The service also accommodates the multi-cultural nature of British Columbia, with ‘multi-lingual legal help services’. 539

In 2017, after only three months, Ask JES had already responded to an astounding amount of inquiries (over 1,400).540 They also forecasted that within the next three years they would be

535 ibid.
536 ibid.
537 ibid.
540 ibid 6.
helping at least 20,000 British Columbians per year.\textsuperscript{541} Figures like those portray an image of a service which is evidently important to its users. It symbolises a change in the way in which the people in British Columbia approach the legal sector, leaning towards using technological processes and favouring a virtual experience. This could be put down to the attractiveness of how accessible a service like Ask JES is.

Importance of Accessibility
Something that is central to what Ask JES does is accessibility. This service is all about finding ways to provide legal help and information to British Columbians in a way which most people can access. It recognised the fact technology plays such a crucial role in many people’s lives today and has helped move forward developments in technological access to justice. It provides personalised expert information and support, on any legal issue, free of charge. Among an aura of technological modernity, it has given way to an excellent service that has helped build upon the capacity of the justice system in British Columbia.

Conclusion
The use of technology within British Columbia has laid the foundations necessary to remove barriers to accessing justice. Its layered and varied technological platforms offers citizens comprehensive access to legal remedies and information. Access which in turn has helped reduce the need to resort to the courts in favour of mutually agreeable settlements. The system still requires improvement in order to remove barriers surrounding language etc., however it has proven itself to be an effective means of improving access to justice.

\textsuperscript{541} ibid.
Chapter 10: Comparative Analysis of Global IT Developments and their Effects on Access to Justice: The Netherlands

Katherine O'Reilly, Killian Campion, Matthew O'Shea
This section shall focus on the state of IT and the law in the Netherlands from a past and present perspective. Drawing attention to a small number of readily available products, this examination shall conclude that the Netherlands is a country with substantive potential for innovative enhancement of its legal system through the use of technology.

I. The Past

The Rechtwijzer is often pointed to as one of the first instances of the legal profession embracing the revolution of the internet in a meaningful way.\(^{542}\) An account of the development of the Rechtwijzer is necessary in order to accurately frame the impact of technology on access to justice in this jurisdiction today.

Rechtwijzer 1.0

Launched in September 2007, the web application (which translates literally to ‘signpost’), could be found on the Dutch Legal Aid Board website. The tool was designed as an alternative to potentially high-cost dispute resolution through the courts by allowing users to input facts about their case and receive information regarding options, both legal and non-legal, they could avail of.\(^{543}\) The Legal Aid Board, along with other proponents of the application, were hoping that this simple tool which provided an instant, free point-of-contact for users would divert many conflicts away from the courts and result in a decrease in claims for legal representation for conflict resolution, thus a more cost-effective facilitation of access to justice.\(^{544}\)

In an exhaustive study of the efficacy of the Rechtwijzer, surveyors found that users rated their experience with the online tool quite highly.\(^{545}\) The study reported that in the areas of divorce and conflict resolution, where the application had to account for various peculiarities and

\(^{542}\) For further discussion on the significance of the novel Rechtwijzer and its ultimate demise, see Smith, R. ‘The Decline and Fall (and Potential Resurgence) of the Rechtwijzer (Legal Voice, 12 September 2017) <www.legalvoice.org.uk/decline-fall-potential-resurgence-rechtwijzer/> accessed 15 June 2020, see also J V Veenan’s work on setting out precisely what the Rechtwijzer is and how it works, specifically her presentation at the 5th International Workshop on Online Dispute Resolution, which can be accessed online at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.952.5029&rep=rep1&type=pdf> accessed 15 June.


\(^{544}\) ibid.

asymmetrical balances of power and dependence between parties, the application responded somewhat robustly with users reporting an average rating of 7.51 for divorce and 7.29 for consumer conflicts on a ten point scale.\footnote{ibid.}

Despite the favourable reception the application received, the level of sophistication of a program required to receive highly context specific information from users and then automatically determine the precise avenue to take in order to avoid litigation was not achievable at the time.\footnote{Earl Johnston, ‘Lifting the American Exceptionalism Curtain: Options and Lessons from Abroad’ (2016) 67 Hastings LJ 1225.} Even with the ease with which the program could be used, the net result was rarely more than a desultory referral to a lawyer who could provide further guidance and invoice accordingly.\footnote{ibid.} This apparent lack of sophistication was the downfall of the Rechtwijzer as the goal of online dispute resolution without recourse to lawyers had not been achieved.

Rechtwijzer 2.0

Upon realizing why the initial version of the application failed in its goal to reduce the burden of dispute resolution on the courts, Rechtwijzer 2.0 was launched in November 2015 in a limited state, only dealing with divorces, with a discernible increase in services offered and programming sophistication.\footnote{Jin Ho Verdonschot, ‘In the Netherlands, Online Application Helps Divorcing Couples in Their Own Words, on Their Own Time’ (2015) 21 Dispute Resolution 19.} Not only could the program facilitate inter-party communication online, but it also allowed parties to set out the factual basis for their claim and then, if communication broke down, the program would organize an online mediation for the parties.\footnote{ibid.}

The Dutch Legal Aid Board envisioned the application paying for itself and so charged minor fees\footnote{ibid.} that, though diminutive compared to the costs of litigation, presented a financial barrier to the access of justice that was not present in the first iteration of the application. It is unclear exactly why this refurbished version of the application also failed, with Johnston and Smith
citing the fact that few couples actually used the program and also the fact that the application was simply not given enough time and promotion to allow it to take off. Nonetheless, this reiteration has faded into disuse and lost the institutional support that allowed it to evolve and develop.

Failure of the Rechtwijzer

There are different theories as to why the Rechtwijzer did not materialise to the expected potential it had. These theories should be examined and assessed in moving forward.

“**Theory 1:** Citizens do not want online supported resolution services.”

Although it appears that a substantial proportion of the population is willing to try online supported resolution services, it is obvious that some will have reservations. However, given the current climate due to COVID-19 one would expect that the willingness and enthusiasm towards online platforms will grow. To understand this resistance, analysis should be had as to why and how this could be resolved.

“**Theory 2:** Legal aid boards, ministries, courts and law firms not ready for online supported dispute resolution services.”

There were high expectations that this online platform would be positively received and swiftly implemented due to obvious dissatisfaction of court procedures in many jurisdictions. However, this did not materialise. This was mainly due to institutional barriers reaping the full potential and benefits of platforms of this nature.

England and Canada implemented different versions of the model. The Legal Services Society of British Columbia implemented a version which only supported negotiation, thus missing

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553 ibid.
554 ibid.
556 ibid.
557 ibid.
key components such as mediators, adjudicators or reviewers. The Legal Aid Board had concerns about joining a “public-private partnership between a non-profit foundation for access to justice.”\textsuperscript{558} Additionally, the ‘markek’ did not materialise. It has been discussed that this is mainly due to lack of funding of delivering justice in innovative ways. Procedures implemented in various jurisdictions are prescribed by legislation, which does not encompass innovative technologies. Additionally, a high proportion of the Legal Aid Board’s budget goes towards funding lawyers.\textsuperscript{559}

\textbf{“Theory 3: The market can resolve the access to justice problem, therefore the government is not needed, and we failed to deliver.”}\textsuperscript{560}

This theory considers the elimination of blame from the government and their lack of support and discusses the trade of Rechtwijzer’s product to the market.

It is concluded that “offering ODR to citizens as an independent service is an option, but it is uncertain whether it will succeed without some form of government support.”\textsuperscript{561} Therefore, the overarching consensus is that the government and Rechtwijizer would have to find a method of working in unison in order to deliver the most effective access to justice through technology.\textsuperscript{562}

\textbf{Conclusion}

This disappointing result belies the potential of the Rechtwijzer. Its novelty and popularity once promised to be an effective measure to decrease reliance on expensive litigation and the attendant strain on the Dutch legal aid system while also providing an effective service to people in need of genuine solutions. This application has been stultified since 2017\textsuperscript{563} but could soon see its return to prominence as a sophisticated and useful legal web-based tool, especially given the fact that, as will be explored in the next section, the Netherlands has a highly-

\textsuperscript{558} ibid.
\textsuperscript{559} ibid.
\textsuperscript{560} ibid.
\textsuperscript{561} ibid.
\textsuperscript{562} ibid.
developed IT industry that is poised to usher in a new era of digital innovation.

II. The Present

For a true comparison, it is best to consider the current state of affairs in the Netherlands, from the points of view of both its legal system and its Information Technology sector, and how these are currently perceived to interact. This analysis shall provide a brief examination of both the legal system and IT sector in the Netherlands, before investigating a small number of examples of innovations already existing between both areas.

The Current State of the Law

The Netherlands is a constitutional monarchy, with a civil law legal system that incorporates elements of French penal theory. The country is divided into 11 district courts, 4 courts of appeal and 1 Supreme Court, covering three core areas of law: Civil (private), Administrative, and Criminal law. The Dutch Government has already acknowledged the monetary barrier to justice that can exist in the civil context for smaller claims made by consumers and such litigants, and has set out a plan to simplify the procedural complexity for civil disputes, aiming to make the process both faster and less complicated for litigants.

The Current State of IT

The Netherlands is widely considered one of the leading countries in Europe in terms of internet connectivity. In fact, in 2020, the country was ranked first in the EU for Outstanding Use of ICT, by the World Economic Forum, as well as the World’s Number One Country for Connectivity. In addition, the Netherlands hosts 60% of Forbes 2000 companies in the IT industry. Furthermore, the Netherlands is also a leading nation in the EU for its cyber security sector, with global corporations such as IBM, Huawei and Cisco operating under the Dutch Government’s ‘Triple Helix’ Approach to cyber security. The ‘Triple Helix’

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564 ibid.
565 ibid.
566 ibid.
568 ibid.
Approach encompasses robust policies by which companies must operate in a manner which safeguards societal privacy and wellbeing insofar as is feasible.\textsuperscript{570} This establishes a strong platform from which the Netherlands may go about implementing innovative solutions in its legal system.

The Current Interactivity of IT and the Law

Given the advanced nature of the IT sector in the Netherlands, it is perhaps unsurprising that there is already a certain level of advancement in the interactivity between the Dutch legal system and its IT sector. There is already a wide range of online platforms via which both litigants and lawyers alike may access materials useful in the legal system. Perhaps most notable are the following products:

i) \textbf{De Advocatenwijzer}

This is an independent service which links litigants with lawyers.\textsuperscript{571} With constant availability throughout the week, this service furthers access to justice, facilitated by online innovation.\textsuperscript{572} De Advocatenwijzer makes up a part of the larger Omnius Legal Service Provider in the Netherlands, which has been seeking to introduce innovative solutions to difficulties in the Dutch legal system since 2012, and has introduced 15 brands such as De Advocatenwijzer to ‘make it easy and affordable for everyone to resolve legal issues.’\textsuperscript{573}

ii) \textbf{Clocktimizer}

This is a digital platform which facilitates the reliable digital generation of accurate quotes for legal fees.\textsuperscript{574} Founded by a team of Dutch developers, this subscription-based platform uses machine learning and AI to predict fees in a transparent and accurate manner.\textsuperscript{575} This is an example of the Netherlands’ rich IT sector being used to enhance the legal profession in various ways: firstly, it allows lawyers to more accurately and more quickly predict the fees their clients

\textsuperscript{570} ibid.


\textsuperscript{572} ibid.

\textsuperscript{573} Omnius Legal Service Provider, ‘Cascading Legal Services’ <www.corporate.omnius.nl> accessed 17 June 2020.


will pay, and secondly, it provides peace of mind to clients, with its transparency reassuring them of fair practice. This example of innovation is one which saves a great deal of time for lawyers in the Netherlands and enhances the legal profession as a result.

iii) Rechtwijzer\textsuperscript{576}

As discussed above, if this were to be considered by the Dutch Government as a nationalised service in the future, its undeniable merit would certainly bring innovation to the Dutch legal system. The ability to reduce litigants’ costs substantially, whilst simultaneously improving the efficacy of mediation and arbitration on-line, is one which would undoubtedly enhance the legal system in the Netherlands.\textsuperscript{577}

\textbf{Conclusion}

From our analysis of the past and present developments in both the Dutch IT sector and its legal system, it is abundantly clear that this country is one with significant potential for the enhancement of access to justice through the use of information technology. The current state of IT in the Netherlands creates a strong platform from which the Dutch Government may innovate its legal system. There is already evidence of entities in the Netherlands using its strong IT sector to enhance elements of the legal system, as shown by the aforementioned tools. Thus, it is concluded that the Netherlands is strongly positioned to introduce further innovations across its legal system in order to ensure an equitable and far-reaching access to justice for its citizens, enhanced greatly by the use of its IT sector.

\textsuperscript{576} Rechtwijzer, ‘First Aid Solutions’ <\url{www.rechtwijzer.nl}> accessed 16 June 2020.

Chapter 11: Comparative Analysis of Global IT Developments and their Effects on Access to Justice: China

Daniel Byrne, Hannah Edwards
This chapter of the research project will focus mainly on the use of online trials in China, and the provision of legal services online, such as online dispute resolution and legal advice, both of which have the potential to make legal aid far more accessible to those in need of legal support. Part I will comprise of an analysis of the origin and structure of online legal resources available in China. Part II will analyse the progress that has been made in this respect, the benefits of these systems and the future potential.

This chapter should be prefaced with the notice that there was some difficulty in finding the relevant articles and information pertinent to this research project, and some of the research material, written in Chinese, may have been translated poorly or with differing emphases to the original. Furthermore, while it has been relatively straightforward finding empirical reports on the use of IT and other technologies in the legal sector, there are few resources for the accounts of users’ experiences first-hand of these technologies.

I. Origin and Structure:

A forerunner of international technological development commercially, China has also been at the forefront of the integration of numerous technologies into its legal system such as AI and cloud-based platforms. The case of the advancements in the Chinese system is a special one in that the need for a transition of legal services to online platforms has also been driven by the country’s uniquely high population. These online systems come as a solution to a dramatic increase in civil cases being filed with the Chinese courts, the number of cases filed by June 2019 grew by 14.5% compared with the same time period in 2018.\(^\text{578}\) The development of online and technologically supported legal services has the potential to distribute legal aid more universally in a country where the legal aid system has been described as having a narrow scope and being insufficiently funded,\(^\text{579}\) specifically with regard to criminal cases.

The COVID-19 pandemic accelerated the use of IT to facilitate the needs of those seeking intermediation or conflict resolution without the capacity to attend the courts in person. The


use of “cloud court trials”\textsuperscript{580} has been particularly successful in China and it is anticipated that once the quarantine measures put in place are fully lifted there may be a permanent shift in favour of these cloud-based systems.

The country’s first online court was piloted in 2017 in the city of Hangzhou with two more introduced in the cities of Beijing and Guangzhou in 2018.\textsuperscript{581} These courts engage primarily in “legal disputes that have a digital aspect”\textsuperscript{582} such as online trade disputes, like those from online shopping on sites such as China’s online retailer Taobao, and copyright cases. These courts operate with an “online interface in which litigants appear by video chat while an AI judge… prompts them to present their cases”.\textsuperscript{583} Those parties involved in the dispute, when filing their lawsuit online, can also submit their litigation materials and evidence online.\textsuperscript{584} The Chinese judiciary have also introduced a “WeCourt” which includes litigation services provided through the country’s popular national social media app “WeChat”.\textsuperscript{585} Furthermore, these internet courts make use of “blockchain evidence”, a decentralised system that ensures the integrity of digital and online evidence, which has recently been supported by the Hangzhou Internet Court as an admissible form of evidence in trials.\textsuperscript{586}

These online courts, and AI judges contribute to a more efficient and sophisticated legal system, where cases are processed quicker and the resources, especially for those involving e-commerce disputes, are readily available online in the form of blockchain evidence. The Xiancheng District Court, during the COVID-19 pandemic, reported cloud-court trials that lasted 43 minutes, with 90% not requiring another hearing.\textsuperscript{587}


\textsuperscript{581} ibid.

\textsuperscript{582} AFP -JIJI, ‘In brave new world of China’s digital courts, judges are AI and verdicts come via chat app’ The Japan Times (7 December 2019).

\textsuperscript{583} ibid.

\textsuperscript{584} Xinhua, ‘China starts pilot program to boost civil litigation efficiency’ China Daily (16 January 2020).

\textsuperscript{585} AFP -JIJI, ‘In brave new world of China’s digital courts, judges are AI and verdicts come via chat app’ The Japan Times (7 December 2019).


These internet courts, conducting “cloud-trials” have contributed to the efficiency and speed with which many Chinese citizens receive justice and have greatly relieved the burden on the judiciary. The use of AI judges, while representing an impartial and unbiased arbiter, have also eased the burden on the judiciary.

As a result of the new ubiquity of internet access in China, the e-commerce markets have boomed, and in response to the increase in e-commerce activity, new methods of online dispute resolution and online arbitration have also become prevalent.588

In addition to the online courts, there are numerous legal services available online where consumers can shop for legal services, access Q&A sites and consult legal encyclopaedias.589 One such online site is legaland.cn, which is self-described as;

“an internet legal technology company with high-tech enterprise qualifications…

As an internet legal service supply chain provider [legaland.cn] fully accesses the legal services business chain provider to provide customers with one-stop services… [a] social internet legal service system”.590

Legaland.cn contains a database of legal service providers available in China, with each record having a product description and the relevant information pertaining to the provider. These records are screened and those resources that are deemed repetitive, irrelevant or not related to legal services, no longer useful or those that are simply the Chinese version of a foreign product are removed. Some of these remaining providers form a type of platform economy, compared to that of Uber, where they group the providers according to their specialties in what has been described as “virtual law firms”.591 This allows these services to cater to the needs of individuals by drawing from multiple different legal sources, and at a lower cost for the customer.

While these online services are able to avoid many of the market regulations typical of the “non-virtual” legal sector, it is important to recognise and be aware that with this lack of regulation there also comes the risk of providing sub-par or insufficient quality legal services.

Other legal websites where lawyers offer online legal services include Rainbow Lawyers (http://www.ch64.cn) and Business Law Brain (website unavailable).

In addition to these websites there are also numerous apps that provide legal services, such as Pocket Lawyer, where once the user has registered they gain access to a number of resources such as a “pocket lawyer”, “pocket contracts” and a “WeChat” option in order to communicate with a legal representative.592 Similarly, after they have submitted the relevant documentation and credentials and a preliminary check by the app, lawyers can also sign up and begin supplying their services through the app. Users can scroll through the database of credited lawyers in order to find the right one, or they can make use of the “speed service” if their case is one of urgency where the app will transfer the request to lawyers in the locality.593 The app also has a number of restrictions on the lawyers designed to protect their users, such as the regulation of the duration of calls, a number of compulsory call backs, and upon registering, lawyers must deposit a sum of money into an escrow account to cover liability if the lawyer fails to provide services to the satisfaction of the customer.594

Essentially, these legal apps and websites act as “matchmakers”595 to connect people with the lawyers and legal services suitable to their situation for a lower cost, lower risk and greater efficiency and with far wider reaching potential.

II. Benefits and Potential:

There are numerous advantages to the existence of these online legal resources in China, the most obvious one of these being improved access to legal services for those in need of it. As was noted above, China has a particularly high population therefore accessing legal services

594 ibid.
595 ibid.
without the assistance of technology would be especially difficult in this jurisdiction. China is estimated to have approximately one lawyer for every 4,500 people. This spreads those working in the legal profession quite thin, comparatively, with the US, for example, having approximately one lawyer per every 300 people. Thus, without the introduction of the innovative forms of legal technology outlined above, the public demand for legal services would far outgrow the resources available, leading to low levels of access to justice. The use of online trials and the provision of legal services online has helped to minimise this issue, tackling the unmet legal needs of the people of China.

The use of IT in providing legal services may also be used to effectively reach those described as most in need, such as the elderly, juveniles, women and the disabled, and those not deemed to have met the financial requirements in order to qualify for legal aid. A number of academic have flagged the use of legal technology as being of particular significance for low-income individuals. As well as that, there are a number of benefits that apply more generally, stemming from the reduced costs and increased levels of efficiency heralded by these systems. Engaging in the legal process has traditionally been a lengthy and expensive endeavour. As pointed out by Staudt, court systems are often unnecessarily complex, which has led to a great deal of dissatisfaction among those who engage with it. However, the use of technology in the legal field, as exists in China, has been seen to lower the costs associated with this process, as well as reduce timeframes and alleviate some of the complexity of the traditional court system, which is hugely beneficial. Moreover, the use of similar technology in other jurisdictions has been reported to reduce the overall levels of stress of clients engaging in legal proceedings, which suggests that the same is true in China.

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597 ibid.


600 ibid 4.

601 ibid 17.

602 Maurits Barendrecht, ‘Rechtwijzer: Why Online Supported Dispute Resolution is Hard to Implement’ (2017) 2.
Evidently, there are a number of advantages flowing from the existence of online legal services and trials in China. However, it is important to note that many of those in need of legal support may not have access to the internet or other online services, particularly those in rural areas and the elderly. This problem has become known as the ‘digital divide’. According to the China Internet Network Information Center, the number of those with access to the internet rose to 854 million users, or 60% of the country’s population, as of June 2019. However, the majority (62%) of “non-netizens” or those without internet access consisted of those living in rural areas with shortage of internet skills and limited literacy levels being cited as major factors in preventing non-netizens from accessing the internet. While there have been rapid advances in the integration of IT into the provision of legal services, these improvements will not reach many of those most in need of legal support without proper access to online facilities.

As to the potential for the future, it may be difficult to implement the systems in place in China elsewhere in the world. One reason for this is because China’s legal system is still relatively new – the modern Chinese legal profession is around 30 years old. As a result, it was easier for them to adopt the use of new technology as it became available, without having to amend or overhaul a pre-existing archaic system of law, as would be the case in many jurisdictions. Additionally, there are also linguistic barriers, making it difficult for the legal technology in place in China to interact with other jurisdictions. The same can be said for legal and regulatory barriers. The fact that China is a civil law system makes the adoption of these systems in common law jurisdictions even more challenging. Common law concepts, such as legal professional privilege and discovery, do not apply in China. It would be difficult to integrate a system with no regard for these concepts into a legal framework built on these ideas.

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605 ibid.
607 ibid.
Conclusion

Overall, China is quite advanced in its use of technology in the legal field to improve access to justice. The existence of online trials in China, as well as the provision of other legal services online have been relatively successful in creating greater access to legal aid for those in need of it. There are numerous additional benefits to the use of this technology, including increased efficiency and decreased levels of stress and costs. However, the system in place in China is not immune to the digital divide, potentially holding it back from reaching its full potential in this respect. The ease with which the technology in place in China may be exported internationally is also hindered by the fact that most other jurisdictions do not benefit from the blank slate effect, as well as by regulatory and linguistic barriers and the inherent differences between civil and common law systems.
Chapter 12: Comparative Analysis of Global IT Developments and their Effects on Access to Justice: Singapore

Lucy Shuyao Lu, Muireann Carton, Robert van Breda
As stated by Chief Justice Sundaresh Menon at the 20th Inter-Pacific Association Annual Meeting and Conference:

“Technology will continue to birth a multitude of new products, players and processes, and as it does so, the professional landscape we inhabit will evolve until, without warning, the point is reached where it becomes totally unrecognisable from the past (...) By then, the expectations of clients and the very idea of how justice should be administered and legal services delivered might all be so radically different to what we have been accustomed to.”

Information technology holds an integral role in the Singapore legal sector and has affected the Singaporean population’s access to justice immensely. This section will focus on the technological developments of Singapore’s legal sector and the Singaporean government’s efforts in using IT as a tool of efficiently promoting justice. This section will analyse the historical aspects of the technological developments; the advancements in online dispute resolution and the Community Justice Tribunals System and lastly, provide analysis on the usage of technology in the promotion of justice in the Singaporean private and public sectors respectively.

I. Background of Singaporean IT Developments in the Legal Sector

Since becoming an independent republic in 1965,608 the Singapore legal system underwent a consolidation process. This consolidation sealed the legitimacy of Singapore’s legal system and laid the foundation for the refinement period which ensued in the early 1990s.609 The refinement process saw to the establishment of an autochthonous legal system and jurisprudence, which marks both the Singaporean government’s efforts in working towards the transformation of Singapore into a legal services hub610 and its efforts in spearheading the adoption of technology in legal practice.

609 ibid.
610 ibid.
Launch of LawNet

Various technological initiatives have been launched by the Singaporean public sector. The inception of LawNet is a pivotal development in the history of Singaporean IT developments in the legal sector. LawNet is a subscription portal which contains databases on case law, legislation, criminal sentencing information amongst many other online legal information services and resources.\(^{611}\) Since the initiative’s launch in 1990, there has been continuous growth and updates of various databases on the platform, from the addition of the Subsidiary Legislation Database to the launch of the Legal WorkBench Module in 1998.\(^{612}\) The adoption of LawNet marks the shift of Singapore’s legal research from print to the digital realm.

Developments in e-Filing

The Electronic Filing System (EFS) was applied to all civil litigation processes in 2000.\(^{613}\) The EFS is an application which integrates case management and court records. It is available to all persons in the legal sector and eliminated the need to provide courts with paper documents.\(^{614}\) Singapore’s EFS was the first national digital court documentation service to be applied in the world.\(^{615}\)

The launch of this application has eased the attainment of files for both law firms and the courts. Inspection of documents and extraction of court orders were then able to be executed through the EFS without lawyers having to make on-site inspections at the courts.\(^{616}\) The courts themselves have also gained a plethora of benefits. The EFS streamlined workflow and saw to the automation of case tracking; confidentiality was increased as restrictions were easily implemented electronically; the time of retrieving documents was shortened while documents

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could be viewed by more than one person at any one time.\footnote{ibid} This greatly increased productivity and resolved paper handling problems for the courts.

However, the launch of the EFS led to more multifaceted benefits for Singaporean law firms. Law firms in Singapore were then made to run two parallel documentation systems, both the paper system and the then newly launched electronic system.\footnote{ibid.} The benefits of the EFS were not fully realised for lawyers as they had to manage the procedures concerning the paper documents and also implement the new procedures regarding the e-files. To identify and address the issues regarding the EFS, the EFS Review Committee was formed in 2003, and was ordered to carry out an extensive review of the system. The goal in the formation of the Committee was to ensure that Singapore’s legal technology was consistently being identified and further developed.\footnote{ibid.}

In 2013, the EPS was upgraded and the eLitigation system was launched. The launch of eLitigation identified issues of its predecessor and provided a comprehensively streamlined application for both the courts and law firms with a single access point to start. Instead of using smart cards such as that needed when using the EFS, users can input information directly into online forms. The information is then used to auto-source other court documents. Law firms and courts have simultaneous access to case information though a newly centralised source of information.\footnote{ibid.} The adoption of the eLitigation system provided the legal sector with unprecedented ease in accessibility.

There has been a rapid development of Singapore’s e-filing system in the legal sector. From the implementation of the EFS to the upgrade of the eLitigation system, we see Singapore’s role in leading the use of technology in the effective pursuance of social justice.

The Technology Courts

Another technological early initiative by the Singapore Courts is that of the Technology Courts, first launched in the Supreme Court in 1995.\footnote{ibid.} This new type of courtroom allowed layers to

\footnote{Commonwealth Secretariat, \textit{Commonwealth Public Administration Reform 2004} (Commonwealth Secretariat, 2003) 275.}
prepare their cases using multimedia tools and present these cases using the various graphics available. A recording feature was implemented, which meant that oral testimony could be digitally recorded. Witnesses could then provide testimonies from remote locations - this is beneficial for vulnerable witnesses of criminal trials or foreign witnesses abroad. The development of the Technology Court has increased efficiency in court proceedings and improved the delivery of justice in the Singaporean legal sector.

Following the major success of the first Technology Court, a second Technology Court was established in 2001, with various improvements such as the implementation of a video marker system. This allowed users to annotate images displayed on touchscreens, which were later printed for documentation. As of today, the Supreme Court houses a total of six Technology Courts which may be used in the hearing of matters in open court or in chambers; or for any other dispute resolution process.

Conclusion

These aforementioned early developments in the use of technology in the Singaporean legal sector are incremental and pivotal in laying the foundation of the developments which followed. For example, in 2017, the Community Justice and Tribunals System was launched in the Small Claims Tribunals. This successful online filing and case management system was later applied to the Community Disputes Resolution Tribunals and the Employment Claims Tribunal in the years that followed. Evidentially, technology has been harnessed as a tool of propelling social justice in the Singaporean legal sector and is consistently being adapted and manifested for the promotion of justice.

624 ibid.
II. ODR in Singapore; Community Justice and Tribunals System

There is currently much interest in online dispute resolution in Singapore. It is seen as a way of simplifying, expediting and minimising the cost of dispute resolution. The Community Justice and Tribunals System (CJTS) is the main functioning example of ODR in the legal system of Singapore, though what appears will be a more complex system for motor accident cases is currently being developed by the State Courts. The Singapore Mediation Centre has also been piloting ODR.

What is the CJTS?
The CJTS is an online filing, case management and ODR system for the Community Justice and Tribunals Division (CJTD) of the State Courts in Singapore. It was first introduced in July 2017 for small claims tribunals cases; low value claims between purchasers and sellers or landlord and tenants. The system was expanded and applied to community dispute resolution tribunals (neighbour disputes), and employment claim tribunals cases in February 2018 and January 2019 respectively.

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Features of the CJTS

The whole CJTS platform was designed with the experience of litigants-in-person (the end user) in mind. Litigants-in-person are not usually legally trained or familiar with the legal system, they may not even have or be able to use the technology needed to access courts’ electronic services.

A number of measures aim to facilitate their using the platform without needing to seek professional advice or assistance. The system can be accessed at any time, using any device with internet connection. Mandatory pre-filing assessment helps the user to understand whether their case is under the jurisdiction of the tribunal and to tailor the legal information which the user receives to their case. There is a ‘Case Search’ feature for users’ checking whether they have any pending claims or orders against them. These features aid litigants-in-person, mitigating against several of the factors which the Singapore Academy of Law

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identified as problems in guaranteeing access to justice, *inter alia*, “knowledge of legal procedures”, “knowledge of legal implications” and “filing court documents”.638

These aspects of the CJTS are interesting in terms of their implications for access to justice, but strictly speaking the ODR platforms which are available on the system are the ‘eNegotiation’ and ‘eMediation’ modules. The former is simply a confidential and secure platform on which parties can negotiate a settlement directly.639 The latter is a function whereby parties can resolve their dispute online with the assistance of a court mediator.640

**Strengths of CJTS**

Common challenges to the functioning of ODR are identity verification and outcome enforcement,641 but these are admirably overcome by the CJTS.

In order to verify users’ identity and create a secured platform, the CJTS requires an individual’s ‘SingPass’ or company’s ‘CorpPass’ login. These logins are digital identities for interacting with online government services in Singapore; the national authentication platform gives security and consistency to the CJTS.642 A temporary ‘CJTS Pass’ can be obtained for those who are not eligible for either of the other options.643

In terms of enforcing agreements made through the CJTS’s ‘eNegotiation’ or ‘eMediation’, the system is at an advantage by dealing with local-type claims which are governed only by the


law of Singapore; enforcement gets more complicated when considering international mediations.\textsuperscript{644} If a dispute is resolved successfully via the CJTS, parties can then apply directly for an enforceable Tribunal Order on the platform or withdraw their claim, without ever needing to approach a courtroom.\textsuperscript{645}

**Conclusion**

- The CJTS provides a range of online services from case filing and management to e-mediation, e-negotiation and payment mechanisms.\textsuperscript{646}
- The interface and processes aim to obviate the need for legal professionals and to reduce the costs in time and money associated with being a litigant.\textsuperscript{647} This could increase access to justice, especially for litigants-in-person.
- The programme has robust identity checks and enforcement procedures, but they can be viewed as simplified due to the fact that the CJTS only caters for small value cases within Singapore.

**III. Legal Tech and Access to Justice in Singapore; Contrasting the Public and Private Approaches.**

**Access to Justice in Singapore**

The right to access to justice in Singapore stands in a unique position when compared to similar jurisdictions. While many constitutional democracies struggle to ‘concretize’ rhetorical judicial

\textsuperscript{645} ibid.
discourse and abstract constitutional rights into substantive judicial and governmental practice, it is arguable that the inverse is true in Singapore. There has been a historically weak interpretation of rights relating to access to justice, yet the government and judiciary have made concrete efforts to give practical effect to this right, despite this lack of articulation in judicial discourse and constitutional jurisprudence.

To this end, the role and implementation of IT has been an important avenue for the improvement of access to justice for all, and especially for some of Singapore’s most vulnerable groups. In particular, the usage of Legal technology in Singapore is heavily focused on increasing efficiency and reducing costs, including improving cost-free methods such as self-help for unrepresented litigants. This is influenced by the Singaporean mentality of ‘workfare, not welfare’, whereby the government focuses on improving conditions for their most disadvantaged citizens through innovation, business and employment, rather than direct social schemes. This increase in efficiency advances the objective of access to justice, by satisfying the aim of preventing unnecessary litigation and decreasing excessive costs. As wittily put by one judge, “Justice may be priceless, but it is not costless” and by reducing this cost barrier, access is improved for all.

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654 Another clear example of this mentality can be seen in Singapore’s employment of its ‘Central Provident Fund’ scheme, a mandatory savings scheme for workers which the government and employers contribute directly into, and can be accessed only for specific reasons such as retirement, education and paying for social housing. It is the main form of social support for most Singaporean citizens.
There have been two primary, but not mutually exclusive, avenues for the implementation of IT to improve access to justice in Singapore. On one end there is public implementation of technology, led by the courts and Attorney General's Chambers (AGC) which focus the usage of technology as a supplement to improve internal workflows and accessibility to the public, allowing for a lower cost and more efficient delivery of state-based justice services. On the other end, the private sector, and SLP’s (Singapore law practices) in particular, have been encouraged to adopt more disruptive technologies, which not only act as a facilitator for more efficient work, but are also likely to change how the industry fundamentally operates.

However, these efforts are not independent of one another, with public/private integration across the board, and the vision of the adoption of legal technology being specifically articulated as a collaborative effort, with initiatives and committees being set up and expanded to facilitate the adoption of IT for both sectors.

Legal Tech in the Private Sector

Starting in 2017, the Singaporean government began to heavily incentivise the private adoption of technology with their gateway legal tech initiative ‘Tech-start for law’, which provides financial assistance (from a pool of SGD 2.8M) to private firms for the adoption of certain legal tech services, primarily online research, document management and online marketing. This was a joint effort between the Law Society of Singapore and the Ministry of Law and was heavily influenced by a 2016 government commissioned study, which discovered a shockingly low technology participation rate for small and medium legal firms in Singapore.

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Following this, in 2017 the Singapore Academy of Law produced a comprehensive report providing a road map for the innovation of the legal sector in Singapore called ‘Legal Technology Vision’. In it they detail the “(AI)²” strategy for the adoption of LegalTech. This four-prong strategy involves the adoption of baseline technology (Adoption), the implementation of enhanced services (Improving), developing further useful technologies (Adapting) and finally the creation of an ecosystem which is conducive to the development of legal tech in Singapore (Inventing). So far, they have only described the first two stages in detail and given examples of the types of technology which might be implemented to satisfy these two stages. The baseline includes many basic productivity and research tools while the enhanced options include suggestions for online automatic document assembly, validation and review and improved access to legal knowledge for both the public and professional through the use of interactive websites and services.

Giving effect to this report, the Singapore government has launched a number of additional schemes to promote the development and integration of legal tech in the private sector; The Future Law Innovation Programme by SAL, The Smart Law recognition scheme by the Law Society, TechLaw.Fest Singapore, and the SAL Legal Technology Manual.

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662 An organisation for the development and promotion of law in Singapore, which has combined public and private functions, by producing research and guiding policy as well as creating combined public/private committees such as the one which produced this report: The legal technology cluster committee: <https://www.sal.org.sg/> accessed 1 July 2020.


However, the most important of these initiatives is the new ‘Tech-celerate for Law’ grant programme issued by the Ministry of Law.669 In many ways a continuation of the ‘Tech-start for law’ initiative, the SGD 3.68M fund covers up to 70% of SLP’s first year costs for adopting baseline and advanced legal tech. It also details specific baseline and advanced technologies, giving details of existing products and vendors which are available to SLP’s to implement and integrate, accelerating the completion of the first two stages of the SAL’s “(AI)²” strategy.

The focus for legal tech in the private sector is undoubtedly mainly to keep SLP’s at the forefront of the legal market, where it can attract talent, export expertise and increase operating efficiency in an ever more complex industry. However, the knock-on effects of legal tech in the private sector, particularly for access to justice, have not been lost. The SAL specifically contemplates the effects of technology ushering in a new age of self-help and collaboration with ‘grandmothers eventually being able to write and execute their own wills without assistance from legal counsel’.670

In addition to this, the availability of cheap and fast legal services is likely to reduce the burden on the traditional court system, such as though ADR and ODR, which the Law Society of Singapore is actively promoting the usage of. 671 Additionally, systems such as ADR and ODR can benefit greatly from legal tech, where automation and AI can bring the cost and time involved down significantly, 672 in a way not possible for traditional litigation.

Legal Tech in the Public Sector

The objective of legal tech in the public sector in Singapore is fundamentally different from its implementation in the private sector. Rather than disrupt the system as a whole, it serves to incrementally improve the processing and efficiency of the court system as a whole, through

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unified databases and case management systems. They do not, unlike the private sector, want to be at the forefront of legal tech and as early as 1996 have stated that due process and dignity are too important to compromise by implementing yet-unproven technologies.

However, there are a number of areas which allow the employment technology more flexibility without creating procedural justice concerns, and one of the primary examples of this public access to legal information. Building on the Singapore Statutes Online system, the AGC started the ‘Plain law understandable by Singaporeans’ project to make legal language more accessible, and optimise for digital viewing of content. This improves the utility of these online services, creating at least a baseline of free legal content which can be freely accessed for potential justice customers, helping to improve overall access available for no cost.

The courts are also interested in employing ADR and ODR to improve access to justice, such as through the CJTS system or the planned motor accident case system.

Conclusion

Singapore provides a fascinating opportunity to study how the private sector can be utilised to create substantial and disruptive change which improves access to justice by cost mitigation and providing alternative routes to justice. The cost for implementation is also impressively low, with the two main grant schemes only making up a total of SGD 6.48M, for an industry worth over 2.1 Billion SGD. Despite the low cost, the interest generated has been immense, and private firms are now leading a charge that will eventually (with the full support and collaboration of the public legal system) drive down the cost of access to justice and also create

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new and innovative systems to improve not only the availability of justice, but also the quality of the service provided.

**Conclusion**

As technology continues to advance, it opens new and interesting ways in which it can be employed to facilitate access to legal advice and services. Singapore has taken the opportunities presented by increased functionality of legal technology in its stride, and has continuously worked to employ legal technology in ways which not only improves citizens experiences with the justice system, but which are also able to benefit other areas of Singaporean society such as through the innovation of its private legal service sector.

Singapore also offers a uniquely pragmatic example of innovative and low cost implementation of IT in the legal sector, always with an eye towards maximising efficiency for both the users and providers of legal services, whether through the implementation of smart courts or the adoption of technically advanced alternative dispute resolution methods. In addition to this, the high regulatory harmonisation and collaboration between the private and public sectors highlights the effectiveness of a coherent and well strategized road map for legal tech implementation, which (directly or not) improves access to justice for Singaporean stakeholders.
Chapter 13: Comparative Analysis of Global IT Developments and their Effects on Access to Justice: Australia

Julia Best, Naoise D’Arcy, Róisin Casey
This chapter will examine the use of information technology in the Australian legal sector. Part I will consider how technology has affected the accessibility of justice through a discussion of the online dispute resolution platforms. Part II will analyse the legal advice mechanisms available across Australia. Part III will then provide an overview of electronic discovery and conveyancing in Australia. The final part of this chapter will briefly address how advancements in technology can have a disproportionately negative effect on certain socio-economic or age groups, reinforcing barriers to justice or perhaps creating new challenges.

**Part I: Online Dispute Resolution**

It has been noted by those within the litigation system that advancements in technology have the potential to significantly transform dispute resolution and its process.678 Across the states and territories of Australia, online dispute resolution platforms have been created and developed. New South Wales and Victoria are regarded as at the ‘forefront of ODR in Australia’679, with New South Wales being the first to establish an online court in Australia. Numerous courts have integrated the use of technology into their systems, for example the Supreme Court of New South Wales predominantly uses videoconferencing for bail applications whilst the Federal Court of Australia uses e-filing.680

This section focuses on the online dispute resolution resources offered by the Federal Court of Australia and the state of New South Wales, and their effects on access to justice.

**The Federal Court of Australia**

The Federal Court of Australia has developed an advanced e-court programme. The programme enables the legal parties to participate in the court proceedings online rather than attending a court. The parties can access court documents, the status of their trial and make submissions electronically. The Federal Court currently offers the following online resources:

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679 University of Cambridge Pro Bono Project, ‘A Comparative Analysis of Online Dispute Resolution for the International Legal Aid Group’ (February 2019) 41.

- **eLodgement**: an electronic filing facility which allows any member of the public to lodge documents with the Federal Court of Australia and the Federal Magistrates Court of Australia.\(^{681}\)

- **Commonwealth Courts Portal**: a joint initiative of the Federal Court of Australia, Family Court of Australia, and Federal Circuit Court of Australia which enables lawyers, litigants and other court staff to access user friendly information about cases before the courts.\(^{682}\)

- **Federal Law Search**: provides real time information on cases before the Federal Court of Australia and General Federal Law jurisdiction of the Federal Circuit Court of Australia.\(^{683}\)

- **eCourtroom**: a virtual courtroom which deals mainly with *ex parte* applications for substituted service in bankruptcy proceedings, applications for examination summonses and the giving of directions in general federal law matters.\(^{684}\)

The judiciary in *Harris Scarfe & ORS v. Ernst & Young & ORS*\(^{685}\) expressed the view that the eCourt has already demonstrated two major advantages. Firstly, there is a significant reduction in trial time. Secondly, the reduction in trial time has resulted in a reduction in cost as the court noted that ‘even a minor reduction in the length of the trial will deliver significant cost savings’\(^{686}\). However, it could be suggested that the significance of these savings is limited by the fact that the virtual courtroom deals only with the matters listed above.

**New South Wales**

New South Wales (NSW) has created two online dispute resolution platforms: the online registry and the online court. The online registry was formally launched in February 2014 in

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\(^{685}\) *Harris Scarfe & ORS v. Ernst & Young & ORS* (NO 3) [2005] SASC 407.

\(^{686}\) ibid.
the NWS Supreme, District and Local Courts.\textsuperscript{687} The core function of the registry is to allow for the completion and filing of court forms in civil cases. Initially, the registry allowed parties and their lawyers to file up to forty-two forms however, this has now expanded to eighty different forms in the NSW Supreme, Land and Environment, District and Local Courts.\textsuperscript{688}

The NSW Attorney General stated that ‘lodging and managing civil claims will be easier, more efficient and faster’\textsuperscript{689} with the establishment of the online registry. Although there has been minimal long-term analysis on whether the registry has achieved this, it should be noted that there is considerable assistance provided to users who are starting a new case on the Online Registry. For example, there are videos which take the user through the process of how to complete and file a statement of claim and there are detailed answers to frequently asked questions.\textsuperscript{690}

The New South Wales Online Court was introduced in addition to the Online Registry in 2015 and is the first of its kind in Australia. The Online Court operates as an online forum that enables legal representatives to apply and respond to applications in relation to preliminary matters without having to attend a court. The Online Court operates on a diverse range of matters including matters in the NSW Supreme Court, the Land and Environment Court, the District Court and the Local Court.

The NSW Attorney-General commented that a main aim of the Online Court was to make ‘access to justice… faster, easier and cheaper.’\textsuperscript{691}\textsuperscript{692} Furthermore, the NSW Department of


\textsuperscript{690} University of Cambridge ‘A Comparative Analysis of Online Dispute Resolution for the International Legal Aid Group’ (February 2019) 54.


\textsuperscript{692} Media Statement of NSW Attorney-General (GabrielleUpton),"Online Court Makes Access to Justice easier", 9 September 2015
Justice stated that the online court aims to be more efficient in the use of court time and legal practitioners’ time required for preliminary matters; via the Online Court preliminary matters can be dealt with in a matter of minutes and at any time. This in turn provides greater equality of access to ‘suburban-based lawyers and remote court clients.’

Although there has been no sustained analysis of the failings of the online dispute resolution platforms of NSW, a Pro Bono Project conducted by Cambridge University identified a number of issues which have the potential to hinder access to justice. Firstly, the filing fee required to use the Online Registry can only be paid via credit card which may pose an obstacle for a small number of individuals. Secondly, the procedure of the Online Court is dependent on which court and list the matter is assigned to. The different procedures could cause confusion for members of the public. Furthermore, the plentiful material provided to instruct in the usage of the online court seems to be written for lawyers rather than the layperson. Lastly and arguably most notably, for some matters, including matters in the District Court and in the Local Court, the use of the online court is limited to those with legal representation. This clearly creates an obstacle for self-represented parties in their attempts to access justice.

Part II: Legal Aid Commissions

Across Australia’s states and territories, legal aid commissions offer a range of services aimed at ensuring everybody has access to justice. The country’s eight states or territories each have their own legal aid websites with specific information for citizens and residents of that region. Telephone helplines, fact sheets and other online resources are widely available across the country. Although these resources are delivered online, and, in this sense, use technology to enable access to justice, this section will not explore how these services are delivered.

693 ibid.
694 ibid.
695 University of Cambridge ‘A Comparative Analysis of Online Dispute Resolution for the International Legal Aid Group’ (February 2019) 61.
696 ibid.
697 ibid.
698 ibid.
Instead, it will look at the more innovative legal aid services available across several states and territories and the ways that these technologies currently enable access to justice in Australia.

New South Wales

LawAccess New South Wales is a free service, primarily aimed at those living in remote and isolated areas or those with disabilities.\textsuperscript{700} It provides information on representing oneself in court through a series of educational videos.\textsuperscript{701} The videos cover topics such as pleading guilty, asking for an adjournment and presenting a case at a defended hearing.\textsuperscript{702}

The most recent Annual Report, published in 2019, also details how the Commission is “using information technology to deliver legal services more efficiently.”\textsuperscript{703} For example, it rolled out a new Client and Case Management System (CCMS).\textsuperscript{704} However, the advances detailed in the report are primarily aimed at improving efficiency among the organisation’s staff and have not been discussed directly in relation to individuals’ access to justice.\textsuperscript{705} Although there are no recent statistics specifically on the impact of the Commission’s online videos, the Legal Aid New South Wales website was reportedly viewed 784,787 times in 2018-19, a 7.8% decrease on the previous year.\textsuperscript{706}

Queensland

Legal Aid Queensland offers a range of services on several areas of law including criminal law and family law.\textsuperscript{707} As part of their “Community Legal Education”, the organisation posts videos

\begin{footnotes}
\item[702] ibid.
\item[703] ibid.
\item[705] ibid.
\end{footnotes}
on their YouTube channel dealing with topics ranging from annual report snapshots to information on Queensland’s new Human Rights Act or the region’s “lemon laws.” The YouTube channel was started in 2011 and, at the time of writing, has 46,320 views.

South Australia

Legal Services Commission of South Australia, like LawAccess NSW, has an online Legal Chat service, available Monday to Friday from 9am to 4.30pm, which is designed “for fast information.” The Commission also offers a free online service, 24Legal, which provides legal information across more than 60 topics 24 hours a day, 7 days a week. It asks citizens to enter their postcode and gender before guiding them through a series of common questions and answers. The number of people using these legal services is increasing each year, in 2018-19, 11,143 people used 24Legal while 6,342 availed of the Legal Chat online service.

Tasmania

Legal Aid Commission of Tasmania offers users access to a range of videos centred around different areas of the law. The Commission’s “Videos for Seniors” cover two topics; enduring power of attorney and enduring guardianship. Legal Aid Commission of Tasmania also has a free education kit with 10 short videos “about common legal problems that people arriving [in] Australia may encounter.” It also offers legal advice through its video outreach service and, like many other commissions, has an online chat service, Legal Talk, which delivered 3,465 chats in 2018-19.

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708 See for more information <https://www.youtube.com/user/LegalAidQueensland/videos> accessed 2 July 2020.
709 See for more information <https://www.youtube.com/user/LegalAidQueensland/featured> accessed 2 July 2020.
712 ibid.
Western Australia

Legal Aid Western Australia offers website users access to informative videos that cover topics ranging from car crashes to mortgages.\(^{717}\) The Commission also “has a network of virtual offices in local community agencies across the state.”\(^{718}\) These offices enable clients to have “face-to-face legal advice appointments” with a lawyer working in another location from an office in their local area.\(^{719}\) Moreover, the Commission recently launched an online legal chat service.\(^{720}\) In 2018-19, the Commission saw a 58% jump in the number of website views and recorded 1,139,483 views that year.\(^{721}\)

Victoria

Victoria Legal Aid offers an online Legal Help Chat, available Monday to Friday between 8am to 6pm that supplies users with general legal information.\(^{722}\) The website also offers website users access to videos, which cover a range of topics such as dealing with door-to-door sale, and common legal problems that those arriving in Australia may encounter.\(^{723}\)

More recently, Victoria Legal Aid has begun working in conjunction with Code for Australia to develop an online tool “that will make it easier for community members to get legal assistance” and “save up to 30 hours a week of phone calls” to Victoria Legal Aid’s Help team.\(^{724}\) The Commission has also developed an online checker to help users establish whether their issues fall within the scope of the Commission’s services.\(^{725}\) Many of the organisation’s online legal aid ventures have proven successful, for example, since October 2018, 7,758 people received legal assistance through the organisation’s new online live chat service.

\(^{717}\) Legal Aid Western Australia, ‘Videos about the law’ <https://resources.legalaid.wa.gov.au/project/videos> accessed 1 July 2020.


\(^{719}\) ibid.

\(^{720}\) Legal Aid Western Australia, Annual Report 2018-2019 (2019)

\(^{721}\) ibid.


\(^{724}\) ibid.

\(^{725}\) ibid.
Conclusion

Evidently, across Australia, technology and legal aid are becoming interlinked and each of the eight legal aid commissions continue to utilise technology to enable access to justice.

Part III: Electronic Discovery and E-Conveyancing

This section will discuss new developments in technology which have been facilitating access to justice by reducing costs.

Electronic Discovery

Discovery can often be one of the most expensive and time-consuming phases in litigation. Indeed, in Ireland the Supreme Court recently acknowledged that the discovery process was often expensive and at times unmanageable.\(^726\) Similar problems have been recognised in the Australian justice system.\(^727\) The development of technology has led to an immense increase in the volume of discovery facing lawyers, with computers, mobile phones and social media generating sizable quantities of material.

In cases where discovery is necessary, the Australian courts expect the parties involved to take all steps to minimise its burden.\(^728\) Related to this is the increase in use of electronic discovery and technology assisted review in Australian courts.

The process of technology assisted review or predictive coding involves a review of electronic documents by software which is trained to identify those documents which are relevant to issues in the proceedings. The pre-determined data set (including, for example, key words and date ranges) is created by lawyers and agreed by the parties to proceedings. Documents that do not meet the selected criteria are excluded. A human, usually a senior lawyer sufficiently familiar with the issues that the proceedings involve, then reviews some of the sample.\(^729\) When that sample has been reviewed, the system then learns from this human review and incorporates

\(^726\) Tobin v Minister for Defence [2019] IESC 57
the results into predicting the relevance of further documents. The software then categorises all the documents as either relevant or not.\(^\text{730}\)

In 2016, the Supreme Court of Victoria delivered the first Australian case endorsing the use of this type of technology in *McConnell Dowell Constructors (Aust) Pty Ltd v Santam Ltd & Ors* (No 1).\(^\text{731}\) This case originally involved around 4 million documents that had been identified as relevant in the proceedings, which was later reduced to 1.4 million. While this was a large reduction, the Court observed that it would be unlikely that manual discovery would be a cost effective or proportionate method of dealing with the discovery. A court appointed Special Referee recommended the use of technology assisted review in the discovery process, which the Court approved of and made orders to give effect to an appropriate protocol for this to occur.\(^\text{732}\)

Australian courts are now requiring parties to consider electronic document management in the conduct of matters. For example, the Supreme Court of Queensland has issued a practice direction in 2018 directing litigants to adopt a proportionate and efficient approach to the management of paper and electronic documents at all stages of the litigation.\(^\text{733}\) The courts expect parties to use technology in the management of documents in proceedings, particularly when creating lists of discoverable documents, giving discovery by exchanging electronically stored information and inspecting discovered documents and other material.\(^\text{734}\)

While electronic discovery is certainly improving, there is still much of a way to go. It has been observed that mobile devices have complicated eDiscovery by creating multiple touchpoints through which information is accessed, collected and stored. A costs survey conducted by RAND in 2012 suggests that 70 per cent of total eDiscovery costs relate to the review process, with the majority of that time spent identifying the relevant material by sifting through mostly

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\(^\text{732}^\text{ibid.}\)

non-relevant material. Even after electronic review procedures, often the amount of relevant material remains only a fraction of the total documentation and large amounts of documentation will still need to be reviewed by lawyers at considerable cost. There are also concerns that electronic discovery could lead to duplication, for example eDiscovery has resulted in issues where searching has failed to adequately differentiate between emails, email chains and other identical documents, leading to duplication and multiplication of costs. As well as this, there are worries that it can fail to identify documents that are privileged, resulting in the accidental disclosure of privileged information.

Conveyancing

The Electronic Conveyancing National Law (Queensland) Act 2013 provides a legislative framework for the implementation in Queensland and operation of a national electronic conveyancing system. National e-conveyancing allows land conveyancing transactions to be completed electronically whereby instruments can be lodged directly into state and territory electronic land registers, thus removing any need for signed paper documents. However, there are problems associated with eConveyancing; it may be expensive for sole practitioners or small practices, which may not have the accreditation or expertise required. Furthermore, all conveyancing will be electronic, which means there will be no choice in how a conveyance will occur.

On a related note, algorithms have begun to play a larger role in automated due diligence for property and merger and acquisition work. Allens developed a Real Estate Due Diligence App which uses AI to simplify due diligence for real estate leases, improving efficiency and access

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738 Electronic Conveyancing National Law (Queensland) 2013 Incomplete reference
740 ibid.
in this area. There are concerns however over who should bear responsibility and costs if an algorithm was to breakdown.\footnote{Lisa Toohey, Monique Moore, Katelane Dart, Dan Toohey, ‘Meeting the Access to Civil Justice Challenge: Digital Inclusion, Algorithmic Justice, and Human Centred Design’ \url{https://www.mq.edu.au/__data/assets/pdf_file/0009/866295/Meeting-the-Access-to-Civil-Justice-Challenge.pdf} accessed 02 July 2020.}

**Part IV: Technology as a Barrier**

Concerns over technology leading to parties incurring increasing costs and thereby impeding access to justice is however not limited to fears over algorithms. In a country where 13% of citizens live under the poverty line, access to digital technology in Australia is far from widespread, and in this sense, the increased incorporation of technology in the legal process could have negative implications for access to justice. The Law Council of Australia undertook a report analysing aspects relating to human rights and technology. The resulting report raised concerns that ‘unequal access to technologies can exacerbate inequalities, especially where access is affected by factors such as socio-economic status, geographical location and cultural or linguistic diversity’.\footnote{Law Council of Australia, ‘Human Rights and Technology’ (2018) 17. Available at \url{https://tech.humanrights.gov.au/sites/default/files/2019-12/TechRights2019_DiscussionPaper.pdf} accessed 02 July 2020.} Individuals from a low-income background and the elderly are those that would appear to suffer most from the increase in use of legal technology. In 2018, the Australian Digital Inclusion Index produced a Report titled Measuring Australia’s Digital Divide: The Australian Digital Inclusion Index 2018. In that Report, it was found that whilst Australia had made some inroads over the years, a number of challenges remain. They reported that the most digitally excluded groups included (in ascending order) ‘low income households (41.3), mobile-only users (42.7), people aged over 65+ (46.0), people who did not complete secondary school (47.4) and people with disability (49.2)’.\footnote{Lisa Toohey, Monique Moore, Katelane Dart, Dan Toohey, ‘Meeting the Access to Civil Justice Challenge: Digital Inclusion, Algorithmic Justice, and Human Centred Design’ \url{https://www.mq.edu.au/__data/assets/pdf_file/0009/866295/Meeting-the-Access-to-Civil-Justice-Challenge.pdf} accessed 02 July 2020.} It has been found that people aged over 65 are disproportionately less likely to seek resolution of a legal problem by seeking advice or accessing the justice system.\footnote{Susannah Sage-Jacobson, ‘Access to Justice for Older People in Australia’ (2015) 33 Ageing and the Law 2. Available at \url{https://journals.latrobe.edu.au/index.php/law-in-context/article/view/58/112} accessed 02 July 2020.}
Clearly, advancements in technology represent possible solutions to reducing what can often be lengthy and costly legal procedures. Problems associated with disclosure are not limited to the Australian legal system, it has caused a number of issues in England and Wales including the collapse of a number of trials and it poses a growing concern in this jurisdiction.

Conclusion

Overall, technological advancements have become integrated into all levels of the justice system in Australia. Individuals are able to avail of a wide range of free legal advice on different areas of law through the legal aid websites. These are an important tool in making the law more accessible to all and in a sense 'demystifying’ it for non-lawyers. Lawyers themselves have benefitted from new technologies, for example in the eDiscovery process and the development of eConveyancing, which it is hoped will in turn lower costs for clients, although improvements in these areas will have to be made. The online court system developed in some territories has reduced the length of some proceedings thereby reducing costs and has the advantage of facilitating disputes without the usual associated travel exigencies for parties. Australia has learned however, that improving access to justice in some areas does not necessarily mean advancement for all. In particular, technology can fail to improve access to justice for older generations and has the potential to represent a barrier for them.
Chapter 14: Comparative Analysis of Global IT Developments and their Effects on Access to Justice: South Africa

Liadán Mack
This section will examine access to legal services and advice in South Africa. South African law is not codified and therefore relies predominantly on a Constitution, a Bill of Rights, legislation, judicial precedent and customary law.\textsuperscript{745} The Constitution is supreme; therefore, it is vital that it is widely accessible and communicated. The Constitution dictates in s39(2) that in interpreting legislation, common law or customary law the judiciary must do so with the object of promoting the Bill of Rights;\textsuperscript{746} therefore easy access to legislations, judgements and academic commentary is vital in facilitating citizens enforcing their rights.

Similarly, facilitating access to justice and legal services online has become paramount. This chapter will examine how this operates in South Africa through virtual courts and videoconferencing.

**Part I: Provision of online legal materials**

Polity.org.za

Polity is a website that provides access to a wide range of articles, opinions, podcasts, legislation, speeches and statements on legal issues. It provides comprehensive and easy to understand case summaries, which promote access to the law for all citizens. They also provide links to the full judgement of cases through SAFLII. It further provides analysis on various legal areas from a High Court appeal on COVID-19 restrictions to an article on the Police Ministers response to police brutality.\textsuperscript{747} This site is free and provides a substantial volume of legal, economic and political information.

The object of Polity is to “deepen democracy through access to information”.\textsuperscript{748} This website promotes transparency by making access more widely available; Polity further has installed iPhone and Android applications, which allows this trove of legal information to be accessed.


\textsuperscript{746} ibid.


\textsuperscript{748} ‘About us’ (Polity) <https://m.polity.org.za/page/about-us> accessed 01 July 2020.
on the go while also attracting a broader audience into this information. It has published that 41,740 impressions are generated by 18,350 distinctive viewers weekly.\textsuperscript{749}

Parliament of South Africa and the South African Government

The Parliament of South Africa website largely resembles the Oireachtas site and similarly provides access to Acts and Bills as well as access to Parliamentary papers and a detailed description of how the law is made. This transparency through live Parliament TV, Podcasts and a Video Gallery promotes legal transparency without having to leave the house.\textsuperscript{750} Additionally this site publishes monthly a newsletter InSession which includes information on the work of the Parliament with the mission of securing “participatory democracy and ensure oversight and transparency”\textsuperscript{751}; access to this is available freely from 2015 to 2020 varying from 10 to 12 issues yearly. The Parliament endeavours to promote the principles of openness, responsiveness and accountability which it practices through these digital features.

The South African Government website similarly provides access to Acts, Draft Bills, Bills and the Constitution. It further provides a section for residents on how to deal with the law, detailing how to report a crime and information on other legal matters particularly a section on victim empowerment which allows residents to report discrimination and lodge a complaint about police misconduct. It also provides information for organisations and temporary residents.\textsuperscript{752}

The Parliamentary Monitoring Group provides further digital transparency as it offers access to committee meetings and Bills.

\textsuperscript{749} ibid.


Laws of South Africa: Consolidated Legislation

While these sites are very informative and easy to use, neither have access to consolidated legislation; Ward comments that this makes it difficult for the public use and understand legislations.\(^{753}\) However, the author notes that the University of Pretoria sought to provide consolidated legislation in a manner that would be effective, practical and cost effective. Their approach sets an example of a “low-cost low-tech” method that was achieved in a relatively short amount of time, further it was drafted with non-legal users in mind.\(^{754}\) In less than a year from embarking on this project 200 consolidated Acts were freely provided.\(^{755}\)

The University of Pretoria established the Laws of South Africa database to provide free-legal access to consolidated legislation under the direction of Ms Shirley Gilmore. This entity facilitates open access to national legislation\(^{756}\) and provides an alternative basis for accessing legal information, however it is still a work in progress and it does not have many features.\(^{757}\) Nonetheless, the Laws of South Africa has been so effective that the United States Library of Congress, which stores materials on American law and international legal jurisdictions, has selected it for inclusion in the Law of African Jurisdictions Web Archive.\(^{758}\)

Juta

Juta is a subscription-based database, which provides access to a wide range of sources such as legal journals, legislations and Bills. The Statute Editor’s Alert provides specific access to notable legislations and proposals that would be of general interest, which bears non-legal users in mind by putting forward the most objectively relevant legislations for users to access. Furthermore, this database provides other services such as links to other useful sources such as

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\(^{753}\) Ward, ‘Building free access to law in Africa: Some examples of such projects’, Legal Information Management 2014 14(4) 290-300, 292.

\(^{754}\) ibid at 293.

\(^{755}\) ibid.

\(^{756}\) ibid.


Legalbrief which gives access to electronic newsletters on legal issues such as e-law, forensic law, environmental law and workplace law for an additional fee.  

While this database is very comprehensive and provides extensive access to a wide range of legal tools, by requiring a fee it restricts who can access this material and therefore, this acts as a barrier to potentially beneficial and extensive resources.

SAFLII

SAFLII is an online database that provides free general access to South African case law with the objective of promoting judicial accountability and open access to the law. Ward notes that this service is not particularly rich with features and more advanced features would be welcomed however, it does meet the “fundamental need for open access” to South African legislation and case law by facilitating access to these materials freely.

This database aligns with the Free Access to Law Movement which declares that public legal information should be available online free of charge as facilitating and promoting access to these materials promotes justice and the rule of law. The Declaration on Free Access to Law further holds that legal institutions will co-operate to reach these objectives and assist developing countries in achieving these goals. This assistance includes technical assistance, development of open technical standards and exchange of research results. It also involves promotion of public policy that would facilitate accessibility to public legal information. Members, including SAFLII and BAILII, meet annually to discuss these objectives.

This accessibility is essential to the South African legal system. The Ethnographic Research on the Impact of Legal Information Institutes in Zimbabwe and South Africa Report denotes Magistrate Jantjes J commenting that using SAFLII makes him feel more confident in preparing judgements while similarly allowing lawyers to better prepare as they have access to current and unreported cases.

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760 Ward, ‘Building free access to law in Africa: Some examples of such projects’, Legal Information Management 2014 14(4) 290-300, at 294.
762 ibid.
The database also provides a service called “pocket law” which can be accessed offline however, it only contains a limited amount of case law and legal materials. Nevertheless, it allows legal practitioners to have access to relevant materials while on the move and in areas where there may be limited connectivity. In the aforementioned report, High Court legal researcher Shouket Alliie notes that this service provides access to case law where WIFI is unreliable,\textsuperscript{764} thus eliminating the obstacle of connectivity in the provision of open access to the law.

African LII
This database also cooperates with the Free Access to Law Movement and provides free access to legislations and case law for the whole continent of Africa. It convenes sixteen other African LIIs to promote access to legal advice throughout the continent of Africa. Similar to SAFLII it provides free access to case law making it easily and widely accessible.

\textbf{Part II: Provision of Online Legal Services}

\textit{Videoconferencing}
Traditionally witnesses would have to be present in-person at a trial to testify however through videoconferencing technology a witness can virtually testify without having to be physically present in the courtroom. In light of COVID-19, this is essential in upholding guidelines on social distancing; however, it has other alternative advantages. Knoetze provides the example that providing expert evidence may overlap and a case may have to be postponed if the expert is required to testify in two remote areas on the same day; videoconferencing allows the expert to remain in the laboratory until they are required to testify and facilitates them providing this legal service with greater efficiency.\textsuperscript{765} Remaining in the laboratory also allows experts to utilise lab technology and provide a more comprehensive testimony that may be better understood by jurors, lawyers, judges and litigants.\textsuperscript{766} The learned writer recommends that this should be utilised in South Africa especially in relation to civil proceedings.\textsuperscript{767}

\textsuperscript{764} ibid at 8.
\textsuperscript{766} ibid.
\textsuperscript{767} ibid.
Virtual Courts

When the courts halted due to the onset of the COVID-19 pandemic, the Chief Justice Mogoeng Mogoeng advised that individual courts had the discretion to permit electronic hearings through videoconferencing and virtual courts, however this has not been widely employed by South African courts and little provisions were in place. Whitear-Nel highlights that South Africa was lagging behind other international countries, referencing that the USA published “Guidelines for Pandemic: Emergency Preparedness and Planning: A Roadmap for the Courts” in 2007 and that the Indian Courts have been working on developing remote hearings for a period of approximately fifteen years. However, the writer notes that even if virtual courts were utilised in South Africa obstacles such as people not having access to online facilities, especially unrepresented litigants, would act as a barrier.

The Chief Justice issued Practice Directives on 29th of April 2020 on how video hearings should operate. In response to this Justice Mandisa Maya, President of the Supreme Court of Appeal, coordinated training with twenty-five judges on how the virtual platform would run. All judges further engaged in a virtual meeting before the May hearings began to further discuss the operation of the virtual hearings; as Baratang Constance Mocumie comments “the resolve for all to achieve justice was proportional to the courage to pursue it even when this was unchartered terrain in unprecedented times”. Furthermore, The National Commissioner of Police v Gun Owners of South Africa case was live streamed on Facebook and YouTube in South Africa. Justice Maya also noted that she was confident that the provision of virtual hearings would improve over the coming term. Similarly, the UK Chief Justice had

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769 ibid.
770 ibid.
772 ibid.
773 ibid; see also The National Commissioner of Police & The Minister of Police v Gun Owners of South Africa (Gun Free South Africa as amicus curiae (561/2019).
774 ibid.
facilitated public access to virtual hearings to maintain the general requirement that court proceedings should be public.\textsuperscript{775}

CaseLines was introduced in South Africa in January 2020 although it was seldom used by legal practitioners, however by April 2020 all matters heard by the high courts must be presented solely on CaseLines.\textsuperscript{776} This electronic case management system allows a case to be created and viewed by other parties electronically. It also allows documents to be filed and cases to be heard digitally.\textsuperscript{777} Counsel now present arguments to judges through Microsoft Teams and judgments are handed down through CaseLines. Legal practitioners are also beginning to receive training on using this virtual platform.\textsuperscript{778} CaseLines facilitates virtual courts once there is an internet connection, it very secure as it allows access to evidence in one location so there is less of a chance of evidence being mislaid and there is “invitation-only” access to evidence, it is also compliant with ISO 27001, the international standard for information security management.\textsuperscript{779}

Whitear-Nel comments that the right to have a fair trial can only be limited where there is no other reasonable method of achieving this right and embracing technology would have allowed court proceedings to continue with health and safety in mind. The South African courts have received criticism for not having legislative framework in place for virtual court proceedings and therefore falling behind the rest of the world.\textsuperscript{780} However, the introduction of CaseLines has the potential to accelerate their progress and the willingness of judges to adopt this virtual platform is promising.

Online Dispute Resolution

Arbitrations and mediations have continued throughout COVID-19 virtually. The Arbitration Foundation of Southern Africa has taken measures to ensure that these continue to run


\textsuperscript{777} ibid.

\textsuperscript{778} ibid.


smoothly such as setting up virtual meetings between arbitrators and litigants via Zoom.\footnote{1} The African Arbitration Academy also published a Protocol on virtual hearings in Africa, which includes objectives of encouraging investment in information technology to promote accessibility to virtual hearings and to ensure equal treatment of parties so each party can fairly present their case online.\footnote{2} This Protocol was drafted with the infrastructural and technological issues which Africa faces in mind, and accordingly there is a back-up internet provider and alternative technical platform in place before each hearing in case of any difficulties. Further Arbitration administers should have the technical facilities for these hearings and can provide them where an individual party lacks infrastructure.\footnote{3} The platform is tested no less than 72 hours before the virtual hearing and a qualified technician must be available to assist should there be any technical difficulties.\footnote{4}

Rule 41A in the Uniform Rule in Court introduced in March 2020 dictates that every new action must be submitted with a notice as to whether the parties agree to refer the matter to mediation,\footnote{5} this minimises some of the negative effects of the physical courts closing as mediations are still running effectively virtually. This has the potential to alleviate some of the backlogs in the courts and reaching a resolution can be speedier and more cost-effective.

**Conclusion**

Access to legal advice and services is essential to a fair, transparent and just legal system, only when citizens know and understand their rights and entitlements can they enforce them. In South Africa there are many databases and government websites available which provide access to legislations, regulations and case-law. Free services such as SAFLII and AfricanLII are imperative in providing access to case law. As law student Ms Mudenda commented in the Ethnographic Research on the impact of Legal Information Institutes in Zimbabwe and South Africa Report, if SAFLII stopped, students would have to buy commercial legal services, which


\footnote{3} ibid.

\footnote{4} ibid.

\footnote{5} ibid.
would be too expensive, and she would not be able to work from home. Mariya Badeva-Bright highlighted that the report emphasises the positive impact SAFLII has on the judiciary, students, lawyers and the community, the learned writer also made suggestions as to where LII’s can improve. Firstly and similar to the aforementioned opinion of Ward, LII’s have limited access to consolidated and subsidiary legislation which are not always updated “where the law is not known, it cannot be effectively applied”. Further, the writer recommended that LII’s should use social media to promote access to the law and legal services to engage users.

In relation to access to legal services virtually, South Africa has received criticism for being behind the curve and not as digital as other international countries. However, COVID-19 has accelerated this process and the introduction of CaseLines has been effective in facilitating virtual courts, nonetheless there is scope for e-courts to be more readily utilised by legal practitioners in South Africa to ensure a fair and efficient legal system.

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788 ibid.

789 ibid.
Chapter 15: Comparative Analysis of Global IT Developments and their Effects on Access to Justice: France

Ellen Hyland, Erika Price, Rebecca Kelly
A commitment to ensuring access to justice for marginalised groups was fostered as a foundational value of French culture for centuries, dating back to the legal system established by King Louis IX in 1278. As Francis Teitgen put it, ‘providing access to the law was perceived as a moral obligation of our profession.’ Based on this sentiment, it comes as no surprise that the French legal system has seen a number of technological developments in recent decades to increase the accessibility of legal services in France, and these developments have presented themselves as being of paramount importance in such unprecedented circumstances that we find ourselves in today. This paper will explore the structure of the French legal system and summarise the current state of affairs in relation to technology and justice accessibility. A cogitation on French legal technology initiatives will follow, discussing the evolution of the e-Barreau system and relevant governing legislation and funding initiatives on a national level to allow for the expansion of access-to-justice initiatives. This will lead to the ultimate conclusion that ‘e-Justice can provide effective tools to make justice easier to access, speedier and less costly’, and that the French government have demonstrated a gold standard approach in addressing barriers to justice in this regard thus far.

The French Legal System

France uses the civil law system, which focuses on codified laws, and these are divided into two main branches, those being judicial law and administrative law. Precedent is not binding within this system, meaning that it is up to the judge in each case to determine the outcome by reference to the wording and the purpose of the laws in question that are found in the relevant code, although it is usual practice for previous case law to be followed. As a result of the nature of this system, the court structure also varies slightly to that of Ireland with the two different branches of law having two different supreme courts. The judicial courts are headed by the Court of Cassation (Cour de Cassation), which never sits as an appeal court but instead only ensures that the law has been applied correctly in the lower courts, while the administrative

courts are headed by the Council of State (Conseil d’État), which can in certain circumstances function as a court of appeal but generally exercises powers as a court of cassation. 792

The General Public’s Relationship with the Law

The Association for the Popularization of Legal Information and Education in Law (AVIJED) is an association that was founded in 2013 by the Justice Village (Village de la Justice) with the aims of creating an online presence on various platforms which would inform the French public of their legal rights and obligations. 793 Although it is yet to gain much traction, they have published a survey investigating the public’s view on access to the law and the need for legal information in France, which was inspired by a survey carried out in 2013 that found 88% of French citizens believe that justice is too complex and that 80% of them consider that judicial language is difficult to understand.794

The AVIJED survey discovered 48% of the participants often research specific legal information and 39% research information from time to time. It also observed that 82% of participants turn to the internet for legal research, as it has become the fastest and easiest way to learn about their legal obligations. Breaking this figure down, 24% of the survey used official public websites such as Légifrance or service-public.fr, 13% used internet forums, 12% used private legal aid sites and 13% used sites of legal professionals while the remaining 20% used a search engine to look up keywords to guide them in their legal research. However, the survey also found that 60% of participants do not systematically trust the information found by themselves and 5% never or almost never trust the information found, while 96% of participants acknowledged that legal information is not easily found in one single place and it is sometimes necessary to navigate several sites before finding the information sought. The conclusions reached from this indicate that the internet is becoming an important tool for learning about the law for the French general public but that it is not easy to obtain the exact information sought and that there is a patent lack of trust for much of the information found.795


AVIJED followed this survey up with a study in 2017 that had the aims of understanding the public’s expectations for legal information and the best ways to meet them. There were numerous different reasons recorded for the wanting of legal information, including for work situations, consumer rights, contract issues and family situations. This study also found that information search methodologies varied but the main method was via internet research with the most trust being placed in official legal information sites. Regarding the legal information found by participants, 58% believed that they would have been better informed if the information had been simpler and clearer, 22% if they had immediately known which professionals to turn to and 16% if they had understood earlier that they were faced with a legal problem. The study also found that 60% decided the need for easily accessible legal information is the most preferred option but 53% of respondents also stress the need for information that is clear and understandable. Additionally, the majority of respondents (67%) said that their future strategy would be to research on the internet on an official site. This study indicates that the general public in France are interested in legal research for their daily lives and for that the internet is the most accessible option for them and a large portion of them find easily accessible legal information to be the most important factor in their research.\(^7\)

In general, the law appears to be quite accessible to the French general public. The codes which contain the laws of the country are available to purchase by any individual, although they may be hard to decipher without the relevant legal knowledge and it may be difficult for the general public to know exactly which laws apply and how. However, it is important to note that this is a universal issue. Additionally, the majority of legal research is performed online because, as aforementioned, it is the easiest and most accessible method of researching legal information. However, it is evident that there are still some issues not only with finding the exact information online but trusting such information as well.

**Legal Technology**

Legal Technology can be defined as ‘technology assisting (or perhaps even replacing

completely) the professional legal service provider.\footnote{Dr. Alan Cunningham, Prof. Andrew James, Prof. Bruce Tether [2018] \textit{Disruptive Technologies and Legal Service Provision in the UK: A Preliminary Study} p.6.} France provides for an estimated 30\% of legal-tech companies worldwide\footnote{Pierre-Michel Motteau, ‘Is France becoming the vanguard of civil law LegalTech?’ \textit{Legal Business World} (January 22 2020) <https://www.legalbusinessworld.com/single-post/2020/01/22/Is-France-becoming-the-vanguard-of-civil-law-LegalTech> accessed 15 June 2020.}, and each company provides a service either for the client or the legal worker that would otherwise not be digitised.

Navigating the legal system of any country is likely a daunting task for most citizens, and therefore when it comes to accessing justice, legal-tech companies work to alleviate some of the confusion and costly billing hours with legal advocates in order to make accessing justice that bit easier.

An example of such a company is Demanderjustice.com, a site whose legality was confirmed by the Paris Court of Appeal in 2018, and which prepares formal letters of notice and referrals to courts over the web.\footnote{‘La légalité de Demanderjustice.com confirmée en appel’ \textit{Legalis} (12 November 2018). <https://www.legalis.net/actualite/la-legalite-de-demanderjustice-com-confirmee-en-appel/> accessed 26 June 2020.} The website itself claims to settle disputes without lawyer’s fees and to take worries about travelling and the formatting of formal documents out of the equation.\footnote{Homepage of Demanderjustice.com <https://www.demanderjustice.com/> accessed 26 June 2020.} While it does not purport to replace the role of a lawyer (the Court of Appeal’s decision confirmed this), it does make accessing justice that bit easier for the legal layman or financially constricted.

**Information & Communications Technology (ICT) in the French Administrative Branch**

At the heart of discussions relating to legal technology and the welcoming of the ‘Information Society’ (PAGSI) lay considerations of substantive individual rights such as the right to a fair trial, right to equality of arms, and the right to an effective remedy.\footnote{Article 13, European Convention on Human Rights.} Additionally, the justifications for the introduction of such measures are arguably congruent to those relating to the introduction of Information and Communications Technology (ICT) in the French Administrative Branch:

‘The intervention of the State is warranted by its legitimate threefold role: a) as a catalyst, it must make business companies and citizens aware of the stakes of IT; b) as a regulator, it must
ensure compliance with the rules on the networks, in particular with respect to the users’ safety; c) as a leading actor itself, it modernizes its operation and its relationship with business companies, local organizations and citizens.’

**e-Signatures and Digital Certificates**

The use of cryptography tools or digital signature technology was authorised by the implementation of law no. 659/1996, and these were further legitimised by law no. 230/2000 which gave digitised versions of signatures/certificates the same status as handwritten ones. Furthermore, EU Directive 1999/93/EC ‘establishes the legal framework at European level for electronic signatures (eSignatures) and the recognition of certification-service providers.’

This meant that in France, lawyers now had to meet certain requirements to secure cross-border recognition of digitised documents and defines the relevant terms in this area. The Directive increased accessibility on a continental basis by laying down a number of rules ensuring the maintenance of market accessibility within the EU.

**e-Greffe**

The e-Greffe service was an information system available in the *tribunal de grande instance* in Paris. This aimed to digitise legal documents in their physical form, and the idea was ‘to allow lawyers to access information on a case, to receive court e-notices, and to download electronic documents.’ This was achieved partially through the court’s Case Management Systems (CMS), which made relevant information for lawyers available online. Digitised certificates stored on USB sticks were required to log on to the e-Greffe system, which were provided by leading European certification authority Certeurope.

The system was founded on an agreement between the Ministry of Justice, the local Bar Associations and the courts and functioned on a subscription basis charged monthly to law firms. This presented itself as controversial in the legal profession due not only to the cost of subscriptions, but also the exclusivity of the service to the Paris region. This led to reformation

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in the area with the reduction of subscription costs and the eventual expansion of the service to a nationwide project called e-Barreau.

From the 1st of September 2019, electronic communication was made mandatory before the district court for all tasks relating to proceedings from that date.\textsuperscript{805} This made accessibility to legal technology even more important as it became an essential facet in the process leading to the administration of justice on a very fundamental level. Any notices, warnings or convocations to be sent to the opposing parties’ counsel also had to be transmitted electronically. Additionally in 2009, the Ministry of Justice translated the 2007 convention into regulation, making it mandatory for official electronic communication to comply with Article 1 requirements.\textsuperscript{806}

Although e-Greffe has presented many shortcomings over the years, academic commentary on the matter appear to favour its implementation, arguing that ‘it has been generally considered as an important step for ICT innovation in the administration of justice. It helped to experiment, set up and institutionalize the framework of the governance network that would be used from then onwards in the design and implementation of the e-justice projects.’\textsuperscript{807}

\textbf{e-Barreau}

Despite the increase of accessibility to justice with the introduction of legal-technology initiatives in the Paris region, the remainder of France were deprived of access to such digital resources. However, this changed in the year 2004 which seen the proposal of a nationwide electronic communication project. In its proposal, the CNB had two primary aims;

1) To address and correct the failures of Avocaweb, the first lawyers’ virtual private network experience launched in the 1990s; and

2) To introduce ‘an information system which complied with the rules regarding lawyer-client privilege and confidentiality.’\textsuperscript{808}

\textsuperscript{805} Décret n° 2017-892 du 6 mai 2017 portant diverses mesures de modernisation et de simplification de la procédure civile.\textsuperscript{806} Arrêté du 7 avril 2009 relatif à la communication par voie électronique devant les tribunaux de grande instance.\textsuperscript{807} Marco Velicogna and Antoine Errera and Stephane Derlange, ‘E-Justice in France: The E-Barreau Experience’ (2011) 7 Utrecht Law Review 172.\textsuperscript{808} ibid.
The most efficient manner in which to achieve this was to implement a single nation-wide network, and this was done through the agreement of September 28, 2007 between the Minister of Justice and the president of the National Council of the Bars.

**Legislative Intervention**

The implementation of such systems warranted a number of procedural changes in the courts which were introduced with the Decree of 28 December 2005, no. 1678. Article 71 of this decree introduced in the new Code of Civil Procedure (NCPC) an article ‘allowing the courts to hold electronic registers and dockets, provided that the system can guarantee the integrity and confidentiality of the information therein’. More importantly, Article 73 introduces several articles into the NCPC relating to official electronic communication (Articles 748-1 to 748-6). Article 748-1 allows the electronic transmission of a broad range of procedural acts, documents, summonses and judgments, provided that the recipient has agreed to receive them electronically (Article 748-2). The recipient automatically sends an acknowledgement of receipt mentioning the date and hour of receiving them to the court (Article 748-3). Article 748-6 lays down the requirements that official electronic communication has to meet: a reliable process of identifying both parties; safeguarding the exchanged documents through the security and confidentiality of the exchange; and the creation of logs allowing the verification of the time and date of the exchanges.”

**Online Dispute Resolution**

Another initiative that has increased the accessibility of legal services is the Online Dispute Resolution (ODR) platform. This refers to ‘the use of technology to support the settlement of disputes… and offers unique features for handling millions of disputes annually and has the potential to significantly increase access to justice across all legal jurisdictions.’ This platform was introduced across the EU to allow the settlement of disputes across both domestic

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and cross-border online purchases. This, alongside the aforementioned developments, has further expanded the wide tapestry of legal technology in France.

**Legal Technology and Remote Working**

With the eradication of the necessity of a Navista box for the use of e-Barreau, a great degree of flexibility was introduced for practising lawyers too. A development by the CNB called *Application Télétravail* soon followed, allowing lawyers to work from home, which is an option that is particularly important today. Additionally, the *bureau virtuel* allows judges to work from home and view PDF versions of cases files and other relevant documents.

**French Legislation Conducive to Legal Tech**

French Funding Practices

It is important to distinguish France from other countries when it comes to their financial system. France is unlike many of its neighbours in that the state has a more significant role in the country’s banking.\(^{812}\) This has led to many ambitious projects to entice an entrepreneurial spirit into its citizens, one of which was introduced by President Emmanuel Macron in 2019 and sees 5 billion euros worth of institutional investment being dedicated to tech companies over three years.\(^{813}\) This project specifically has helped to curtail some of the costs associated with a legal tech start-up, as the cost of high-skilled labour and creating an innovative platform for clients is enormous compared to other start-ups.\(^{814}\) Investors are becoming increasingly interested in legal tech specifically; an investment company conceived in February of 2020 has dedicated €500,000 to those willing to create legal tech tools.\(^{815}\) This shows that the private sector is willing to invest in fledgling companies, but the public sector is not far behind.

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The French government set up ‘La French Tech’ in 2013, a scheme which provides a number of government grants to newly formed technical companies. An example of such a grant is the Bourse French Tech grant, which covers up to 70% of eligible expenses for small tech companies created in the past twelve months. France’s public investment bank, Bpifrance, is inseparable from these schemes. Their website states that they have provided 19 billion euros worth of financing to French businesses since their inception, and provide advice to potential new clients on creating a successful business.

It is imperative to understand this entrepreneurial spirit of French culture in order to comprehend the massive amount of legal tech start-ups originating in France. Both public and private investors in other states would not be as forthcoming with capital for such a new and costly business venture, and therefore when comparing French legal tech to other states this must be understood.

Mediation Laws

Mediation has always been open to French citizens as a way of solving their civil disputes before appearing in front of a judge, but recently mediation has been mandatory for neighbourhood disputes or claims not exceeding 5,000 euros. This law has made the process of settling smaller claims more informal in France, but it has also made it easier for claims to be settled online. Litige.fr, a legal tech company owned by the same people as Demanderjustice.com, offers ‘amicable conciliation’ through its website, to satisfy this requirement and to possibly settle the dispute out of court.

Even the French courts’ website, Justice.fr, offers a link to an online form that can be filled out in order to arrange for a conciliator to come to an agreed place to attempt reconciliation. While this means that the actual mediation would have to occur in person, it alleviates a lot of the stress of organising a meeting with the opposing side through more formal channels.

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Mediation laws in France therefore make smaller disputes more accessible through online means, and this type of legislation therefore clearly complements the large amount of legal-tech companies that exist in France.

**Justice.fr: Government and Legal Tech**

As mentioned above, the official court’s website in France is Justice.fr. It is important to examine this website as it is a form of Legal Tech, as it shows what a government can do to facilitate access to justice through technology. A few facets of this website are prudent to highlight in this regard.

One facet of Justice.fr which is extremely helpful are the vast amount of easy-to-navigate factsheets that exist on most if not all areas of law which makes the legal dispute or criminal charge one is involved in much easier to understand. An example of such a factsheet is the page on assault and battery,821 which includes definitions, penalties, possible aggravating circumstances, and other helpful information. This means that a citizen can grasp at least the very basic facts of their dispute online without the need of a legal representative.

Another facet that is extremely helpful is the vast number of directories that exist on the website, including one for lawyers,822 notaries,823 and conciliators (as mentioned above). There is also a search engine for local courts,824 and simulators for both legal aid825 and alimony payments.826

It is clear that all of this information exists to make the process of tackling a legal dispute easier for those who do not have a legal background and may feel overwhelmed by the complexities of their case. By providing all of the online links and directories the government has made accessing justice through technology that much easier and it is something that other countries could consider, as it provides a credible source for French law while also allowing lawyers and

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other legal personnel to have an online presence which is helpful for their careers as they are more accessible.

**Conclusion**

It used to be the case that ‘almost everything is available online except justice, which continues to be denied to millions of people who cannot afford going to courts, or who are disabled or in remote places with no means to seek remedy.’ However, it is evident from the above analysis that this is no longer the case in the French legal system, with constant developments streamlining access-initiatives and promoting the widespread use of technology with marginalised groups in mind. The projects not only increase convenience for practising lawyers, but they also reduce costs and time, and create the possibility of eternalising physical case files and remote working.

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Chapter 16: Comparative Analysis of Global IT Developments and their Effects on Access to Justice: Germany

Cormac O’Brìc, Orla Murnaghan, Suzanne Flynn
This research aims to assess how IT developments have affected access to justice in Germany. It will firstly explore forms of legal technology available in Germany, but will also question its barriers to accessing justice. It will discuss case studies on the potential of technology to improve access to justice in Germany, examining data protection regulations and court proceedings. Finally, this chapter will offer solutions to these barriers. Overall, this chapter highlights that while Germany has certainly made efforts to adopt the usage of technology to further social justice, many challenges remain.

Overview of German Law

Germany is a civil law country, with a legal code known as “Bürgerliches Gesetzbuch”. This means that the outcome of cases is not so much based on precedent established by the judiciary, but rather stems from the provisions set within a well-defined legal codex. It has been argued that civil law systems, as opposed to common law states bound by *stare decisis*, are more constitutionally correct insofar as the law comes directly from the representation of the legislature (the Bundestag and Bundesrat) rather than the decrees of unelected judges. Germany is also unique insofar as it is a federal state, which can be divided into sixteen partly sovereign states known as Länder, which have their own state-level laws. Most areas of public interest law run under either state-level law or what is known as “concurrent legislation” where “the Länder have the right to adopt legislation provided and in so far as the Federation makes no use of its legislative powers in the same field”828.

Legal technology available in Germany

Three categories of legal technology outlined at Tobschall829 offer access to justice differently from the traditional client-lawyer interface. These are outlined below.

The first of such categories is “legal advice products”. This refers to instant collection services, which file many cases against the same defendant at the same time and redistribute what rewards are achieved, keeping a small portion of the earnings for itself in order to fund its

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services\textsuperscript{830}, such as Bahn Buddy, for claims against the rail network\textsuperscript{831}. They act as a form of insurance, but the risk is ultimately taken by the consumer\textsuperscript{832}. However, one such problem with this type of technology often cited is the lack of face-to-face contact involved in these legal advice products. The absence of “verbal cues such as body language, tone of voice, facial expression” can be problematic especially in family law cases, which often “involve emotional discussions”, and this may risk miscommunication between the lawyer and client.\textsuperscript{833}

The second of such categories is “legal process outsourcing”, aimed at speeding up traditional legal procedures, such as divorce and disclosure of illicit activity, by removing the need for lawyers and facilitating dialogue between affected parties. Examples of this are Digitorney’s WhistleB software, which allows employees to disclose illicit activity to employers by means of an anonymous in-house interface\textsuperscript{834}, and Rechtwijzer Uit Elkaar, a Dutch-German service facilitating divorce-using conciliation.\textsuperscript{835}

The third category of legal technology is “contract assembly and tools”. These services provide access to legal document templates, and advice on how to complete them. This prevents the need to go to the police to acquire the documents, and to go to a lawyer for advice on their completion. An example is the Formblitz website, which offers a variety of templates, such as marriage contracts, tax returns and construction contracts.\textsuperscript{836}

As observed by Barendrecht, the wealth of legal services in Germany stems from a public demand for such services, such that they are not viewed as a novelty there, but as a real aid to accessing justice\textsuperscript{837}. This contrasts with the UK, where the demand is not as prevalent.

\textsuperscript{830} Plog, P, ‘German Draft Law on Legal Tech: Take the Plunge!’

\textsuperscript{831} For more information see \texttt{<bahn-buddy.de>} accessed 26 June 2020.

\textsuperscript{832} Plog, P, ‘German Draft Law on Legal Tech: Take the Plunge!’


\textsuperscript{834} For more information see \texttt{<https://plus.digitorney.com/wppg_product_manager/digital-whistleblowing-compliance/>} accessed 10 June 2020.

\textsuperscript{835} Maurits Barendrecht, ‘Rechtwijzer: why online supported dispute resolution is hard to implement’ (ILAG Conference, June 2017).

\textsuperscript{836} For more information see \texttt{<formblitz.de>} accessed 26 June 2020.

\textsuperscript{837} Plog, P, ‘German Draft Law on Legal Tech: Take the Plunge!’
However, it parallels the US, where such a market has developed despite the common law-civil law difference.\footnote{Zoe Andreae, ‘2019 Harvard Legal Technology Symposium: Takeaways for Germany’ <hlrecord.org/2019-harvard-legal-technology-symposium-takeaways-for-germany/> (April 23, 2020) Last accessed June 26, 2020}

**Barriers to accessing justice in Germany**

According to the European Union Agency for Fundamental Rights\footnote{European Union Agency for Fundamental Rights, ‘Access to Justice in Europe – Thematic Study: Germany’ <https://fra.europa.eu/sites/default/files/fra_uploads/1526-access-to-justice-2011-country-DE.pdf> (2011) accessed 30 June 2020.}, judicial proceedings in Germany are normally concluded promptly\footnote{ibid, p 5}, compensation is generally adequate\footnote{ibid, p 17}, legal cost-sharing is generally fair\footnote{ibid, p 18}, the burden of proof is reasonable\footnote{ibid, p 19}, representation by a lawyer is not required in court\footnote{ibid, p 10} and representation requirements are flexible\footnote{ibid, p 13}. The only major barrier that exists is in access to non-judicial procedures\footnote{ibid, p 10} (“alternative dispute resolution” or “online dispute resolution”), being their status within German law. This can be divided into questions of validity, legal precarity and federalism.

For validity, consider the discrimination claims service offered by State Agencies for the Protection against Discrimination, which is run in parallel with the traditional, conventional courts\footnote{ibid, p 9}. This arrangement raises questions as to the validity of online dispute resolution, as there is no guarantee that it is legally binding.

Adding to the lack of legal certainty is the fact that online dispute resolution is not considered to be provision of legal services, under the Law on Legal Services of December 2007\footnote{Plog, P, ‘German Draft Law on Legal Tech: Take the Plunge!’ <https://www.fieldfisher.com/en/insights/german-draft-law-on-legal-tech-take-the-plunge> (May 1, 2019) accessed 26 June 2020.}. Under this, mediators may hear disputes but cannot legally propose settlement options, leaving this to the parties, who may not easily compromise. Added to this uncertainty is the fact that results of mediation, and self-service procedures, are not published, meaning greater difficulty
accessing precedent. However, it must be noted that under the German civil law system, precedent is not binding, resulting in a perception of it lacking necessity.

The federal system of government in Germany adds to the uncertainty. Some states have mandated mediation in interpersonal disputes before resort to a court, in the hope of finding an amicable settlement. It is not clear how many states mandate this, creating a disparity in technology and access to justice between different regions of the same country. Additionally, only two states, Berlin and Brandenburg, have Anti-Discrimination Agencies.

Moreover, Germany does provide for the possibility of hosting oral negotiations and the hearing of evidence submissions in cases of civil litigation, under its Civil Code. This could help to significantly expedite cases and free up backlogging in courts. However, apart from the region of North Rhine-Westphalia, there has not been widespread uptake of this digital option, even during the current COVID-19 pandemic.

Conclusion
These are the four barriers to access to justice in Germany: questionable validity of online dispute resolution, legal precarity of this, underused digitised legal processes and the federal system.

Case studies: Court Proceedings and Data Protection

Court proceedings
In regard to court proceedings in particular, IT has the potential to aid judges, legal counsel and court clerks, as well as enhancing the speed of proceedings. The average duration of court proceedings in the local courts in Germany is 4.5 months, while in the district courts the average is 8.1 months. The length of proceedings differ in administrative courts, with the average duration of proceedings range from 12.3 months in the lower administrative courts to 13.8

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850 ibid.
851 §128a ZPO (German Civil Procedure Code)
months in higher administrative courts\textsuperscript{853}. Although it has been remarked that the German judicial system is performing well\textsuperscript{854} and the procedures are concluded within a reasonable time, one could argue that there is much potential for information technology to improve court proceedings, in particular in relation to their duration, as well as the inherent process of court proceedings.

The existence of limitations on court proceedings is an arguably unusual feature of judicial systems. The German Act on Equal Treatment (AGG) is an anomaly in German law in that it explicitly sets time limits for asserting a claim against discriminatory misbehaviour\textsuperscript{855}. Engaging in lengthy proceedings will typically disadvantage the individual taking action, in terms of time and costs. However, the concept of imposing time limits on court proceedings is not an alien concept in Germany, as since the 1970s, the German law of civil procedure recognises a general objective of a “speedy trial”, a principle that obliges the court to undertake all necessary steps in order to ensure a quick resolution of the case. According to sections 278 and 279 of the Civil Procedure Code (ZPO), the court must carefully prepare the hearing by giving hints and feedback to the parties\textsuperscript{856}. One could argue that in the year 2020 more could be done with the assistance of technology to ensure a quick resolution of a case, as the means available fifty years after the recognition of the “speedy trial” objective, are advanced.

The European Commission for the Efficiency of Justice reported on the use of information technology in European courts.\textsuperscript{857} The Commission considered how IT is of direct assistance to judges, prosecutors and court clerks, administration and court management, communication between courts, professionals and other court users, and other aspects such as organisation and governance of court information systems, system security and personal data protection. According to the report, Germany’s “global IT development level” is at a level 2, meaning there is ongoing development in the areas of equipment, legal framework and governance,

\textsuperscript{853} ibid, p 3
\textsuperscript{856} ibid, p 6.
which is promising in terms of the development of IT in Germany\textsuperscript{858}. The report contends that IT offers solutions for case management\textsuperscript{859}, with particular regards to electronic case management systems, such as the facilitation of online registration and video conferencing between courts. Technological mechanisms such as these can be especially useful in criminal trials in relation to the giving of evidence and sentencing. Other tools referenced in the report such as office automation tools and drafting assistance tools\textsuperscript{860} support court staff by speeding up much of the day-to-day work involved in court proceedings. Case law databases also equally aid judges and prosecutors in supporting their respective decisions and arguments, allowing them to access information from one particular online source, rather than manually look up cases using paper sources.\textsuperscript{861}

IT can further improve communication with court users by providing them with direct access to certain types of information without the need for a professional. This can be achieved with general-interest information websites for users for example, which may describe the courts’ work or provide a judicial map showing the distribution of courts across the country\textsuperscript{862}. Websites allow those seeking access to justice to obtain clear guidance on court proceedings.

Conclusion

It can be gleaned from examining the European Commission for the Efficiency of Justice report that IT seems to have vastly improved communication, not only between the various persons associated with court proceedings but also in the individual branches of law such as civil/commercial, criminal and administrative\textsuperscript{863}.

Data Protection

It is important to note that the increasingly widespread access to social media technologies has in of itself created a public interest law issue across the globe. One key area where Germany is fighting to secure justice through the usage of technology is through its establishment of the Federal Commissioner for Data Protection and Freedom of Information (BfDI). Each Member

\textsuperscript{858}ibid, p 14. \textsuperscript{859}ibid, p 22. \textsuperscript{860}ibid, p 18. \textsuperscript{861}ibid, p 19. \textsuperscript{862}ibid, p 29. \textsuperscript{863}ibid, p 38.
State of the European Union is mandated to create such a post under Article 51 of the General Data Protection Regulation (GDPR), a new EU-wide set of laws governing privacy rights and data usage. The BfDI’s powers are regulated by Articles 57 and 58 of the GDPR, as well as by the provisions of the Bundesdatenschutzgesetz (BDSG) a German federal data protection act. Within the BDSG is the enshrined special constitutional right to informational self-determination: i.e. to be informed of how one’s personal data collected online is used. Privacy is seen as a fundamental value in German law, stemming from the state’s history with autocratic regimes, and the importance of an impartial body that can protect citizens from both state and private interference cannot be overstated. It is therefore the BfDI’s duty to ensure that the laws governing personal data are complied with by third parties, and it also enjoys the powers to sue any such breaches which are seen as violating this constitutional liberty.

The creation of the BfDI has enabled further access to justice for German citizens by creating a publicly funded entity that ensures private companies are not unfairly harvesting data from Germans’ online activities - and if necessary, has the statutory powers to enforce claims on behalf of these concerned citizens. This has become an increasingly important topic with the advent of “Big Tech” companies which have been found to be in breach of GDPR by illegally transferring German (and other European) citizens’ data and metadata back to the United States for profit. This harvesting can include categories of “sensitive” data, such as German citizens’ criminal history and health records - which are bought by American companies to further their own capitalistic ventures.

However, much to the frustration of German authorities, there is one major barrier preventing these American companies being brought to justice in Berlin. Under the “one-stop-shop” mechanism, German authorities cannot directly prosecute these technology monoliths – Twitter, Facebook and WhatsApp, for example – as these Big Data companies have their headquarters in Ireland. Nonetheless, the current Federal Commissioner for Data Protection and Freedom of Information, Ulrich Kelber, has been an extremely vocal critic of the Irish Data Protection Commission, and has repeatedly voiced his frustration at his Irish counterpart’s tardiness and failure to vindicate Germans’ citizens fundamental rights. For a country with over

26 million Facebook users, this criticism symbolises significant efforts by the German authorities to ensure that the public interest is protected, in paving a new avenue for protecting basic constitutional rights from Big Tech. In addition, the BfDI has been quick to act against internal breaches of data mishandling. In November 2019, the Berlin Commissioner for Data Protection and Freedom of Information (Berliner Beauftragte für Datenschutz und Informationsfreiheit) issued a sizeable 14 million euro fine against a German real-estate company for failure to establish a competent storage-and-deletion procedure for their clients’ data, as mandated under the GDPR. The BfDI, therefore, has created a new breed of public interest law: Germany, by regulating technology in a stringent manner, has ensured that every citizen’s right to benefit from technological benefit does not cost Germans the basic dignity afforded by deeply held privacy rights.

Overcoming barriers to justice
Overcoming barriers to justice in Germany lies not in the proliferation of online justice procedures, as these are already present, but in increasing their authority and validity. To this end, the German Free Democratic Party are proposing a law to regulate legal technology and provide “automated consultation”, i.e. advice from non-lawyer legal professionals. The situation is that German lawyers hold a monopoly on legal services, which this law would break by judicial regulation of online dispute resolution and a ban on lawyers charging success fees. The aim is to place lawyers and non-lawyers in the same playing field, and allow people seeking legal advice the choice of who to consult. This would resolve the three problems recognised above; regulation would give validity to online dispute resolution, codification would recognise online dispute resolution as a legal service and federal status would break the deadlock of different state approaches to legal technology.

One other method of promoting access to justice in Germany would be to reverse the privatisation of the German legal technology market. Currently, the legal technology sector is very much geared towards profit-making companies. The redistribution of these technological platforms to non-profit public advocacy bodies may work to enhance a more even playing field.


where access to a lawyer becomes ubiquitous, and not just a commodity for the middle class as ADR has become.

Relaxing the marketing of the provision of digitalised legal services may also serve to promote greater accessibility to the legal system, as Germany is one of the most stringent countries in its governance of the advertising of legal services.869

Conclusion: Remaining barriers

While the Free Democratic Party’s proposed law proves highly comprehensive, a problem remains around authority of online dispute resolution services, yet unaddressed by any source. Lawyers and online dispute resolution services would be made to compete with one another on a level playing field, but the ultimate authority would lie with the Constitutional Court, tended by lawyers. When there is such an environment, lawyers may still compete unfairly with online dispute resolution by dismissing it as pointless, as lawyers can be consulted from the start and appeals will inevitably finish with them. This has been resolved by the states of Berlin and Brandenburg by mandating mediation before litigation, essentially placing all online dispute resolution below the courts. Barendrecht has proposed a subsidy solution, in which the government subsidises the registration fees of certain online legal services870.

Overall, Germany has made tangible progress in facilitating greater access to justice with technological development, however various obstacles still remain.

870 Maurits Barendrecht, ‘Rechtwijzer: why online supported dispute resolution is hard to implement’ (ILAG Conference, June 2017).
Chapter 17: Comparative Analysis of Global IT Developments and their Effects on Access to Justice: Estonia

Isabelle Healy, Jonathan Murchan
Estonia, a former Soviet country ‘reborn at the same time with the Internet’, is a small republic in north-east Europe that has become a pioneer of utilising technological solutions in public services, particularly in the justice sector. A member of the EU since 1 May 2004, it uses a civil law system with a distinction between public and private law. The following is an examination of the recent developments in the legal sector regarding technology and access to justice. Estonia is an extremely technologically advanced nation, and many government services are online. Public service innovation is much more advanced than in other countries. External factors to pure technology usage are also very important relative to other countries. Things like appropriate laws and regulations and supportive policies are very much to the forefront. This is partly the result of the small population of the country, meaning that online projects are less risky because there is less data on the line under threat from hackers. The relatively similar socio-economic make-up of the population means that it easy to introduce new measures and technological processes without much opposition if these processes fit broadly with the opinions of the society at large (since there is no long tradition and historical way of providing government services).

Technology in the Justice System

Estonia has gradually integrated technology further and further into its justice system, far earlier than the introduction of AI judges. The first country to implement blockchain on a national level, citizens carry ID cards and government documents that are easy to file online. The Electronic State Gazette (Riigi Teataja) is the central national database for all Estonian legislation (similar to the Irish Statute Book) and access to the Gazette and to all legal information services is available free of charge. All legislation of the legal code is available along with consolidated texts for most provisions. For improving court processes, a single

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874 ibid.
875 ibid.
central Court Information System (KIS) has been developed to connect existing systems to allow the exchange of data and communication between parties for those involved in the criminal justice information chain.\textsuperscript{878} This is controlled by the Ministry of Justice in collaboration with other ministries and has led to a successful digitisation.\textsuperscript{879} Estonian legislation clearly describes and specifies what types of information must be available digitally for citizens and how it should be handled.\textsuperscript{880} This means that citizens have much faster and easier access to the law and legislation than in other European nations, and Estonia currently has the second fastest court proceedings in Europe.

Reduced court fees have been introduced for digital documents to encourage citizens and lawyers to exchange information digitally and the exchange of digital documentation for proceedings is a requirement in law.\textsuperscript{881} A benefit of this is that the reduced fees mean there is less of a financial barrier to accessing justice for some citizens and proceedings can be simplified. On the other hand, the requirement of electronic documents may mean that others who do not have access to internet services may see their access to the justice system reduced, slowed down or denied. However,\textsuperscript{882}

In Estonia, the working processes of the justice system have been altered and enhanced by technological improvements to include the sending of documents electronically and the automatic allocation of cases to judges, resulting in a better balance and distribution of cases so that capacity is used more efficiently in the court system.\textsuperscript{883} This digitisation has meant that proceedings have been sped up, increasing the probability of accessing the justice system. However, a paper trail of documents continues to exist because the ‘paper document is still legally considered to be the original document.\textsuperscript{884}

The aim of the Estonian digitisation initiative is ‘improving the service to citizens through better information provision and digital access to information associated with the criminal

\begin{flushright}
\textsuperscript{878}ibid. \\
\textsuperscript{879}ibid. \\
\textsuperscript{880}ibid. \\
\textsuperscript{881}ibid. \\
\textsuperscript{882} Statistics Estonia \texttt{<https://www.stat.ee/29992>} accessed 2 June 2020. \\
\textsuperscript{883} Carolien de Blok, Aline Seepma, Inge Roukema, Dirk Pieter van Donk, Berend van Keulen, Rinus Ofte, ‘Digitisation in criminal justice chains: The experience in Denmark, England, Austria and Estonia from a supply chain perspective’, (University of Groningen and WODC Ministry of Security and Justice Netherlands 2014). \\
\end{flushright}
justice process’. The Estonian E-File system enables the simultaneous exchange of information between parties in a case and links all areas of the process, including the legal aid system, and saves time and money due to the electronic communication and data being only entered once. This will lead to better access to justice for Estonian citizens. The system was developed with the aim of achieving transparency for the parties involved and for the public. The public get insights into criminal cases in which they are involved while victims can see how the criminal case is progressing and what punishment is imposed on the accused. The Estonian model has since gained a reputation of a reliable and trustworthy service due to the level of encryption and security in the e-File platform. As noted by the authors of a Dutch government report, ‘Estonia was emphasising accessibility and service for individual members of the public’. The technology is used to support the legal system as it allows legal practitioners to focus on important issues requiring human interaction.

**Robot Judges – Eliminating the Human Element**

Estonia has begun to test a pilot judicial AI program that will adjudicate disputes of up to €7000, most likely focusing on contract disputes and crucially, all decisions can be appealed to a human judge. The benefit of using AI judges is that it can solve simple problems, thus leaving more time for judges and lawyers to solve tougher disputes. There is the possibility that case legal research will be reduced to a matter of seconds. For this to be successful at a

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885 ibid.
888 ibid.
larger scale, one must avoid certain pitfalls and judges must understand the technology.\textsuperscript{895} The problem of automation bias in the programming and learning of the machine has the potential to affect outcomes and this must be overcome by ensuring that humans continue to inject their own expertise into the system.\textsuperscript{896}

The main issue with using AI in a common law system where precedents are relied on, is that the ability of AI to create new precedents is, for the present at least, unknown. Currently AI relies on having an electronic database of past cases that are used to infer the probabilistic outcome of individual trials.\textsuperscript{897} This means that it does not move the law forward like a human judge might, changing the law in accordance with social changes. Comparatively, AI acts much more retrospectively when it only weighs past decisions in its calculus.

The current restriction of AI to small-claims cases goes some way towards mitigating this harm, since these cases are often straightforward or have low stakes. In the past, where judges were prevented from spending time on larger, more significant cases, the introduction of AI means that they are in a position to deal with huge backlogs and cases that are significant for progression of the law. AI can reach conclusions based on data within seconds and can handle multiple cases simultaneously. Even if they are not trusted (yet) with determining the outcomes of larger claims and criminal cases, the digitisation of the majority of Estonia’s legal documents means that they can locate relevant material for these cases almost instantaneously. This means that quasi-automated decision-making has two forms in Estonia. Firstly, the AI making legal decisions and creating precedents in small-claims cases and secondly, acting as a support system for judges and citizens.\textsuperscript{898} This lessens the pressure on the legal system as a whole, and may go some way to encouraging more citizens to take their cases to court, since this new process is less stressful, cheaper, and less time-consuming.

At face value, these two functions seem to be totally distinct; as in the second scenario the human judge retains decision-making capabilities. However, concerns have been raised that the persuasiveness of AI judgements and decisions can lead human judges to “rubber-stamp”

\textsuperscript{895} ibid.
AI judgements, thus giving AI more control over the justice system than citizens might think and blurring the line between advice and authority.\textsuperscript{899}

What is still unclear as of now is the usage that specifically robot judges will attract. Although online governmental services and documents are used and accessed frequently, Estonia’s e-platform OSALE was extremely unpopular relative to these other functions. Launched in 2007, OSALE was established as a platform to promote e-participation and promote open dialogue with the Estonian government. Among other things, it allows for government agencies to publish policy plans in order to improve transparency and citizen participation in governmental decision making. However, it has not facilitated as much dialogue or interaction as was hoped when it launched, with interest groups considering the platform detached from real governmental policy, and officials regarding it as useless.\textsuperscript{900} It has been speculated that the differences between e-participation systems (such as OSALE) and e-government systems (that facilitate service provision) are important when it comes to citizen participation.\textsuperscript{901} For example, most e-government systems are set up to automate an already existing process whereas e-participation systems seek to change something about the democratic process at a fundamental level, which may lead to more friction and resistance. E-participation systems also depend on their ability to engage a diverse array of groups, from officials to interest groups, who have different needs and expectations of the platform.\textsuperscript{902} The success of the system is a combination of human error, environmental constraints, demand, and political will. Clearly there is political will for a successful and fast justice system in Estonia - as they already have the second fastest court system in Europe. However, it remains to be seen if the public are willing to trust AI to make even small decision for them, and if they consider this change to be merely an automation of an already existing service or a radical rethink of justice.

\textbf{Other Developments}

A chatbot has been used by a law firm to provide free legal aid and this then generates legal documents for matching claimants, legal practitioners and government agencies. The program


\textsuperscript{901} ibid 9.

\textsuperscript{902} ibid.
for matching clients and lawyers is called “Hugo-AI”. This initiative works well in Estonia due to the fact that all citizens already use a national ID card, essential for online services such as e-voting and taxation. More than two-thirds of adults file online forms for government services, almost twice the EU average.

Conclusion

Estonia is a highly digitalised modern society and has a deeply entrenched use of technology in the justice system. It has recently begun to experiment with the use of AI judges in small disputes. This is an exciting development but leaves some questions as to the legitimacy of these decisions and the level of human input that still will be needed. The society is highly digitalised, and the introduction of online resources, databases and AI judges has the potential to increase access to justice for the citizens of Estonia and many other countries if it is applied elsewhere. However, the actualization of that increase is contingent on people having access to the internet. In Estonia, access to WiFi and the internet are almost ubiquitous, and computer literacy rates are high even for a European nation. It remains to be seen whether these conditions for success are replicable in other, less technologically advanced societies.

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904 ibid.
905 ibid.
Chapter 18: An Analysis of the Use of IT in the Irish Legal System

Colette Whelan, Ella McGill, Laoise Murray, Mary-Kate Slattery, Orlaith Connolly
In this chapter, the use of IT in the Irish legal system will be analysed. Since Ireland became a member of the then EEC in 1972, now known as the European Union (the “EU”), the Irish legal system has changed and adapted to incorporate EU laws into the national legal framework. The EU recognises the requirements for the use of technology in the legal system, especially for the purposes of access to justice for the citizens of all the Member States. The EU legislation, as it affects the Irish legal system, will be reviewed. The types of technology in use in the Irish legal system will also be detailed.

In addition, COVID-19 has challenged legal systems on a global level. Lockdown in Ireland has forced the judicial system to find new ways of using its existing technology to remain functioning, including increased digital communications, the conducting of trials remotely using video conferencing technology, and the accepting of electronically submitted legal documents. This chapter will discuss these solutions that enabled the legal system to work through difficult times. Finally, the chapter will highlight the current technological reforms that are in place for the Irish legal system.

I. Current Use Of Technology in the Irish System

Investment

The budget allocated to the Irish judicial system - at €24 per inhabitant - is lower than the European Union median of €34 per inhabitant.\(^906\) This budget is considered low for Ireland in particular, which has a comparatively high capita GDP, however this disparity could be purely a result of Ireland’s common law system, due to for example the comparatively low number of professional judges working in common law systems over civil ones.\(^907\) An increase in the Irish judicial budget between 2014 and 2016 saw 7.4% of it invested in IT tools, and in particular, there was a significant increase in allocation to computerisation.\(^908\) The Court Service has acknowledged that this increase in investment has resulted in progress in standardising processes and upgrading ICT systems, however progressing ICT projects while maintaining existing projects poses an existing challenge.\(^909\) In their Annual Report for 2017, Mr Justice

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\(^{907}\) Ibid.

\(^{908}\) Ibid 38.

\(^{909}\) The Court Service, *Strategic Plan 2017 - 2020* at 14.
Frank Clarke, commented that “the potential of technology to improve access to justice, enhance service delivery and improve efficiency is enormous”. Thus, it has been announced that €100 million will be invested in online judicial services over the next 10 years with €17 million allocated to the ‘digital first’ programme and €80 million allocated to new technology or ‘new ways of working’.

Current Technology

The technologies operating in the Irish courts have been evolving in recent years. In 2016, *Lanigan v Barry* was the first paperless litigation case in Ireland, using documents which were scanned and uploaded to tablets via the eCourt App, replacing paper documents and lever arch files. It has been noted that this approach could eliminate significant wastage of resources, energy and expertise. This sentiment developed in legislation in 2018, providing that documents can now be served electronically. Despite these developments, *The Irish Times* have reported that when this was introduced, lawyers were slow to take up the technology and opted instead for the long-standing paper file system, indicating that the infrastructure in the courts and capacity for change among professionals is lacking therefore these technological developments are rendered unsustainable.

The following are current services provided by the Court Service and are accessible via the user-friendly Court Service website.

A Small Claims service is provided, which is a procedure of dealing with a consumer civil dispute - of a claim not exceeding €2,000 - without involving a solicitor and this can be filed and monitored online through the Court Service Online (CSOL) system.

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914 S.I. No. 378/2018 - Circuit Court Rules (Service) 2018.
The Court Service also allows Court Fines\textsuperscript{917} to be paid online using credit or debit card, using the PIN and case number from a Fines Notice received in court.

Phase one of the E-Filing of Application for Leave to Appeal to the Supreme Court\textsuperscript{918} has been launched through CSOL. This allows solicitors’ firms and law offices of state bodies to lodge an application of this nature electronically where parties are legally represented. Legal firms and offices can register, applications can be made, documents uploaded and fees paid - all online.

The Court Service has outlined that from July 3rd 2020, CSOL will be the primary channel for licensing Court Orders nationwide. This comes after such eLicensing\textsuperscript{919} was successfully piloted on this platform in counties Donegal, Sligo, Leitrim and Louth. Legal firms nationwide will now be able to lodge, pay and track applications for licensing online.

Finally, phase one of the High Court E-Filing of Application for Legal Costs Adjudication\textsuperscript{920} has been launched and allows legal practitioners and legal costs accountants to lodge such applications electronically where parties are legally represented.

Mr Justice Frank Clarke has spoken publicly about the efficiency and increasing popularity of the above initiatives, which provide services through a swift round-the-clock portal.\textsuperscript{921} Furthermore, the Court Service has recognised huge potential for “ICT to deliver more digital on-line services with more streamlined processes, thereby improving access to justice.”\textsuperscript{922}

Additionally, the Legal Aid Board\textsuperscript{923} facilitates online applications for civil legal aid and advice, as long as applicants live in the Republic of Ireland and have access to a personal computer with internet access. Beyond that, the applicant must provide certain documentation relating to income to prove eligibility, for example a payslip or P60. To support access to this, the Legal Aid Board also provides a quick user-friendly online financial eligibility calculator.

\textsuperscript{917} The Court Service, ‘Fines’ \texttt{(courts.ie)} <https://beta.courts.ie/fines> accessed 03 July 2020.
\textsuperscript{918} The Court Service, ‘Leave Appeal’ \texttt{(courts.ie)} <https://beta.courts.ie/leave-appeal> accessed 03 July 2020.
\textsuperscript{919} The Court Service, ‘eLicensing’ \texttt{(courts.ie)} <https://beta.courts.ie/elicensing> accessed 03 July 2020.
\textsuperscript{922} The Court Service, \texttt{Strategic Plan 2017 - 2020} at 13.
In 2017, following the pilot of a Supreme Court argument broadcasted on RTÉ, Mr Justice Frank Clarke announced that “we are taking the step of televising the judgments of the Supreme Court, as a way of demystifying the courts process. We wish to allow people to see how their highest court operates. This will help explain and create an understanding of the courts.” Such a development will bring the legal system into the homes of the Irish public.

Special Measures

Part III of the Criminal Evidence Act 1992 introduced the concept of special measures to support the giving of evidence by children for proceedings involving violent and/or sexual offences. The principal technological measures included video-link and pre-recorded testimony and the introduction of such was quite progressive. Although the constitutionality of such evidence was challenged on a number of occasions in, for example, *White v Ireland*, its constitutionality was eventually upheld by the Supreme Court in *Donnelly v Ireland*. In 2017, Part III was amended by the Criminal Law (Sexual Offences) Act 2017 and the Criminal Justice (Victims of Crime) Act 2017 to transpose and give effect to the EU Victims Rights Directive.

Section 13 provides that video-link, which enables a witness to testify live on a screen in the courtroom while being in another location, may be used by (i) anyone under 18 years of age who gives evidence and (ii) anyone under 18 years of age who gives evidence in relation to sexual offences. Section 16 provides for pre-recorded testimony, however this has been historically quite restrictive as there have been admissibility issues.

II. The Irish Legal System’s Use of Technology During the COVID-19 Pandemic

The COVID-19 pandemic requires the Irish legal system to use existing technologies in new ways. This includes adjusting its methods of communications, both inwards and outwards, conducting trials remotely and facilitating electronic submission of documents.

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Communications

One of the biggest ways technology has had to be employed in the legal system during the pandemic is in communications. Widespread laptop ownership meant working from home and alternating office hours could be introduced to comply with social distancing guidelines. As such, in-person communications between colleagues have been replaced with increased communications via phone, Whatsapp, email and Zoom\textsuperscript{928}. This change has been vital to keep employees informed, morale high and the justice system functioning, while simultaneously maintaining safe practise.

Methods of correspondence between the legal system and the public have also changed. In particular, there has been a surge in the use of email. Email can now be used to adjourn all civil matters by consent, to apply for consent orders that do not require the hearing of evidence, to send copies of judgements to relevant parties, and to deal with subsequent issues that arise. To facilitate social distancing, only cases that the court deems ‘urgent’ are going ahead. Applications for one’s case to be considered ‘urgent’ can be made to the relevant court office via email\textsuperscript{929}. Court offices remain open, but one can only attend in person if one has obtained an appointment via email\textsuperscript{930}.

The way in which the Court communicates information to the public has also changed. The Courts Service of Ireland already posted regular updates of proceedings on its website, Facebook and Twitter, and issued a regular newsletter of legal updates. During COVID-19 these practises are continuing, and new ones are being formed using existing technologies, to inform the public. Judgements of cases now being conducted remotely are to be posted online\textsuperscript{931}. The \url{www.courts.ie} website has a banner pinned atop their homepage for COVID-19-specific updates. The educational video ‘Safely Attending a Court Building during the COVID-19 Pandemic’ was posted on The Courts Service of Ireland YouTube channel. The Legal Aid Board has also amended the way it shares information with the public, with sections

\textsuperscript{928} ‘ Facing the challenge – how the Court Offices are responding to the pandemic’ (Courts Service News, May 2020) <\url{http://news.courts.ie/newsletter/1tqmfxf7uump1af66l69y01?lang=en&u=a&n=p=57037781&f=23121565}> accessed 2 July 2020.
on its website dedicated to the pandemic (‘Legal issues that may rise because of the Coronavirus COVID-19 crisis’). It has also set up a nationwide telephone service for legal information, and another one specifically for victims of domestic violence.

Amendments to hearings

Hearings are now taking place remotely to ensure social distancing. However, some entire trials can now be conducted remotely. On 31 March 2020, Chief Justice Frank Clarke and the Presidents of all Jurisdictions of the Courts confirmed that the ICT infrastructure to navigate remote hearings was already being developed in Ireland. They then confirmed, on 9 April 2020, that this technology was complete and that its viability would be tested via a pilot mock trial. On 17 April 2020, a mock virtual trial occurred. The following Monday, the first real remote hearings were conducted in the Supreme Court and the Court of Appeal. The cases were displayed on video screens in mostly empty court rooms for media attendance. Trials of this nature have continued, a reported 47 having already been held by 8 May 2020, including call over lists, and case management, civil and criminal hearings.

The Court are using the video streaming app PEXIP for these trials. PEXIP can be accessed using many different platforms such as Skype, Zoom or Microsoft Teams. Some 10-14 days before the hearing, the presiding judge will issue a ‘statement of case’. This will lay out the Court’s understanding of the case and its facts and seek clarification on anything the Court is unclear about. This procedure is hoped to resolve issues of clarity in advance of hearings, to minimise Court intervention for clarification purposes during the hearings themselves. On the morning of the hearing, the court registrars sit in their regular place. The judges stay in chambers. The registrars then call each case in turn, just as they usually would. Bona fide

932 R Geary, ‘Lessons from first remote Court hearings in Ireland and the UK’ (www.rdj.ie, 21 April 2020)
933 ‘Virtual Remote Courts Piloted in Ireland this morning.’ (beta.courts.ie, 20 April 2020). accessed 2 July 2020
members of the media are granted access to the trials so that justice continues to be administered in the public eye, and if and to the extent that it is practicable to do so, members of the public may be given access too. No new technology is required in the trial process, merely a reworking of the ways existing ICT infrastructure is used.

Currently, few courts in Ireland are equipped to hold remote hearings. This is expected to expand in the future. While this process is already established in other countries, the Chief Justice noted that they came from ‘significantly higher technology base[s]’ than Ireland.

E-Filing
While drop boxes have been established outside court offices for the depositing of documents, the Court also recognised the need for a move to ‘significant electronic lodgement and filing of documents’. This is another social distancing measure, which reduces the circulation of physical documents and numbers of people required to attend court offices. An information notice posted on 20 April 2020 details this procedure.

Conclusion
New uses of existing technology allow the Irish legal system to continue to administer justice throughout the COVID-19 pandemic, by enabling alternative means of communication both internally and with the public, hearings to occur remotely, and documents to be submitted electronically.

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938 ‘Gradual and careful planning for creating a pathway to opening some courts - Courts Statements Friday May 8th 2020’ (n 6).


941 ibid.

III. The European Union’s impact on IT in the Irish legal system

As a member of the European Union, Ireland is bound by EU laws that have direct effect (e.g. regulations), or obligated to transpose EU laws (e.g. directives). The EU has introduced laws that have improved or enhanced the use of technology in the judicial system, which the Irish legal system thereby benefits from. This section will highlight the areas that the EU has directly affected the use of IT in the Irish legal system.

European Small Claims Procedure

Citizens from Member States are increasingly more likely to enter into legal relations with individuals from different Member States. For example, online shopping has increased between Member States. The EU has brought in some measures to protect consumers in cross-border transactions. In 2015, the EU introduced Regulation (EC) 2015/2421943, which was given full effect in Irish law by S.I. no. 315/2018.944

Section 3 of S.I. no. 315/2018 allows for the use of electronic transmission of documents, provided (a) the sender is satisfied the intended recipient of the electronic communication received it and (b) a response is sent within seven days of the transmission. Otherwise, the electronic transmission is void and treated as if it had not been sent. The document must then be served by another means provided in S.I. no. 315/2018 within eight days of the electronic transmission. A document sent by electronic transmission will not be invalid or ineffective due to a lack of a manuscript signature or, where a fee is required, due to the lack of a stamp on the document confirming payment of the fee.945 The use of electronic transmissions makes it easier for individuals to pursue a small claims procedure from an individual or firm in another

944 District Court (European Small Claims Procedure) Rules 2018, SI 2015/2421
945 ibid.
Member State. The claim form can be downloaded from the Courts Service website,\textsuperscript{946} thus making the process easier for people to engage with.

Cross-border Maintenance Obligations

Regulation (EC) No 4/2009\textsuperscript{947} legislates for cases where there is a conflict of issues regarding maintenance obligations. Recognising the costs associated with cross-border maintenance cases, this regulation sets out that all parties to the action, including the courts, should be encouraged to use “modern communication technology” in order to reduce the length of proceedings and reduce the costs associated with the litigation.\textsuperscript{948} The use of technology facilitates individuals in accessing legal routes to pursue cross-border maintenance cases that they might otherwise have not been able to access. This regulation was given full effect in Irish law by S.I. no. 274/2011.\textsuperscript{949}

Electronic Signature

Ireland has recognised the use of electronic signatures since 2000 with the Electronic Commerce Act 2000,\textsuperscript{950} which was brought in to implement the EU Directive 1999/93/EC.\textsuperscript{951} This Act allowed for the use of e-signatures and gave recognition to electronic contracts in commercial and non-commercial transactions. Thus, contracts with e-signatures were deemed as valid as contracts with manually signed.\textsuperscript{952}

The EU repealed the EU Directive 1999/93/EC with the EU Regulation No. 910/2014 on electronic identification and trust services for electronic transactions in the internal market. Commonly referred to as the eIDAS Regulation, it came into effect on 1st July 2016. While eIDAS took into account the advances in technology since the 1999 Directive, eIDAS, in order to facilitate a smoother e-commerce environment, has implemented stricter controls on e-signatures. It has also enhanced security accountability of the trust service providers (“TSPs”).

There are three levels of e-signatures under eIDAS. They are:

1. Simple or basic e-signatures (SES).
2. Advanced e-signatures (AES). This enhances the security by requiring encryption of the document with an electronic code, which is then decrypted by the recipient. An AES should be unique to the signatory and identify them.
3. Qualified e-signatures (QES). This is similar to an AES but with enhanced security features. A QES signature has the equivalent legal effect of a handwritten signature. A qualified TSP issues a qualified certificate for QES, which will meet the requirements stated in Annex 1 of eIDAS.

eIDAS also covers electronic seals (“e-seal”) and electronic time stamps.

Currently, Ireland does not accept e-signatures on the following documents:

- Wills or any stated testamentary instruments laid down in the Succession Act 1965;
- Enduring powers of attorney;
- Affidavits, statutory or sworn declarations;
- Documents required by the rules, practices or procedures of a tribunal or court;
- Documents with the intention of creation, acquisition, disposal or registration of interests in real property

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955 ibid.
957 ibid.
958 Succession Act 1965.
Contracts for the sale / purchase of land are permitted to be carried out electronically.959

General Data Protection Regulation (GDPR)

With ever increasing usage of the internet in daily life, from online shopping to watching TV shows, people are leaving a digital footprint on the various sites they access. In order to protect the data privacy of European Union citizens, the EU brought in The General Data Protection Regulation 2016/679 (“GDPR”).960 This legal framework “imposes obligations onto organizations anywhere, so long as they target or collect data related to people in the EU”.961 Chapter 7 gives a detailed explanation of GDPR. This section will review Ireland’s response to the GDPR Regulation.

As an EU regulation, Ireland was not required to transpose the GDPR Regulation into Irish legislation. However, it did incorporate it into the Data Protection Act 2018.962 The Data Protection Act 2018 also transposes EU Directive 2016/680.963 This directive runs parallel to the GDPR directive,964 and details the way personal data is processed by the data controllers with respect to law enforcement purposes. The Data Protection Act established a Data Protection Commission, which acts as the State’s data protection authority. It set the digital age at 16 years, which is the age set by the EU, although they gave individual Member States flexibility to set a lower age, between 13 and 16 years.965

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960 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] OJ L 119/1
961 GDPR.EU (What is GDPR, the EU’s new data protection law?)<https://gdpr.eu/what-is-gdpr/?cn-reloaded=1> accessed 1 July 2020.
962 Data Protection Act 2018.
965 Data Protection Act 2018.
Online Dispute Resolution (“ODR”) Platform

The EU introduced Regulation (EU) No 524/2013\(^ \text{966} \) established an online dispute resolution (“ODR”) platform that allows traders and consumers within the EU to settle their disputes regarding domestic and cross-border transactions. Disputes are directed to national Alternative Dispute Resolution (ADR) bodies, appointed by the Member States and who are connected to the ODR platform.

The platform is easily accessible via any type of device, multilingual and disputes can be handled entirely online once the complainant has completed the online form on the platform.

As this is an EU Regulation, it has direct effect and does not require transposition into Irish legislation.

e-Justice Portal

The EU have developed an e-Justice portal which citizens from Member States can access for information on justice systems within the EU.\(^ \text{967} \) The portal contains sections on items such as law, case law, judicial systems and legal aid. It is easy to navigate, as the list of topics is on the left hand side of the screen. Each section contains an overview of the EU position, with a fact sheet on the specifics of each Member State on that section. To view a Member State fact sheet, an individual can click on the respective flag icon at the side of the screen.

While EU legislation is binding on all Member States, occasionally some negotiate opt-outs from treaties or legislation. If a Member State has negotiated an opt-out of particular EU legislation, there will not be an available fact sheet. For example, Ireland opted out of Regulation No. 606/2013\(^ \text{968} \) on mutual recognition of protection measures in civil matters. Therefore, the Irish flag icon is not available to click on under this section of the e-Justice portal, as the fact sheet does not exist.


To simplify the search for case law, the EU developed the European case law identifier (ECLI).\textsuperscript{969} Previously, while EU cases could be viewed on Member State databases, each database had a different identifier. EU case law, including judgements can now be searched, via the e-Justice portal, using the ECLI. Each Member State appoints a national ECLI co-ordinator, either a judicial or a government organisation. In Ireland, the national ECLI co-ordinator is the Department of Justice and equality and the country code is IE.

The ECLI consists of the following criteria:

1. ECLI
2. Country code – 2 characters
3. Court code – between 1 and 7 characters
4. Year of the decision
5. Unique identifying number – maximum length 25 characters

The ECLI is written as follows: ECLI:(country code):(court code):(year of decision):(unique identifying number).

The e-Justice Portal can be viewed in 23 official languages of the EU. This aids the access to legal information that individuals can have on the EU legal framework and how they might be able to access justice.

**EUR-Lex**

EUR-Lex is an online database of EU law and legal documents.\textsuperscript{970} There are eight sections under EU law containing Treaties, Legal acts, Consolidated texts, International agreements, Preparatory documents, EFTA documents, Law-making procedures and Summaries of EU Legislation. There are three sections under EU case law, which are Case law, Digital reports and Directory of case law. There is also a section on National law, where information on transposition can be viewed. Another section is Information, which contains developments on EUR-Lex, EU online budget details and EU news. EUR-Lex is updated daily.

\textsuperscript{969} E-Justice portal (ECLI European Case Law Identifier)  

\textsuperscript{970} The website for the EUR-Lex Access to European Union Law portal is  
Documents can be viewed in the official EU languages. However, the only documents that can be viewed in Irish are key legislation that has been adopted jointly by the Council of the European Union and the European Parliament and some treaties.\footnote{EUR-Lex ‘Which EU Documents can I find in Irish?’ (EUR-Lex) <https://eurlex.europa.eu/content/help/faq/documents-irish.html> accessed 8 July 2020.}

European Judicial Network (EJN)

This is a network of contact points within Member States for the facilitation of cross-border judicial co-operation in criminal proceedings.\footnote{European Judicial Network (EJN) <https://www.ejn-crimjust.europa.eu/ejn/Ejn_Home/EN> accessed 3 July 2020.} The website gives up-to-date details on the initiatives of the EJN. It also provides information on the implementation in each Member State of EU legal instruments.

One tool of the EJN is the European Judicial Atlas, managed by the EJN Secretariat. The Atlas is an IT tool that allows for mutual, cross-border legal assistance in criminal matters. The details of the competent authority of each Member State responsible for implementing this cross-border co-operation can be found on its website.\footnote{European Judicial Network (EJN) (European Judicial Atlas) <https://www.ejncrimjust.europa.eu/ejn/AtlasChooseCountry/EN> accessed 1 July 2020.} One advantage of the Atlas is that it can assist a Member State, using the online database, to find the appropriate authority in a different Member State, without needing to understand the manner in which their legal system operates.

e-CODEX

e-CODEX (e-Justice Communication via Online Data Exchange) is a pilot scheme across Member States which “provides easy access to cross-border justice for citizens, business and legal professionals all over Europe” \footnote{e-Codex: making justice faster ‘FAQ’(e-codex) <https://www.e-codex.eu/faq-e-codex#-~text=e%2DCODEX%20is%20currently%20maintained,grants%20of%20the%20European%20Commission> date accessed 5 July 2020.}. The project involves 19 Member States, of which Ireland is one.

The aim of the e-CODEX project is to improve the secure access, exchange and use of information from across the judicial systems within Member States, with the aid of information
and communication technology. Due to the cost effectiveness of the system, it should help facilitate access to justice for citizens of the EU.

For some Member States, e-CODEX allows some claims to be submitted electronically, such as a European Small Claim or a European order for payment claim. This is something that Ireland has not yet signed up for.

It is worth noting that e-CODEX is still in the development stage. Codex has stated that “The final outcome of e-CODEX will be an interoperable environment building upon national systems and infrastructures supporting the e-Justice activities, especially the European e-Justice Portal and the activities of the e-Justice Action Plans”.

IV. Comparative Analysis of Technology and Justice Systems in the EU

The use of legal technology in a system of justice is integral to the communication of legal information and additionally for procedural purposes to increase efficiency and to allow greater public access to justice. This is true for both the Irish and the greater European Union legal system and has been a subject of EU discussion for the past decade. Cooperation and coherency between the judicial systems of EU Member States achieves greater access to justice for all EU citizens, whether in their national courts or in dealing with cross-border disputes. As will be examined later in this section, Ireland has taken an unusual stance when it comes to judicial cooperation within the EU. However, enforcing the use of updated technology where possible to deal with cross-border negotiations could incentivise Member States to use similar technologies to enhance the efficiency of their national systems. This section will contrast the online systems in place in Ireland, with those of other Member States, in the areas of both civil and criminal law and seek to establish a legal reasoning for our comparatively backward practices. Furthermore, an examination of the current regulations made under Title V of the

975 ibid.
IT Development in Irish Courts

According to a 2018 Report published by the European Commission for the Efficiency of Justice,\(^\text{978}\) the use of information technologies in Ireland for civil dispute procedure and criminal prosecution is relatively outdated and underdeveloped when compared to the more dynamic and accessible online justice systems of other Member States. When considering the evolution of the global development of information technologies and their support between 2014 and 2016, Ireland scored a 6/9 in both 2014 and 2016 demonstrating our incomplete transition towards an IT based justice system and lack of substantial improvement within that timeframe.\(^\text{979}\) Comparatively, Austria, Poland and Germany scored 9/9 in 2014 and Spain, Austria, Hungary and Turkey scored a 9 in 2016. The 2018 Report states that Ireland invested 0.4% more of our State budget between 2012 and 2016 on the computerisation of the court system compared to an increase of 21.3% in Sweden and 25.5% in Scotland – although it is noted that cycles of maintenance on the systems and investment phases mean that budgets can differ significantly between countries.\(^\text{980}\)

It must be stated that the EU cannot regulate or condemn the judicial procedure within national courts unless there is evidence of an abrogation of the right to an effective remedy and to a fair trial under Article 47 of the Charter of Fundamental Rights of the EU.\(^\text{981}\) However, there is EU influence on procedures used for cross-border purposes as will be explained in the next section.

The TFEU Opt-Outs

When attempting to organise a passable second referendum to ratify the Treaty on the Formation of the European Union (TFEU),\(^\text{982}\) the Irish Government negotiated an opt-out


\(^{979}\)ibid. Map 4.14: The score is based off a scale of 1-3, with 3 being the most developed, on three components: technological equipment of courts, legislative oversight, and governance.

\(^{980}\)ibid. Map 4.15.


arrangement for Regulations and Directives made under Title V of the TFEU. The Government wanted to avoid being bound by legislation that conflicted with the UK-Ireland border policy and policing methods given the Irish common law system differs from those of Continental countries.\(^\text{983}\) We are one of only three countries who have an opt-out arrangement: Denmark and the United Kingdom are the two others. Title V of the TFEU governs the area of freedom, security, and justice; Chapter 2 of Title V focuses on border checks, asylum and immigration, Chapter 3 & 4 on judicial cooperation in civil and criminal matters respectively, and Chapter 5 on police cooperation. As the Irish government must make an opt-in declaration before the legislation becomes binding, it is not immediately clear if all Directives and Regulations made under Title V have a direct effect in Irish law. This is important as any of the Regulations centring on judicial cooperation in civil and criminal matters involve the use of common technologies and systems of justice in order to ensure trust and coherency between Member States. If Ireland opts out of one of these future Directives, there is potential for us to diverge from a standard modernised procedure of the EU to a more underdeveloped system and become further out of step with technological advancements used in the courtrooms of other European states.

Small Claims Procedure

An example of a procedural development initiated by the EU under Title V of the TFEU is Regulation (EC) No. 861/2007\(^\text{984}\) which set up a European Small Claims Procedure for cross-border disputes between traders and consumers. Cases involving issues of family law and maintenance, employment, social security matters or bankruptcy are not dealt with using this system; however, trading disputes of less than €5,000 in value can be dealt with efficiently through this stable, largely written procedure.\(^\text{985}\) The applicant begins the process online, by filling out a digital form on the e-Justice website\(^\text{986}\) to state their claim and is continued through online communications unless the applicant chooses an alternative. Often video-conferencing technology is used if oral statements are needed for the claim so that time and money spent on

\(^{983}\) Barry Vaughan, ‘Ireland’s Engagement with EU Policy on Justice, Home Affairs and Foreign Relations’ (National Social & Economic Council Paper 7) 7.4.2
travel can be reduced. Article 4(5) of the 2007 Regulation states that such forms should be made available to fill out online on the national websites of Member States, thus incentivising national courts to increase their use of online portals for similar activities in order to reduce the need for applicants to make their claims in person.

It is now possible in Ireland to initiate a small claim online by creating an account on the Courts.ie portal. Payment of the court fee and tracking the process of the claim through its various stages are also possible with the online portal. Most countries in the EU have developed online procedures to a greater extent; for example in Germany, an automated judicial dunning procedure handles written claims for debt collection from their inception to completion. Communication of documents using the German system is not allowed using simple email; rather an encrypted transmission path ensures complete data protection of all legal communications. Additionally, under Section 128a of the German Code of Civil Procedure, a witness may give oral testimony for civil cases through a real-time broadcast transmission to the court (available prior to COVID-19 induced lockdown). The French system is very similar with civil claims of up to €5,000 being processed 100% through the online service provided by the Huissiers de Justice.

Ireland has also adopted Directive 2013/11/EU, which provides a legislative framework for alternative dispute resolution (i.e. mediation) to cross-border disputes. Chapter 2(a) of the 2013

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988 ibid 9.
992 ‘Requirements for online dunning requests’ <https://www.mahngerichte.de/de/voraussetzungen-online-mahnantrag.html> accessed 26 July 2020.
Directive requires Member States to create both an online and offline information and procedural mediation portal to ensure public access to justice is of a high standard. If such services are available to the public for cross-border purposes, it begs the question as to what is preventing similar online services, such as the one in France,996 to become widely available for disputes at a national level.

The European Protection Order and Judicial Cooperation on Criminal Matters

In the area of criminal law and the protection of victims of violence, Ireland has been out of touch with some of the EU procedural recommendations. Ireland opted into Regulation (EU) No 606/2013997 complementing Directive 2012/29/EU998, which relates to mutual recognition in matters of civil protection. Additionally, we opted into The Victims Directive999 but decided against adopting the (criminal) European Protection Order Directive1000 (EPO) as it was believed unnecessary; most of the protection orders granted in Ireland are done so under the remit of civil and family law. This insular approach means that anyone from another Member State with an EPO has to reapply for a civil protection order here to have the same level of police protection.1001 If Ireland had opted in to the 2011 Criminal Directive, we would have been forced to reimagine the way our protection order system works and possibly adapt it to match the technological development of other EU states. This makes us unable to translate our criminal procedures to those of other countries in the EU using common IT systems.

Although it is not possible to link directly the increased level of IT development in countries such as Germany and France to a specific EU Directive which they are bound to and to which Ireland is not, it is clear that legislative intervention and reporting of national developments from the EU can encourage further developments in the area of IT-enhanced dispute resolution.

996 ‘Medicys’ is a free online mediation service between consumer and trader within France, available at <www.medicys.fr> accessed 26 July 2020.
999 ibid.
Thus, it is observed that cooperation between Member States on matters of procedural law can lead to cooperation on the increased use of technology, in turn leading to a harmonised and developed system across the EU.

**Conclusion**

In conclusion, although not incredibly substantial, investment in IT in the Irish courts is growing in recent years. This investment has increased online access to justice through, for example, eLicensing and television broadcasting of court judgements. Special measures allow witnesses of certain offences to testify via video-link, which is a well-established technological feature of the courts, or through pre-recorded testimony. While Ireland has managed to keep the judicial system functioning during the pandemic, it did so with notably less rapidity than some of its EU counterparts, due to its having a smaller technological ‘base’. In spite of this, it has made good use of the technologies it has, particularly by facilitating virtual hearings to go ahead. Ireland still has a long way to go to match her EU counterparts regarding the use of IT in the legal system. While the EU has items such as AI on its agenda, Ireland has still not implemented initiatives such as Track-my-crime, despite recognising its usefulness and has not gone as far as other Member States regarding electronic transmission of documents i.e. other EU countries have the legislation to complete a European Small Claim entirely electronically, while Ireland does not. Ireland has many technological measures in place, to ensure access to justice is made easier, however it still has further to go if it wants to match the standards of many other EU countries.
Chapter 19: A Roadmap for Integrating IT into the Irish Legal System

Alan Eustace, Emma Bowie, Katharina Neumann, Orla Doolin, Sean O’Driscoll, Tadhg McTiernan
This section sets out recommendations for how information and communication technology should be integrated into the Irish legal system to improve access to justice. It will focus on the following key areas: legal education, law firms, legal clinics, the Courts Service, prisons, and planning, before examining how mobile technology in particular might be used to the advantage of access to justice on a broader scale.

I. Legal education

It is particularly important to properly integrate technology into legal education. Educational institutions are a unique part of the legal system as they affect widespread, generational change; law schools shape the next generation of judges and practitioners, and the future of legal thought. Comprehensive education in legal technology at this early stage is the most effective way to instigate change in thinking and practice at every stratum of the legal system. Broadly speaking, the changes required to transition to such a model can be understood in two categories: training for use of new technology, and substantive changes to syllabi. The latter will, for the most part, follow changes in the law, and does not require a great degree of planning. The former necessitates a proactive approach.

Teaching Technology

The COVID-19 pandemic has of course brought to the fore certain technologies and their applications in a legal context. Remote hearings & consultations, online teaching, and other practices have made clear the need to incorporate tech into legal practice. It will not be necessary for legal educators to instruct students in most of these technologies. A certain degree of digital literacy may be assumed for law students, in the future to an even greater extent than now. Furthermore, the responsibility to instill this base level of tech familiarity does not lie with legal specialists, and it may safely be assumed that education of this nature will form part of future iterations of primary and secondary level syllabi.

This is not true for technology in all its forms, however. Less ubiquitous technologies, which are more explicitly linked to legal practice, should be incorporated into legal education at some

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1002 Tom Wicker “Practising Law In The 'New Normal’” (2020) IBA Global Insight 74(3) 46
level. Moreover, certain caveats should be borne in mind when students are assumed technologically literate. It has been pointed out that undergraduates’ digital literacy is sometimes shallow, grounded in areas irrelevant to practice, and may mask issues such as an inability to evaluate reliability of information sources\textsuperscript{1004}. This underscores the need to incorporate into legal education, without diluting education in core areas of law, relevant technology.

Data Privacy
Technology relating to data security is a prime example of a technology with which prospective practitioners must be made familiar. It is not so omnipresent that familiarity is to be assumed, and it is in some ways specific to legal practice. Furthermore, it may be argued that the lawyer has a moral duty to ensure proper care of data.

The lawyer-client relationship by its nature encourages and to an extent necessitates trust being placed in the lawyer. This reality is recognized and reflected in norms of practice, in statute, and in common law. Common legal practices such as redaction are better suited to physical documentation. These practices should be updated, and norms such as lawyer-client privilege should be reflected in an online world. The basic protections – personal passwords and usernames – do not suffice for sensitive data\textsuperscript{1005}. Hackers proliferate and become more sophisticated constantly\textsuperscript{1006}, and mass, indiscriminate surveillance by governments and big data paired with an ability to efficiently parse and categorize data by algorithm is cause for concern. This necessitates educating prospective lawyers in practices such as encryption, which prevent unauthorized access to data and communications. There is an existing body of academic work on this topic\textsuperscript{1007}, focused on making these practices accessible to practitioners of law. It is desirable to incorporate this work into legal education to a greater extent than is done at present.

\textsuperscript{1004}Simon Canick “Infusing Technology Skills Into The Law School Curriculum” (2014) Capital University Law Review 42(3) at 665
The current model, in Ireland as in many other countries, sees encryption and other practices taught to a certain limited extent; in specialized technology and IT law courses, with a view to fulfilling statutory obligations and giving the student better prospects on the job market. It would be preferable if encryption and general data privacy were incorporated to a broader extent at the level of institutions such as Blackhall Place or the King’s Inns - a brief module in data privacy for prospective practitioners would suffice. Data privacy should not be seen as a means to an end – a way to satisfy GDPR requirements – but as a necessary aspect of practice and proper education.

Limited mandatory instruction for soon-to-be solicitors and barristers would be well complemented by an introduction to the field at university level. This could be achieved by the introduction of workshops and modules in data privacy, as has been done elsewhere\textsuperscript{1008}. The current model results in unfairness- proper care of data is by and for large corporations with large clients, not for smaller practitioners. Widespread education will democratize the practice and mitigate this. Some regulatory authorities for the profession have made a degree of proficiency in this area a requirement for practice\textsuperscript{1009}. At some point, this is likely to be the norm. The main issue in this context then becomes whether educators will preempt this reality, and change prospectively, or be forced to adapt after the fact.

**II. Law Firms and Legal Technology: ‘More for Less’?**

The legal industry has never been regarded as a bastion of innovation, but in recent years, innovation has become vital for survival;\textsuperscript{1010} consumers are now demanding ‘more for less’\textsuperscript{1011}, with alternative legal providers and increased competition allowing clients to expect more from

\textsuperscript{1008} Miguel Willis “8 Law Schools on Cutting Edge of Tech + Innovation” (2016) Innovative Law Student \<https://www.innovativelawstudent.com/2016/04/7-law-schools-cutting-edge-tech-innovation/> (accessed 29 June 2020)


their lawyers. In this race to provide better value legal services, law firms are faced with a number of options: they may reduce their overheads, they may outsource, or they must innovate. This section will focus on the benefits of agile working for law firms, as well as technological advances which make it possible to streamline processes, providing higher quality services at a lower price.

Remote working: working hard or hardly working?
The benefits of agile working are undeniable; they offer law firms the opportunity to substantially reduce rents, as well as providing an incentive for employees in what is an increasingly competitive market. In 2019, 93% of top 20 law firms had vacancies with 53% of vacancies being filled through lateral hires. This has the effect of driving up salaries. The option to work from home not only attracts staff but can also improve retention, especially the retention of women, creating a more diverse workforce and lowering costs.

However, there are barriers to the implementation of flexible work practices, the most ubiquitous of which is the culture of ‘presenteeism’ which permeates Irish law firms. This problem is not particular to law firms, and many who work from home are familiar with it. Those who work remotely are less likely to be considered for promotion. Facilitating staff to work from home can also be expensive, and requires an initial investment in the necessary hardware, as well as software and training; however, there has never been a better time to make the change. Since the onset of COVID-19, the majority of Irish lawyers are now working from

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1014 ibid 28.
1015 ibid 22.
1016 ibid 28.
1019 Pilita Clark, ‘Why we’re about to learn if we really are in the A-team’ (The Irish Times, 1 June 2020), <https://www.irishtimes.com/business/work/why-we-re-about-to-learn-if-we-are-really-in-the-a-team-1.4266959> (accessed 1 July 2020).
home; 85% would like to continue working from home after the pandemic\textsuperscript{1020}, but 72% believe it will not become the norm.\textsuperscript{1021} The desire is there, and with many firms forced to invest in technology and rapidly expand the number of staff working off-site, there is now the opportunity to continue this trend, supporting staff in transitioning to work remotely, instead of a phased return to the office, leading to a change faster than anyone could have predicted or thought possible.\textsuperscript{1022}

Nonetheless, it is important to appreciate that agile working capabilities do not represent some utopian future. Setting aside the environmental difficulties and increased caring responsibilities many lawyers, especially women, face, working from home can blur boundaries, resulting in lawyers who are ‘always on’.\textsuperscript{1023} While the facility for lawyers to work ‘at any time in any location’ has been lauded as progress,\textsuperscript{1024} it can lead to burnout, and so systems must be put in place to protect workers from a transition from presenteeism to performative activity online, assisting workers in setting boundaries between their work and home lives.

While law firms will never be able to dispense with their offices, necessary for client meetings and collaborative work,\textsuperscript{1025} with the right technologies in place law firms can reduce costs while attracting and retaining a skilled and diverse workforce, leading to better outcomes for clients, and for their bottom line.

Law-tech or high-tech? The future of law firms and technology

Technology can now create increased efficiencies when embraced by law firms, with computers increasingly capable of performing repetitive tasks better than the young lawyers

\textsuperscript{1020} Ibid.
\textsuperscript{1024} Dawn Jones, ‘Flexible and Agile Working in Law Firms’ (2017) 17 LIM 11, 12.
they were previously delegated to.\textsuperscript{1026} While widespread use of artificial intelligence is still many years away,\textsuperscript{1027} law firms are increasingly turning towards technology to satisfy client needs and reduce costs.\textsuperscript{1028}

The period of rapid technological advancement we are now entering will create drastic changes in our courts,\textsuperscript{1029} and consequently how law firms do business. One such change has been the introduction of Technology Assisted Review (TAR), which combines human expertise with predictive coding,\textsuperscript{1030} and was approved for use in Ireland in \textit{IBRC v Quinn}.\textsuperscript{1031} It has allowed law firms to provide ‘more for less’, drastically reducing the time required to review large quantities of documents.\textsuperscript{1032}

The pressures placed on law firms by alternative service providers have highlighted the need for law firms to keep pace with rapidly developing technologies.\textsuperscript{1033} An ever-increasing amount of information is available online, from legislation and case law to ‘document assembly systems’.\textsuperscript{1034} Clients are now approaching lawyers only for the most high-level work.\textsuperscript{1035} This has led to the diversification of law firms, with many lawyers now working as part of multi-

\textsuperscript{1031} [2015] IEHC 175; [2015] 1 IR 603.
disciplinary teams. A survey carried out by Oxford University showed 40% of solicitors surveyed in England and Wales are already working in multi-disciplinary teams. As technology advances, we can expect to see an increase in the number of lawyers working in multi-disciplinary teams as law firms adjust to keep pace.

Automation of process will also be key for law firms to remain profitable moving forward. Already we are seeing the automation of routine or rudimentary tasks, with investment in automation of manual processes planned by 44% of firms in Ireland at the end of 2019. Software such as Kira is being used to carry out due diligence, apps such as VizLegal and Oathello are making information more accessible to law firms and reducing paperwork, respectively, while software such as Brightflag is helping clients to manage legal fees. Irish Tech News also predicts the increased adoption of contract management systems ‘for the entire life cycle of legal documents, from requesting to negotiating and authoring to approval’, along with the use of ‘template management systems’ to automatically create contracts. These developments will help to satisfy the demand for legal services ‘quicker and cheaper’. Of course, these developments will require increased training of lawyers, and perhaps the training of a new type of lawyer, as discussed above. The security implications of the adoption of any new legal technology must also be monitored closely to ensure continued confidentiality.

1038 Smith & Williamson, ‘8th Annual Survey of Irish Law Firms’ (2020) 34.
and avoidance of security breaches, but if implemented correctly, emerging legal technologies have the potential to drastically reform law firms as we know them, allowing law firms to truly provide ‘more for less’.

III. IT and legal aid services

In Ireland, legal aid is one of the main ways by which the State enables the realisation of the right to access justice. It is clear, however, that there is a demand for a more financially inclusive and generally expanded legal aid model. It is submitted that integration of IT within non-profit organisations providing legal aid services would improve community delivery of legal aid, and largely enhance access to justice. Up to now, there has been very limited adoption of technology into the provision of community legal services in Ireland. There are commercial legal aid websites offering information packages and online-consultation services at low costs. In non-profit organisations, the extent of remote services are phone-in clinics such as those offered by FLAC in light of the COVID-19 pandemic and, as of 2018, the legal aid board rolled out card payment terminals, connected to the Government’s VPN, and ‘significant progress was made on the replacement of end-of-life PCs across the entire office network.’ Funding has largely constrained the expansion of traditional civil legal aid.

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The adoption of IT in this context represents an opportunity to do more with less. That is, to offer a broader body of legal aid, while facilitating time and cost savings. The adoption of technology will enhance access to justice, while optimising the more resource and time-consuming practices of legal assistance. Roger Smith astutely identified how to approach the adoption of technology into legal aid: ‘The issue is how, facing a realistic assessment of what is available, we can use technology to construct a network of provision which provides the level of legal advice and assistance to which people are entitled.’

IT has been embraced into the traditional legal aid model in other jurisdictions. In the US, LSC devised a model which consists of a legal information portal, put in simple language, which aggregated the online information already available, and provides it to participating entities, or to people seeking assistance to specific problems. Operating at all times, the system was designed to provide referrals matching users with services according to their problem and was to be available on mobile devices, laptops and tablets. In the same line of development, in Canada, MyLawBC uses guided pathways, which is a system which asks questions and based on the answers dictates what sort of information is needed, to provide bespoke ‘action plans’ to individuals seeking assistance, and includes online mediation and dispute resolution tools. These online models give people the information they need to help themselves without or prior to accessing advice services, and are offered alongside traditional face-to-face services. In Ireland, services like these would offer help to people who may not necessarily qualify for aid under statute, but still are in need of assistance, or basic information. Furthermore, these services can allow for the expansion of services that are particularly important. For example, based on the data that 84% of applications to the Legal Aid Board involved a family matter, the family mediation service and the information offered by the Legal Aid Board can be expanded to include online mediation and dispute resolution programmes in an effective way. Finally, remote service delivery models, such as practices

1051 See <https://mylawbc.com/> (accessed 1 July 2020). See also for a similar example in the US, funded by Microsoft: <https://simplifyinglegalhelp.org/about/> (accessed 1 July 2020).
based around the use of Skype or Zoom, offer reduced costs and cut down time taken to see clients.

The examples provided above are a few of a range of researched and bespoke technological innovations to the provision of legal aid. More generally, the underlying aims of IT integration in this context are to: 1) develop technologically enabled frontline services for clients or service users for legal empowerment through public legal education, information and advice, 2) improve user interaction methods for advice provision and 3) to put in place better processes, products and models for practice management.\(^\text{1053}\) It is recommended that Ireland take these elements as central to the roadmap for integrating IT in this context.

In Ireland, discussions of integration of IT in this area suffers from a lack of collected and analysed data. Lack of research impairs attempts to make evidence-based recommendations and hinders broader discussion of the topic. Concerns of funding, problems of digital and legal literacy, information fragmentation, and regulatory concerns have been raised as barriers to the integration of IT and legal aid services.\(^\text{1054}\) In the UK, however, it has been shown that the benefits of IT integration outweigh the barriers when done right. It is proposed that specific assessments of the barriers to the integration of IT and legal aid services should be performed using data and research. For example, an assessment of the digital delivery of legal aid to individuals on low incomes. Based on this assessment, bespoke digital services would be developed according to the researched outcomes. This would ensure that both funding is used in the most effective way, and that individuals receive technological innovations specific to their situations.

It has been acknowledged that face-to-face provision of legal aid is resource intensive and time consuming, and in some cases not optimal from the advisor, or the advice-seeker’s perspective. IT offers opportunities to optimise the current model of legal aid. However, IT is not a panacea. Online information portals, dispute resolution tools and advice given over skype will not offer conclusive replacement for the face-to-face provision of legal aid. Rather, these will offer alternatives to traditional legal aid, which will be availed of depending on the person and the

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\(^\text{1054}\) ibid 4.
situation. A technological integrated approach to legal aid will effectively optimise the traditional model operated by these non-profits of legal assistance and advice, allowing legal-aid providers to operate more comfortably in a time and resource scarce environment and thus enhance access to justice.

IV. Digitalisation of the Courts Service

a) Court procedures and case management

In recent years, the Courts Service has endeavoured to improve the efficiency and reduce the cost of civil procedures through the provision of online services. The Courts Service Online (CSOL) platform, which aims to provide a ‘civil integrated case management system’\(^\text{1055}\) for legal firms and court users, is currently being implemented on a modular basis.\(^\text{1056}\) Services which are fully operative include the online submission of small claims, the payment of court fees, and ‘eLicensing’,\(^\text{1057}\) while services which have entered the first phase of operation include the e-filing of applications for leave to appeal to the Supreme Court, and legal costs adjudication to the High Court.\(^\text{1058}\)

Despite these recent innovations, unnecessary court appearances, over-listing of court dates, and extensive pre-trial procedures continue to extend the length of cases and increase the cost of litigation, impeding citizens’ access to justice.\(^\text{1059}\) Indeed, in the Doing Business 2020 survey


\(^{1057}\) eLicensing enables legal firms to lodge, pay and track licensing applications and collect their licensing Court Orders. From 30 June 2020, legal firms nationwide can avail of this service, following an online pilot scheme in which the system was operative in Donegal, Sligo, Leitrim and Louth; see ‘Online System Goes Fully Live’ (Law Society Gazette, 22 June 2020) <https://www.lawsociety.ie/gazette/top-stories/online-licensing-system-goes-fully-live/> (accessed 28 June 2020).

\(^{1058}\) For more information on CSOL services, see <https://beta.courts.ie/online-service> (accessed 28 June 2020).

conducted by the World Bank Group, Ireland scored 8.5 out of a total of 18 marks in the ‘quality of judicial processes index’ – significantly lower score than the other eight common law jurisdictions surveyed. Within this category, Ireland received a considerably low mark for case management (1/6) and court automation (0.5/4). The Bar of Ireland notes that while this ranking represents the quality of judicial processes involved in commercial disputes, the same issues relating to case management ‘resonate across most areas of litigation’.

Moreover, the services provided for by the CSOL platform have digitised civil processes pertaining to quite specific and ‘niche’ areas. Achieving the digital management of most court proceedings will require a radical increase in the use of digital technology and significant government investment in the Courts Service, as is envisaged by its forthcoming Long Term Strategic Vision 2030.

E-filing

The electronic submission of documents and applications to the courts is a cost-effective, sustainable technological practice, which has been largely underutilised by the Irish civil courts system in comparison to other common law jurisdictions. E-filing is the norm in Victoria, Australia, where the Electronic Data Interchange (EDI) system of the Magistrates’ Court allows lawyers to file civil complaints and default judgements, as well as issue summonses for oral examination. The Australian Federal Court’s eLodgement facility also enables litigants-in-
person and legal practitioners to initiate proceedings,\textsuperscript{1065} and in England and Wales, both groups can monitor the progress of claims and appeals to the Queen’s Bench Division through the CE-File system.\textsuperscript{1066}

E-filing has thus far been employed in a limited capacity in the Irish system through CSOL services such as eLicensing and applying for leave to appeal to the Supreme Court.\textsuperscript{1067} However, developments in the electronic filing of documents to the Court of Appeal have been expedited with the advent of the COVID-19 pandemic, replacing the traditional practice of filing a hard copy Core Book and Book of Evidence, among other documents.\textsuperscript{1068} Documents are emailed to the Court of Appeal office, and in the event that files are too large to process, the filing party is advised to submit the appeal papers by secure file transfer or cloud server\textsuperscript{1069} – a system which could be translated to future e-filing practices.

In order to fully realise the potential of e-filing in the Irish legal system, the Courts Service could look to the example of our common law neighbours and extend existing systems of electronic filing to the lower courts. The benefits of paperless litigation are manifold: firstly, legal practitioners have direct access to their caseload online, receiving court notices, orders and judgements as soon as they are available.\textsuperscript{1070} Solicitors and litigants-in-person could commence civil proceedings remotely, for example, by electronically filing a claim notice to the District Court, or a notice of motion to the High Court.\textsuperscript{1071} This would reduce the time and money required to post or personally deliver an application to the respective court offices. From

\textsuperscript{1065} For more information, see <https://www.fedcourt.gov.au/online-services/elodgment/faq-started> (accessed 28 June 2020).
\textsuperscript{1067} RSC Ord 58; PD SC19.
\textsuperscript{1069} Appeal papers should be submitted in this manner where the Court of Appeal Office directs or permits, where the Court directs, or where the documents being filed exceed 10 megabytes (MB); see ‘Covid-19: E-Filing Information Notice’ (20 April 2020), <https://beta.courts.ie/news/court-appeal-covid-19-e-filing-information-notice-20042020> (accessed 28 June 2020).
\textsuperscript{1071} Currently, notices of motion must be filed and issued by post, or in person, at the Central Office of the High Court; for more information see: <http://www.courts.ie/Courts.ie/Library3.nsf/16c93c36d3635d5180256e3f003a4580/e214ba6dec8ee480258050000b28ad?OpenDocument> (accessed 28 June 2020).
an environmental perspective, e-filing could also significantly reduce paper usage and the overall carbon footprint of civil litigation.\textsuperscript{1072}

Digitalising court procedures

A core aim of the courts’ forthcoming ten-year digitalisation strategy is to reduce the time, resources and expense involved in procedural hearings and administrative adjournments.\textsuperscript{1073} Similarly, a key objective of the Administration of Civil Justice Review Group, which is chaired by Mr Justice Kelly, is to ‘remove obsolete, unnecessary or over-complex rules of procedure’ in civil cases.\textsuperscript{1074} As noted by the Chief Justice in his statement for the new legal year, achieving procedural efficiency will involve not least the automation of current processes, but indeed a complete overhaul of traditional practices;\textsuperscript{1075} resolving as many cases as possible through alternative dispute resolution before a formal hearing is required, and conducting physical hearings when only absolutely necessary.

Under the new ‘digital-first’ strategy, the costly and often time-consuming process of applying for an adjournment in the High and Circuit Courts will be transferred online where both parties consent.\textsuperscript{1076} Persons charged with minor ‘non-custodial matters’ such as litter, TV license and road traffic offences will be permitted to plead guilty online\textsuperscript{1077} – a significant development, considering that road traffic offences constituted just under 55\% of all District Court offences


\textsuperscript{1074} For more information see <http://www.civiljusticereview.ie/en/cjrg/pages/about> (accessed 28 June 2020).


b) Virtual courtrooms and remote hearings

Increased use of technology in courtrooms is widely expected to reduce costs and time delays in the courts system. Two significant elements under consideration are remote hearings (including pleas in criminal cases) on the one hand, and electronic resources in court during live hearings. Some of these innovations were already anticipated by the Courts Service’s new ten-year strategy for the use of technology in courts, but the COVID-19 pandemic has spurred much more rapid adoption. April 2020 saw the first time an Irish court sat with all parties ‘present’ by means of video-link. In particular, remote appearances by criminal defendants from prisons have increased 400% during the pandemic.

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1082 The strategy document itself has yet to be published, but is expected in the coming weeks.


There are concerns, however, that the ‘zoom to Zoom’\textsuperscript{1085} necessitated by the pandemic may simply result in, as Chief Justice Frank Clarke put it, ‘the digitisation of bad habits’,\textsuperscript{1086} rather than the far-reaching changes the courts system needs to improve access to justice. Holdsworth says: ‘It’s imperative that we don’t simply graft a digital layer onto the existing procedural systems currently designed to moderate and arbitrate competing legal rights and interests in society.’\textsuperscript{1087} The remainder of this chapter will sketch a roadmap for how to re-imagine the courts system in the digital age to better serve parties and practitioners, and realise the benefits of technology for access to justice. It will focus on three recurring challenges for jurisdictions who have integrated IT into the courts system to provide for remote hearings: accessibility, publicity, and security. The Irish courts system must engage with each of these if technology is to improve access to justice.

1. **Accessibility**

A key concern about integrating IT into courtrooms is that the technology be accessible to all users. This requires that both suitable software and hardware be available to all parties involved and, in light of publicity concerns below, other interested persons.

During the pandemic, the Courts Service adopted a service called PEXIP, which it describes as ‘an industry leader in inter-operability’; parties can dial in to the hearing from any similar video-conferencing software, such as Zoom or Skype.\textsuperscript{1088} It is recommended that such inter-operable services be used in future, to avoid the need for everyone to be operating off the same software platform.


The Courts Service itself uses the same hardware in courtrooms as is used for video-link witness testimony or remote appearances from prison. At present, parties are reliant on their own hardware, including internet connectivity, to join the hearing. Although this is unlikely to pose difficulties for those parties with well-resourced legal representation (law firms will have video-conferencing hardware and meeting rooms in their offices, which they can use for their clients), legal clinics, lay litigants or witnesses may not have access to similar technology.\textsuperscript{1089} If remote hearings are to enhance access to justice, provision must be made for all those with business before the courts to access suitable hardware, software, and conditions in which testimony can be given and proceedings observed.

2. \textit{Publicity}

The principle that justice be administered in public will require that the proceedings of remote hearings be visible to the media and other interested observers. Broadly speaking, there are two ways this can be accomplished. On the first approach, hearings are live streamed online (as in the UK),\textsuperscript{1090} or at least recorded and posted online afterwards. On the second (and this is the model currently preferred in Ireland during the pandemic), is that a secure link is provided to members of the media who may join the hearing. These journalists ‘[act] as the eyes and ears of the public’.\textsuperscript{1091}

There is already a system of Digital Audio Recording (DAR) in Irish courts.\textsuperscript{1092} However, recordings and transcripts are not generally available to the public. Even parties to the case


\textsuperscript{1091} Courts Service, ‘Virtual Remote Courts Piloted in Ireland this morning’ (20 April 2020), \langle https://beta.courts.ie/content/virtual-remote-courts-piloted-ireland-morning\rangle (accessed 24 June 2020).

\textsuperscript{1092} As governed in respect of the District, Circuit and Superior Courts by the District Court (Recording of Proceedings) Rules 2013 (SI no 99/2013), Circuit Court Rules (Recording of Proceedings) 2013 (SI no 100/2013), Superior Courts (Order 123) 2013 (SI no 101/2013) respectively.
need to make an application to the Court to obtain a copy of the DAR transcript, and a fee of approximately €200 per hour of recording may be charged.\textsuperscript{1093} An alternative to publishing video recordings of remote hearings would be to make the DAR or transcripts thereof more widely available.

3. Security

It goes without saying that video-conferencing technology used by the courts must be secure from cyber-intrusion, and respect users’ rights to privacy and data protection, as is the case for any organisation. There are three further issues in respect of remote hearings which should be highlighted.

First, for jury trials, best practice is for the jurors to be physically present in the same location and dial in to the hearing collectively, rather than each dial in from a separate location.\textsuperscript{1094} This allows the jurors to be protected in the ordinary way, easily sequestered if necessary, and ensures they all follow the proceedings in the same way (rather than risk individual jurors experiencing technical difficulties, \textit{etc}). Second, for hearings held \textit{in camera}, it will be vital to ensure the parties and witnesses are alone while dialling in, or only accompanied by persons permitted to observe the proceedings. This may require them to dial in from a secure location or under the observation of court staff. Where vulnerable witnesses need support, this should be physically present with them, rather than remote.\textsuperscript{1095} Third and relatedly, the Court will need to be assured that there is nobody ‘off-camera’ coaching, assisting, or even intimidating a witness during remote testimony, nor that the witness has access to documentary material they have not been given leave by the Court to consult.\textsuperscript{1096}

\textsuperscript{1093} For more information see <https://beta.courts.ie/access-court-records> (accessed 25 June 2020).
Of course, some of these security concerns undermine the case for remote hearings in the first place – if jurors and witnesses need to be in designated premises under the observation of court staff, there might not be much advantage in cost and efficiency over a physical hearing.

V. Other areas of the legal system

a) Prisons

Prisons would hugely benefit from increased integration of technology, making them more efficient, less cost intensive and less dangerous. Today, the Prison Act 2007 allows, under section 33, for court meetings via video link conferences. It states that certain applications can be made to the court using video link, if the accused person is in prison and has been provided with legal advice. An application to which this section applies may be heard without the prisoner being present in court if the court so directs on being satisfied that: to do so would not be prejudicial to the prisoner, the interests of justice do not require his or her presence at the hearing and that the prisoner can participate in, view and hear and be heard in, the proceedings before the court. Furthermore, it must be otherwise appropriate regarding to the prisoner’s age, the nature of the application, the complexity of the hearing and the prisoner’s mental and physical state. To increase and improve access to justice in Ireland, a broader implementation of this is necessary, theoretically expanding the legal scope of courts via video link by amending section 33(11), minimising the exceptions in which a video link trial is inaccessible as well as increasing practical realisation of online courts from prison.

Furthermore, while the Criminal Justice (Legal Aid) Act 1962 provides that free legal aid may be granted, in certain circumstances, such as for the defence of persons of insufficient means in criminal proceedings, it omits that this legal aid can be given by video link, which is not currently being utilized. Providing prisoners with legal aid via video link would greatly increase their access to justice. It would be more cost efficient for the state and less time-consuming for the legal practitioner, meaning that the prisoner could be provided with more and better-quality legal aid. Thus, the implementation of legal aid through video link is a crucial

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step that Ireland should take to make its criminal justice system more efficient and provide prisoners with the best legal representation possible.

b) Planning

The legal system is broader than just the courts; indeed, for most people outside the legal profession going to court is a rare experience, whereas interactions with regulatory or public services bodies are much more frequent. Integration of IT into the administrative state more broadly is often called ‘e-government’, and the European Union’s 2016 Action Plan obliges Member States to become ‘open, efficient and inclusive, providing borderless, personalised, user-friendly, end-to-end digital public services to all citizens and businesses in the EU.’

The Irish government’s current strategy in this area is coming to a close, and consultation has begun on devising a strategy for post-2020.

One area of the Irish legal system that is subject to widespread criticism for its inefficiency is the planning process. It is possible to make a planning application or written observations online to some local authorities, but An Board Pleanála still requires the use of paper forms, posted to their Dublin office. This compares unfavourably with other Irish regulators, like Revenue and the Health and Safety Authority, who allow for e-filing of declarations and complaints. There is no provision for remote hearings in the planning process, nor are hearings streamed or video recorded for public access, although An Bord Pleanála may record digital transcripts of some hearings and make these available after the case is decided. In light of commentary that public participation in planning decisions is increasingly important in

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1100 For example, see Orla Hegarty and Lorcan Sirr, ‘The Irish planning system has been dragged backwards’ (The Irish Times, 15 May 2019), [https://www.irishtimes.com/opinion/the-irish-planning-system-has-been-dragged-backwards-1.3892234](https://www.irishtimes.com/opinion/the-irish-planning-system-has-been-dragged-backwards-1.3892234) (accessed 1 July 2020).
‘democratising’ property, as well as the potential to save cost and time in the planning process while increasing transparency around planning decisions, planning authorities should make provision for online participation.

VI. Integrating technology into the Irish legal system – general improvement of access through mobile devices

To facilitate a better integration of technology into the Irish legal system to improve access to justice it is necessary to start looking at the roots of the access problem. Internet access in Ireland has grown enormously over the past years. 88% of all Irish households have access to the internet and 79% of individuals use the internet at least once a week. Mobile devices are the primary means of access to the internet as smartphone ownership is at 93% across the country, indicating that ‘a class of “next generation users” is emerging’, defined by their diverse access to the internet through a range of mobile devices. Internet access through mobile devices has bridged the digital-accessibility gap between low income and high income households in Ireland as such devices are more affordable, thus becoming the main source of internet access for low income households. However, even where online information is available, it can be difficult for the targeted low-income earners to find, understand and utilize legal information.

The first solution towards better technological integration into the Irish legal system across all sectors of the legal industry is the improvement of accessibility and usability of existing

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1108 ibid 19.
information and services.\textsuperscript{1109} The legal community needs to develop new strategies to continue to deliver content and services to their clients by using new mobile technologies, posing both opportunities in increased accessibility and challenges in terms of an increased need to compress information and cost of creation, such as through the development of apps or other forms of software.\textsuperscript{1110}

Websites developed for mobile devices need to differ in functionality, design, and content.\textsuperscript{1111} Automated systems should automatically detect the nature of a querying device and deliver information in the format appropriate to the device.\textsuperscript{1112} Furthermore, considering that mobile devices are the main source of access for many low income users in Ireland, often less familiar with legal jargon, the focus of mobile legal websites should lay on clear, understandable information.\textsuperscript{1113} Screen-size restrictions of mobile devices also indicate that instead of written content, legal aid information in Ireland could be delivered through audio and video sources. Videos should be short and have a simple message more about process than solutions. While improving usability of legal aid information in Ireland this also creates a different form of communication, reaching a different socio-economic group of people in Irish society, improving the general accessibility of legal advice across Irish society.\textsuperscript{1114} Thus, mobilizing and simplifying legal aid and information websites such as courts.ie, citizeninformation.ie and legalaidboard.ie, would enormously improve the access to information regarding legal rights


and legal aid in Ireland, specifically for low-income households.

Accommodating the distinct functionality of mobile devices, many countries sharing the common law system including the US, Australia and Canada have developed legal aid apps, which do not only provide easily accessible information but also interact directly with legal aid clients.\textsuperscript{1115} The development of such an app in Ireland would enormously simplify and improve Irish people’s access to legal information. Ideas for further applications to improve access to justices in Ireland are:

- A courthouse map application to find the right courtroom and Linkage to court schedules
- Credit card transaction payments for court services using mobile devices
- Checklists of documents needed for interviews or court appointments
- Preventive information and tools\textsuperscript{1116}

Furthermore, mobile devices have access to instant messaging through SMS, which can be used to push personalized information to those who need it, as it is already done by Irish help hotlines such as Childline or NiteLine. Implementing the distribution of legal information through SMS in Ireland would facilitate easier access to specific information needed by Irish citizens and would thus be an easy yet effective means to improve access to justice across society.

Lastly, QR codes make use of the camera within a smart phone and can thus bridge the gap between the physical and the online by providing an individualized code on printed material which will direct the user to a website with further information. Thus, a QR code simplifies the access to specific legal information, improving access to justice in Irish society. QR codes that are saved to a smartphone to link to location-specific information, could also be used to access a user’s case and schedule information.\textsuperscript{1117}


Exploring mobile devices’ potentials to provide more accessible, usable, and concise information for citizens in all areas of the legal industry is a simple but important step to take. While making the provision of legal advice more time- and cost-efficient, the exploration of mobile devices functionality will be hugely beneficial to improve access to legal advice across all of Irish society but particularly for those in low income households. A further step to improve the access to justice of low-income households could be to convince telecommunications carriers to exclude specified access-to-justice addresses from the computation of chargeable usage counts.\footnote{Report of The Summit on the Use of Technology to Expand Access to Justice (2013) 8, <https://www.lsc.gov/sites/default/files/LSC_Tech%20Summit%20Report_2013.pdf> (accessed 27 June 2020).}

**Conclusion**

The Irish legal system lags behind other jurisdictions in their use of information and communications technology. This chapter set out a roadmap for reforming key areas of the Irish legal system in order to improve access to justice. Institutional change is affected through education; therefore, ICT ought to be properly integrated into legal training. The widespread understanding and use of technology will have a multitude of benefits across the entire legal sector. Law-firms can use technology to provide higher quality services at a lower price, legal aid services can expand their outreach and improve community delivery of legal aid and the digitalisation of the Courts Service can improve efficiency, cost and accessibility. It is hoped that these ideas can further the modernisation of the Irish legal sector to benefit clients and practitioners alike.