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Candidate name:	Tiahna Rani Joshi
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"Would a Digital Planning App Make the UK Planning System More Efficient and Accessible?"

By Tiahna Rani Joshi

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Being a dissertation submitted to the faculty of The Built Environment as part of the requirements for the award of the MSc International Real Estate and Planning at University College London:

I declare that this dissertation is entirely my own work and that ideas, data and images, as well as direct quotations, drawn from elsewhere are identified and referenced.

Tiahna Joshi 08.09.2020

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Abstract

Debates concerning the need to make the planning system more 'efficient' and 'accessible' can be located in politics, in academia, in the media and in household conversations across the UK. With recent technological advancements and the COVID-19 pandemic, the debate has become more focused on the relationship between planning and technology and ways in which the two can be better integrated. This dissertation aims to research whether the development of a digital planning application (app), available to download on to one's smartphone or tablet would be one way of making the UK planning system more *efficient* and *accessible* and to establish how useful an app would be to professionals in the industry. This aim is achieved through a critical evaluation of current literature and qualitative research; interviewing small, medium and large-scale housebuilders alongside local authority planners, private planning consultants and technology industry experts. The research reveals that whilst a digital planning app would make the UK planning system more accessible, it would not necessarily make it more efficient. The concept of having one all-inclusive planning app is also challenged, instead the dissertation proposes different planning apps which have different functionality and together feed into one comprehensive, digital planning system.

Key words: Planning, Efficiency, Accessibility, Technology, Digital Applications, Streamline, Modernise, Speed, Cost, Diversity, Public Participation.

Chapter 1 – Introduction

Town planners help communities, companies and politicians to decide on the best way to use land and buildings (RTPI, 2020). Thus, the fundamental role of a planner is to plan for sustainability within societies, economies, and the environment by regulating the development process and balancing competing interests for land use. Planning is "vital to providing new homes as it helps to determine how many, where and what type of new homes are built" (National Audit Office, 2019, p.5). The UK follows a 'discretionary' planning system whereby applications are decided on a 'case by case' basis giving local authority planners somewhat individualistic planning powers. According to the RTPI (2016, p.6), "the UK planning system and often the very notion of urban planning itself, have been under sustained scrutiny for a considerable period of time". The discretionary nature of the UK planning system has been widely criticised for being problematic; 'uncertain' 'complex', 'weak', 'unstable', 'slow', 'outdated' and 'out of step' with current planning practice (Gordon & Travers, 2010; Ball, 2011; Rozee, 2014; Jeffereys & Lloyd, 2015; Mace, 2017; Cheshire, 2018; Raynsford, 2018). This has led to debates concerning the need to 'modernise' the planning system. These debates are located within a wider context of UK planning reforms which have been ongoing over the course of the past decade.

The year 2010 signified a wave of planning 'decentralisation' and subsequent planning reforms. The publication of Open Source Planning by the Conservative party triggered the abolition of regional spatial strategies and the devolution of power from central to local government planning authorities via the Localism Act in 2011. However, these reforms were matched with policies of 'austerity'. Local authority planning departments have been significantly under-resourced; there was a "15% decrease in numbers of local authority planning staff between 2006 and 2016" (National Audit Office, 2019, p.4). Scarce funding and resources combined with increased responsibility have led to planning delays (Lyons, 2014), forming the common perception that the UK planning system is too 'slow' at handling applications (Ball, 2011; Jeffereys & Lloyd, 2015; Mace, 2017). This prompts the need to identify ways in which the system can be made quicker and more efficient, which is what my research aims to discover. Additionally, complex lexis and a lack of transparency means that planning lacks accessibility (CPC, 2019). Raynsford (2018) and Rydin et al. (2015) comment that change is inevitable as the current system is 'unstable', 'unpopular', 'inefficient' and

'fundamentally flawed'. In their recent publication Planning for the Future MLCG (2020, p.4) state the need to "modernise our planning system, ensuring it supports the delivery of homes that local people need" which provides resonance for this research. Furthermore, MLCG (2020, p.4) agree that the "planning process has failed to keep pace" with changes to society and technological advancements. In light of these statements Connected Places Catapult (CPC) and the Royal Town Planning Institute (RTPI) have been working together to understand how planning professionals can best adopt new technologies to create a more *efficient* and *accessible* planning system that frees up planners to plan (Harris & Webb, 2019; RTPI, 2020), which provides the central focus of this dissertation. This leads me to my research question: "*Would a digital planning app make the UK planning system more efficient and accessible?"*

1.1 Hypothesis

My hypothesis is that a digital planning app, available for users to download free of charge from their smartphones or tablets would:

1. Make planning more **efficient** through:

   Speeding up the process of submitting planning applications and gaining planning permission

   Reducing planning costs

   Diversifying the housebuilding industry

2. Make planning more **accessible** through**:**

   Removing obstacles to public participation

1.2 Aims & Objectives

Aims

- To test my hypothesis and determine whether the development of a digital planning app would make the UK planning system more efficient and accessible.
- To establish how useful an app would be to professionals in the industry.

Objectives

1. To research existing literature on UK planning reforms over the course of the past decade and establish the need for further planning reform.
2. To identify how technology can be used to make the planning system more efficient and accessible.
3. To research existing literature concerning the speed and cost of planning and diversity in the housebuilding industry.
4. To research existing literature on breaking down the barriers to public participation.
5. To assess the perceptions of the actors involved in the planning process to understand whether the development of an app would improve the speed and cost of planning and diversity in the housebuilding industry.
6. To assess the perceptions of the actors involved in the planning process to understand whether the development of an app would improve the accessibility of planning.
7. To investigate what functionality an app would need to have in order to be effective.

1.3 Structure

The structure of this dissertation is as follows:

Chapter 1 - Features an introduction which outlines the topic in question, provides resonance for this dissertation and states my hypothesis and the aims and objectives of the study.

Chapter 2 - Contains a literature review, which identifies existing information on the debate concerning planning and technology and highlights a gap in the literature to be filled with my own research.

Chapter 3 - Provides a research methodology which discusses and justifies the methods of data collection and analysis that were used to meet the project objectives.

Chapter 4 - Presents and analyses my findings and answers the posed research question: "Would a digital planning app make the UK planning system more efficient and accessible?"

Chapter 5 - Summarises the results and discusses research limitations and recommendations for further research.

Chapter 2 – Literature Review

Given the aims and objectives of the study stated above, this chapter reviews and critically evaluates current literature related to the topic area based on a wide range of academic sources including books, journal articles and professional reports, websites and government publications. I aim to draw on connections between existing research and identify gaps in the literature to be filled by my own research. The structure of the review will be as follows. Firstly, it will explore existing planning reforms in the UK over the past decade since the formation of the coalition government in 2010 and present arguments for and against further planning reform and modernisation of the UK planning system. Secondly, it will focus on the ways in which technology can be incorporated into planning. Thirdly, it will explore how technology can be used to make planning more efficient, considering the speed of planning, cost of planning and the issue of diversifying the housebuilding industry. Next, it will explore how technology can be used to make the planning system more accessible through removing obstacles to public participation. Lastly, it will consider existing technological platforms which will be followed by a summary of findings in the literature.

2.1 Is the UK Planning System in Need of Reform?

Since Kate Barker recommended streamlining the planning processes in 2006, the issue of planning reform and 'modernising' the planning system' has received an increasing amount of attention from urban scholars and policy makers. Following former Prime Minister David Cameron's statement about the 'broken planning system' (Conservative Party, 2010) several reforms have been made to planning in the UK. These include: the decentralisation of planning; devolving power from central government to local authorities; the abolition of regional planning, the introduction of Localism in 2011 and the introduction of Neighbourhood Planning and subsequent 'duty to cooperate' for local councils. Additional planning reforms include: the introduction of the National Planning Policy Framework (NPPF) in 2012 which was recently revised and updated in July 2018; creation of the national infrastructure commission in 2015; 'permission in principle' and extension of permitted development rights in 2016; and formation of New Town Development Corporations in 2017. Current debates concerning the reform of the planning system include the possible "introduction of a zonal planning system and the creation of special development zones"

(Pickard & Hammond, 2020) conforming to the American system. However, it is important to note that the kinds of planning reforms that have been put in place, to date, have been concerned with *adapting planning legalisation* as opposed *inducing comprehensive technological reform* which is what this dissertation argues is necessary to bring the planning system into the 21st century (Airey & Doughty, 2020).

Arguments in Favour of Further Planning Reform:

According to Allmendinger (2009), Ball (2011), Jeffereys & Lloyd (2015) and Mace (2017) the UK planning system is perceived to be slow, inefficient, bureaucratic, restrictive, expensive, uncertain and complex suggesting the need for significant planning reform. Nathan and Overman (2011), Rozee (2014) and (Raynsford, 2018) also argue in favour of widespread planning reform. These arguments comply with common critiques that planning is 'out of step' and 'not fit for purpose' and it has "failed to keep pace" (MLCG, 2020, p.4) with modern times. The RTPI (2020, p.7) also state the importance of creating a "clearer, more efficient, and more accessible planning system", justifying my research question. Figure 1 reflects the long-winded process that is the process of submitting a planning application, which this dissertation argues could be streamlined with the creation of a digital planning app.

Arguments Against Further Planning Reform:

Equally, a number of studies challenge these claims for further planning reform arguing that in recent years it has been excessive and unnecessary. Raynsford (2018, p.25) argued that "many local planning authorities are not managing to see through one cycle of plan-making before the system was subject to major change" implying that there has been *too much* reform. The Raynsford Review (2018, p.7) also alludes to 'endless tinkering' with the system "carried out without a clear sense of what reform was meant to be achieving". Correspondingly, the RTPI (2016) reported that around 73% of RTPI planners think that constant changes to planning have hindered their ability to deliver good places. Likewise, Gilbey (2020) commented that "the government has plenty to be getting on with without clogging the legislative programme with rafts of planning reform". However these arguments *against* planning reform are outnumbered by the number of arguments *for* widespread reform and modernisation of the planning system.

Overall, this section has demonstrated that existing planning literature contains very little information and lacks detailed research regarding the use of modern technology as a type of 'planning reform' and the "development of digital technologies within the planning system remains a fertile field" (Wilson et al., 2019, p.299). This provides scope for my dissertation to tap into a new sector of research and attempt to fill the gap in the literature.

Figure 1

Planning Application Process. Source: Planning Portal (2020).

2.2 Planning & Technology

Digital apps came to light in 2008 following the release of the first iPhone in 2007 which triggered the 'smart-phone' revolution (Gilbert, 2019). A mobile app is essentially a software application, "a computer-generated program designed and developed to run on iPhones, Smartphones, tablets and many other mobile devices" (Rajput, 2015). "Over the past decade, digital technologies have transformed the way that people live, work and play – and yet, over the same period, the planning system has remained relatively unchanged" (Future Cities Catapult, 2018, p.2). This is partially due to the fact that "when it comes to tech, the planning industry can be notoriously a little slow on the uptake" (Carnwarth, 2020). "Big data, artificial intelligence, and visualisation have transformed the way we process and interpret information, yet these types of digital interventions are seldom seen in the planning system" (Yates, 2017). Raynsford (2018, p.66) also argues that there remains "an overwhelming case for the greater use of digital resources by local planning authorities both to aid the process of planning and to speed up its administration" which justifies my research in this field.

In light of recent events, in particular the COVID-19 pandemic; "a digital planning system is crucial to prepare for a sustainable economic recovery in England" (PBC Today, 2020). COVID-19 has demonstrated the importance of digital systems to allow planners to work remotely and communicate effectively (McFarlane, 2020). "Gone are the days of turning up to the community centre at a given time to contribute to local plans… the future of UK planning must be digitally led" (McFarlane, 2020). Carnwarth (2020) notes that "lockdown has prevented many planning processes from carrying on as before" which led to a change in the way the planning committees host their meetings; via Zoom or Microsoft Teams. As a result, "ministers are preparing for a major overhaul of the planning system in England to speed up approvals for new developments as part of the government's attempts to kick-start the economy hit hard by the coronavirus crisis" (Pickard & Hammond, 2020). The RTPI (2020, p.12) highlight the importance of technology being implemented across all local authorities in England to ensure that everyone is one the same page as "while some local authorities are forging ahead, the impacts of austerity have reduced the ability of others to innovate". Therefore "unless all planning authorities in England approach this transformation in a unified manner, we risk creating disparate ways of solving common challenges" (RTPI, 2020, p.12).

In their recent publication 'Priorities for Planning Reform', the RTPI (2020, p.5) propose the need to:

- **Publish** all planning documents, ensuring that they are machine-readable and easy to interrogate, share and re-use.
- **Standardise** common terminology, processes and data across local government bodies to support cooperation between stakeholders.
- **Promote** innovation and collaboration.
- **Invest** in open source tools which enable local planning authorities, private companies and local communities to collect, analyse and visualise data and better communicate the different weight and flexibility of individual planning policies.
- **Harness** digital technology to foster participation in planning.

If these proposals are implemented effectively, this in turn will make the UK planning system more efficient and accessible. To add to this, CPC (2020, p.4) state that "in an increasingly digitised world, technology could enable urban planners to make better value judgements on policies and development proposals… to better inform planning decisions".

Although this review has presented several arguments for the digitisation of planning, Wainwright (2017) challenges this. He questions whether "increasing access for one demographic, could it also be making the system more baffling for others?". Additionally Wainwright (2017) draws attention to the fact that "not everyone has a smartphone, access to a computer or the digital literacy to interact with online maps" (although technology is leading us in this direction). This is supported by Carnwarth (2020) who also highlights the benefits and drawbacks to virtual public meetings and the need to strike a balance between a mix of physical attendance to public consultations and remote access. Wilson et al. (2019, p.290) corroborate this view, arguing that *if* "technological applications, are to be successful, they must walk a fine line between being fluid and engaging, and fitting within decision-making mechanisms that are often more static". Furthermore, "if the future of city planning is digital and data-driven, we must stay alert to where that data is going and who is profiting from it" (Wainwright, 2017).

Overall, although much of the existing literature mentioned above supports my hypothesis by highlighting the need for planning reform and embracing modern methods of technology, it fails to touch on exactly *how* technology can be used to make the planning system more

efficient. There is little evidence to suggest that researchers or government bodies are looking into app development as a way of making the planning system more efficient and accessible which is what this study aims to uncover. Whilst there is evidence to suggest that some local planning authorities are finding new ways to innovate online and streamline the application submission process, innovation is somewhat 'patchy' and non-uniform across all local planning authorities. Moreover, this section of the review has highlighted that although digital applications may be more efficient and accessible to younger, more technologically advanced generations, they may exclude other older or vulnerable groups. All encompassing, these concerns should be carefully considered when developing new software.

2.3 How Can Technology be Used to Make the Planning System More Efficient?

Critics have frequently stated that the speed of decision-making, the perceived regulatory burden imposed by planning systems, and a lack of local involvement in plan-making and planning decisions are three key reasons why planning needs to change (RTPI, 2016).

As stated in part one of my hypothesis, a digital planning app would:

1. Make planning more **efficient** through:

   Speeding up the process of submitting planning applications and gaining planning permission

   Reducing planning costs

   Diversifying the housebuilding industry

Speed of Planning:

In a recent interview with the Financial Times, Robert Jenrick (Communities Secretary) had suggested the need for 'shaking up' the planning system to accelerate the speed at which plans are approved (Pickard & Hammond, 2020). The National Audit Office (2019) report highlighted the 'unacceptable' slowness of the planning inspectorate in determining appeals; a thirty-eight-week long process. CPC (2020) note that a key barrier to technological innovation in planning, which slows down the speed at which we process planning applications is a lack of standardized data sets which limits the interoperability of data and subsequently increases the time needed to screen through planning proposals. In their research, CPC (2020,

p.10) identified that these limitations "have forced planners to find manual workarounds and increased the amount of menial administrative tasks – such as copying and pasting content between programmes" which causes delays. As aforementioned, the 'slowness' of the planning system is largely due to government cuts to public expenditure (Colomb & Tomaney, 2016; POS, 2020), leaving planning departments significantly under resourced (Inch, 2018). Austerity has therefore "fractured the capability of local planning authorities to design and deliver a more efficient, transparent and accessible planning service" (Harris & Webb, 2019). To add to this, there has been a growing difficulty in recruiting local authority planners, as graduates often head towards the private sector. This implies that there is a need to automate aspects of the planning system which justifies the development of a planning app that removes the requirement for a planning officer to go through each individual application, thereby speeding up the process and making the system more efficient.

Cost of Planning:

"It is no secret that planning can be costly, uncertain and time consuming" (Plainview Planning, 2019). Debates concerning the cost of planning and the price to pay for 'the public good' are addressed in this section. According to Airey & Doughty (2020, p.15) "the planning system in its current form increases the cost of living and the cost of doing business in this country, unnecessarily and often by obscene amounts". Typical 'planning costs' include land acquisition costs, land promotion costs, infrastructure costs, physical construction costs, financial costs, and costs associated with administration, management and design. Further costs may also include those negotiated as part of Section 106 agreements and Community Infrastructure Levy (CIL) tariff. What is more, planning consultancy fees can cost a great amount. Arguably, if certain aspects of planning could become more automated this would ease the workload for planning consultants, councils and developers thereby lowering fees. Although, it is important to note that the cost reduction in this case would be marginal.

Delays in the planning process have the most significant financial burden on small-medium sized housebuilders (Ambrose & Peak, 2008) as they are typically provided loans with higher interest rates than more established developers; the longer it takes to deliver the development, the longer it takes for the developer to capitalise and start to repay loans (Gallent et al., 2019). Conversely, Raco et al., (2018, p.2) highlight that "planning delays are deployed strategically by different interests… the powerful, reflexive, and time-resourced

developers and investors use planning timeframes to capture markets and boost returns over the longer-term". In light of this statement, what is advantageous for some is a disadvantage to others and can act as a barrier to entry for smaller firms. Moreover, Adams and Tiesdell (2010, p.196) argue that planning is partially responsible for making certain developments 'unviable' "by increasing the cost of developments or delaying their delivery". Airey & Doughty (2020) attribute these costs to the 'complex', 'discretionary' nature of the UK planning system. Decisions are regularly challenged in the courts and the process of appeals thereby increases the cost and risk and causes delays. According to Airey & Doughty (2020, p.13), reforming the planning system "will reduce the risk and cost of the planning process, thereby reducing the costs of developing land – making more brownfield and infill development viable – and lowering the barriers to building new homes for smaller builders". In the long-term, this will also have an effect on house prices, lowering the rate of affordability.

Diversity in the Housebuilding Industry:

In the Conservative and Unionist Party Manifesto (2019, p.31), a commitment was made to "make the planning system simpler for the public and small builders" which justifies my research in relation to wider political debates. Furthermore, Airey & Doughty (2020, p.9) argue that "the complexity and risk of the planning system has diminished the country's base of small and medium sized developers". This is because only volume housebuilders have the *capital* and *resources* to work with the system in place (D'Arcy & Keogh, 2002; Coiacetto, 2006; Ambrose & Peak, 2008; Ball, 2013). This dissertation proposes that a less risky and less costly planning process, with planning consent easier to achieve and more land released for development, will facilitate a more diversified housebuilding industry. Diversifying the housebuilding industry will in turn diversify housing types and tenures and increase the overall housing supply (Whitehead et al., 2016; Letwin, 2018).

This section has emphasised the notion that a digital planning app is needed to make the UK planning system more efficient. The literature agrees that the current system is 'uncertain', 'complex', 'weak', 'slow' and 'efficient' and that the cost of planning does act as a barrier to SME developers.

2.4 How Can Technology be Used to Make the Planning System More Accessible?

As stated in part two of my hypothesis a digital planning app would:

2. Make planning more **accessible** through**:**

Removing obstacles to public participation

"Through embracing digital advancements, the planning industry can create a more publicly involved and informed planning process" (Carnwarth, 2020). This dissertation proposes that a digital planning app would break down the barriers to public participation in planning; making planning more accessible, by creating an online common place for the public to voice their opinion and vote on local planning decisions. According to the RTPI (2020, p.20), "difficulty engaging with planning is an issue raised across many different sectors of society". Furthermore, widespread engagement in planning has often been either difficult to achieve or has remained relatively low (Holman & Rydin, 2013) or dominated by the 'same old faces' (Clifford, 2013). This is important as "involving a diverse and representative mix of communities in planning helps support inclusive places" (Perry, 2017). To add to this, Wilson et al. (2019, p.286) support the movement to digitalise planning as existing public participation methods are "unsuitable or unwieldy for many people". TCPA (2019, p.5) state that "local planning authorities should improve the usability and transparency of their websites and planning portals (which are often slow and difficult to navigate) and the accessibility and readability of planning documents". TCPA's (2019, p.18) research identified that "apps and online consultation platforms can be very useful in interacting with and engaging a wider audience in planning consultations". However, in agreement with Wainwright (2017), TCPA (2019) state that any form of planning digitisation needs to be supported with some elements of traditional forms of engagement to ensure that vulnerable groups are not excluded. TCPA (2019) also found that planning vocabulary needs to become more comprehensible to the average reader which is supported by Wilson et al. (2019, p.288) who state that local planning authorities notify the public of proposed planning changes using "technical and legalistic language which can be difficult for non-planners to understand". This is supported by Yates (2017) who argues that "complex language, outdated processes, and professional interests obscure the planning system to outsiders, keeping knowledge hidden, or at least privileged".

Bugs et al. (2010) list four principal categories for technology-mediated participatory urban planning practices: information distribution; transparency; solutions through participation; and consensus building - to facilitate two-way discussions between planners and citizens. However the question remains: “what sort of digital technology could be designed to pilot a new system suitable for citizen engagement in local planning which would also be useful to professional planners?” (Wilson et al., 2019, p.291).

This section has validated my hypothesis that a digital planning app would make planning more accessible by breaking down barriers to public participation. The literature agrees that planning is largely inaccessible due to archaic consultation processes and complex language, which prevents local communities from being involved in planning.

2.5 Existing Platforms

The official UK government Planning Portal created in 2002 acts as an online web portal for people to upload and track the progress of planning applications. It was essentially the first form of planning digitisation which has since been semi-privatised and is now a joint venture between the Ministry of Housing, Communities and Local Government and TerraQuest, a private entity (CPC, 2020). According to CPC (2020) the planning portal is a ‘one-way system’ once an application is submitted, it cannot be amended through the portal, it is also prone to delays in processing planning application fees, “often causing friction and confusion between applicant and planning authority” (CPC, 2020, p.7).

In his review, Raynsford (2018) draws attention to two online digital innovation platforms: Plan X and Catapult Future Cities; which is now ‘CPC’, and states that the benefits of these platforms could involve the ‘automation’ of parts of the planning process. Plan X is a platform for creating and publishing digital planning services whilst CPC works to promote ‘Smart Cities’ and is currently looking for new ways to grow the innovation market and digitise the planning system. CPC recently launched PLANtraq; a prototype tool which has been developed to create more transparency and simplify the post-planning permission process (Plainview Planning, 2019). The purpose of PLANtraq is to track planning and development information following the approval of planning permission. A key function of PLANtraq is it facilitates communication between developers and planning officers and produces live updates and reminders for permission discharges. However, there is no evidence to suggest that CPC are

considering developing an app as a means of making the planning system more efficient and accessible. Through my research, I also identified Land Insight which focuses on streamlining the land sourcing process, redefining the way property developers find and assess off-market sites. Additional platforms which are topical to the digitisation of planning include Open Systems Lab and 'submit my planning application' (SMPA) which is a collaboration between the London Borough of Hackney, MLCG, design agency 'Hactar' and Snook. According to CPC (2020, p.15), "SMPA aims to guide householder applicants through the submission process, helping them include the right information, accurate and complete documentation and to pay the correct fee, the latter of which is particularly error-prone". Another example of how technology is being better incorporated into planning is through Public Access; an interactive map that local authorities have been using to view existing planning applications. However, not all local authorities have the finances to pay for such services hence they are still practicing manually which is more time-consuming. Furthermore, Carnwarth (2020) draws attention to 'Vu-City'; "a 3D modelling software that shows cities in their entirety, along with any pending or consented planning permissions" that allows people to see future projections of what a city or area will look like in a few years' time. An existing digital platform created to increase public participation in planning is 'ChangeExplorer' a smart watch app that can be downloaded and paired with an iPhone. ChangeExplorer provides citizens the opportunity to comment on planning issues in their local areas. "The app leverages in-situ, quick interactions encouraging citizens to reflect and comment on their environment… all comments are geo-tagged with the device's location" (Wilson et al., 2019, p.292), this is illustrated by Figure 2 below.

Overall, this section has specified the importance of the Planning Portal which was essentially the first act of planning digitisation. It has also highlighted issues associated with the Planning Portal which an app could potentially address. Although existing platforms do exist, none of these platforms are focused towards making planning more efficient or accessible which is where my research is unique.

Figure 2

Details of ChangeExplorer's client server architecture and screen shots of the watch's interface; screen shots of the notification being received, the app on home screen, and the process of leaving feedback and confirmation (in Wilson et al., 2019).

2.6 Summary

This literature review has explored arguments for and against further reform of the UK planning system, concluding that there is a strong need to bring planning into the 21st century. The review has explored aspects of planning practice which have been detrimental to the system and has shown where technology can be used to reduce these problems, concluding that a digital planning app might make the planning system more efficient by speeding up the process of gaining planning permission, reducing planning costs and diversifying the housebuilding industry. It has also demonstrated the need to make the planning system more accessible and has explored ways in which a digital planning app might remove barriers to public participation. Furthermore, the review has highlighted the fact that although digital applications may be more efficient and accessible to younger, more technologically advanced generations, they may exclude other older or vulnerable groups. Whilst the review has identified some examples of technological planning innovations such as PLANtraq and ChangeExplorer, the idea of having a comprehensive planning app that allows for a more

efficient and accessible planning system cannot be found in existing literature as the "development of digital technologies within the planning system remains a fertile field" (Wilson et al., 2019, p.299). This provides scope for my dissertation to attempt to fill the gap in the literature.

Chapter 3 – Methodology

This section aims to explain and justify methodological choices that have been made when designing my research project. Firstly, I draw your attention back to my objectives.

Objectives

1. To research existing literature on UK planning reforms over the course of the past decade and establish the need for further planning reform.
2. To identify how technology can be used to make the planning system more efficient and accessible.
3. To research existing literature concerning the speed and cost of planning and diversity in the housebuilding industry.
4. To research existing literature on breaking down the barriers to public participation.
5. To assess the perceptions of the actors involved in the planning process to understand whether the development of an app would improve the speed and cost of planning and diversity in the housebuilding industry.
6. To assess the perceptions of the actors involved in the planning process to understand whether the development of an app would improve the accessibility of planning.
7. To investigate what functionality an app would need to have in order to be effective.

3.1 Methodological Choices

In order to fulfil objectives one, two, three and four, I have conducted desk-based research and formulated a literature review (chapter two). To fulfil objectives five, six and seven, I undertook qualitative research across the planning, development and technology industries. Qualitative research is the appropriate form of research as it is concerned with the ***perceptions***, experiences and knowledge of others (Mason, 2018) and it is "useful to provide insights and hunches which could lead to more careful formulations of the problem and explicit hypotheses" (Bryman, 1988). From the perceptions of actors in the industry, I intend

to answer my research question: “Would a Digital Planning App Make the UK Planning System More Efficient?”

3.2 Data Collection

Participants for my research were recruited via ‘purposive sampling’ according to their role in the planning and development and technology industry. Some participants were people I have encountered with previously for both employment and educational purposes over the course of the past few years. However, the majority of my participants were recruited via ‘LinkedIn’ which I found to be a useful tool to connect me with the right individuals for my research. Snowball sampling occurred in a few cases, whereby participants were able to recommend other professionals in the industry for me to make contact with who would be willing to help with my research; I found this to be extremely useful in increasing the number of interviewees. The process of recruiting participants was as indicated by figures 3 and 4. I typed in the LinkedIn search bar the name of the local authority or company that I wished to get in touch with, clicked on their homepage and proceeded to scroll through employees listed on LinkedIn sending out requests to ‘connect’. Those who accepted my requests were then messaged via the app.

Example Message:

“Thanks for connecting! I am a post-graduate student undertaking my MSc in International Real Estate and Planning at the Bartlett School of Planning at UCL. I am currently researching for my dissertation (due September 2020) and am looking for interviewees to participate in my research. My research question is: Would a digital planning app make the UK planning system more efficient and accessible? My dissertation aims to explore planning reform and focuses on how technology can be used to modernise the planning system. Given your role as a ‘Planner’ at X it would be great to hear your thoughts on this matter. I was hoping to informally interview you (via telephone). The interview would take approximately 30 minutes (maximum). I look forward to hearing from you.”

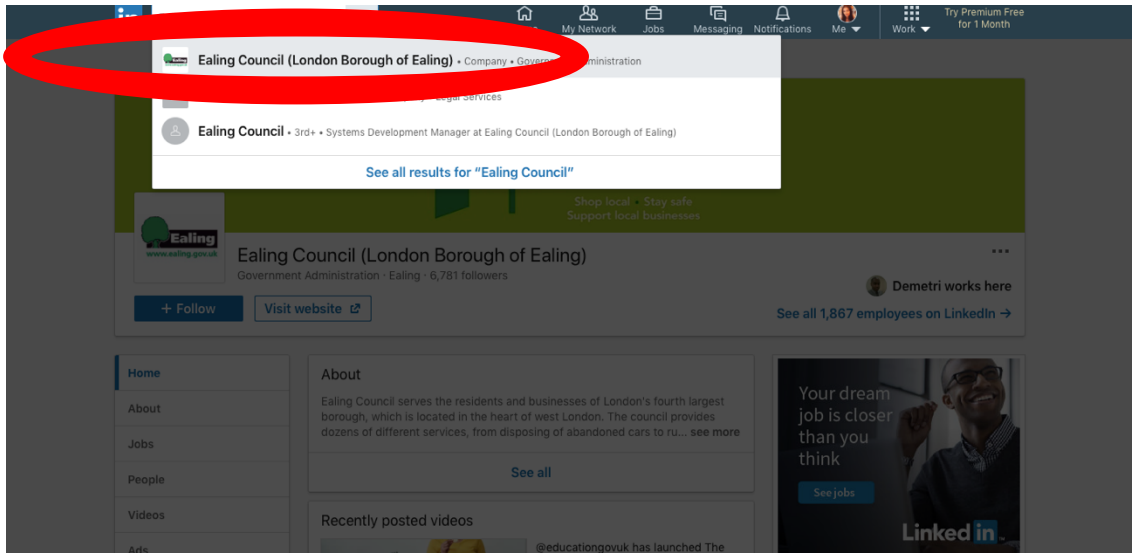

Figure 3

Screenshot of participant recruitment process step 1. Source: Author's own.

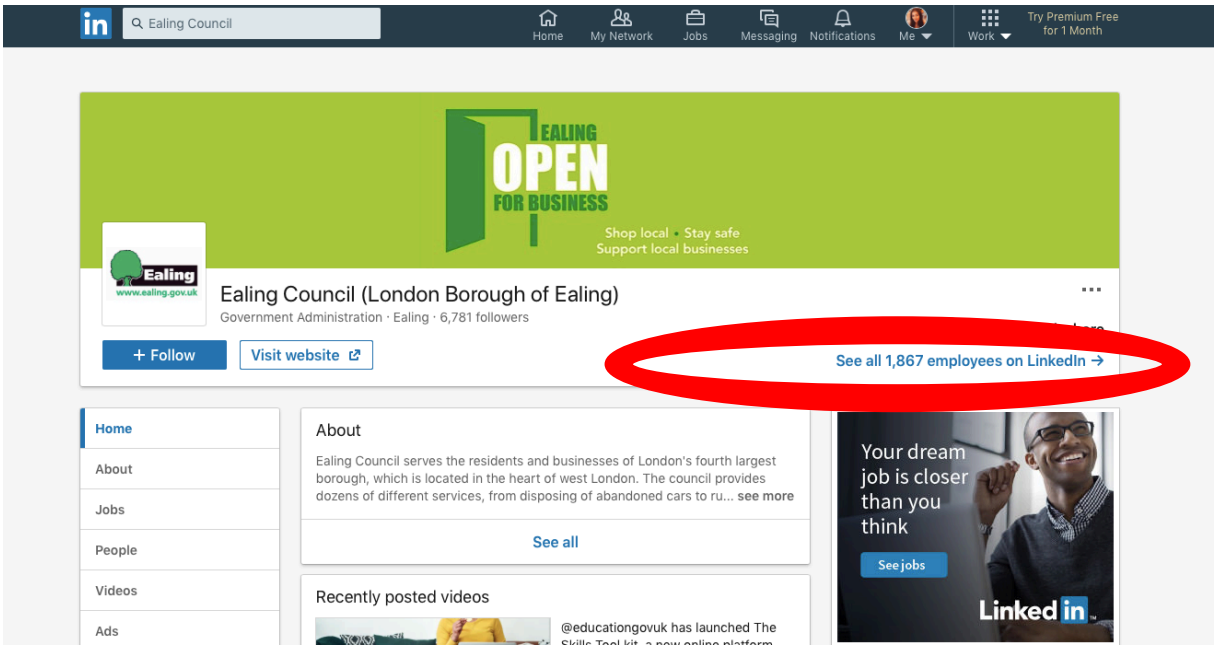

Figure 4

Screenshot of participant recruitment process step 2. Source: Author's own.

Following their agreement to participate in my research, I then proceeded to take participants' contact details to send them the relevant consent form and information sheet prior to conducting an interview. Only one participant requested that they call me from a No Caller ID for data protection purposes which I willingly accommodated for. All of my interviewees stated they would like their name to be exempt from the dissertation and some but not all

participants requested for their company name to also be exempt from the dissertation, hence I will refer to interviewees via their respective job titles. Please see appendix A for a table of interviewees.

I adopted an interpretivist, epistemological approach (Mason, 2018) to collect my data via semi-structured telephone interviews. Given the outbreak of COVID-19 and subsequent UK lockdown in March 2020, telephone interviews seemed to be the most appropriate method of data collection. Moreover, this style of interview enabled me to probe participants for additional information and I was able to read moments of hesitation and stuttering more easily than if I had sent out an e-questionnaire. I had prepared a set of eight questions, which I was able to adapt and tailor to the persona of the interviewee, these are located in appendix B. Furthermore, this method facilitated effective, organised and structured data collection as I was able to schedule appropriate times and dates which worked for myself as the interviewer and the interviewees. Having gained the consent of the interviewees, telephone interviews were recorded in quiet areas using a high-quality recording device to ensure accurate data. Interviews were then transcribed, re-read, 'coded' (Cope, 2003; Braun & Clarke, 2006) and 'thematically analysed' (Glaser & Strauss, 1967).

3.3 Ethical Considerations

Ethical considerations were very important when carrying out research for this dissertation. Firstly, I completed an ethics application and risk assessment form (please see appendix E) to ensure that my research complied with UCL's ethical code of conduct. Given that I chose to undertake qualitative research I was cautious not to violate participants rights hence prior to obtaining any data, I emailed each participant a copy of a participant information sheet (please see appendix C) stating the aims of my research, how their data would be used, and their rights to withdraw from the process at any time (Ritchie & Lewis, 2003). I also obtained written consent from all participants (please see appendix D). Once I began my data collection, all of the information I received was securely stored under files on my password protected laptop. In addition, interviews have been kept anonymous hence as mentioned previously I refer to participants using their respective job titles throughout my dissertation. Only interviewees who worked for the three largest housebuilders' in the UK specifically requested their company name not be included in the dissertation.

3.4 Method Limitations

Given the fact that qualitative data is rich in detail, I decided to keep my sample size relatively small; fifteen participants were interviewed for my research. I acknowledge that whilst a larger sample may have been useful to get more varied opinions, this was beyond the scope of my dissertation due to limited time and resources in which to complete the project. In addition, all of my interviews were conducted with people who live and work in London and the South East hence my results are somewhat biased as they do not reflect wider cross-country opinions. If I were to conduct my research at a National scale, the outcome may have been different. Furthermore, the COVID-19 pandemic which brought the country into 'lockdown' meant that I was unable to conduct face to face interviews or to visit libraries to conduct my research. All of my research was carried out online and therefore not all of the material I had intended to use was available to me.

Chapter 4 – Research Findings

This chapter aims to present, analyse and evaluate the findings from my research to establish whether a digital planning app would make the UK planning system more efficient and accessible.

4.1 Data Analysis

As stated previously, I thematically analysed my data, breaking down all of the information into a distinct set of themes. Having transcribed my data, I printed off each interview and circled key words which I noticed came up across my data set. I then created a mind-map containing key words and phrases to generalise my themes and to structure my analysis as indicated by figure 6. In addition, to organise and aggregate my data I created a table which contains quotes from my interviews categorised into their relevant themes. Conducting my data analysis in this way presented distinct columns for each participant, to ensure quotational accuracy. It also enabled me to identify commonalities amongst responses and to 'generalize' insights that have a wider theoretical resonance (Mason, 2018). As illustrated by Figure 5, ten key themes arose from my research. These have been grouped into four categories due to the fact that some of my themes cross-correlate.

Figure 5

Key Themes. Source: Author's Own.

1. Speeding Up the Planning System
2. Communication
3. Better Data & Access to Information

6. Policy Restructuring
7. Planning Subjectivity
8. Planning Resources

4. Accessibility Vs Efficiency
5. Community Engagement

9. The Planning Portal
10. App Limitations & App Functionality

4.2 Thematic Analysis Framework

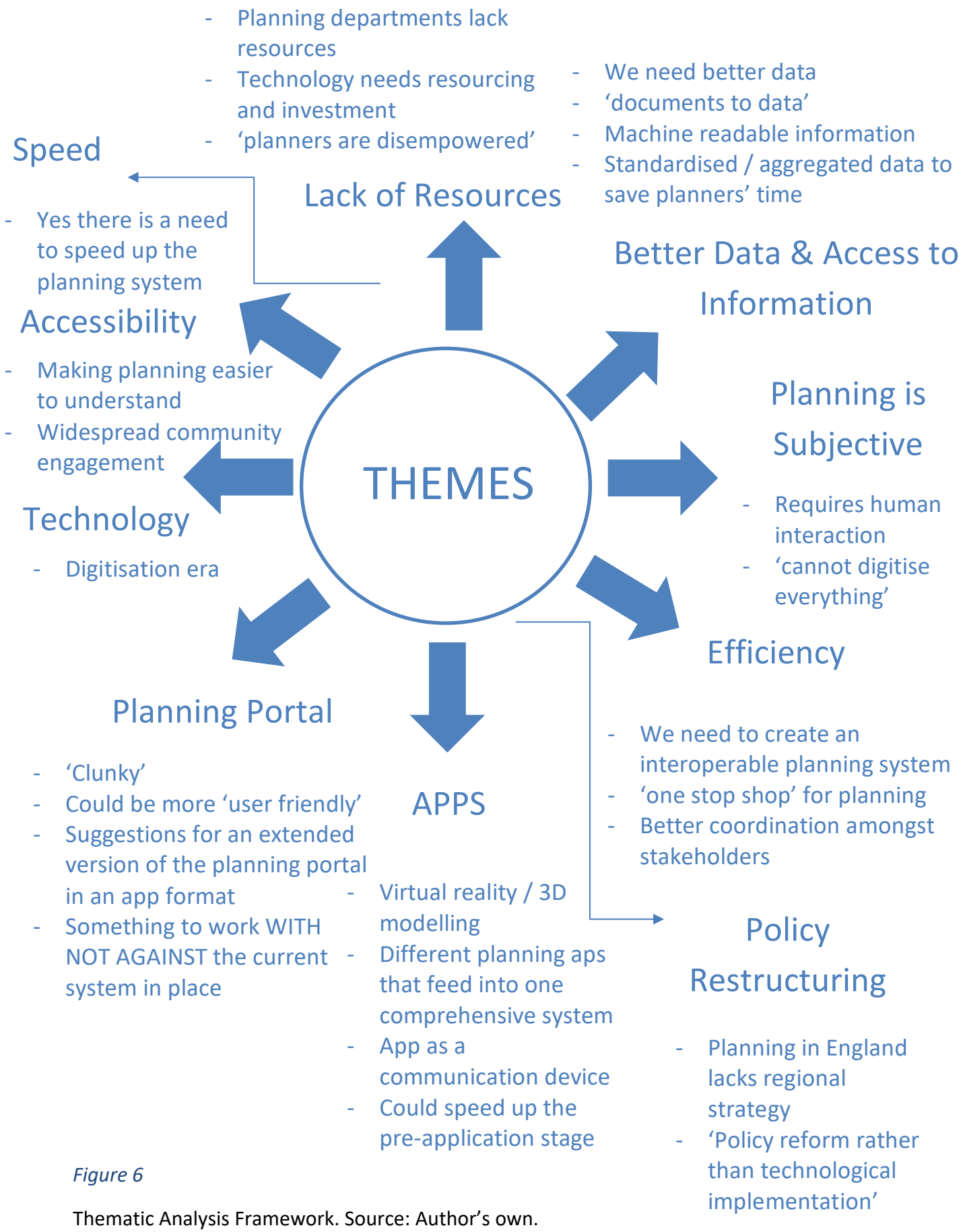

Figure 6

Thematic Analysis Framework. Source: Author's own.

4.3 Results

I draw your attention back to my hypothesis:

A digital planning app, available for users to download free of charge from their smartphones or tablets would:

1. Make planning more **efficient** through:

   Speeding up the process of submitting planning applications and gaining planning permission

   Reducing planning costs

   Diversifying the housebuilding industry

2. Make planning more **accessible** through**:**

   Removing obstacles to public participation

The aims of this dissertation were to test my hypothesis and to establish how useful a planning app would be to professionals in the industry. Firstly, 13/15 participants stated "yes" the current planning system is in need of modernisation and were *for* the 'digitisation' and 'streamlining of the UK planning system.

To some extent, my results contradict my hypothesis as my findings suggest that a digital planning app would marginally affect planning costs and would have little impact on diversifying the housebuilding industry. Some but not all participants stated that producing a planning application is costly as often the developer has to appoint a wide team of consultants. SME developers highlighted the fees associated with submitting a planning application prior to approval, whilst larger developers highlighted the costs associated with getting the app up and running which they felt would increase short term planning costs. Furthermore, participants suggested that accessing newer, more sophisticated technology is harder for SME housebuilders. A few developers stated that in the long term, if all the communication and submission material was all held in one place, this would speed up the process thereby reducing costs. In terms of diversifying the housebuilding industry, the RTPI Policy and Networks Manager agreed with my hypothesis that there are several barriers to entry for SME developers as bigger developers have more capital and resources to better engage with planning as well as more active sites to diversify risk. This theory was also supported by a recent report published by APPG (2020) during the time in which I was

conducting my research. I argue that if the relevant data and information was made more accessible, this would help developers at all levels to interact with the planning system. This view was corroborated by a developer who affirmed that an app would ease the process of submitting an application thereby allowing more new entrants into the field. On the other hand, the Former Chief Planning Officer for the City of London argued that SME developers would be worst affected by any introduction of new technology in the planning system… "they would perhaps find it to be another impediment, another complication so it might not improve the diversity". Furthermore, the Land Director at a medium sized housebuilder emphasized that there are always new entrants into any market hence the creation of an app would not have an effect on those who are prepared to enter the housebuilding industry. Moreover, the Place Director at Future Gov' specified that "part of the reason we have a non-competitive housing market is that planning rules are quite difficult to understand and secretly developers don't want a simpler planning system as they know the rules of the game hence it easier for them to get their own way". This reinforces Raco et al.'s (2018, p.2) argument referenced in chapter two that "planning delays are deployed strategically by different interests". These are issues which an app would be unable to overcome. However, participants were in agreement that the creation of an app *would* speed up the process of submitting planning applications at the pre-application stage and it *would* remove obstacles to public participation, creating a platform for widespread community engagement. The former being most useful to professionals in the industry and the latter being more useful to individuals and local communities. Additional ideas, themes and approaches emerged from my research which will be explored below.

So far, it has been established that development of an app would have little influence on the cost of planning and diversity of the housebuilding industry, but it would speed up the planning process and remove obstacles to public participation, making planning in some ways more efficient and certainly more accessible. The following section aims to address the ways in which an app would impact the speed of planning and make planning more accessible, offering ideas and suggestions based on my results. It also aims to address what functionality an app would need to have in order for it to be effective.

4.4 Speeding Up the Planning System, Communication & Better Data & Access to Information

The majority of participants agreed that a digital planning app would speed up the planning application process and would be one way of making the planning system more efficient. Common perceptions were that an app would remove uncertainty in the early stages of planning, however the rate of *success* of the app in making the system more *efficient* relies on other factors. Conversations about the speed or rather the 'lack of speed' in planning stimulated talks of an app being utilised as a communication device to streamline the planning approval process. My research found developers to be the strongest advocators of 'texting through an app' or an 'online chat room' to liaise with the case officer assigned to their planning application. This was also corroborated by the Planning Officer for Ealing Borough Council and a Private Planning Consultant who agreed that this kind of app would improve communication as there would be one point of contact. Participants also suggested having a "one stop shop" for planning that allowed you to connect and communicate with all of the necessary stakeholders involved in the project and recommended a 'traffic light system' to be shown on the app so the applicant could see the stage of their application; green = approval, amber = pending and red = rejected. A Private Planning Consultant stated that "tracking a planning application is not as detailed as tracking your parcel in the post" hence this is something that could be improved. This idea was supported by the Land Director at a medium sized housebuilder who stated that they "struggle to interact efficiently and effectively with the case officer throughout the life span of an application" hence a communication device would make the interaction with the case officer more direct.

These suggestions to facilitate communication between developers and planning officers relate to CPC's work and 'PLANtraq', however as aforementioned there is no evidence to suggest that CPC are considering developing PLANtraq into an app as a platform for communication. A developer working for one of the UK's largest housebuilders mentioned the fact that larger organisations can benefit from having a 'PPA' (planning performance agreement) which ties the developer and the local authority into an agreement whereby each party must respond within two days. However they specified that PPA's are expensive and therefore less accessible to smaller organisations, hence they too supported the idea of a digital planning app.

The phrase 'documents to data' was repeated by a number of participants who emphasized the importance of having clear policy requirements communicated through an app and planning applications to be submitted in a more uniform way in machine readable formats so that data can be aggregated and standardised, validating CPC (2020). This also supports the proposals made by the RTPI (2020) in 'Priorities for Planning Reform' mentioned in section 2.2. Participants argued that this in turn would improve the speed of screening through applications and would allow applicants and case officers to communicate in a more efficient and effective way with everyone 'speaking the same language' (Yates, 2017; TCPA, 2019; Wilson et al., 2019). On the subject of data, some participants also highlighted 'data ownership' and stressed the importance of the app being driven by the public sector as opposed to it being something the private sector can profit off which was also argued by Wainwright (2017) in chapter two. A Development Manager at a largescale housebuilder specified that a technological revolution driving the way in which we plan would need to be led and institutionalised by central government, he did however argue that "they would need to allow different businesses to provide similar products or services so they can become competitive in the market".

4.5 Accessibility Vs Efficiency & Community Engagement

The general consensus was that whilst accessibility and efficiency are core components of an *effective* planning system, having a planning system that is more *accessible*, may not necessarily make it more *efficient* in fact the opposite is more likely to occur. Former Chief Planning Officer for the City of London stated that "technology frequently doesn't save staff and make the system more efficient it simply makes it more accessible and therefore puts more pressure upon it." Furthermore, a few participants highlighted the fact that whilst an app would allow more people to engage with planning and comment on applications - more comments does not necessarily mean better quality of comments, in fact there were concerns amongst both planners and developers that this could lead to more objections and to quote an SME developer "people objecting for the sake of objecting because they don't like change". In response to this, the Development Manager for a largescale housebuilder suggested if the public were able to comment on aspects of the development that were indeed material considerations, this would allow for better quality comments. Similarly, the former Chief Planning Officer for the City of London stated that "people have to be made aware of what

they can and can't object to… the more objections you receive, the more frustrated people will become when their objections will not have any impact". In light of this view, public opinion would need to be orientated towards making positive amendments as opposed to simply objecting to new developments happening in the local area. Another participant stated that whilst community engagement is imperative – "it does slow down the process!".

Several participants agreed that the digitisation of planning via an app would make planning more accessible to a variety of stakeholders. For example it would open it up to young people, people working long hours and people for whom English is not their first language. However, digitising planning would exclude older, more vulnerable groups who are not familiar with modern methods of technology and who do enjoy participating in face to face public consultation meetings, corroborating Wainwright (2017) and TCPA (2019). An app would in fact be less efficient and accessible to these members of society. The Development Manager for a largescale housebuilder highlighted that there are already existing consultancies that specialise in running community engagement events, however with COVID-19 much of this work will now be seen online. The Land Director for a medium sized housebuilder also added that "if the developer could hold presentations on the app that councillors, case officers, interested parties and design consultation teams could all have access to in one place and comment on – that would broaden the consultation experience and make it more accessible to everyone." Thus, overall participants agreed with my hypothesis that a digital app would speed up the public participation process and make it more accessible.

In terms of efficiency, some participants agreed that a digital app would make planning more efficient as it would speed up negotiation and public consultation time, however the general consensus was that efficiency in planning is more to do with 'political whim', a problem that an app would not be able to solve. Furthermore, as a whole, participants agreed that efficiency is more related to the way the planning system works and policy, which is need of restructuring. In the current climate of COVID-19, this is something that Prime Minister Boris Johnson has alluded to in his recent political statements. Some participants used COVID-19 as an example of how technology can be utilised to make what is in some ways an 'archaic' planning system more efficient. For example, the use of video technology; tools such as Microsoft Teams and Zoom have proven to be successful in improving the efficiency of the planning system through the way in which committee meetings are held online, echoing McFarlane (2020) and Carnwarth (2020).

4.6 Policy Restructuring, Planning Subjectivity & Planning Resources

As aforementioned, several participants specified the need for the restructuring of planning policy reinforcing the points of Nathan and Overman (2011), Rozee (2014), (Raynsford, 2018) and Airey & Doughty (2020). In June 2020, Boris Johnson announced "the most radical reforms to the country's planning system since the Second World War" (Housebuilder, 2020), signifying that my research is aligned with current debates. However, his plans are more centred around extending 'permitted development' of commercial to residential space and limiting planning requirements for household development and do not consider re-introducing regional planning for the UK, which is what my research identified to be the most pressing issue in terms of policy reform.

Several participants stated that 'planning is subjective', it considers feelings and emotions, whereas apps gear people towards 'binary choices' and limited ways of thinking. That is of course the reason why the UK follows a discretionary, flexible planning system as opposed to a regulatory zoning system. As the planning officer for the London Borough of Ealing stated, "planning is not a tick box exercise, but a collaborative process to ensure the right kind of development is built in the right place". Interestingly only one participant – an SME developer was in favour of planning becoming a 'tick box exercise'; arguing that this would make it more streamlined and straightforward. Nevertheless, you cannot eliminate the human interaction entirely from planning and as stated by the Senior Urbanist at CPC; "it is not how can tech be incorporated rather how can tech help the human behind the process".

10/15 participants referred to the shortage or 'depletion' of planning resources available to local authorities which deeply effects the efficiency of planning in the UK. They argued that instead of proposing an app, better resourced planning departments would be more able to handle the high volume of planning applications that are being submitted, faster and more efficiently. The Senior Urbanist at CPC stated that "we spend too much time trying to deregulate planning and not enough time or resources investing in it", echoing the work of Inch (2018) and Raynsford (2018). This statement suggests that there are not enough planning officers, planners with the right kinds of skills, money and resources to negotiate and manage their time effectively.

4.7 The Planning Portal, App Limitations & App Functionality

Almost all participants specified the importance and relevance of the Planning Portal and stated that any form of new system would need to work alongside this rather than against it. Many participants did refer to the Planning Portal as 'clunky', 'complex' 'impossible to navigate' and in need of modernisation, getting this right and making the Planning Portal more user friendly they argued would be the first step ahead of developing an app. The Planning Officer for Ealing Borough Council stated that "modernising the planning portal would help increase accessibility for people who aren't experts or aren't town planning professionals". Overall participants did agree that the extension of the Planning Portal into an app format would be the next logical step, for example one participant mentioned 'as you have BBC News online, this is also translated into an app'. A Private Planning Consultant stated that "there is nothing beyond the Planning Portal, at the moment it is just a repository for planning applications" hence he suggested exploring what 'add-ons' can be linked to this existing National system rather than developing an entirely new one separate from this. This participant also commented that "a typical planning application involves a collection of documents by a number of people of various disciplines: an architect, planning consultant, highways engineer, engineers in drainage, specialists and so on and the larger the planning application, the more complex and technical these documents become". The main concern amongst participants was that it may be challenging to read all of these documents in small print on an app screen. However if the planning portal was made available in an app format, this would give planning professionals the option to work smart, access their planning applications on the go and store everything in one place on their smartphone or tablet.

Overall, participants were in disagreement as to what the main functionality of a planning app would be. Henceforth I have illustrated some suggestions which arose from my research via Figure 7 below.

To better inform and communicate planning requirements to individuals.

To identify where in the local area there are sites to develop on that are allocated in the local plan. Similar to Land Insight.

An app which allowed you to walk around a local area, be able to hold your phone up to a site and see the proposed development plans and 3D virtual models that showed what that site would look like in five or ten years. Similar to Vu-City'.

You would need to be able to fill in a profile of yourself, select the locations where you are interested in planning and development and there would needs to be a series of filters to direct the user to the relevant places.

Sent out when development is happening in your local area. Users: business, local authorities, developers of all shapes and sizes, retailers, campaign groups and the general public.

Figure 7

App Functionality Framework. Source: Author's own.

However, to try and create an app on this scale which incorporated all of the various details mentioned above would require a huge data set and a lot of information, this is something which needs to be researched further. The RTPI Policy & Networks Manager highlighted that the kind of app my thesis hypothesised would be "a monster app" hence there would need to be different apps to do different things, with different built in functionality. The Senior Urbanist at CPC furthered this, suggesting that all of these proposed different apps would need to feed in to one comprehensive digital planning system.

Chapter 5 – Conclusion

This section aims to present my key findings, consider limitations to my research and provide recommendations for future research in alignment with this dissertation topic.

5.1 Key Findings

The aim of this dissertation was to fulfil my objectives and answer my research question: Would a Digital Planning App Make the UK Planning System More Efficient and Accessible?

My results suggest that the UK planning system does need to be brought into the 21st century (Airey & Doughty, 2020) and it is in need of modernisation and digitisation. The concept of 'documents to data'; making all planning reports machine readable and aggregating and standardising data sets, was popular amongst most participants, particularly those coming from a technology background. They argued that this would be the first step towards a more efficient digital planning system. Almost all participants agreed that efficiency is a deep-rooted problem located in planning policy and politics which the development of an app would not be able to solve singlehandedly. As stated by the Senior Urbanist at CPC "a digital app would be the beginning of a very long digital transformation process, but I don't think it's the one solution that we need".

My results validated my hypothesis that there is scope for the creation of a planning app that can streamline the submission and approval of planning applications, speed up the negotiation process and improve the communication between applicants and local authority planners. This kind of app would act as a 'communication device', a 'one stop shop' for planning with all relevant planning material necessary for an application uploaded on to one platform, which would be useful to professionals in the industry.

My results also justified conducting public consultation through an app, however there is still a high level of uncertainty as to what functionality this kind of app would need to have in order for it to be effective. Would it be an app that you download 'as and when' you would like to comment on a planning application occurring in your area? Or would it be the kind of app that you download and receive updates and notifications for new developments that you can comment on, with built in functionality that allows you to hold up your phone to a site and shows you a virtual model of what it will look like in a few years' time? Nonetheless an app for public engagement would need to be separate to the 'communication device' aforementioned, as my results suggest there would need to be different apps for different things which feed into one comprehensive digital planning system. This implies a reason for why the idea of having an all-inclusive planning app that allows for a more efficient and accessible planning system cannot be found in existing literature.

My results also differ from my hypothesis as they suggest that developing a digital planning app would not significantly reduce planning costs or diversify the housebuilding industry. Furthermore, they suggest that a digital planning app *would* make planning more *accessible* but not necessarily more *efficient*, which was agreed by all of my interviewees. This is because making planning more accessible for the public to engage with, understand and comment on proposed developments leads to more people having a say in planning which could potentially lead to more planning objections, increasing pressure upon local authority planners, subsequently slowing down the speed at which plans are processed, the negotiation process and decreasing the overall efficiency of the planning system. Additionally, my results offer a number of ideas for alternative planning apps which future researchers could consider developing.

5.2 Research Limitations

A key limitation to this research was the timeframe available in which to complete the study. Had the timeframe have been longer, it could have been possible to conduct more interviews to generate a more robust dataset. In addition, the interviews that were conducted were with participants who are based in and around London and the South East henceforth their perceptions and experiences are limited to these areas and do not represent the rest of the UK. Furthermore, given the current COVID-19 pandemic which broke out around the time I

began recruiting participants for my research, this slightly delayed the time in which I was able to get responses from participants who are now working from home.

5.3 Recommendations for Future Research

A private planning consultant described my research as “potentially ground-breaking”, however it is clear that there are a number of areas that would benefit from further research and my results offer several ideas for alternative planning apps which could be considered. The dissertation justifies the development of a digital planning app or rather having different apps for different things which feed into one comprehensive digital planning system. This however requires further research, innovation and collaboration between different industries; web-development and digital application specialists and members of the planning system, working together to establish exactly what aspects of the system can be digitised and created into an app format and how feasible this would be. My research has established that creating an app that acted as a ‘communication device’ would improve the efficiency, speed and communication between applicants and local planning officers at the pre-application stage and throughout the planning process, this is a concept that could be developed further. Lastly, I would recommend revisiting this topic as amendments to planning are constantly being made and technology is ever-changing, and in light of COVID-19 many services and industries are expected to have a technological transformation over the course of the next few years.

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Appendices

Appendix A.

Table of Interviewees:

Job Title	Industry
1. Place Director at 'Future Gov'	Technology
2. Senior Urbanist at 'Connected Places Catapult' (CPC)	Technology
3. Former Chief Planning Officer for the City of London (now Professor at the Bartlett School of Planning)	Planning
4. Former Planning Director at the London Borough of Camden (now Professor at the Bartlett School of Urban Design)	Planning
5. Planning Director at 'ROK planning Ltd'	Planning
6. Private Planning Consultant at 'IPE Ltd'	Planning
7. Planning Officer at Ealing Borough Council	Planning
8. RTPI Policy & Networks Manager	Planning
9. Strategic Land & Planning Manager at a Largescale UK National Housebuilder	Planning & Development
10. Development Manager at a Volume UK National Housebuilder	Planning & Development
11. Assistant Development Manager at a Volume UK National Housebuilder	Planning & Development
12. Land & Planning Manager at a Volume UK National Housebuilder	Planning & Development
13. Land Director at 'Bugler Developments Ltd' (Medium Sized Developer)	Planning & Development
14. CEO of 'Uplift Properties' (SME Developer)	Development
15. Director of 'Huntmore Developments' (SME Developer)	Development

Appendix B.

Sample Interview Questions.

1. What is your role in the planning and development industry?

2. Do you think there is a need to 'modernise' the UK planning system?
    a. Yes / No

3. What kinds of planning reforms would be useful?

4. How could technology be incorporated to make planning more efficient and accessible?

5. Do you think that developing a digital planning app could be a way of making the planning system more efficient?

6. Do you think a digital planning app would improve the speed and cost of planning and diversify the housebuilding industry? Diversify = bring forward more SME builders.

7. Do you think a digital planning app would improve the accessibility of planning and improve public participation in planning?

8. What functionality would a planning app need to have in order for it to be useful?

9. Other comments:

Appendix C.

Participant Information Sheet

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Title of Study: Would a Digital Planning App make the UK Planning System more Efficient and Accessible?
Department: Bartlett School of Planning
Name and Contact Details of the Researcher(s): Tiahna Joshi – tiahnajoshi@icloud.com / 07859435547
Name and Contact Details of the Principal Researcher: Dr Danielle Sanderson – danielle.sanderson@ucl.ac.uk

1. **Invitation Paragraph**
   Explain that the potential participant is being asked to take part in a research project.

   You are being invited to take part in a research project. Before you decided it is important for you to understand why the research us being done and what participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

2. **What is the project's purpose?**
   The aim of this project is to test my hypothesis and determine whether the development of a digital planning app would make the UK planning system more efficient and accessible and to establish how useful an app would be to professionals in the industry. The duration of this project will last from now until the date of submission; September 8th 2020.

3. **Why have I been chosen?**
   You have been chosen based on your role within the RTPI and your contribution to research concerning the modernisation of the UK planning system. Other participants will also be recruited to the study based on their professional expertise within the planning and development industry.

4. **Do I have to take part?**
   Taking part in the study is entirely voluntary and refusal to agree to participate will involve no penalty. You have the right to withdraw from the study at any time. Should you choose to participate in my research, you will be required to sign an ethical consent form.

5. **What will happen to me if I take part?**
   You will be asked to complete an informal telephone interview (one) which should last approximately 30 minutes.

6. **Will I be recorded and how will the recorded media be used?**
   Whilst we are speaking, I will be recording you via audio recorder on my iPad and also taking notes. This recorded data will then be transcribed and thematically analysed. Once transcribed, this audio recording will be deleted, it will not be published or broadcasted. No one outside of the project will have access to the original recordings.

7. **What are the possible disadvantages and risks of taking part?**
   Your participation in my research has no risk associated with it. Should you wish to query this, please do not hesitate to ask.

8. **What are the possible benefits of taking part?**
   Whilst there are no immediate benefits associated with taking part in the project, your participation in my research will help me answer my research question and identify whether a digital planning app would make the UK planning system more efficient and accessible. Your participation may also help shape future research into this topic area.

9. **What if something goes wrong?**
   Should you wish to make a formal complaint, please email my supervisor Dr Danielle Sanderson. Should you feel your complaint has not been handled to your satisfaction you may contact the Chair of the UCL Research Ethics Committee – ethics@ucl.ac.uk

10. **Will my taking part in this project be kept confidential?**
    All the information that we collect about you during the course of the research will be kept strictly confidential. Should you wish for your name and job title to be kept anonymous in the final dissertation please do say so at the time of recruitment.

11. **Limits to confidentiality**
    - Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases the University may be obliged to contact relevant statutory bodies/agencies.

12. **What will happen to the results of the research project?**
    The final research project is likely to be published in Autumn 2020. Your personal data will be destroyed immediately after submission of my research project.

13. **Local Data Protection Privacy Notice**

    Notice:
    The controller for this project will be University College London (UCL). The UCL Data Protection Officer provides oversight of UCL activities involving the processing of personal data, and can be contacted at data-protection@ucl.ac.uk

    This 'local' privacy notice sets out the information that applies to this particular study. Further information on how UCL uses participant information can be found in our 'general' privacy notice:

    The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices.

The categories of personal data used will be as follows:

    If we are able to anonymise or pseudonymise the personal data you provide we will undertake this and will endeavour to minimise the processing of personal data wherever possible.

    If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at data-protection@ucl.ac.uk.

14. **Contact for further information**
    Tiahna Joshi
    tiahnajoshi@icloud.com
    07859435547

Dr Danielle Sanderson
danielle.sanderson@ucl.ac.uk

Thank you for reading this information sheet and for considering to take part in this research study.

Appendix D.

CONSENT FORM

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: Would a Digital Planning App Make the UK Planning System More Efficient and Accessible?

Department: Bartlett School of Planning

Name and Contact Details of the Researcher(s): Tiahna Joshi – tiahnajoshi@icloud.com / 07859435547

Name and Contact Details of the Principal Researcher: Dr Danielle Sanderson - danielle.sanderson@ucl.ac.uk

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

I confirm that I understand that by ticking/initialling each box below I am consenting to this element of the study. I understand that it will be assumed that unticked/initialled boxes means that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element that I may be deemed ineligible for the study.

		Tick Box
1.	*I confirm that I have read and understood the Information Sheet for the above study. I have had an opportunity to consider the information and what will be expected of me. I have also had the opportunity to ask questions which have been answered to my satisfaction *[and would like to take part in* - *an individual interview*	
2.	*I understand that I will be able to withdraw my data *4 weeks after submission*	
3.	*I consent to participate in the study. I understand that my personal information will be used for the purposes explained to me. I understand that according to data protection legislation, 'public task' will be the lawful basis for processing.	
4.	**Use of the information for this project only** Anonymity is optional for this research. Please select from the following 3 options: (a) I agree for my real name and role/affiliation to be used in connection with any words I have said or information I have passed on. (b) I request that my comments are presented anonymously but give permission to connect my role/affiliation with my comments (but not the title of my position). (c) I request that my comments are presented anonymously with no mention of my role/affiliation.	

5.	*I understand that my information may be subject to review by responsible individuals from the University for monitoring and audit purposes.	
6.	*I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason. I understand that if I decide to withdraw, any personal data I have provided up to that point will be deleted unless I agree otherwise.	
7.	I understand the potential risks of participating and the support that will be available to me should I become distressed during the course of the research.	
8.	I understand the direct/indirect benefits of participating.	
9.	I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher(s) undertaking this study.	
10.	I understand that I will not benefit financially from this study or from any possible outcome it may result in in the future.	
11.	I understand that I will be compensated for the portion of time spent in the study (if applicable) or fully compensated if I choose to withdraw.	
12.	I agree that my [anonymised] [pseudonymised] research data may be used by others for future research.	
13.	I understand that the information I have submitted will be published as a report and I wish to receive a copy of it. Yes/No	
14.	I consent to my interview being audio/video recorded and understand that the recordings will be: - Stored under a password protected laptop and destroyed upon submission of the dissertation	
15.	I hereby confirm that I understand the inclusion criteria as detailed in the Information Sheet and explained to me by the researcher.	
16.	I have informed the researcher of any other research in which I am currently involved or have been involved in during the past 12 months.	
17.	I am aware of who I should contact if I wish to lodge a complaint.	
18.	I voluntarily agree to take part in this study.	
19.	I understand that other authenticated researchers will have access to my [anonymised] [pseudonymised] data.	

If you would like your contact details to be retained so that you can be contacted in the future by UCL researchers who would like to invite you to participate in follow up studies to this project, or in future studies of a similar nature, please tick the appropriate box below.

	Yes, I would be happy to be contacted in this way	
	No, I would not like to be contacted	

_____ _____ _____

Name of participant Date Signature

Appendix E.

RISK ASSESSMENT FORM

FIELD / LOCATION WORK

The Approved Code of Practice - Management of Fieldwork should be referred to when completing this form

http://www.ucl.ac.uk/estates/safetynet/guidance/fieldwork/acop.pdf

DEPARTMENT/SECTION - BARTLETT SCHOOL OF PLANNING
LOCATION(S) – UCL LONDON
PERSONS COVERED BY THE RISK ASSESSMENT – TIAHNA JOSHI

BRIEF DESCRIPTION OF FIELDWORK
I will be conducting 'remote' fieldwork, holding telephone interviews with local authority planners and developers for my research project.

Consider, in turn, each hazard (white on black). If **NO** hazard exists select **NO** and move to next hazard section.
If a hazard does exist select **YES** and assess the risks that could arise from that hazard in the risk assessment box.
Where risks are identified that are not adequately controlled they must be brought to the attention of your Departmental Management who should put temporary control measures in place or stop the work. Detail such risks in the final section.

ENVIRONMENT	**The environment always represents a safety hazard. Use space below to identify and assess any risks associated with this hazard**
e.g. location, climate, terrain, neighbourhood, in outside organizations, pollution, animals.	Examples of risk: adverse weather, illness, hypothermia, assault, getting lost. Is the risk high / medium / low ? No environmental hazards

CONTROL MEASURES	**Indicate which procedures are in place to control the identified risk**
	work abroad incorporates Foreign Office advice
	participants have been trained and given all necessary information
	only accredited centres are used for rural field work
	participants will wear appropriate clothing and footwear for the specified environment

	trained leaders accompany the trip
	refuge is available
	work in outside organisations is subject to their having satisfactory H&S procedures in place
	OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

N/A

EMERGENCIES	**Where emergencies may arise use space below to identify and assess any risks**
e.g. fire, accidents	Examples of risk: loss of property, loss of life

CONTROL MEASURES	**Indicate which procedures are in place to control the identified risk**
	participants have registered with LOCATE at http://www.fco.gov.uk/en/travel-and-living-abroad/
	fire fighting equipment is carried on the trip and participants know how to use it
X	contact numbers for emergency services are known to all participants
X	participants have means of contacting emergency services
	participants have been trained and given all necessary information
	a plan for rescue has been formulated, all parties understand the procedure
	the plan for rescue /emergency has a reciprocal element
	OTHER CONTROL MEASURES: please specify any other control measures you have implemented: N/A

EQUIPMENT	**Is equipment used?**	**YES**	**If 'No' move to next hazard** **If 'Yes' use space below to identify and assess any risks**
e.g. clothing, outboard motors.	Examples of risk: inappropriate, failure, insufficient training to use or repair, injury. Is the risk high / medium / low ?		

This is very LOW RISK as the only equipment being used to conduct interviews will be my Apple Ipad (recording device), my Apple Ipone (communication device) and my Macbook Laptop (note-taking device).

CONTROL MEASURES	**Indicate which procedures are in place to control the identified risk**
	the departmental written Arrangement for equipment is followed
	participants have been provided with any necessary equipment appropriate for the work

	all equipment has been inspected, before issue, by a competent person
	all users have been advised of correct use
	special equipment is only issued to persons trained in its use by a competent person
	OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

N/A

LONE WORKING	**Is lone working a possibility?**	**YES**	**If 'No' move to next hazard** **If 'Yes' use space below to identify and assess any risks**
e.g. alone or in isolation *lone interviews.*	Examples of risk: difficult to summon help. Is the risk high / medium / low? I will be conducting interviews over the telephone from a quiet room in my house, assumingly participants will be located in their offices / place of work or at home also. Lone working in this case is very LOW RISK.		

CONTROL MEASURES **Indicate which procedures are in place to control the identified risk**

	the departmental written Arrangement for lone/out of hours working for field work is followed
	lone or isolated working is not allowed
	location, route and expected time of return of lone workers is logged daily before work commences
X	all workers have the means of raising an alarm in the event of an emergency, e.g. phone, flare, whistle
	all workers are fully familiar with emergency procedures
	OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

ILL HEALTH	The possibility of ill health always represents a safety hazard. Use space below to identify and assess any risks associated with this Hazard.
e.g. accident, illness, *personal attack, special personal considerations or vulnerabilities.*	Examples of risk: injury, asthma, allergies. Is the risk high / medium / low? N/A

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk
	an appropriate number of trained first-aiders and first aid kits are present on the field trip
	all participants have had the necessary inoculations/ carry appropriate prophylactics
	participants have been advised of the physical demands of the trip and are deemed to be physically suited
	participants have been adequate advice on harmful plants, animals and substances they may encounter
	participants who require medication have advised the leader of this and carry sufficient medication for their needs
	OTHER CONTROL MEASURES: please specify any other control measures you have implemented: N/A

TRANSPORT	Will transport be required	NO		Move to next hazard
		YES		Use space below to identify and assess any risks
e.g. hired vehicles	Examples of risk: accidents arising from lack of maintenance, suitability or training Is the risk high / medium / low? NO transport will be required			

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk
	only public transport will be used
	the vehicle will be hired from a reputable supplier
	transport must be properly maintained in compliance with relevant national regulations
	drivers comply with UCL Policy on Drivers http://www.ucl.ac.uk/hr/docs/college_drivers.php
	drivers have been trained and hold the appropriate licence
	there will be more than one driver to prevent driver/operator fatigue, and there will be adequate rest periods
	sufficient spare parts carried to meet foreseeable emergencies
	OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

N/A

DEALING WITH THE PUBLIC	Will people be dealing with public	NO	If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
e.g. interviews, observing	Examples of risk: personal attack, causing offence, being misinterpreted. Is the risk high / medium / low?		

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk

	all participants are trained in interviewing techniques
	interviews are contracted out to a third party
	advice and support from local groups has been sought
	participants do not wear clothes that might cause offence or attract unwanted attention
	interviews are conducted at neutral locations or where neither party could be at risk
	OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

N/A

WORKING ON OR NEAR WATER	Will people work on or near water?	NO	If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
e.g. rivers, marshland, sea.	Examples of risk: drowning, malaria, hepatitis A, parasites. Is the risk high / medium / low? N/A		

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk

	lone working on or near water will not be allowed
	coastguard information is understood; all work takes place outside those times when tides could prove a threat
	all participants are competent swimmers
	participants always wear adequate protective equipment, e.g. buoyancy aids, wellingtons
	boat is operated by a competent person
	all boats are equipped with an alternative means of propulsion e.g. oars
	participants have received any appropriate inoculations
	OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

N/A

MANUAL HANDLING (MH)	**Do MH activities take place?**	**NO**	**If 'No' move to next hazard** **If 'Yes' use space below to identify and assess any risks**
e.g. lifting, carrying, moving large or heavy equipment, physical unsuitability for the task.	Examples of risk: strain, cuts, broken bones. Is the risk high / medium / low? N/A		

CONTROL MEASURES	**Indicate which procedures are in place to control the identified risk**

	the departmental written Arrangement for MH is followed
	the supervisor has attended a MH risk assessment course
	all tasks are within reasonable limits, persons physically unsuited to the MH task are prohibited from such activities
	all persons performing MH tasks are adequately trained
	equipment components will be assembled on site
	any MH task outside the competence of staff will be done by contractors
	OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

N/A

SUBSTANCES	Will participants work with substances	NO	If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
e.g. plants, chemical, biohazard, waste	Examples of risk: ill health - poisoning, infection, illness, burns, cuts. Is the risk high / medium / low? N/A		
CONTROL MEASURES	**Indicate which procedures are in place to control the identified risk**		

	the departmental written Arrangements for dealing with hazardous substances and waste are followed
	all participants are given information, training and protective equipment for hazardous substances they may encounter
	participants who have allergies have advised the leader of this and carry sufficient medication for their needs
	waste is disposed of in a responsible manner
	suitable containers are provided for hazardous waste
	OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

N/A

OTHER HAZARDS	Have you identified any other hazards?	NO	If 'No' move to next section If 'Yes' use space below to identify and assess any risks
i.e. any other hazards must be noted and assessed here.	Hazard: Risk: is the risk		
CONTROL MEASURES	**Give details of control measures in place to control the identified risks**		

N/A

Have you identified any risks that are not adequately controlled?	NO	X	Move to Declaration
	YES		Use space below to identify the risk and what action was taken

For more information, please refer to: http://ethics.grad.ucl.ac.uk/

DECLARATION	The work will be reassessed whenever there is a significant change and at least annually. Those participating in the work have read the assessment.

Select the appropriate statement:

X	I the undersigned have assessed the activity and associated risks and declare that there is no significant residual risk
X	I the undersigned have assessed the activity and associated risks and declare that the risk will be controlled by the method(s) listed above

NAME OF SUPERVISOR

Dr Danielle Sanderson

SIGNATURE OF SUPERVISOR DATE

Danielle Sanderson *03/06/2020*

FIELDWORK 5 May 2010