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An Institutional Perspective on Information and Communication Technologies in Governance

A thesis submitted for the degree of doctor of philosophy

by

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Abstract

Information and Communication Technologies (ICTs) are becoming increasing relevant in policy making and governance activities. However, the broad effects of digital governance have not been adequately conceptualised; conflicting assumptions vary from rather optimistic accounts of empowered citizens to even completely dismissing the potential of engagement through technical means.

This research attempts to reposition the impact of ICTs on policy making and political communities. Drawing from institutional studies, an integrated perspective is synthesised to guide case investigations in three main directions: (1) the way influences from the institutional environment are understood and balanced locally, (2) the co-evolution of institutional and technological configurations and (3) the dynamic response of institutional actors to the challenge of online engagement. The empirical part focuses on two different contexts (local government authorities and a trade union federation) that cover the holistic objective of this study.

The findings inform on the extent to which ICTs are actually merging with existing governance structures. Both studies show that policy making is fundamentally different from other activities at the general intersection of Internet and politics. Citizens form online communities to organise ad hoc around single issue movements. However, this does not necessarily translate into sustainable and meaningful participation in formal politics. Hence, adapting institutional structures emerges as a complicated challenge beyond fitting technical means into existing engagement activities.

On this basis, the thesis questions the extent to which policy making mechanisms are able to enact engagement from the grassroots, as for example encouraged by the social media collaboration philosophy. Implications for practice show how the alignment between new tools and the existing norms has the potential to identify paths of least resistance, and then exploit them to accomplish positives changes whose beneficial effects should not be taken for granted.

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Dedication

First of all this thesis is dedicated to my parents and sister who were never bored to observe my endless studying and keep letting me how much they believed in what I can accomplish. Along with them, my gratitude goes to my friends and godmother in Greece who I had to miss for long periods of time.

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Preface and Publications

The work presented in this thesis combines empirical material from different sources. At the early stages of the data collection process in the Kingston study, assistance was provided by Mutaz Al-Debei. In the trade union study, the author maintained a close relationship with the organisation; the research implications of this relationship are discussed throughout the thesis.

A list of publications which contain material from the thesis follows. Dissemination was also realised through non-academic outlets including: practitioners' blogs, the ePetitions Community of Practice, the Headstar eGovernment bulletin¹, the Guardian Government Computing magazine², the Guardian Local Government Network³ and other newsletters.

Journals

- 1. (under review, 2nd round) **Panagiotopoulos Panagiotis**, *Towards Unions 2.0?*Rethinking the Audience of Social Media Engagement, New Technology, Work and Employment.
- (in press) McGrath Kathy, Elbanna Amany, Hercheui Magda, Panagiotopoulos
 Panagiotis, Saad Elizabeth, Exploring the Democratic Potential of Online Social
 Networking: the Scope and Limitations of E-Participation, Communications of the
 Association for Information Systems.
- 3. **Panagiotopoulos Panagiotis**, Al-Debei Mutaz, Fitzgerald Guy, Elliman Tony (2012) *A Business Model Perspective for ICTs in Public Engagement*, Government Information Quarterly, vol. 19, no.2, pp. 192-202.
- 4. **Panagiotopoulos Panagiotis**, Sams Steven, Elliman Tony, Fitzgerald Guy (2011) *Do Social Networking Groups Support Online Petitions?* Transforming Government: People, Process and Policy, vol. 5, no. 1, pp. 20 31.

http://www.headstar.com/egblive/?p=831 and http://www.headstar.com/egblive/?p=617 (accessed 20/09/2011)

http://www.guardian.co.uk/government-computing-network/2010/dec/09/online-citizen-engagement-feature-09dec10?INTCMP=SRCH (accessed 20/09/2011)

http://www.guardian.co.uk/local-government-network/2011/jun/21/councils-fail-digital-democracy (accessed 20/09/2011)

Book chapter

5. **Panagiotopoulos Panagiotis**, Elliman Tony, *Online Engagement from the Grassroots:*Reflecting on Over a Decade of ePetitioning Experience in Europe and the UK, (eds)

Charalabidis Y. and Koussouris S., Empowering Open and Collaborative Governance:

Technologies and Methods for On-line Citizen Engagement in Public Policy Making,

pp. 79-94, Springer-Verlang: Berlin.

Conferences

- 6. McGrath Kathy, Elbanna Amany, Hercheui Magda, **Panagiotopoulos Panagiotis**, Saad Elizabeth, *Online Social Networking and Citizen Engagement: Debating the Potential and Limitations (panel)*, 32nd International Conference on Information Systems, Shanghai, China, December 2011.
- 7. **Panagiotopoulos Panagiotis**, Moody Christopher, Elliman Tony (2011) *An Overview Assessment of ePetitioning Tools in the English Local Government*, IFIP 3nd International Conference on eParticipation, LNCS 6847, pp. 204 215, (eds) Tambouris E., Macintosh A., and de Bruijn H., Delft, Netherlands, September 2011.
- 8. **Panagiotopoulos Panagiotis**, Brooks Laurence, Elliman Tony, Dasuki Salihu Ibrahim (2011) *Social Networking for Membership Engagement in Non-profit Organisations: a Trade Union Study*, 17th Americas Conference on Information Systems, Detroit, USA, August 2011.
- 9. **Panagiotopoulos Panagiotis**, Elliman Tony, Fitzgerald Guy (2011) *How Can Public Sector Transformation be Institutionally-Enabled? A UK Local Government Study*, 19th European Conference on Information Systems, Helsinki, Finland, June 2011.
- 10. Panagiotopoulos Panagiotis, Al-Debei Mutaz (2010) Engaging with Citizens Online: Understanding the Role of ePetitioning in Local Government Democracy, Internet, Politics, Policy 2010: An Impact Assessment, St Anne's College, University of Oxford, UK, September 2010.
- 11. **Panagiotopoulos Panagiotis**, Elliman Tony (2010) *Institutional Culture and Lessons from the Strategic Use of eParticipation Technologies*, IFIP 2nd International Conference on eParticipation, (eds) Chappelet et al., pp. 295 303, Lausanne, Switzerland, September 2010.
- 12. Al-Debei Mutaz, **Panagiotopoulos Panagiotis**, Fitzgerald Guy, Elliman Tony (2010) *Rethinking the Business Model Concept with eParticipation*, Transforming Government Workshop, Brunel University, UK, March 2010.
- 13. **Panagiotopoulos Panagiotis**, Elliman Tony, Fitzgerald Guy (2009) *Democratic Decision Making in the Information Society: Exploring Stakeholders' Views*, 4th Mediterranean Conference on Information Systems, Athens, Greece, September 2009.

Chapter 1 - Introduction and Motivation

1.1 Introduction

The concept of participatory decision-making in public governance was historically established in ancient Athens around 2500 years ago. It sought to enforce collective power through predefined rights and obligations imposing direct and collective decision making as a citizen obligation; even in terms of being able to produce a quality opinion and cast a justified vote. In fact, citizens who were not willing or able to participate were called "private" citizens in an insulting manner, since they remained in their private houses during public deliberations. This is how the word idiot originates from the Greek word "idiotis" ($\iota\delta\iota\dot{\omega}\tau\eta\varsigma$ = private, individual, one's own). It was originally used to characterise someone as either mentally ill or indifferent to public concerns.

Modern public institutions have increasingly been considering the use of Information and Communication Technologies (ICTs) to foster citizen engagement and attempt to reach citizens beyond their private world. It is becoming widely accepted that technology initiatives are no longer exclusively implemented to achieve financial and operational gains, but also to provide broader citizen engagement effects. In this effort, a plethora of available tools have been applied in a wide range of governance activities (e.g. Chee 2008). These initiatives have been driven by the belief that ICTs' potential to enhance democratic processes is significant but has yet to be realised (Chadwick, May 2003, Bekkers, Homburg 2007). Within this debate, the concept of technology mediated citizen participation or eParticipation is a new research area and an important part of the eGovernment agenda (e.g. Saebo et al. 2008, Rose, Sanford 2007, Macintosh 2006).

Online citizen engagement activities are viewed as part of the digital governance field; complementary to participation in policy making, citizen engagement is recognised as an objective covering a broader range of activities such as collaborative service design (e.g. Chan, Pan 2008). Overall, governing institutions use online means to interact with citizens and provide them with added value elements in different ways from political involvement to traditional service delivery and electronic voting (Janssen et al. 2008). In this effort, ICTs for public involvement are not simply a set of new services but an emerging agenda of

governance activities that seek to foster transparency, openness and legitimacy (e.g. Bingham et al. 2005, Bertot et al. 2010).

This thesis concerns the connection between ICTs, people and their formal governance activities. The working term eParticipation is adopted and used interchangeably with online engagement. The research associates with any efforts of online engagement beyond improving internal processes. Motivated by the availability of new technologies and their more widespread use, the main objective of this study is to examine the integration and impact of ICTs in policy making. In a complementary aspect, this integration processes has been referred to as institutionalisation or enactment (e.g. Fountain 2001, Cordella, Iannacci 2010, Azad, Faraj 2009, Kim et al. 2009b).

The institutionalisation or enactment view generally aims to explain how public systems, policies and actors both shape and are shaped by the environment within which they exist. The outcome of this examination can uncover how those ICTs in different contexts succeed or not to have a positive impact on existing policy making. Such an investigation can be particularly useful as the digital governance concept is maturing from the theoretical/experimental to the implementation level. Despite rapidly growing work in the field, a number of influential studies recommend that there is a lot more to learn about the actual effects of political engagement ICTs on policy making structures (e.g. Saebo et al. 2008, Macintosh 2004b, Macintosh et al. 2009, Dutton, Eynon 2009).

The current chapter serves as a research introduction and thesis roadmap. The next section presents a brief background and summarises the thesis motivation. Section 1.3 outlines the research approach which includes an introduction to methodology and the empirical context. Section 1.4 states the expected contribution of this work and section 1.5 presents a thesis roadmap which previews upcoming chapters.

1.2 Limitations on the study of ICTs in governance

During the last decade, there are numerous examples of ICTs in democratic processes, for example petitions (Seaton 2005), consultations (Tomkova 2009), deliberations (Rose, Saebo 2010), planning applications (Conroy, Evans-Cowley 2006) and participatory budgeting activities (Peixoto 2009). These areas have been supported by a large variety of common

tools deployed in citizen engagement efforts. Such examples can include newsletters, alert services, polls, surveys, webcasts, podcasts and search engines (Wimmer 2007). Caddy et al. (2007) review numerous examples of eParticipation projects in terms of stakeholders involved, aims and scope, tools and methodologies used.

The increasing use of ICTs in public engagement has seen a combination of existing practices pushed on the web due to the expectations generated by the availability of new technologies (Saebo et al. 2008). Following some years of experimentations, mainly before 2004, such tools are now gaining maturity, consolidating more comprehensive lessons on their use. However, understanding the conditions under which they become part of formal policy making is essential to eventually realise their potential from theory to practice (Saebo et al. 2008, Macintosh et al. 2009).

For example, in their review of Internet and politics, Anduiza et al. (2009) inform us that such a relationship is not in any case linear. It is rather uncritical to assume that effective use of Internet tools will necessarily increase public participation and contribute to better policy making. Recent studies have discovered unpredictable patterns of online political behaviour which warn that online citizen-driven political activity does not automatically converge with formal policy making (e.g. Jungherr, Jürgens 2010, Lindner, Riehm 2010, Carman 2010, Panagiotopoulos et al. 2011).

Similar indications have been uncovered by studies which examine the integration of those tools (e.g. Gronlund 2003, Miller 2009, Panagiotopoulos, Al-Debei 2010). In fact, engagement efforts became even more complicated with the emergence of the Web 2.0 paradigm and the opportunities it generates for online interactions (e.g. Saebo et al. 2009, Chadwick 2009). Although the eParticipation term first denoted more traditional aspects of public sector Information Systems, it was later recognised that Web 2.0 has considerable implications for engagement strategies (Meijer, Thaens 2010). Institutional actors such as public authorities, political parties and universities have been challenged to reshape their activities in order to enable, instead of constraining, bottom-up involvement efforts by networked individuals (Dutton, Eynon 2009). This naturally leads to the concept of exploiting more spontaneous citizen-driven political activity produced through everyday Internet tools (e.g. Macintosh et al. 2009).

Although there are some successful cases demonstrating positive results, citizen engagement initiatives are often impeded by practical barriers such as low adoption, reduced acceptance, coordination difficulties and a lack of impact assessment (Saebo et al. 2008, Macintosh et al. 2009). In fact, projects pursuing citizen engagement have proved as complex to implement as any other eGovernment services (Rose, Grant 2010) and have additional difficulties, including targeting stakeholders and integration within the policy making lifecycle (e.g. Macintosh 2004b, Andersen et al. 2007).

Indicatively, the challenges for achieving meaningful engagement include: (1) handling the problem of massive scale, (2) building capacity and citizenship, (3) ensuring coherence and integration within the different stages of the policy making life cycle, (4) understanding the impact of engagement efforts and (5) achieving institutional commitment to adapt structures and governance processes (Macintosh 2004b). In particular, among these, the challenge of how to cultivate citizen engagement through institutional mechanisms remains mainly unsolved and results in poor sustainability (Lowndes et al. 2006). According to Carman (2010), for such mechanisms to be sustainable and meaningful, significant attention needs to be devoted on public perceptions of procedural fairness and neutrality with regards to the use of engagement tools.

Despite the aforementioned shortcomings, researchers and practitioners have been enabled to report on notable cases on how political institutions could use technology to reconnect with their public. However, moving beyond instrumental, technological and application descriptions, we still need to better understand this connection at a conceptual level and examine its implication for institutions themselves. The widespread use of engagement tools, their challenges and controversial impact have opened a whole agenda of theoretical issues which have not been adequately explored (e.g. Bingham et al. 2005, Macintosh et al. 2009). For example, the models used so far to describe progress in participatory applications are often biased over technological or political statements (Gronlund 2009); most of them demonstrate a passage from e-Informing (posting public information online) to e-Consulting (citizens are consulted online) and eventually to e-Empowerment (citizens seize decision-making agendas).

According to Macintosh et al. (2009), efforts towards maturity of the field require research that will realise stronger links between theory and practice by positioning ICTs within

frameworks embedding cultural and ideological dynamics. Such dynamics shape the eParticipation concept as a strategic issue for political institutions beyond implementation decisions and thus, are subject to interpretations by online engagement actors. The next section introduces the institutional perspective in information systems research.

1.3 ICTs and institutions: examining the interactions

The study of ICTs and institutions comes at the forefront due to the fact that, during adoption processes, ICTs for public engagement usually bears wider concerns over traditional policy making. In many cases, technologies uncover underlying assumptions which provide prima facia evidence that existing structures within organisations could explain, or even have predicted, emerging responses. More recently, the impact of ICTs on public sector change has begun to be examined from the institutional theory perspective. This theoretical lens views such initiatives as standing at the intersection between people, institutions and efforts of technology innovation (e.g. Orlikowski, Barley 2001).

Studies of ICTs and organisations have revealed how institutional factors can affect the use of technologies in dissimilar, but equally significant ways (e.g. Mignerat, Rivard 2009, Currie 2009). Current work in digital governance research includes elements of institutional thinking, but fails to comprehensively establish this connection across different contexts. For example, studies have highlighted aspects such as:

- How institutions shape the conceptualisation and conduct of ICTs for participation at the policy framework level (Chadwick, May 2003). One of the examples used in this study is the UK Local Democracy, Economic Development and Construction Act (2009) which forced English local authorities to implement online petitioning facilities for their citizens.
- The opposing views reflected by diverse political actors and elected representatives
 in particular (Mahrer, Krimmer 2005). It seems that the more radical the citizen
 participation concepts, the less the support is expected from politicians. Possible
 interpretations are attributed to personal fear of change.

 Dilemmas occurring within political organisations on how systems should be integrated administratively and politically. For example, Miller (2009) reports on the UK Parliament's debate concerning the introduction of an ePetitioning system that would balance public expectations with institutional practices.

The above work provides an important starting point for more holistic examinations which can take into account previous Information Systems (IS) research on the study of ICTs and institutions. In common usage, the term *Institution* is often perceived as a large formal organisation. However, from the theoretical perspective, institutions are not organisations, but the norms, structures, standardised behaviours or assumptions that are "taken-forgranted" within and across them (Powell, DiMaggio 1991, Scott 2008). In this sense, institutions can exist as a social context without any formal organisation. Such structures are not de facto sources of stability since they can "both enable and disarm the efforts of those seeking change" (Scott 2008, p.220).

In IS research, a rising number of studies are adopting an institutional view to examine IT-related phenomena (Mignerat, Rivard 2009, Weerakkody et al. 2009). A key lesson from institutional studies is that ICT strategies, policies or systems face resistance when in conflict with institutional dynamics, but are facilitated when aligned with them (Christiaanse, Huigen 1997). Not without their critics (e.g. Hasselbladh, Kallinikos 2000), institutional studies offer a conceptually rich perspective to explain how IT-oriented forms of organising may gain (or not) legitimacy and become part of organisations. Mignerat and Rivard (2009), distinguish between studies focusing on institutional effects and those focusing on institutionalisation processes mainly from an organisational perspective. Weerakkody et al. (2009) explain that an institutional perspective provides a useful conceptual basis for investigating issues of shaping change in public sector environments, as well as an analytical lens to examine the political view of institutional processes.

Also responding to the call for new theoretical approaches in public sector ICTs, the institutional view has been gaining momentum (Yildiz 2007). Different scholars have focused on the institutional aspect: from the eGovernment enactment framework developed by Cordella and Iannacci (2010), to the concept of "situated practices" by Azad and Faraj (2009) and the institutionalisation dimensions addressed by Kim et al. (2009b). Nevertheless, although eGovernment services are also seen as "a heuristic for engaging the"

citizen in the political process (eParticipation)" (Ong, Wang 2009), limited previous research has focused on how citizen engagement exercises impact upon and are affected by governance institutions. Having introduced this background, the next section summarises the research approach adopted in this thesis.

1.4 Introduction to research approach

Summarising the previous sections, it seems that the availability of new technology stimulates opportunities to develop new forms of digital engagement. However, previous studies indicate that the rapid pragmatic evolution of online interactions fails to make clear their underlying logic and sometimes results in the potential of ICTs being ignored. In other occasions, political organisations rush to exploit ICTs within the scope of their traditional governance activities, but they fail to adequately prepare, understand and assess their impact. On this basis, the online engagement concept motivates this study to explore the following simple, yet important question:

How do ICTs for public engagement impact on institutional policy making structures?

1.4.1 Aims and objectives

Adopting an institutional approach as a theoretical basis, this study attempts to link the use of ICTs for public engagement in different contexts and develop joint conclusions. Those tools at the beginning emerged as part of eGovernment research, thus positioning governmental agencies at local, national or transnational level at the centre of attention. Nevertheless, establishing more generalised conclusions is important since the concept's relevance is not limited to civic functions. Other formal policy making mechanisms based on representative relationships include political parties, trade unions, or any other microinstitutional contexts. Such communities are affected by engagement technologies in various ways and in many cases need to reconceptualise their traditional political processes and even their internal structure and organisation. This investigation can be broken down into the following motivating questions:

• How political organisations perceive institutional influences to exploit ICTs for public engagement and how does this reflect upon their organisational environment?

- How do ICTs for public engagement adapt to existing policy making mechanisms during their institutionalisation processes?
- How do different actors influence the adoption and use of ICTs for public engagement and what is their effect on processes of institutionalisation?

Addressing those issues within the main research question leads to the division of the following objectives with their corresponding thesis chapters:

- Objective 1 Present a concise review of the institutional perspective in organisational studies and IS research with particular focus on the intersections with the institutional study of ICTs in governance (chapters 2 and 3).
- Objective 2 Demonstrate how the institutional perspective has the potential to illustrate the use of ICTs in governance (chapters 3 and 4).
- Objective 3 Uncover new insights that this perspective can elicit on digital governance initiatives led by governmental agencies (chapter 5).
- Objective 4 Uncover new insights that this perspective can elicit on digital governance initiatives led by non-governmental communities (chapter 6).
- Objective 5 To holistically examine the impact of ICTs, combine and evaluate conclusions from the two case studies. On this basis, develop implications for theory and practice, as well as future research directions (chapters 7 and 8).

1.4.2 Epistemology and methodology

The issue of epistemology has long been debated in such a diverse field such as Information Systems. Positivist, interpretivist and critical approaches all stand with their supporters and critics (e.g. McGrath 2005, Klein, Myers 1999, Walsham 2006, Dubé, Paré 2003, Lee 1991). For this study, interpretivism can provide the insights needed with respect to the different perceptions on the impact of ICTs in policy making. This is due to the fact that attempting to understand ways of arguing and acting about online engagement naturally leads to an analytical study where close interaction with participants is inevitable.

The empirical part of this research is based on a multiple case study methodology. Researching into contemporary phenomena and addressing questions related to how and why such phenomena occur within their real-life settings define the appropriateness of case studies (Yin 2009). When examining the design and impact of ICTs, a case study is particularly relevant following the need to understand the organisational context in which technologies are embedded and their ubiquitous interactions with associated social processes (Dubé, Paré 2003). The political and socio-organisational complexity of public organisations has established the case study methodology as the leading paradigm in digital governance research; see for example (Heeks, Bailur 2007).

The nature of this research is exploratory since it attempts to enhance our knowledge of a quite novel phenomenon using well established theoretical ideas from previous studies. The main data sources in this study are qualitative. Interviews with selected participants across all systems' aspects provided a rich set of data to address the questions raised. They are supported by a wide range of secondary documentary material and informal contacts made within involved organisations. Quantitative data were also used as secondary sources. Combining different data sources ideally results in achieving *triangulation* of findings (Yin 2009); a rather positivist concept, which can also be useful here.

Data analysis was developed in two phases: a within-case analysis was followed by a cross-case synthesis. The former adopted the thematic analysis technique proposed by Braun and Clarke (2006). This quite flexible and widely used technique to qualitative data analysis is based on identifying common patterns within sets of data. Figure 1.1 illustrates the research design for the material presented in this thesis and identifies points of expected contributions.

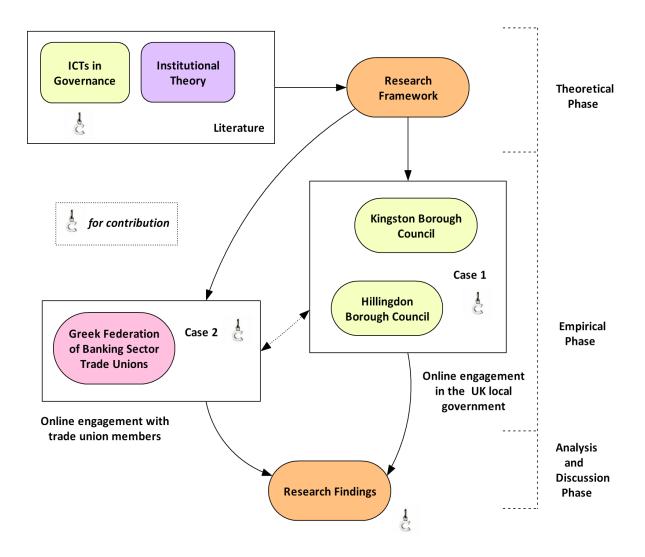


Figure 1.1: Research design.

The research design evolves in three phases: the theoretical, the empirical and the discussion and analysis:

- The *theoretical phase* focuses on the first two objectives, aiming to establish the technological and theoretical background. The insights gains from the review of institutional studies aims to support the theoretical contributions of this research.
- The *empirical phase* addresses the objectives 2 and 3. Two case studies were conducted in two distinct settings aiming to offer complementary insights.
- Finally, the discussion and analysis phase addresses objective 5 by evaluating and synthesising insights from the two studies and developing them within the scope of the main research question.

1.4.3 The empirical context

The fieldwork presented in this thesis was carried out in three different organisations in the UK and Greece. The first study was conducted with two London local authorities, the Royal Borough of Kingston and the London Borough of Hillingdon, focusing on their ePetitioning initiatives (the unit of analysis). Kingston-upon-Thames was the first council to experiment with implementing online petitioning in 2004, aiming to complement traditional petitioning channels to the authority. Hillingdon introduced ePetitions in 2010 as a response to the legislation by the Labour government. The Hillingdon study draws useful comparisons with the more developed Kingston experience and particularly demonstrates how in both cases the new technology interacted with existing structures. Those two studies are supported by the findings of an overview web content analysis survey which investigated the adoption of ePetitioning tools in the English local government in March 2011 (see Appendix 1).

The second study traces the efforts of a trade union federation which, since 2009, decided to use social networking tools to improve interactions with its members. The Greek Federation of Bank Employee Unions is a nationally influential political entity which unites individual collectives from public and private banks, eventually representing thousands of bank employees in negotiations with employers and the state. Their ongoing exploitation of ICTs is related to broader socio-political forces and is also greatly affected by the way Greek trade unions operate. This case provides an interesting context to investigate the use of online engagement tools in formal politics beyond governmental agencies. The qualitative data collected over a period of two years are supported by a membership survey which profiles members' expectations.

1.5 Main findings and contributions

Both studies derive important lessons on the relationship between ICTs and policy making. The internal and external institutional influences surrounding online engagement efforts can be useful in explaining, or even predicting, emerging responses by the organisations examined. The way local actors assessed the opportunities and risks related to online engagement shows how such tools merge with existing structures in asymmetrical ways:

they do not necessarily foster more inclusive governance, but can have positive impact if involved actors are motivated to perceive gains from those initiatives.

Despite Internet tools being now well established in every aspect of social life, this study does not indicate that ICTs are having transformational effect in policy making. Instead, even for basic gains to be achieved, institutional adaptability should not in any case be taken-for-granted as it requires a whole set of political, organisational and eventually technological variables to be configured. Even so, the extent to which policy making structures are able to enact engagement from the grassroots remains problematic. Formal policy making should be seen as fundamentally different from campaigning or other activities in the general intersection of Internet and politics (e.g. Anduiza et al. 2009). The fact that citizens use Web 2.0 tools to organise ad hoc around single issue movements does not necessarily translate into sustainable and meaningful participation in public decisions. Those observations should not be limited to governmental initiatives since they seem relevant for all institutional communities such as trade unions and political parties.

From the theoretical perspective, the thesis contributes to our knowledge on the effects of technology in political organising. The studies particularly seek to broaden the field's perspective within and beyond public authorities by focusing on concepts applicable to all institutional communities. In this direction, the multidisciplinary theoretical view synthesised addresses the call for theorising this emerging field (Macintosh et al. 2009, Saebo et al. 2008). The theoretical analysis identifies how and why ICTs do not necessarily lead to democratisation by focusing on their more complicated impact on formal politics and its mechanisms for public participation.

Furthermore, certain methodological contributions are developed about conducting research which focuses not on the tools but on the people, processes and institutions that interact with them. The material drawn together from different contexts combines the longitudinal trade union study with the well-developed experiences of the English local government authorities. This combination leads to an integrative understanding of digital governance in its different forms and with respect to different stakeholders. On this basis, the thesis reflects on issues of data collection, the researcher's involvement, as well as the implications for information systems research when it comes to studying ICTs in political organising.

From the practical perspective, the study seeks to contribute to the instrumental and conceptual agenda of eParticipation (Saebo et al. 2008). To increase its relevance to practice, the thesis is consistent with the advice of reporting on exceptional cases of high value for practitioners (Dubé, Paré 2003, Benbasat, Zmud 1999). The institutional analysis provides useful suggestions as to what makes online engagement efforts successful or not. Policy makers can be motivated to look carefully at their institutional environment and diagnose sources of potential resistance and emerging opportunities. Following this analysis, they should think first of adapting institutional mechanisms to new technologies and then about their functional fit with current procedures. The thesis elaborates on how the conclusions can be useful within and beyond the contexts and tools examined.

1.6 Thesis roadmap

The thesis structure aims to unfold the research in a reflective way, explaining the choices made and the transition from the theoretical background to contributions for current research and practice. The thesis is structured in eight chapters as follows:

Chapter 1 provides an overview of the thesis, the research questions and the motivation.

Chapter 2 briefly reviews current efforts in online engagement and particularly focuses on petitioning and social networking tools. The literature describes the important dimensions in the study and use of those tools. For example: technologies, actors, stages in policy making, evaluation, focus areas, proposed benefits and decision making costs. EPetitioning tools are introduced as simple, popular and increasingly used by many public authorities internationally. Finally, an introduction of social networks explores how they emerged as spaces where citizens gather around specific interests and in many cases attempt to influence political agendas.

Chapter 3 reviews and synthesises the theoretical perspective based on institutional theory. The literature is examined in a multidisciplinary and progressive way starting from the definition of institutions as the norms, structures, behaviours or assumptions that are taken-for-granted within and across organisations. Such structures are observed as both enabling and constraining individuals and organisations. The review examines this perspective in organisational and IS studies and then with regards to public sector ICTs.

Useful concepts include institutionalisation processes, isomorphic influences, entrepreneurs and institutional alignment of ICTs. Apart from drawing upon those concepts to position the work conducted in the thesis, the review also identifies interesting directions for future research in the field.

Chapter 4 clarifies the thesis ontological and epistemological assumptions, as well as the details of the research processes. The two case studies are introduced along with their data collection activities. Data collection is mainly qualitative supplemented by two quantitative studies. Alternative approaches to methodology and epistemology are also discussed to exemplify the choices made. Furthermore, chapter 4 operationalises the useful theoretical concepts reviewed in chapters 2 and 3 and explains how they directed the empirical investigations in the form of a guiding framework for data collection and analysis. Finally, the chapter explains how the data analysis part was conducted.

Chapter 5 applies the institutional perspective on a digital governance initiative led by a public authority: the cases of the two London local authorities and their experiences with ePetitioning tools. The cases show how the English local governance context cultivated the activity of ePetitioning in a combination of formal and informal initiatives. Leadership by inspired individuals, flexibility and institutional authority enabled those tools to generate positive impact on local democratic processes. Nevertheless, the attempt to regulatory enforce ePetitioning tools at the national level produced several not encouraging results three months after the implementation deadline. On this basis, chapter 5 concludes by discussing what sort of impact on democratic processes was achieved by local government ePetitions and whether this belongs to the sphere of institutional change or not.

Chapter 6 applies the institutional perspective on a digital governance initiative led by a non-governmental institutional community. This is the case of an influential Greek trade union federation studied for almost two years with respect to its eParticipation efforts. In this political organisation, ideas of engaging with members online were strongly connected to broader national and transnational forces. The alignment between those influences and the local union culture resulted in internal debate around issues of organisational identity, leadership, union modernisation and capacities to leverage the participatory potential of ICTs within current structures. Online engagement is examined as part of a process of

socially mandated institutional change where the union's mission had to be reconsidered under difficult national socio-economic circumstances.

Chapter 7 reflects on the empirical material presented and analysed. The discussion focused on certain common topics that frame the impact of ICTs on democratic processes. The first major theme is institutional adaptation to online engagement activities. It is highlighted that, despite the widespread use of Internet tools for organising social movements, protesting and campaigning, sustainable citizen participation in formal policy making involves a set of fundamentally different activities. This is why, with few exceptions, enacting bottom-up engagement in meaningful ways can be identified as the key institutional challenge. Chapter 7 also considers how key actors approach online engagement in relevance to the research findings. It is suggested that politicians or other traditional power-holders do not necessarily act as inhibiting factors. Instead, as with all involved actors, they attempt to benefit from those tools according to their perceived interests; a response which develops dynamically as the effects of online engagement become more explicit from theory to practice. Finally, chapter 7 discusses certain implications about evaluating online engagement.

Chapter 8 summarises the research findings and provides a retrospective thesis overview. On this basis, it discusses the thesis contributions for theory, methodology and practice. The thesis concludes with limitations, future research directions, as well as an epilogue on the future of digital governance.

Figure 1.2 maps the chapter structure to the research objectives.

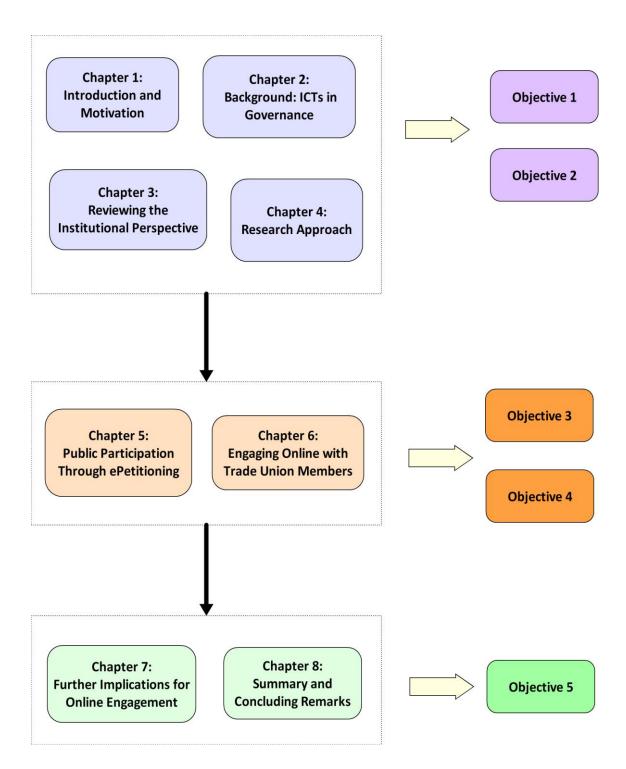


Figure 1.2: Thesis structure

Chapter 2 - Background: ICTs in Governance

2.1 Introduction

Based on the concepts and aims introduced, chapter 2 elaborates on current research on ICTs in governance. This review does not aim to reach the completeness of previous work focusing on this objective (Rose, Sanford 2007, Saebo et al. 2008), but acts introductory to the cases and the theoretical background presented in this thesis.

Section 2.2 defines in more detail the eParticipation concept and explains how interest in such activities increased during the last few years. Section 2.3 presents a brief review of current research. It provides examples of online participation tools, examines the benefits proposed by such initiatives and explores how they are perceived by involved actors. Sections 2.4 and 2.5 focus respectively on the two main technological backgrounds used in this research: ePetitions and social networks. Finally, section 2.6 summarises the main points presented in this chapter.

2.2 Overview of ICTs in public engagement

EParticipation forms a multi-disciplinary and quite diverse field. Researchers have tackled eParticipation topics from diverse perspectives. For example, studying ICTs in political communication processes (e.g. Bimber 2000, Anduiza et al. 2009), or operational researchers examining the effects of decision support systems (e.g. Lourenço, Costa 2007, Cartwright, Atkinson 2009). According to Saebo et al (2008), online engagement is not new, but has rather been stimulated by the evolution of many existing activities which were significantly pushed by advancements in Internet technologies. Saebo et al. provide a wide definition of the concept as (p.400):

"EParticipation involves the extension and transformation of participation in societal democratic and consultative processes mediated by information and communication technologies ICT), primarily the Internet. It aims to support active citizenship with the latest technology developments, increasing access to and availability of participation in order to promote fair and efficient society and government."

The relationship between engagement in policy making and service provision to citizens is interrelated in eGovernment research. Chadwick and May (2003) undertook a comparative analysis of national eGovernment policies and concluded that the democratic potentials of ICTs were marginalised on the existence of a dominant "managerial" model of citizengovernment interactions. However, particularly from the period 2004-2006, there is evidence of increasing interest to strengthen the participatory potentials of ICTs. In a popular OECD report produced to examine this aspect, Macintosh (2004b) predicts the increase in online engagement efforts. This observation was supported by many popular initiatives which had managed to attract widespread attention.

The findings of the last two UN Global eGovernment Surveys (UNPAN 2008, 2010) suggest that especially following the popularity of Web 2.0 tools, online engagement is progressively becoming part of national agendas. The 2010 survey, nevertheless, points out the difficulties in measuring formal eParticipation activities at such scales and shows that eParticipation exploitation levels remain rather low; less than 30% in the great majority of countries. At the local government level, a few studies have attempted to assess the diffusion of eParticipation activities (e.g. Medaglia 2007b, van de Graft, Svensson 2006, Scott 2006). Those studies implicitly warn that overview research provides useful information but does not reveal intentions and capacities to open governance.

Apart from the technological dimension, there is a series of important decisions when designing online engagement exercises. This for example relates to the different stages and models of participation discussed by Gronlund (2009). The next section elaborates on some of those key dimensions which have been summarised by Macintosh (2004a) in the following table:

Dimension	Description
Level of participation	what level of detail, or how far to engage citizens
Stage in decision making	when to engage
Actors	who should be engaged and by whom

Dimension	Description
Technologies used	how and with what to engage citizens
Rules of engagement	what personal information will be needed/collected
Duration & sustainability	for what period of time
Accessibility	how many citizens participated and from where
Resources and Promotion	how much did it cost and how wide was it advertised
Evaluation and Outcomes	methodological approach and results
Critical factors for success	political, legal, cultural, economic, technological factors

Table 1.1: Summary of eParticipation key dimensions by Macintosh (2004a)

2.3 Current work in online engagement

Online engagement has been explored for a wide variety of governance activities. This brief review explores the main focus areas, tools, benefits and stakeholders in the field.

2.3.1 Focus areas

The important initial decisions concern the choice of focus areas in terms of main activities provided by eParticipation exercises, stages of the policy making lifecycle, and tools to be explored over a wide available range. Typical institutional focus areas with some examples include (Wimmer 2007, Andersen et al. 2007):

- Petitions: signing online petitions to propose issues or questions to be considered by governments or parliaments. One early example is the system developed by the Scottish parliament (Macintosh et al. 2002, Seaton 2005).
- Consultations: exchange of information and opinions concerning issues over public policies involving various actors (Tomkova 2009).

- Deliberations: structured discussions or debates over public decision making topics (Rose, Saebo 2010). They might involve a random number of selected citizens or be open for everyone.
- Spatial Planning: citizen participation in urban planning and environmental decisions, usually with the assistance of geographical systems (e.g. Whyte, Macintosh 2003, Conroy, Evans-Cowley 2006).
- Participatory Budgeting: citizen participation in the process of allocating public resources. Such an initiative took place for example in a Brazilian city and has also been popular in Europe (Peixoto 2009).

An organised email management system can also form a quite interesting activity contributing to citizen-government communications. Ong and Wang (2009) analyse the popular case of the Taipei City Mayor's Mailbox, noting that such a system is difficult to organise in a responsive way.

2.3.2 Internet tools in engagement projects

A wide range of tools have been deployed to make citizen engagement efforts feasible and complete through everyday Internet practices. Newsletters, alert services, polls, surveys, webcasts, podcasts and search engines are classic tools also useful for such projects (Wimmer 2007). Chat rooms and forums are very common practices for governmental initiatives, particularly for consultations and deliberations. Mobile government forms a potential channel for establishing interactions with citizens and is expected to grow due to the availability of smart phones and portable devices which can now perform almost as normal desktop computers (e.g. Ntaliani et al. 2008).

Following the emergence of the Web 2.0 paradigm, social media have been viewed by many authorities as strategic means to engage in participatory processes. An important example is blogging by elected representatives and public officials which is very popular in many countries such as Korea (Park, Kluver 2009). Coleman (2005a) argues that blogging is one of the tools that suit well the desire of politicians to be viewed as "listeners" of the public. Section 2.5 discusses further the idea of social media in formal engagement.

2.3.3 Benefits proposed and decision making costs

The benefits that can be communicated to citizens by participation initiatives are wide-ranging on the basis of the broad "civic engagement" effect. Civic engagement effects lie in empowering citizen groups to connect with authorities, participate in decision making processes, acquire quality information about public issues and form new groups around common interests (Saebo et al. 2008). Engagement tools offer openness for policy making processes in terms of accountability, transparency and responsiveness, making such processes more authentic, visible and legitimate in the eyes of the public (Tomkova 2009).

Furthermore, technologies as organising tools accelerate the shaping of online communities (Anduiza et al. 2009, Garrett 2006) which tend to be more fragmented and pluralistic in nature (ePetitions are typical examples) (Bimber 2000). Equally important is the issue of geographical reach where traditional barriers can be reduced or even eliminated (Anduiza et al. 2009). Social and practical problems in relation to physical political participation can also be reduced. Online environments assist in overcoming social discriminations when addressing large audiences (Gastil 2000, Skoric et al. 2009).

Furthermore, citizens gain abilities to better understand and monitor public processes, as well as the activities of their representatives beyond elections. Therefore, technologies can support political relationships in terms of establishing representation as a continuously deliberative process (Coleman 2005b). Such an example is the TheyWorkForYou.com website where the activities and expenses of UK Parliament members are being recorded and compared.

From the institutional point of view, apart from the communicative, legitimacy and transparency benefits, the issue of decision making costs is also relevant. Although difficult to approach from a cost/benefit approach, online engagement may even lead to financial gains in terms of lowering decision making costs (Kumar, Vragov 2009). This mainly applies when digitising long bureaucratic processes related to citizen engagement. For example, in the participatory budgeting exercise reported by Peixoto (2009), the cost of public participation was significantly reduced compared to the offline practice. Usually, online engagement does not require major infrastructure costs. Human costs and administrative redesign are sometimes more important for preparing information for consultations or

manipulating public input in participatory processes (e.g. setting up forums, maintaining blogs or creating newsletters and mailing lists) (Andersen et al. 2007). Especially in the UK, following a period of public sector cuts and reconsideration of ICT investments, the financial aspect requires more careful decisions.

2.3.4 Actors involved in public engagement

In all aspects of digital governance research, the roles of different stakeholders and consistency amongst their interests and motivations have been emerging as significant issues (e.g. Flak, Rose 2005, Fedorowicz et al. 2009). It is important to identify stakeholders involved in public engagement initiatives and the ways in which they shape those initiatives. Starting from the main actors identified by Saebo et al. (2008) (citizens, politicians, government institutions and voluntary organisations), the following types can be considered:

- Citizens: citizen engagement is a priori the focus, but citizen participation motives and the conditions under which they seek want to engage remain open. Whether online participation favours certain citizen categories over others (e.g. males or the young) also remains significant (e.g. Lindner, Riehm, 2011). Citizens seem to prefer producing political activity in informal means such as social networks instead of taking part in formalised processes such as consultations (e.g. Dutton, Eynon 2009, Miller 2009, Rose, Saebo 2010).
- Citizen/voluntary organisations: there is a wide range of organisations involved in participation activities, for example, NGOs, trade unions, special interest or lobbying groups, social/grassroots movements, community and ad-hoc citizen groups which are organised around a specific interest, e.g. opposing a new policy. Those organisations are interesting not only for their participation and influence in policy making, but also because in many cases they develop their own ICT-enabled democratic structures.
- Civil service: the integration of engagement activities always has implications for public administrators, thus it is important that they are actively engaged in designing and implementing systems (Brewer et al. 2006). However, administrative

and technical control of eParticipation projects by civil servants might lead to limited involvement by politicians (Gronlund 2003) or raise concerns over their legitimacy to set political agendas (Rose, Saebo 2010).

- Politicians and political parties: politicians have been quite controversial actors. Their involvement can increase the success and legitimacy of eParticipation exercises (Saebo et al. 2008). However, they tend to view technologies as means to improve political communications, usually not being eager to support activities that challenge their traditional power or might result in negative public relations. Politicians have been identified as inhibiting factors characterised with the concept of the "middleman" paradox (Mahrer, Krimmer 2005). Although some view online engagement as unnecessary or threatening, others might not be able to support it due to the lack of time or knowledge (Callanan 2005). However, Obama's 2008 campaign seems to have affected the views of politicians about the usefulness of ICTs (e.g. Wattal et al. 2010).
- Technology providers: technology providers and associated consultants offer hardware and software solutions. They may also provide installation, training, hosting, maintenance or after-sale services. Furthermore, they can act as consultants providing technical judgments and expertise regarding solutions and their integration issues.

Many actors from the above categories can be involved in governance initiatives and influence their design and development. Such relationships evolve dynamically: the number of actors and their associations adjust over time, stimulated by changes in technology, regulatory arrangements, market demands and so on. A useful concept to describe such working relationships and their evolutions is the "value network" (Al-Debei, Avison 2010). Value networks have also been examined in policy studies. Barriers in maintaining coordination, accountability and democratic legitimacy of such networks have been identified as: unclear roles, diverse interests, difficulty in motivating citizens, marginalising politicians, different organizational cultures, lack of trust and inadequate institutional frameworks (Callanan 2005, Nyholm, Haveri 2009, Dawes, Prefontaine 2003).

2.4 Petitions and ePetitions

Petitions have traditionally been a process of official political participation in the form of documents addressed to public authorities asking to consider a particular issue. A petition is a formal request to a higher authority signed by one or more citizens. Most petitions are received by parliaments or governments and concern issues related to legislation, public policy change or requests for grants. In some cases, petitions need to be sponsored by an official representative or supported by a minimum required threshold of citizens. The earliest petitions date from the middle of the 13th century.

EPetitions, as the online transfer of this activity, are thought to accumulate particular benefits which can be quite promising for formal decision making processes. Typically, they can increase responsiveness, foster simplicity, broaden geographical scope, allow citizens to gather around common interests and enable authorities to formulate decision making agendas according to the needs of their public. Petitions usually address the agenda setting stage of the policy making lifecycle although they might concern rethinking or cancelling an existing policy or decision (Macintosh 2004).

EPetitioning is one of the first collective action practices that emerged from Internet users through mailing lists or websites which act as hosting portals. In terms of technical characteristics, ePetitioning websites mainly contain a digital space where users can sign or initiative petitions, as well as track the progress of existing ones. Other tools to support the petitioning process can also be integrated. Support services involve discussion forums, commenting functionalities or agree/disagree options.

Lindner and Riehm (2009) compare the ePetitioning systems used by the Scottish Parliament, the Parliament of Queensland, the German Bundestag and several Norwegian Municipalities. They conclude that, although in all cases seeking political legitimacy was the rationale for considering ePetitions, there is a close connection between technical design, procedural standards and institutional contexts. In other words, ePetitions were implemented in a way which highly reflected the traditional petitioning process of political institutions. The two most important examples of ePetitioning websites are those developed by the Scottish Parliament (Macintosh et al. 2002, Seaton 2005,) and the UK government (Miller 2009). The Scottish system was the first such initiative by a national

Parliament since 2000, while the UK government's system has been arguably been the most popular eParticipation project internationally (see the discussion in section 5.2.3).

EPetitions have provided important opportunities to investigate the impact of technical means in democratic processes. Jungherr and Jürgens (2010) analyse a large dataset of signatures collected by petitions addressed to the German Parliament. Their findings suggest that although most users signed petitions only occasionally, there is also an extensive group of citizens who sign petitions on multiple unrelated topics; this group was characterised as "activism consumers". Interestingly, a petition's popularity was found to be dependent upon the success of petitions that happen to be active during the same period. This finding certainly reveals a pattern of non-linear online participation compared to traditional petitioning.

Finally, such observations are also uncovered by Panagiotopoulos et al. (2011). This study used a specially developed computational tool to analyse more than 500 Facebook groups created to campaign petitions linked with the UK government's system. Popular issues were found to generate significant activity in the social networking sphere that did not necessarily translate into petition signatures. Facebook was not automatically found to support the ePetitioning process and attempting to assess this connection was deemed as unpredictable. Hence, even though Internet users generate ad hoc political expression in online communities, this does not mean that they will demonstrate equal support for formal political initiatives, even if they are concerned about them. This is an interesting observation for social media engagement in addition to online petitioning. The next section elaborates on this concept.

2.5 Web 2.0 for public engagement

According to Kim et al. (2009a), the Web 2.0 or social media concept is neither a tangible object nor a planned product. It is a cultural phenomenon describing the main elements of today's Internet which are shifted paradigms of technologies that facilitate collaboration and participation. A significant impact of Web 2.0 concerns the ways in which citizens are empowered to acquire alternative sources of information and transcend the boundaries of traditional governing authorities (Dutton 2009). Following this opportunity and the usual

shortcomings of top-down approaches, policy makers are advised to recognise and strategically adapt to the practices taken by those networked citizens and enable instead of constrain their bottom-up innovation efforts (Dutton, Eynon 2009).

Until a few years ago, maintaining a governmental agency profile on a website such as Facebook would seem inconsistent with the social networks' usually perceived leisure nature. However, today it is generally accepted that web tools create remarkable engagement opportunities for public involvement. A rapidly growing number of studies have attempted to demonstrate the impact of the Web 2.0 engagement philosophy in different settings. Research with commercial organisations has focused on the Enterprise 2.0 concept which includes both internal and external business uses of Web 2.0 tools (McAfee 2006, Seo, Rietsema 2010). Furthermore, especially following the 2008 USA Presidential elections, Web 2.0 tools have been widely examined as mechanisms of political communication (Wattal et al. 2010) and also with respect to their potential for fostering civic engagement (Valenzuela et al. 2009).

It has been argued that authorities can foster citizen participation by engaging with them where they are already online (Chadwick 2009, Meijer, Thaens 2010). In this context, exploiting spontaneous citizen-driven activity in Web 2.0 tools such as social networks and blogs is emerging as a real challenge for organisations seeking to foster engagement (Rose, Saebo 2010). Web 2.0 tools for eParticipation might not come up to the higher ideals for a deliberative public sphere, but do entail a diverse set of valuable mechanisms for online interactions (Chadwick 2009).

Meijer and Thaens (2010) warn that Web 2.0 strategies for public organisations require appropriate configurations and that the "one-size-fits-all" approach cannot be applied at the operational level. They add that research and limited practice has yet to capture rich configurations of sustainable Web 2.0 tools. Some particular suggestions, as part of a framework for using Web 2.0 tools in governmental agencies involve interacting in virtual worlds, social networks and blogs (Chang, Kannan 2008).

A quite promising category of Web 2.0 tools for citizen-government interactions are social networks. Boyd and Ellison (2007) define social networks as web-based services that allow individuals to construct profiles, share connections with other users and view other

connections within the system. In IS research, social networking has developed its own agenda around issues such as the evolution of online communities, how individual and collective behaviour is affected by network participation and interactions between social networks and organisations (Oinas-Kukkonen et al. 2010). Social networking analysis has been more broadly used to understand social dynamics on digital spaces and the interplay between collective action and fragmentation. An excellent example is the study by Park and Kluver (2009) on political blogging by Korean representatives.

Social networks are becoming more and more influential in the political sphere, especially when it comes to campaigning and electioneering. According to a study by PEW (2008) on the role of the Internet in the 2008 USA presidential elections, around 10% of all Americans used social networks to engage in political activities, a figure increasing significantly among young people and Obama supporters. Their potential for participation beyond electioneering remains to a large extent an open issue. Valenzuela et al. (2009) investigated the use of Facebook by college students and discovered that Facebook groups have a positive effect on civic participation. They advise that measuring the ways in which social networking users might engage in a type of political participation requires careful considerations.

Saebo et al. (2009) discuss the role of social networking and suggest that they are important in improving the institutional practice of eParticipation because they attract and sustain massive numbers of active users producing spontaneous political activity. Particularly important is their observation that social networks enable the dissemination of ideas and issues when citizens, gathered around specific interests, attempt to influence the political agenda-setting. However, the authors warn that there might be a potential contradiction between social networks and the nature of government-initiated eParticipation.

2.6 Summary and conclusions

This chapter provided a more detailed description of current work on the use of ICTs in public engagement. The purpose of this introduction was not to provide an exhaustive review of the topic which can be found in the work of Medaglia (2007a), Rose and Sanford (2007) and Saebo et al. (2008). The information presented here is indicative of the effects of those technologies in policy making focusing on topics such as the role of different stakeholders, the benefits they attempt to propose and the management side of those initiatives. The use of Web 2.0 tools for public engagement and the activity of online petitioning were further presented since they form the main technological background of this thesis.

Chapter 3 - Reviewing the Institutional Perspective

3.1 Motivating concepts

This chapter reviews institutional theory as the theoretical basis for this research. The institutional perspective views efforts of technology innovation as standing at the intersection between institutions and people (Orlikowski, Barley 2001). For this study, institutional studies can offer a useful view to understand the use of ICTs in public engagement and examine their effects on existing governance structures.

Institutional theory is a diverse set of knowledge motivated by the existence of powerful social structures which define patterns of social action. The foundations of institutional studies can be found in political sciences and economics, e.g. North (1990). Within these disciplines, institutions have mainly been discussed with respect to (1) their effects on individuals (e.g. actors' bounded rationalities) and (2) how the institutional rules affect financial markets. Those contributions were revised around the beginning of the 90's by the *new institutionalism* which considered the study of institutions in organisational fields. Two major publications, "The New Institutionalism in Organizational Analysis" by Powell and DiMaggio (1991) and "Institutions and Organizations" by Scott (2008) set the grounds for this new approach which, since then, has been demonstrating major impacts on our understanding of institutions and organisations.

In common usage, the term *Institution* is often perceived as a large formal organisation. From the institutional theory perspective, institutions are not organisations, but the norms, structures, standardised behaviours or assumptions that are "taken-for-granted" within and across organisations (Powell, DiMaggio 1991, Scott 2008). In other words, an institution is a belief system that assigns meanings to activities and prescribes the roles of individuals (Lounsbury, Crumley 2007). In policy studies, institutions have also been defined as "the rules of the game" (Lowndes 2005).

Resulting from this definition, institutions are not the same as organisations, since they can exist as a social context without any formal organisation; nevertheless, institutions might have significant effects on organisations. Examples of institutions in modern societies are the professions, marriage, contracts and the army (Jepperson 1991). An apparent

observation from such wide definitions of institutions is the fact that they seem to encompass both formal and informal dimensions. The most systematic approach to the *institutional concept* attempts to unite the different definitions by viewing institutions as supported by three interrelated pillars (Scott 2008):

Pillars of Institutions		
Regulative	Normative	Cultural – Cognitive
Coercive power as in explicit regulatory processes, monitoring, inspection-conformity and rewards-sanctions schemes.	Values as desired behaviours and norms as how things should be done; assessed in terms of shame or honour.	The semiotic facets of embedded cultural forms based on taken-for-granted shared understandings.

Table 1.1: The three pillars of institutions adapted from Scott (2008, p.51).

One of the most important lessons from the new institutionalism is that "Institutional forces can liberate, as well as constrain. They can both enable and disarm the efforts of those seeking change" (Scott 2008, p.220). This statement has motivated scholars both to examine how institutions can be a major source of resistance to change (Zucker 1991), as well as to position the actions of those seeking change (known as institutional entrepreneurs) (e.g. Wang, Swanson 2007, Hwang, Powell 2005).

Finally, a key concept in the theory is *legitimacy*. Seeking legitimacy even more than efficiency is the reason why individuals and organisations might conform to institutional structures (Tolbert, Zucker 1996). Legitimacy can arise from all the different pillars of institutions in complementary ways (Scott 2008); for example: complying with particular auditing processes to gain regulatory legitimacy or obeying to professional codes of conduct to gain normative legitimacy.

As Meyer and Rowan (1991) note, individuals and organisations attempt to draw legitimacy from within their environment in order to be sustained irrespective, or even at the expense, of ensuring their effective performance. Under institutional pressures,

organisations will implement strategies in order to gain, maintain or repair their legitimacy. Oliver (1991) distinguishes those strategies as acquiescence, compromise, avoidance, defiance and manipulation. The need to acquire and maintain legitimacy can explain the apparently non-rational parts of decisions and actions related to different organisational functions; one of them potentially being ICTs.

Starting from this theoretical motivation, the chapter reviews and synthesises previous work. The study of institutions is examined *both* from the information systems *and* the policy studies perspective. Combining insights from the two fields can facilitate a holistic view of how ICTs become institutionally embedded in governance contexts (e.g. Scavo, Shi 2000, Fountain 2001, Lips 2007).

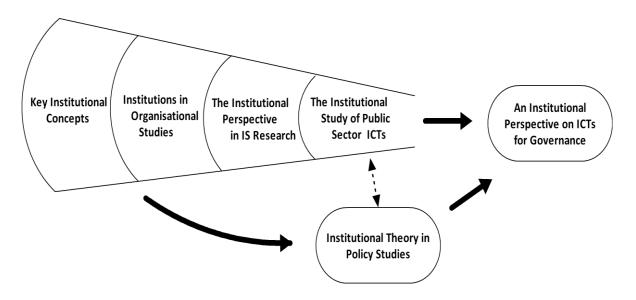


Figure 3.1: Chapter theoretical synthesis.

Figure 3.1 illustrates how the theoretical perspective is developed in the chapter. The initial step is to review the institutional approach in organisational studies (section 3.2) and then specialise this review for IS research (section 3.3). On this basis, section 3.4 focuses on the institutional study of public sector ICTs also using literature from policy studies. The synthesis of the different institutional views is summarised in section 3.5 and concluded in section 3.6. Following the theoretical review, chapter 4 connects the theory with the empirical part of this study.

3.2 Institutional theories in organisational studies

The quest for legitimacy implies that organisations are not only *valued for what they do but also for what they are* (Boin, Christensen 2008). In the process of becoming an institution, organisations negotiate existence conditions that combine both efficiency and legitimacy. Organisations are constantly subject to a wide variety of institutional influences within their environment. Such influences might originate from other organisations (e.g. central government) or individuals (e.g. customers) and they can be related to the local, national or international environments (e.g. Avgerou 2001).

The interactions between environment as institutions and organisations as institutions have been extensively examined. An "organisational field" is the set of organisations which constitute a distinct area of organisational life. Organisations within such a field in many cases tend to demonstrate isomorphic characteristics, for example even related to their website features (Srivastava et al. 2009). What makes organisations within fields similar without making them necessarily more efficient?

3.2.1 Institutional isomorphism

As an outcome of institutional influences, the way new practices, structures and ideas become diffused and adopted may lead to organisational homogeneity. DiMaggio and Powell (1983) identify three main isomorphic change mechanisms:

- Coercive isomorphism results from formal and informal pressures on organisations
 exercised through force or persuasion. Legal frameworks are the most important
 examples of coercive forces which are usually assessed by explicit legitimation
 means (e.g. sanctions).
- Mimetic processes. Especially under conditions of uncertainty, organisations tend to
 emulate other organisations perceived as successful. Copying solutions to
 ambiguous problems which tend to have unclear boundaries is one strategy for
 organisations willing to demonstrate improvement.
- Normative influences are related to professional practices and networks.
 Professional norms are articulated through education, training and affiliation with

professional associations. Normative expectations also refer to ethical and societal demands over particular organisational missions and functions.

Institutional influences arise from many different levels, e.g. international laws or national "best practices"; they also change dynamically. For example, before 2009, the use of ePetitioning in English local government was an idea being transferred mimetically from leading councils and as a normative influence (societal expectation to enhance local democracy). In 2009, this activity was enforced by a central government regulation. Institutional isomorphism may explain the outcome of institutional influences, but does not focus on its processes.

3.2.2 Institutionalisation processes

New institutionalism has widely explored structural isomorphism and to some extent neglected the processes of institutionalisation in addition to its outcomes (Hasselbladh, Kallinikos 2000). As Scott (2008) observes, institutionalism has been associated with conservative accounts over the power of institutions to maintain stability and *de facto* resist change. Although an important motivation has indeed been to demonstrate how powerful certain structures can be, research on institutional change has also registered important contributions. For example, from the cultural-cognitive perspective, Zucker's (1991) experiments have shown that the greater the degree of institutionalisation the greater the resistance to change. If it seems so difficult to change institutionalised structures, how do structures become institutionalised at the first place?

New ideas, structures or practices become taken-for-granted as a result of institutionalisation processes. Tolbert and Zucker (1996) decompose such processes as a passage from the stage of theorisation to wider diffusion, then to institutionalisation and then to an optional phase of de-institutionalisation. The theorisation stage is also important in this process since it attempts to legitimise the new structures and align them with existing norms. Structures can be considered institutionalised when they are taken-for-granted (e.g. Mignerat and Rivard 2009).

Institutional change has been conceptualised as a dialectical process where actors who articulate change try to gain legitimacy by convincing other actors about the necessity and

usefulness of those changes (Hargrave, van de Ven, 2006, Rodrigues 2006). Rodrigues' (2006) long term study investigates conflict towards achieving consensus over new ways of working in a highly institutionalised organisation. Internal political forces continuously interacted with external institutional parameters and resulted in various aspects of changes, even cultural differentiation. Hargrave and van de Ven (2006) attempt a formal definition of institutional change as:

We define institutional change as a difference in form, quality, or state over time in an institution. Change in an institutional arrangement can be determined by observing the arrangement at two or more points in time on a set of dimensions (e.g., frames, norms, or rules) and then calculating the differences over time in these dimensions. If there is a noticeable difference, we can say that the institution has changed.

Hasselbladh and Kallinikos (2000) argue that institutionalisation is sustained when there is a passage from intuition to formal social objects that define forms of *actorhood*. Those forms become embedded in organisations by means of discourses and, hence, led to a view of institutions with respect to how they define actors and actions. Discussing about the role of actors in relation to institutions leads to the concept of institutional entrepreneurship.

3.2.3 Institutional entrepreneurs

Institutional entrepreneurs are those individuals or organisations who attempt to promote new practices through creative agency. Beckert (1999) defines the entrepreneur as (p.786):

The analytically distinguished social type who has the capability to take a reflective position towards institutionalized practices and can envision alternative modes of getting things done. Entrepreneurs destroy established taken-for-granted rules if they perceive such action to be profitable.

Institutional entrepreneurs can be actors endogenous or exogenous to organisations (Lowndes 2005). They usually originate from those who have enough legitimacy to differ from common standards (Koene 2006, Gosain 2004). Successful entrepreneurs are more likely to occupy positions within fields that give them: (1) legitimacy over diverse stakeholders, (2) the capacity to bridge their interests and (3) the position to attach new

ideas to existing norms (Maguire et al. 2004). Entrepreneurial agency can be distributed among community members with dissimilar interests and thus it might be difficult to converge simultaneously (Wang, Swanson 2007).

Successful entrepreneurs tend to draw strategically on existing logics in order to justify the change they seek to establish (Wang, Swanson 2007, Leca, Naccache 2006). They frame their discourses and mobilise organisational communities to give legitimacy to assumptions about the appropriateness of new innovations (Wang, Swanson 2007). Successful institution builders continuously adapt the organization without compromising its identity, even in a trial-and-error process (Boin, Christensen 2008). Hence, in the pursuit of entrepreneurial opportunities, the process seems not to be deterministic, but rather continuously re-evaluated dynamically according to perceived opportunities and outcomes (Wang, Swanson 2007).

Institutional theory, as reviewed in the next section, has motivated IS researchers to examine the interactions between institutions and IT artefacts.

3.3 The institutional approach in Information Systems (IS) research

The interaction between ICTs and their institutional context of use contributes to, sometimes even conflicting, accounts of resistance and change. Avgerou (2001, p.46) remarkably describes the networks of institutions and people around ICTs as:

Technical artefacts such as hardware, software, data in paper or electronic form, carry with them engineers with the conventions of their trade, industries that sell, install and support them, 'users' who understand their significance and interpret the way they should be put to action according to their circumstances and consultants who convert them from symbol manipulating machines to 'competitive advantage'.

There is an increasing number of IS studies which focus on different aspects of institutional theory. Examples of IS topics examined from an institutional perspective include: healthcare (Noir, Walsham 2007, Currie 2010), enterprise systems (Gosain 2004, Boudreau, Robey 2005) and digital governance (Kim et al. 2009b, Robey, Holmstom 2001). In a nutshell, the main lesson from these studies is that *IT strategies, policies or systems face*

resistance when in conflict with institutional dynamics, but are facilitated when aligned with them (Christiaanse, Huigen 1997).

The earliest effort to establish links between institutional models and systems development is the one by Laudon (1985). Later, King et al. (1994) recognised that institutions can be an important component in IT innovation efforts. Orlikowski and Barley (2001) then underlined how institutional concepts can enlighten processes of sociotechnical change (p. 154):

"An institutional perspective would offer IT researchers a vantage point for conceptualizing the digital economy as an emergent, evolving, embedded, fragmented, and provisional social production that is shaped as much by cultural and structural forces as by technical and economic ones"

Currie (2009) notes that there is tendency to: (1) apply the theory at the organisational level rather than the wider environment and (2) focus on institutional outcomes rather than the processes. Two literature reviews have systematically analysed the use of institutional theory in IS research. Weerakkody et al (2009) conducted a review of 511 interdisciplinary articles. Many studies were found to apply the institutional perspective to illustrate socio-political phenomena, while fewer have focused on the adoption of ICTs and the impact of IT-enabled change in organisations. In their review, Mignerat and Rivard (2009) observe that the institutions under study have both been the organisations as institutions and their institutional environment. They separate current work in the two main avenues imported from organisational studies: institutional effects and institutionalisation processes. Section 3.3.1 focuses on institutional effects and section 3.3.2 on institutionalisation processes.

3.3.1 Institutional effects in IS research

Institutional effects come from a variety of stakeholders and are also intended to different stakeholders or stakeholder groups. They might also be conflicting. For example, organisations in the field of electronics metal exchange market, in their quest to be both legitimate and efficient, were left with conflicting demands from the environment with respect to their business models (Cousins, Robey 2005). Mignerat and Rivard (2009)

identified various sources of institutional effects and groups upon which they impact. Some examples illustrate the three categories of isomorphism as introduced in section 3.2.1:

- Coercive pressures mainly come from governments, regulatory agencies, customers, suppliers or parent firms. For example, Khalifa and Davidson (2006) found that coercive pressures from customers were the important factor for adopting electronic trading systems. Teo et al. (2003) identified conformity with parent corporation strategies as the main reason for adopting interorganisational systems.
- Normative pressures arise from professional associations (business, trade and others), but they might also come from governments and private organisations, as well as from top management, employees, customers and suppliers. Wong et al (2009) identified institutional norms exerted on a Chinese container terminal from customers, customs and competitors. In a study of IT outsourcing in US local governments, Miranda and Kim (2006) found normative influences related to authorities' structures (e.g. council managers or council-mayor forms).
- Mimetic pressures come from competitions and are particularly related to "best-practices" and benchmarking techniques which articulate optimal solutions to problems (Gosain 2004, Tingling, Parent 2002). Starting from the observation that much innovative behaviour in organisations is of "me too" variety, Swanson and Ramiller (2004) synthesise attributes of mindfulness and mindlessness when organisations judge whether to adopt popular practices or not. In an analysis of 243 web sites from three different organisational fields, Srivastava et al (2009) found that institutional norms were reflected in similarities of web site features.

The above examples are indicative of different types of institutional influences. Quite a few studies on institutional effects pursue quantitative methods and attempt to measure the influence of each type of factors on organisational decisions usually related to adopting new ICTs. Other studies have attempted to explore the effects of those factors through qualitative case studies which allow reflection within a single or multiple organisational unit of analysis. The next section focuses on studies that pursued in-depth investigations on ICT institutionalisation.

3.3.2 Institutionalisation in IS research

Institutionalised tools are simply those that "arrive" unnoticed and are taken for granted (Silva, Backhouse 2003). Studying the interaction between ICTs and organisational integration is a dynamic process not exclusively dependent upon the effects of exogenous influences (Bellamy, Taylor 1996, Barley, Tolbert 1997). It is argued that the ways in which organisations develop institutional characteristics significantly interfere with their IT implementation efforts (e.g. Boudreau, Robey 2005, Mangan, Kelly 2009, Butler 2003).

An interesting view comes from Avgerou (2000) who observes that ICTs have become an institution on their own since they seem to be sustained in some organisational agendas not because of their convincing value, but because they capture the hopes and fears of people in their professional lives. Hence, ICTs gain their own institutional characteristics as an enabler of "almost anything organizational actors could think as an improvement in their context" (Avgerou 2000, p.240).

Avgerou's observation is consistent with the "institutional myth" of ICTs according to which technology brings modernisation, rationalisation and performance (Noir, Walsham 2007, Currie 2004). Paradoxically, organisations might seek to increase legitimacy by deploying new technologies while, at the same time, they attempt to hide the results from the improved inspection capacities of technologies (Meyer, Rowan 1991, Noir, Walsham 2007). The myth around ICTs can be so powerful that their adoption processes may evolve irrespective of parallel processes of organisational change or intensively interact with them. Mangan and Kelly (2009) view this interaction as a dual process where existing practices become de-institutionalised so that new ones become established.

When attempting to align systems with organisations, technological characteristics are assessed against underlying cultures and logics. According to Gosain (2004), enterprise systems' users have limited understanding of technological configurations and mostly perceive them in terms of their embedded norms. As a result, organisations respond to institutional influences by selecting technology features which reduce the misalignment between the logics of new systems and the dominant institutional logics within organisations. Bridging the institutional alignment mismatch allows ICTs to become parts of organisations and avoid resistance.

Consequently, the outcome of new technologies becomes a reflection of endogenous initiatives at the organisational level responding to exogenous institutional modifications. Thus, institutionally and technology-triggered changes interact in complementary processes. For example, Davidson and Chismar (2007) analysed a clinical system where it was the cumulative influence of those changes that allowed the hospital to accomplish important benefits. Therefore, it seems that despite planned implementations, technology becomes reinvented and enacted in use rather than in technical features (Boudreau, Robey 2005); this can be particularly observed with systems that pose "hard" organisational constraints such as Enterprise Resource Planning Systems (ERPs). Silva and Backhouse (2003) argue that achieving institutionalisation requires practitioners to think how to establish systems as obligatory passage points for users.

Beyond technology configurations, an important set of studies have discussed the connection between top-down and bottom-up institutional processes (Nicholson, Sahay 2009, Mekonnen, Sahay 2008, Madon et al. 2007, Rajao, Hayes 2009, Jensen et al. 2009, Baptista 2009). Top-down refers to formal institutional influences or environmental effects while bottom-up refer to the institutionalised behaviours of organisational actors. Such behaviours usually come from the cultural-cognitive pillar of institutions.

Baptista (2009) conceptualises institutionalisation as a bottom-up process of gradual development of organisational behaviour. This process is primarily driven unconsciously at the minds of individuals, rather than in social or organisational arrangements. Closely related to this view, Jensen et al. (2009) studied the integration of an ERP in a medical organisation. The macro-level structures that brought the ERP system were subject to individual practical interpretations. Doctors using the system felt that it was challenging their professional identity since: (1) they were not consulted during the system development process and (2) some of them believed it was either insignificant to their medical tasks or even an artefact of management control over their judgements.

Therefore, it is suggested that examination and knowledge of locally shared understandings can assist in bridging the gap between macro-institutional and micro-organisational expectations. It can thus lead to successful implementations which are aware of potential sources of resistance and deal with them effectively. Mekonnen and Sahay (2008) report that in their scaling and standardisation exercise in Ethiopia "the

micro-level knowledge of the informal processes, practices and constraints coupled with the top-level political support helped to ensure that the gaps between the formal institutions and informal constraints were minimized" (p.286).

The interaction between macro and micro institutions is hardly straightforward. Studies discussing this interaction have focused on the dialectical nature of organisational persistence or change and linked this with attempts to institutionalise ICTs. Guided by the observation that under pressures some institutions change while others remain, Nicholson and Sahay's (2009) study of Costa Rican software exports reveals how pressures for deinstitutionalization, articulated for example by political tactics of dominant subcultures, can create sufficient momentum to bring IT enabled change.

Nevertheless, processes of ICT institutionalisation should not assume that organisational actors respond passively to them. Examining the source of new ICTs in terms of the creative efforts of institutional entrepreneurs can be illuminating to the conditions under which some ICTs become widespread while others fail to.

3.3.3 Entrepreneurship, organising visions and legitimation strategies for ICTs

Motivated by the observation that IT innovations often emerge as promising buzzwords in certain practitioner fields, Swanson and Ramiller (1997) introduced the notion of the "organising vision". An organising vision is a community's discourse over an IT innovation which is interpreted, legitimised and mobilised within and across firms. The importance of the concept lies in describing the collective understanding and organisational implications for using these technologies. Organising visions are directly related to the work of institutional entrepreneurship to introduce and establish new ICTs (Wang, Swanson 2007). They emerge as responses to real field-wide business problems affected by the practitioners' culture.

New technology can stimulate organising visions or revive olds ones used to address a similar problem. Currie (2004) analyses the case of the Application Service Provision (ASP) organising vision. ASP became a significant contributor to business performance but encountered scepticism as powerful actors in the field did not manage to adequately disseminate and sustain ASPs into the wider community. Nevertheless, since the business

problem remained, the ASP organising vision tried to re-emerge as Web Services in what could be characterised as an institutional synthesis exercise. The same vision may also now be evident in the move to Cloud Computing solutions. Hence, it seems that while certain aspects of organising visions become institutionalised and others not, the need to legitimise particular solutions to longstanding problems remains.

The organising vision concept is based on the quest for ICT legitimacy. Each of the three pillars of institutions provides a different basis for legitimacy. Kaganer et al. (2010) examine the legitimation strategies used to enable organisations and their managers to quickly assess the potential of new ICTs for their own business problem. The authors devise different types of legitimacy such as: *cognitive* (based on comprehensibility and taken forgrantedness), *pragmatic* (based on actual anticipated value), *normative* (based on assessment against moral norms and values) and *regulative* (regulatory compliance). On this basis, they define *socio-political* legitimacy as a meta-type which encompasses pragmatic, normative and regulative forms.

A combined conclusion is that new ICTs gain legitimacy based on their comprehensibility and their socio-political alignment with existing institutions. To complete the institutional review in IS, the next section tackles the connection between institutions and virtual communities. This connection focuses on how institutionalised organisations develop online communication and governance structures.

3.3.4 Institutions and virtual communities

When traditional organisations are attempting to develop virtual communities, it is normal to expect that offline norms will be more or less reflected online. In fact, when face-to-face groups migrate to online environments, they are required to systematise new organisational rules which will mediate their online relationships; de Souza et al. (2004) characterise this process as "compulsory institutionalisation".

Starting from a similar argument, Hercheui (2009a, 2009b) examines virtual communities where parallel, yet contradictory governance structures, were found as a result of institutional patterns. The contradictory structures were attributed to the fact that, although digital collectives needed to legitimate themselves as democratic social

movements, leading actors were still dominating online decision making to avoid criticism. The author raises an interesting issue for future research by stating that Internet tools, given their particular technological characteristics, are configured with respect to institutionalised social structures.

In her literature review, Hercheui (2011) concludes that studying institutional influences in a necessary step towards understanding how online and offline environments interact and are shaped by each other. For example, online communities might reproduce existing institutions, resist the influence of those institutions or create new social structures that could even trigger social change in society. An institutional analysis of virtual communities could therefore not only reveal connections between offline and online norms, but also analyse the impact of digital governance activities where citizens are expected to participate in online communities and interact in policy making topics.

Overall, it seems that the institutional perspective has been quite influential in IS research. The next section reviews the study of institutions with respect to public sector organisations and their technology efforts.

3.4 The institutional study of public sector ICTs

This section has two aims: to present some key institutional ideas from policy studies and then review the institutional study of public sector ICTs. The next section takes a view on the institutional nature of public organisations without yet considering their interaction with technological artefacts.

3.4.1 Institutions and path-dependencies

Institutions are the social structures that hold together public organisations and give them legitimacy to govern. Gasco (2003) gives an excellent institutional definition of governance as: "the collection of institutions and rules that set the limits and the incentives needed for the constitution and functioning of interdependent networks of actors (government, private sector and civil society actors)" (p.6). In other words, governance is an institutional framework which is applied and negotiated within and around organisations (Lowndes, Wilson 2003). Public organisations interact and co-exist with institutional frameworks, but

they are not *simply* institutions themselves (Lowndes 2005). One example of institutional frameworks which define and guide public organisations is the English local governance system (also see section 5.2.1) (Pratchett, Leach 2003).

Institutional frameworks do not exist exclusively at the regulatory pillar. Lowndes (2001) explains this difference as the transition from *government* to *governance*, when the emphasis is shifted from formal government and its regulatory role to also include informal institutions. A dynamic and informal view of institutions brings into the analysis structures such as policy networks and public-private partnerships. Especially with respect to local government, as Lowndes (2005) explains, top-down and bottom-up influences continuously interact to produce non-symmetrical patterns of diversity; such influences are shaped by history, geography and local conventions.

Hence, important institutions might not be as visible, although they do shape the actions of governance actors. Lowndes et al. (2006) examine the relationship between formal mechanisms to stimulate citizen participation and their actual engagement outcomes. The combination of formal and informal rules creates positions for actors and articulates norms of appropriate or inappropriate behaviour. It also provides incentives and disincentives to participate. For example, the day-to-day behaviour of government officers might differ from formal rules and reflect norms which are not explicit.

Following this view, Lowndes et al. (2006) draw a very important conclusion. They position the significance of institutions in the ways in which they shape the environment within which actors make decisions about their style and choice of engagement. Callanan's (2005) study on emerging participatory processes in Ireland also emphasises that institutional alignments of governance structures enable or constrain engagement in practice. For new practices to become institutionalised, devoting considerable resources and time needs to be combined with active support from the civil service.

The above highlight how public institutions determine government and governance. It is implied that, although their informal aspect may entail some flexibility, public institutions are difficult to change. This begs the question: are public institutions indeed change-resistant and, if so, what explains the resistance?

Pierson (2000) identifies two broad reasons to justify why political institutions are usually designed to be change-resistant. The first is that, in many cases, institutional designers constrain themselves in order to achieve greater consensus during institutional building. The second reason is that institutional designers may wish to bind their successors so that institutions protect themselves from malicious individuals. One example is the USA constitution which mandates the separation of three powers (legislative, executive and judicial) so that they are always interdependent. Lowndes and Wilson (2003) add that political institutions are built to be resistant in a sense that they are expected to *adapt* to changing situations without being *damaged* by them. Thinking about protecting and maintaining institutions leads to the notion of *path-dependency*.

Starting from the observation that history is generally significant, there seem to be both "hard" and "soft" versions of this argument (Lowndes 2005). The "soft" version states that institutional evolution is a historical process facilitated by individuals who continuously adapt public organisations while being careful not to alter their identity (Boin, Christensen 2008). The "hard" version is what leads to path-dependency by stating that institutions evolve in paths of continuity since past decisions always constrain current circumstances (e.g. Gains et al. 2005). As an effect, initial decisions on designing public institutions robustly tend to gain a self-reinforcing nature and usually bear considerable change costs.

How can then institutional change be achieved? It seems that, even when institutional changes are actually attempted, they are difficult to control or predict. Lowndes and Wilson (2003) approach institutional change as a mixture of accident, evolution and intention. They provide a definition of the concept as (p.280) ⁴:

"While organisational change may involve no more than structural reorganization, institutional change requires that effective 'rules of behaviour' are altered through specifying and embedding new norms, incentives and sanctions. Rather than being a technical exercise, institutional

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⁴ This passage, although not written having public sector ICTs in mind, it could not be indeed more relevant to their study! The next sections elaborate on this argument.

change is inevitably a value-laden, contested and context-dependent process, which typically throws up unanticipated outcomes."

In this definition, the authors imply that good institutional designs are the ones that are more based on environmental adaptability than instrumental institutional fit which makes future changes even more difficult. Lowndes (2005) agrees that institutional change is rarely technical since it is met with resistance and when it does occur, it tends to be highly context dependent and endogenous. This perspective brings back to the discussion the creative work of institutional entrepreneurs. Such individuals, when facing new challenges, make efforts to critically combine existing structures. In some cases, they might attempt to borrow institutional paths that are foregone or engage in institutional sharing exercises. An example of institutional sharing occurs when public officers from different governmental agencies collaborate with the aim to integrate new tools within their agendas.

Regardless of their strategies, who are those that seek to change public institutions? Lowndes (2005) responds that probably only those *marginalised* within and outside public organisations have the real incentives to think about changes. Such actors might have the incentives but lack the power to propose changes; for example, independent politicians or individual citizens. Lowndes' view was developed for local governance institutions. It contrasts most technologically-initiated efforts of institutional change which were developed by policy makers themselves (see next section).

3.4.2 Public sector ICTs from a macro-institutional perspective

Policy discussion on public sector ICTs evolves on how the solutions that ICTs can deliver are broadly conceptualised and understood (Meijer, Lofgren 2010). For example, around the beginning of 2000's, the ideas of reinventing government through ICTs were becoming more widespread as a result of the emerging Internet. Few studies warned that reinventing government is a long combinatory process and not a mere outcome of expecting IT departments to "deliver miracles" on a daily basis (Scavo, Shi 2000).

Creating policies for technologies is not only about choosing the right ICTs for a specific problem, but also about how to strategically stimulate informed adoption and configure the right values behind technological expectations. EGovernment (and arguably also

eParticipation) has been a great concern, hope and ambition of governments and politicians internationally. Governments have been attempting to guide eGovernment adoption. One example such influences concerns the *Europeanisation* framework which created diverse mechanisms to promote ICTs in European administration (e.g. benchmarking) (Criado 2009). Examining the fundamental ideas underlying eGovernment policies and their implementation efforts can be very illuminating as to why ICTs might fail to become institutionalised.

Our grasp of the dominant assumptions behind eGovernment policies come from the influential work of Chadwick and May (2003) and Bekkers and Homburg (2007). Chadwick and May (2003) explain that in order to understand how eGovernment policies come into existence, it is necessary to reveal their formulating ideas with respect to the existing historical and ideological constraints of public institutions that created and disseminated the policies. Chadwick and May analyse the eGovernment concept as officially approached by three institutions: the United States, the United Kingdom and the European Union. The analysis illustrates the dominance of an executive driven managerial model of citizengovernment interaction which marginalises the participatory potential of ICTs.

Is this conclusion still applicable a few years after? Although there is evidence of increasing use of ICTs for participation (see chapter 2), it seems that Chadwick and May's observations can be viewed in connection with path dependencies. The authors do not attempt this explanation but it seems that, since ICTs for engagement were marginalised in initial eGovernment decisions, it is difficult to reverse this trend due to path-dependencies. Interestingly, Medaglia (2007b) also notes that due to path-dependencies research at the early stages of policy implementations can result in more effective interventions.

Following a similar rationale, Bekkers and Homburg (2007) highlight the core myths and rhetoric behind national eGovernment policies which tend to presume the coming of a new, better and more democratic government consisting of empowered citizens. Their analysis of the national policies of Australia, Canada, the United Kingdom, Denmark, and the Netherlands demonstrates that the envisaged utopian goals and assumptions differ from existing realities: institutional innovation and redesign are articulated as a result of techno-mania which no serious government should be able to resist.

Bekkers and Homburg (2007) further note that ICT-reconstructed government ignores back-office integration problems. It also lacks deep considerations on feasible institutional designs that will take into account the stakeholders involved and their interests. ICTs are seen as an exogenous precondition for institutional changes outside governance mechanisms. Thus, the authors wrap up the fundamental myth of eGovernment in viewing the "omnipotent" technology as the enabler of transformation and institutional change.

Along similar lines, Cordella (2007) analyses the institutional power of eGovernment with respect to the New Public Management (NPM) agenda. According to the NPM rhetoric, ICTs are seen as instruments to radically re-organise public administration outside existing activities; a view which seems to contradict its democratic principles. Hence, eGovernment policies should prioritise improving internal administration processes without compromising valuable institutional identities such as citizen equality and impartiality.

Moving from the policy to the regulatory level, assessing the impact of interventions to stimulate ICTs reveals much about how policies succeed in practice or not. An analysis of seven Danish eGovernment initiatives indicates that governments need to be active in terms of encouraging early adoption of ICT directives (Henriksen, Damsgaard 2007). The Danish examples show that mechanisms to improve eGovernment diffusion need to combine measures such as normative interventions (common standards), economic interventions (rewarding and punishing) and pedagogical interventions (campaigning to influence adoption). According to Henriksen and Damsgaard (2007), the real challenge for adopting public sector ICTs is to provoke voluntary changes instead of changes driven by economic interests. What kind of institutional factors will favour this adoption?

3.4.3 Institutional characteristics and ICT adoption

Current work associates institutional characteristics with eGovernment outcomes by examining variables that could explain adoption. It seems that governmental organisations are indeed building their online interactions depending on some of those features (Moon 2002). Studies based on the hierarchical and geographically fragmented environment of USA have provided some interesting overview suggestions:

- Moon (2002) conducted a survey of USA cities suggesting that larger ones with professional administrators tend to be early adopters of Web technologies.
- Scott (2006) assessed the participatory features of the 100 largest U.S. municipalities. He found that most opportunities for public engagement were offered by medium sized cities.
- Tolbert et al. (2008) discovered that US states with higher revenues and conservative ideology are more likely to develop IT infrastructures. Thus, institutional capacity in addition to modernisation ideologies (usually republicans in the American politics) matter when it comes to considering ICTs for efficiency. Surprisingly, the authors also found that states with larger digital divides are more likely to innovate through ICTs!

European scholars attempted to assess eParticipation developments by local authorities in Italy (Medaglia 2007b) and the Netherlands (van de Graft, Svensson 2006); both studies were apparently affected by the Italian and Dutch local government context respectively. Van de Graft and Svensson (2006) found political orientation not having a significant effect. In most cases, developed initiatives were a result of pressures to innovate in anything the Dutch central government monitoring wanted to measure.

In contrast, Medaglia (2007b) identified three influential institutional background factors: scale, local politics and socio-economic conditions. Larger authorities were considered more supportive of eParticipation initiatives due to: (1) the larger geographical diversity and (2) effectiveness from a cost/benefit perspective due to the scale. Centre-left parties were found to favour administrative reforms and eParticipation. From the socio-economic perspective, wealthier cities were more eager to experiment with eParticipation initiatives.

Those studies show that institutional characteristics can have an effect on public sector informatisation. In their editorial of a special issue, Bellamy and Taylor (1994) gave an early warning that such processes are directly connected with wider cultural, organisational and political factors. They also made a distinction between the technological artefact and the social artefact of communicated (institutionalised) information which they argue should be the focus of academic research. Following this advice, the next section presents studies on ICT institutionalisation in public sector organisations.

3.4.4 Institutionalisation and institutional effects of public sector ICTs

A common shortcoming of digital governance research seems to be the poor understanding of the institutional environment in which people, ICTs and organisations interact (e.g. Barca, Cordella 2004, Lips 2007, Meijer, Lofgren 2010). To use Lips' (2007) words (p. 247), "empirical research findings on ICTs in public administration have been largely de-contextualised from the institutional settings in government".

A first observation is that eGovernment seems to be adding more technological and organisational complexity resulting from stakeholder pressures (e.g. citizens and politicians). Gil-Garcia and Martinez-Moyano (2007) warn that controlling ICT adoption in the public sector often leads to adding counter-productive bureaucracy to innovation processes. This has been the case in many UK eGovernment initiatives where local authorities were expected to implement particular functionalities to be able to receive the relevant funds (Pratchett, Leach 2003).

Robey and Holmstom (2001) explain that global pressures and local cultures coexist and might conflict each other. Dialectically comprehending opposing forces for persistence and change can lead to more realistic ICT solutions which accommodate opposing opinions. Following this view, Barca and Cordella (2004) describe the institutionalisation process of an eProcurement system in a London local authority. They found that institutional forces create implementation uncertainties which make it quite hard for public organisations to understand what eGovernment really means for them. Departmentalism (also known as "silo mentality") was identified as an institutional characteristic which acted as a barrier to the system. More integrated ways of working needed to be institutionally encouraged.

The most straightforward use of institutional theory in digital governance research is the analysis by Kim et al. (2009b) of the Korean anti-corruption project OPEN. Kim et al. point out certain mechanisms implicated during the evolution of this system and its institutionalisation. Their analysis shows that the norm of "ICTs for enhanced government" motivated the initial idea, but the regulatory mechanism was the decisive factor for its institutionalisation. Active leadership and support from the city's mayor provided the strategic vision of ICT-enabled anti-corruption. Mimetic influences were exercised from the

OPEN system to subsequent nation-wide initiatives which perceived OPEN as a leading example.

In their analysis, Kim et al. (2009b) clearly shift the emphasis on institutionalisation processes as explainers of outcomes. This is in accordance with Azad and Faraj (2009) who combine institutional and actor-network theory to analyse the adoption of eGovernment as *situated practices*. This theoretical perspective views institutionalisation as an emergent process and its outcome as directly related to this unpredictable process. The authors posit that the situated character of adopted practices can help us understand why some aspects of public systems become institutionalised while others fail to.

Dovifat et al. (2007) agree that public sector ICT implementation is not mainly a technical problem. They explain that public administrators are not able to assess the implications of new ICTs for their daily operations which are then enacted in unexpected ways. In fact, before technology even attempts to become institutionalised, policy actors interpret it and assess its symbolic institutional value in parallel to its perceived usefulness. Although for some actors one technology might be a political solution, for others the same technology might be a problem (Meijer, Lofgren 2010). Effectively, technologies gain political significance as they translate into economic or political advantage. Bellamy and Taylor (1996) understand this significance in terms of how ICTs reinforce or challenge existing conventions in being "actively implicated in the definition, reproduction and reshaping of political institutions." (p. 58).

ICTs are widely recognised as more than instrumental solutions and connected with processes of transformational change. It is often assumed that rapid changes in ICTs will bring equally rapid changes in institutional structures; arguably this might be happening to some extent or not at all. Schlæger (2010) explains that ICTs can affect processes of institutional change as one factor, but real changes can only be driven by a combination of elements composing policy systems: ideas, institutions and the emerging technologies.

O'Neill (2009) argues that institutional change from eGovernment initiatives tends to be instrumental rather than systemic; this creates an illusion of a new approach, but in fact it is about "doing things differently" and "not doing different things". Hence, delivering

services more efficiently has little impact on the nature of those services at all; it just implies good ICT solutions to business problems. West (2004) directly questions (p.15):

"Is change rational and dictated in key respects by economic trade-offs, or is it a political process characterized by small-scale shifts constrained by budgetary and institutional processes?"

His research with USA federal government and state websites shows that change is rather incremental than transformational. Gasco (2003) attributes this to *path-dependencies*. After warning that instrumentalism does not prevent moving incrementally to wrong directions, he explains that path-dependency is the reason why we cannot ignore the role of ICTs with respect to institutional change.

However, the examination of what kind of transformations using ICTs can be called *institutional change* remains vague. Gasco (2003) states that institutional change requires thinking about transformations beyond the level of organisational change. He attempts to develop several propositions that summarise the relationship between ICTs and institutional change (p. 11, 13):

- ICTs do not necessarily alter the status quo of organisations leading to greater institutional efficiency, transparency or cultural change.
- ICTs can open the way for institutional change if new skills and learning motivate
 actors to change their perceptions on potential gains from the new situations. This
 implies that institutional change comes when the whole set of technological,
 managerial, and political variables can be configured.
- Determining the directions of institutional change implicated by new ICTs is difficult. Dovifat et al. (2007) agree that organisational change is a process of continuous improvement during which unplanned change should not be avoided.

Another important contribution comes from Lips (2007). Motivated by the observation that fundamental concepts of public administration are not part of eGovernment debates, she states that indeed we need to look at how institutional contexts change (or not) as a result of thinking about ICTs. High level political support on the transformational potential of ICTs, mixed with implementation difficulties, suggest that there is evolutionary

transformation which merges the old and the new in interesting ways. Lips summarises the principal changes in government due to eGovernment initiatives as *institutionally enabled* (or disabled) rather than technologically driven.

In connection with Avgerou's (2000) statement that ICTs have become an institution on their own, looking at ICTs in public sector organisations can be a study of how two different institutions interact with each other. The point that ICTs have become institutions of their own in parallel to bureaucracies themselves has been recognised (Tolbert et al. 2008, Meijer, Bannister 2009, Meijer 2007, Wiredu 2010). The norms of ICTs promise efficiency or "Just like IT, the institution of bureaucracy has acquired its own momentum and has its own norms of good practice in modern organisation" (Wiredu 2010, p.99). From this perspective, ICT integration becomes an issue of aligning two institutions: technology and bureaucracy. The simplistic approach of computerising problematic structures to make them more efficient hinders successful alignments (Wiredu 2010).

Previous studies explain that ICT institutionalisation can be more impeded by existing institutional arrangements rather than implementation problems. Dawes (2008) conducts a historical analysis of the digital governance idea in USA focusing on the progress of citizen engagement, improved management and service delivery. One major conclusion is that, with the potential exception of emerging Web 2.0 tools, institutional imperatives limit the use of ICTs to those actually fitting the existing frameworks of public governance. Fountain (2008) questions whether formal and informal institutions have been adequate to support eGovernment. Given that institutional contexts are structured for stability, she argues that bureaucratic inertia needs to be approached institutionally.

Going back to the observations by Dovifat et al. (2007) and Wiredu (2010), when ICTs undergo an institutionalisation process, they are enacted as an outcome of this process. The enactment perspective, in the form of the technology enactment framework (Fountain 2001), has been developed as complementary to the idea of institutionalisation and is presented at the next section.

3.4.5 The (eGovernment) enactment framework

Fountain's (2001) technology enactment framework (figure 3.3) describes the effect of institutional arrangements and organisational structures on how public organisations *enact* technologies. The framework draws from institutional, governance and bureaucracy theories. It distinguishes between the "objective" technology (technical systems) and the "enacted" technology which is the outcome of ICT implementations. In her book, Fountain applies the framework in a set of American case studies. The framework incorporates four types of institutional arrangements: cognitive behaviours, cultural beliefs, social structures, and governmental rule systems. Its principal motivation is to explain how technologies are perceived and enacted according to the cultural and organisational features in which they are embedded.

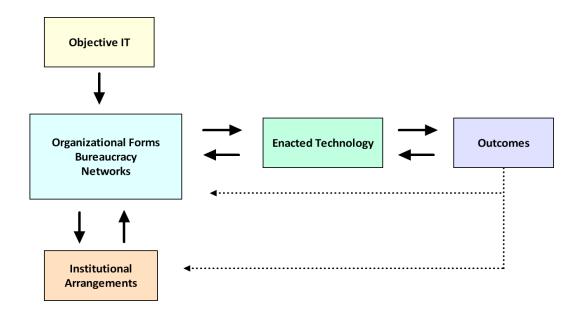


Figure 3.2: Fountain's (2001) Technology Enactment Framework.

The enactment framework has been recognised as important to our understanding of how public institutions shape technologies and it stands with its supporters and critics (Yildiz 2007). Danziger (2004) understands the framework with respect to how actors, given their embeddedness in organisational roles and networks, formulate perceptions and make choices about using ICTs in their organisations. In contrast, Norris (2003) clearly criticises the framework as ahistorical and adds that the empirical cases reveal little about the particular IT characteristics that were enacted. Norris believes that the enactment view is

not significantly different from the concept of institutionalisation. A further criticism comes from Danziger (2004) who believes that the framework does not take into account the ways in which actors may resist changes and produce large scale unintended effects from ICT innovations.

A major extension of Fountain's work is the eGovernment Enactment Framework by Cordella and Iannacci (2010). Recognising the objective nature of technology as a shortcoming of the initial framework, the authors explain that technologies are not objective, but carry policy aims which are reflected in enactment. Following an empirical investigation of a UK criminal justice system, the authors propose the enhanced framework (figure 3.4), which incorporates the eGovernment policy encapsulated in ICTs. Cordella and Iannacci (2010) argue that their extension also encloses the political negotiation surrounding technologies. Therefore, instead of objective technology, they focus on examining the overall process that enacts eGovernment policies; this is shown in figure 3.4 within the dotted box.

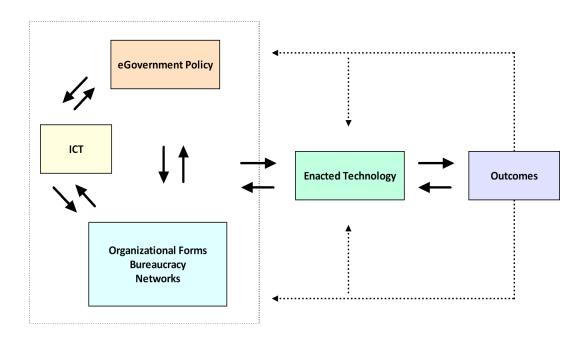


Figure 3.3: The eGovernment Enactment Framework (Cordella, Iannacci 2010).

The (eGovernment) enactment framework complements the institutional study of public sector ICTs. The next section summarises this chapter and leads to section 3.6 which develops future research directions.

3.5 So, what about institutions and their theories?

The broad umbrella of the institutional perspective enables a holistic and critical look at institutions and their effects on ICTs, people and governance activities. An important implication is that, even though we might know a lot of *what* is actually happening in digital governance research, ignoring the institutional perspective leads to limited understanding of *why* things are happening (Heeks, Bailur 2007). Going back to figure 1 (section 3.1), the starting point is that institutional analysis can assist in bridging policy studies and information systems research. Meijer (2007) explains that the synergy between those two established fields can guide re-positioning ICTs not as the determinant, but one of the many variables that are implicated in processes of public sector change.

A number of authors have advocated the usefulness of institutional studies and recognised that it has yet to achieve its potential in digital governance research (e.g. Currie 2009, Weerakkody et al. 2009, Montazemi et al. 2010). Before examining some of their basic arguments, it is useful to group key themes from this review:

- The institutional nature of public organisations. Public organisations exist as part of institutional frameworks which are applied and negotiated within and around them. *Governance*, in comparison to *government*, is not only about bureaucratic structures, but also about the formal and informal institutions that shape public processes. Institutional frameworks profile the environment within which actors make decisions about their style and choice of engagement with governance processes (Lowndes et al. 2006). Public organisations are usually designed to be change-resistant and it is impossible to consider them outside the concept of path-dependencies which states that they tend to move in paths of historical continuity, (e.g. Lowndes 2005).
- The institutional nature of ICTs. ICTs gain their own institutional characteristics since they are taken-for-granted as an enabler of "almost anything organizational actors could think as an improvement in their context" (Avgerou 2000, p.240). Independent of particular technologies, artefacts always come with involved people and their interests on them. They create their own myths and acquire a self-sustaining nature beyond their actual anticipated value. In this respect, technology

can be considered as an institutional structure in society and thus be treated as other political and legal structures (Meijer, Lofgren 2010).

- Endogenous and exogenous institutional influences. Institutional influences arise within (endogenous) or outside organisations as environmental effects (exogenous). Coercive pressures come from a variety of stakeholders, mainly governments and society. Normative pressures come from the patterns that define appropriate professional behaviour. Mimetic pressures come from the "best practices" of successful organisations. Institutions are disseminated globally, but interpreted locally at different levels (Robey, Holmstom 2001). Institutional influences can both enable and constrain actors and their actions (Scott 2008); they might also be conflicting especially in highly institutionalised environments.
- ICT institutionalisation. Institutionalised tools and practices are those that are simply taken-for-granted. Institutionalisation is a process of institutional alignment taking the form of assessing technological characteristics against local cultures. Bridging the institutional alignment is how ICTs avoid resistance. Attempting to institutionalise new systems in many cases requires the de-institutionalisation of existing practises (e.g. Mangan, Kelly 2009). Examination and knowledge of local practices explains differences between micro and macro institutional expectations (Mekonnen, Sahay 2008). Despite planned implementations, ICTs tend to become more emergent and enacted in use.
- ICTs as institutionally enabled. Institutional characteristics affect ICT implementations. Public organisations are more likely to implement anything auditing is likely to measure (van de Graft, Svensson 2006). ICTs should be assessed on how they are used not in terms of their capabilities (Lips 2007). ICT institutionalisation can be more impeded by existing institutional arrangements rather than implementation problems. Institutional redesign through ICTs is largely believed to be something no serious government should be able to resist (Bekkers, Homburg 2007).
- Institutional resistance and change. From an institutional perspective: (1) more institutionalised environments are more resistant to change and (2) ICTs face

resistance when in conflict with institutional dynamics. ICTs are one factor affecting processes of institutional change but real changes can only be driven by a combination of institutional elements: managerial, political and technological. Thus, institutional change is a highly context-dependent, usually endogenous and not simply technical exercise. Determining the outcome of institutional change is difficult; change should be seen more as a process of continuous improvement during which unplanned change should not be avoided. Institutional changes tend to be instrumental and incremental rather than systemic and transformational.

- Institutions, ICTs and people. Before ICTs attempt to become institutionalised, policy actors interpret them; although for some of them one technology might be a political solution, for others the same technology might be a problem (Meijer, Lofgren 2010). During the introduction of new ICTs, involved actors continuously reevaluate their usefulness on-the-fly according to perceived opportunities. Hence, explaining ICT outcomes should be more about comprehending dialectical forces for persistence and change (Robey, Holmstom 2001).
- Institutional entrepreneurs. Entrepreneurs are actors who seek to establish institutional change; they usually draw strategically from existing institutions to justify their propositions. In the business world, they tend to be those who have legitimacy over diverse stakeholders and key positions in fields (Wang, Swanson 2007). In public governance, they are arguably those *marginalised* within and outside public organisations (Lowndes 2005). New ICTs gain legitimacy based on their comprehensibility and socio-political alignment with existing institutions.

3.6 Concluding remarks

Following this summary, the research avenues which the institutional perspective seems to open become more explicit. An institutional analysis is technology independent and helps establish better links between theory and practice since its analytical force tackles the integration (or not) of ICTs (Heeks, Bailur 2007). According to Weerakkody et al. (2009), the theory offers a theoretical lens for studying public sector transformations and future use of institutional theory can focus on (p. 365):

"The influence of external pressures in shaping and institutionalising ICT-enabled change, in particular in the public sector in the context of implementing transformational government and/or electronic government initiatives."

Currie (2009) views the usefulness of institutional forces also in relation with the actions of stakeholder groups that respond to those institutional pressures. Therefore, as Mignerat and Rivard (2009) state, organisational institutionalism addresses the political view of institutionalisation processes where power and politics have important effects over actors' choices. They add that one of the benefits of the institutional perspective is that it facilitates the examination of different levels of analysis, e.g. organisational sub-systems, groups or departments. Nicholson and Sahay (2009) advocate the institutional perspective as a practical tool for systematic diagnosis and action. An institutional analysis can identify points of improvement both as an analytical and a prescriptive framework. It can help answer questions such as: how do new governance practices become institutionalised and what needs to be done to facilitate this (Bingham et al. 2005)?

Furthermore, as emphasised in this review, ICT-enabled institutional change should always be seen within *path-dependencies*; a concept which has not been adequately explored in digital governance research. Path-dependency opens a new direction to examine how public systems come into existence as it helps approaching the mechanisms of institutionalisation historically and evolutionary (Kim et al. 2009b). Path-dependency is consistent with the suggestion by Mignerat and Rivard (2009) to study institutions as a process of historical design and evolution. The theory's prescriptive aspect suggests that it is preferable to overcome change even before it is encountered; understanding logics of opposition leads to more realistic solutions within transformational agendas (Robey, Holmstom 2001). Complementary, it can help improve the regulatory aspect of institutions, which determines digital governance implementation.

The latter is also facilitated by the view of institutional adjustment which highlights that technology is emerging as non-determinant institutional compromise (Wiredu 2010). In this view, ICTs are less seen as technical success or failure and more as a reflection of endogenous initiatives and institutional modifications. Effectively, technology success can

be seen in relevance to potential beneficial changes it might institutionally enable and not as the core of those changes.

The aim of this thesis is to develop and apply an institutional perspective on ICTs in public engagement. An important step towards this direction is to understand how the theory has so far motivated scholars in organisational studies, information systems, policy studies and public administration. Following the chapter process outlined in figure 3.1 (p.42), this perspective was progressively narrowed in order to identify interesting concepts and directions that can guide future digital governance research. On the basis of this background, the next chapter explains the research approach adopted in the thesis. By doing so, it exemplifies how the institutional analysis guided the investigation in terms of data collection and analysis. After the presentation of the main empirical work in chapters 5 and 6, the implications of this work are highlighted in chapter 7.

Chapter 4 - Research Approach

4.1 Overview

Following the background chapters 2 and 3, this chapter explains the research approach adopted in this study. Apart from clarifying the research process itself, it is important to position its epistemological assumptions within the Information Systems (IS) discipline. The IS research community recognises a pluralism in its research philosophies and methods. Positivist, interpretivist and critical approaches stand with supporters and critics (e.g. McGrath 2005, Dubé, Paré 2003, Walsham 1995, Paré 2004).

As we shall see, the nature of this research and the issues it attempts to address leads to an interpretive fieldwork case study as the most appropriate methodology. Interpretive research has examined a variety of ICT-related organisational phenomena, particularly those which are strongly embedded in their social context of use (e.g. Klein, Myers 1999, Walsham 2006). In digital governance research, interpretive studies have been increasingly used to better understand the emergent relationships between ICTs, people and governance processes (e.g. Azad, Faraj 2009, Kim et al. 2009b).

Section 4.2 first provides an overview of IS research paradigms before focusing on interpretivism as the philosophical stance adopted in this research. Section 4.3 outlines the details of IS interpretive studies leading to section 4.4 where the case study methodology is introduced. Section 4.5 links the institutional perspective as the guiding theory and establishes the connection with chapters 2 and 3. Section 4.6 introduces the empirical context and explains the research process details, for example in terms of selecting cases and approaching interview participants. Section 4.6 explains how data analysis was conducted within and across cases. Issues of generalisability and alternative approaches are also briefly discussed in section 4.7. Finally, section 4.8 summarises and concludes this methodological chapter.

4.2 Conducting Information Systems research

Although certain researchers in the community still tend to feel quite strongly about their approaches, it is now recognised that there are many "legitimate" ways to study ICT-related phenomena (Walsham 2006, Mingers 2001, 2003).

4.2.1 Diversity in IS research

A broad view could describe the IS discipline as a community that "has a powerful story to tell about the transformational impact of information technology" (Agarwal, Lucas 2005, p. 381). In this story, prescriptive research on how to best design or configure IT artefacts has been complemented by more analytical studies on the use of ICTs by organisations and individuals. IS has evolved as a synthesis of contributions from many different disciplines such as Sociology, Psychology and Computer Science. The community's multiple nature has led to the recognition that an omni-potent research approach doesn't exist. However, this has also facilitated a split into subcultures based on different countries, journals or even methods (Mingers 2003, Weber 2004).

Robey (1996) characterises the IS field as existing within a "disciplined methodological pluralism" and finds indisputable the fact that IS research will continue to diversify. Benbasat and Weber (1996) see IS diversity in terms of: (1) problems addressed, (2) theoretical foundations and (3) methods used to collect, analyse and interpret data. Back in 1991, the analysis of Orlikowski and Baroudi (1991) identified and criticised the dominance of the positivist perspective as the only acceptable in IS research. Orlikowski and Baroudi were some of the first to defend pluralism in IS research by stating that (p.1):

We believe that a single research perspective for studying information systems phenomena is unnecessarily restrictive, and argue that there exist other philosophical assumptions that can inform studies of the relationships between information technology, people, and organizations.

Their statement could be seen as the start of a more widespread use of interpretive and critical studies. Indeed, a few years later, Walsham (1995) discusses evident signs of the interpretive philosophy gaining attention, but still generating discussions over its legitimacy compared to positivist studies. Thinking retrospectively about this observation about a

decade later, Walsham (2006) expresses his confidence that interpretivism managed to become a well-established part of the field. Although diversity was being increasingly welcomed in IS research, others argued that it should have been something thought of more careful as it embraces identity risks (Benbasat, Weber 1996).

The next section elaborates on the different IS research paradigms and explains their principal differences. By doing so, it lays the ground for justifying the choice of interpretive research for the scope of this thesis.

4.2.2 Research paradigms

Selecting an appropriate paradigm is a researcher's personalised decision which affects the selection and application of research methods. Orlikowski and Baroudi (1991) advise researchers to remain open to the selection of an appropriate paradigm prioritising their own beliefs. Following this suggestion, it is evident why researchers need to have good understanding of the whole spectrum of IS research approaches in terms of their fundamental beliefs and suggestions on how to plan and conduct research.

Orlikowski and Baroudi (1991) draw from Chua's (1986) classification framework on the assumptions that outline research philosophical stances. In brief, the definition of what constitutes a research paradigm has to do with issues of ontology (the nature of the empirical world observed), epistemology (the criteria which constitute valid knowledge), research methodology and the relationship between the empirical world and knowledge. Based on this, they explore the underlying assumptions of the three major paradigms in IS research which could be summarised as follows (Orlikowski, Baroudi 1991):

Positivist research assumes the existence of an objective world which can be described through quantifiable nomothetical statements that test particular hypotheses. Positivists attempt to "capture approximations of real world entities, many of which are intellectual (or social) constructions to be sure." (Straub et al. 2004, p.381). Positivist studies assume that human action is rational and intentional and that inquiries about it are value-free. Such enquiries result in uni-directional cause-effect relationships which can be explicitly identified and tested.

- Interpretive research adopts the position that "our knowledge of reality is a social construction by human actors" (Walsham 1995, p.376). Hence, interpretivists consider reality as subjective and its enquiry dependent on the researcher's personal beliefs which interact with human study participants. Interpretive studies cannot be value-free since they are continuously negotiated. Interpretive researchers cannot pose pre-defined boundaries to phenomena, but allow participants to draw upon their own beliefs and experiences.
- Critical research challenges the assumption that ICTs are essentially desirable and
 result in the benefit of all (McGrath 2005). For critical researchers, social reality is in
 principle historically constructed and continuously produced and reproduced by
 social entities. As a result, the critical philosophy posits that social systems are
 under constant change. Their historical and social examination should not only seek
 interpretation, but also inform social practice through emancipation.

Table 4.1 summarises the three main paradigms in IS research with respect to those basic beliefs. Design Science could arguably be classified as a separate paradigm. It focuses on the development of artefacts which capture different world states (e.g. Hevner et al. 2004). Al-Debei (2010) discusses Design Science as a paradigm of IS research and compares its basic beliefs to the other three major paradigms.

Complementing the discussion about paradigms, Becker and Niehaves (2007) develop a framework aiming to systematically analyse and illuminate the epistemological assumptions behind different research approaches. They suggest that, when evaluating research, epistemology should always be made explicit. Their analysis tends to converge to the view of pluralism in IS research. However, most IS researchers tend to think that the three major paradigms are incommensurable and their conceptual dichotomies impossible to bridge. According to Weber (2004), such opinions tend to be intense within the IS community leading to research methods being bounded by heir corresponding paradigms.

Paradigm Basic Beliefs	Positivist	Interpretivist	Critical
Ontology	Reality is single and exists objectively and independently of human beings.	Reality is subjective as constructed by human beings in different social contexts.	Reality is socially and historically constructed.
Epistemology	Scientific method which tests particular hypothesis and assesses them as either true or false.	Interpretations about subjective meanings are made by the researcher through interacting with study participants.	Long-term historical and ethnographic studies uncover knowledge within its social practices and values.
Methodology	Mainly quantitative, experimental and statistically evaluated.	Mainly qualitative and dialectical using e.g. hermeneutics or ethnography.	A process of shaping and reshaping values and beliefs. Arguably interpretive methods are the most suitable, see McGrath (2005).
Synergy of Knowledge and Practice	Researchers observe phenomena which they cannot alter; no moral judgements or subjective opinions are implicated.	Researchers interfere with the phenomena under study; their inquiries cannot be value free.	Researchers not only interfere with the phenomena under study but also seek to alter current social status quo through emancipatory actions.

Table 4.1: Summarising the three main IS research paradigms.

Nevertheless, others have advocated the use of different paradigms and explained that their fundamental differences do not pose hard constrains on conducting studies that integrate them. The argument that interpretivism and positivism can be mutually supportive was first expressed by Lee (1991) concerning the whole scope of organisational studies. Gable (1994) provides a good example of applying Lee's integrated framework in terms of combining case study and survey methodology research. Furthermore, Weber (2004) suggests that the differences between positivism and interpretivism, if indeed they exist, are not deep and mainly have to do with choosing research methods. The strongest advocate of mixed-methods in IS research seems to be Mingers (2001, 2003, 2004). He justifies his approach by stating that (Mingers 2001, p.243):

"It is possible to detach research methods (and perhaps even methodologies) from a paradigm and use them, critically and knowledgeably, within a context that makes different assumptions".

The next section justifies the selection of interpretivism for this study.

4.2.3 Selecting the interpretive research approach

The above debate summarises the main points related to the different IS research paradigms and their implications for choosing research methods. As highlighted by Orlikowski and Baroudi (1991), knowledge of those paradigms and informed selection is an initial step for an IS study. This thesis has focused on the following question:

How do ICTs for public engagement impact on institutional policy making structures?

The investigation was further broken down to the following motivating questions:

- How political organisations perceive institutional influences to exploit ICTs for public engagement and how does this reflect upon their organisational environment?
- How do ICTs for public engagement adapt to existing policy making mechanisms during their institutionalisation processes?
- How do different actors influence the adoption and use of ICTs for public engagement and what is their effect on processes of institutionalisation?

Seeking to empirically gather and examine findings about the impact of ICTs in governance naturally leads to an analytical study. The investigation is inevitably connected with the socio-political context that frames and enacts institutional policy making. In this context, linking elements of institutional resistance or promotion of digital governance initiatives to existing structures requires careful examination of how ICTs are interpreted within those structures. To achieve this, institutional influences at different levels should principally be viewed with respect to the actors that generate, reproduce and perceive them; for example it is quite recognised that politicians and members of the civil service assess the potential of ICTs in different ways. An interpretive study can contribute to revealing the nature of institutional resistance that occurs when actors attempt to balance their will to improve policy making with their traditional power over it.

Institutional influences, especially implicit cultural-cognitive ones are usually subject to interpretation in new situations even when their meaning is established in routine practices. They are subject to interpretation since they contain a non-rational, non-deterministic element, coming from the fact that they exist on the basis of legitimacy and their connection with efficiency might be disputable. For example, public sector organisations are developing online services not only to increase their efficiency, but also as a response to societal demands for modernisation and more transparent governance.

As a result, it is not possible to conduct this study without establishing a close interaction with participants and attempting to understand their ways of arguing and acting about ICTs in engagement activities. This statement is not limited to assessing their opinions on the usefulness of such technologies. It focuses more on uncovering the rationale behind their engagement decisions as a process of adapting existing institutions to fit those aims. Such a close involvement with participants within their actual decision making situations inevitably permits and to some extent dictates the researcher to contribute to the participants' understanding with his own knowledge and opinions.

Therefore, for the scope of this research, an interpretive approach can be considered as the best fitting option. The interpretive paradigm allows the production of deep explanations of why and how phenomena occur by exploiting theoretical perspectives to illuminate their different aspects. Such a research approach is particularly recommended since, as Macintosh et al. (2009) have identified, research on ICTs in public engagement

needs to be better grounded in theory that will enhance our knowledge of the institutional effects and processes behind the actual use of technologies. Hence, an interpretive study can advance the methodological and theoretical agenda of digital governance which in many cases is limited to descriptions of which tools work well and how (Saebo et al. 2008).

The above discussion justifies the selection of interpretivism and eliminates positivism for two main reasons: close involvement with study participants and the dialectical nature of the enquiry which is not possible to be adequately captured by nomothetical statements. A positivist institutional analysis fieldwork could focus more on identification and systematic analysis of factors, but would certainly reduce the deep understanding on their impact that this research seeks to bring forward. For similar reasons, institutional analysis has been mostly adopted by interpretive researchers in other contexts (e.g. Kim et al. 2009b, Davidson, Chismar 2007, Jensen et al. 2009, Baptista 2009).

If this research clearly aims to reflect on practitioners' choices within their real context, why can't it be characterised as critical? The ambiguous nature of being critical can provide some answers about this. McGrath (2005) explains that being critical in IS research has been subject to different opinions on achieving "criticality". For example, she suggests that adopting some of the principle of interpretive research can lead to better critical contributions, while Avgerou (2005) seems to disagree. Although this thesis does entail some aspects of critical thinking, it can't be characterised as critical because it doesn't aim at social critique nor it adopts an emancipatory view of the technology under investigation (Orlikowski, Baroudi 1991). Furthermore, the theoretical background does not belong to the sphere of critical theories and is possibly too conservative to allow for critical contributions, although Scott (2008) does argue against this view for institutional theory.

A well-respected example of critical fieldwork can illuminate the aims of critical IS studies and make more explicit why this research cannot be critical in the narrow sense. The study of the major Greek social security organisation IKA by Avgerou and McGrath (2007) draws on theoretical concepts developed by Foucault to develop a radical socio-political view of power to analyse how it consistently obstructed ICT innovation in the organisation. In this study, criticality is related to uncovering the socio-political conditions implicated in what people perceive as logical within their organisational context. Institutional theory does not focus on issues of power, although power can be related to the different pillars of

institutions. In fact, Hasselbladh and Kallinikos (2000) believe that institutions need to be viewed more critically in this direction. The next section discusses an alternative approach which can make research choices even more explicit.

4.2.4 Alternative approach to epistemology

An emerging philosophy that could inform this study is *critical realism*. Critical realism has been advocated as an IS philosophy which could help overcome the limitations of positivism and interpretivism while also highlighting the contributions that research methods from these two philosophies can achieve (e.g. Mingers 2000, 2004, Dobson 2001, Smith 2006). Critical realist studies aim particularly at producing deep explanations of phenomena through identifying their generative mechanisms. This is achieved by analysing events produced at the domain of the actual and observed at domain of the empirical. Bygstad (2010) and Easton (2010) are examples of case study research which adopted this philosophical stance.

Critical realism has been suggested as useful for digital governance research (Heeks, Bailur 2007) and has also been combined with institutional theory (Wry 2009). When combined with institutional theory, critical realism can address the causal mechanisms that lead to organisational action as an effect of actors drawing upon institutional influences (Wry 2009). Such an approach could be useful for this research, but would require changing the research question to possibly: "What are the generative mechanisms that lead to the institutionalisation (or not) of ICTs in public engagement?"

Although according to Walsham (2006) critical realism can be pursued as an underpinning philosophy of interpretivism, it would also have required a different data analysis technique which could potentially constrain the study to a causal mechanism analysis, while a broad interpretive study allows better flexibility in data interpretation. The next section elaborates on the nature of interpretive IS research and explains how this paradigm guided the work carried out in this thesis.

4.3 Conducting Information Systems interpretive research

Tracking the emergence of interpretivism in IS research in Walsham (1995), it seems that a more dialectical approach to the study of ICTs was appreciated when the community realised that ICTs tend to be less deterministic and more subject to people's different understandings on their use. It is now widely accepted that interpretive studies tend to produce quite deep analytical insights in IS phenomena in terms of, for example, their development, management and evaluation.

Interpretivism has been conceptually developed in various disciplines such as psychology, anthropology and sociology. Its fundamental philosophical foundations are social phenomenology and hermeneutics (Cole, Avison 2007). The most systematic approach to conducting IS interpretive fieldwork studies comes from the seven principles developed by Klein and Mayers (1999). Taking into account that personal judgement and context should always be the basic principles behind interpretive research, the authors offer those suggestions to provide a more solid basis. The authors themselves offer a healthy warning about uncritical application of those principles in such an idiographic research as interpretive. The seven principles could be summarised as follows:

- The Fundamental Principle of the Hermeneutic Circle. This general principle postulates that human understanding is generated through a continuous cycle of iteration between interdependent meaning of parts and the whole that they form.
- The Principle of Contextualization. The social background of the study site needs to
 be critically reflected and communicated by the researcher. The emergence of the
 study conditions need to be approached historically so that social entities involved
 are seen as producers and not as products of history.
- The Principle of Interaction between the Researchers and the Subjects. The interaction between the researcher and the participants is a significant part of the study that needs to be made explicit and justified. Participants not only interact with researchers, but they are also interpreters and analysts themselves.
- The Principle of Abstraction and Generalisation. Data interpretation should be guided by some form of abstract theoretical concepts. The use of theory as a

"sensitising device" can assist in drawing conclusions that will establish the connection between the idiographic interpretive study and generalised claims.

- The Principle of Dialogical Reasoning. The researcher needs to make his own
 worldviews transparent and explain how they inform the fieldwork process. In turn,
 he may need to change his own preconceptions during the course of the study
 including a potential contradiction between the theoretical framework used and
 the study findings.
- The Principle of Multiple Interpretations. The interpretive researcher has to deal with the multiple world views expressed by study participants, including his own understanding of them.
- The Principle of Suspicion. The researcher should always be sensitive for possible "biases" in data collected with study participants. This requires the researcher to go beyond the world presented and seek to understand the embeddedness of social actors in power structures and with respect to their interests.

An important implication of those principles is that certain degree of involvement with the phenomena under study seems to be preferable especially in terms of getting better access to organisations (Walsham 2006). Nevertheless, close involvement does not dictate the researcher to change those phenomena; this could be the objective of an action research study which has its own principles and conditions (e.g. Davison et al. 2004).

Furthermore, an important aspect of interpretive studies relates to the use of theory. Gregor (2006) uncovers the nature of theory in IS research by identifying the structural components of theories and their different types. She explains that the use of theory in interpretive studies is a way of understanding empirical data by enlightening them through a particular lens. In this way, theory aims to offer rich explanations of how and why things are happening in actual situations. Respectively, the contribution to knowledge from using theory to analyse and explain is assessed in terms of the insights gained. In contrast with positivist studies, theoretical perspectives acquire a more emergent nature in interpretivism. Starting with a theoretical framework to guide the investigation, the researcher might engage with his theory in dynamic ways (Walsham 2006). This is an

aspect that the researcher needs to communicate to his audience including an explanation of why a theory was chosen at the first place.

Theory is directly related to the notion of generalisation, an important and usually confusing aspect of interpretive studies. Research carried out within a single setting is common in interpretive studies, a fact which contrasts for example the notion of statistical generalisation. Interpretivists seek to generalise with the help of theory and in line with the principle of abstraction and generalisation.

Stating that researchers should always make claims about the generalisation of their studies, Lee and Baskerville (2003) develop four types of generalisation in IS research: from data to description, from description to theory, from theory to description and from concepts to theory. Interpretive studies usually generalise from empirical statements to theory which could be characterised as *analytical generalisability*. Lee and Baskerville emphasise that this practice is well established or to use their own words (p. 237):

In summary, the notion of the generalizability of empirical descriptions to theory is well developed. Hence, criticisms that case studies and qualitative studies are not generalizable would be incorrectly ruling out the generalizability of empirical descriptions to theory. Furthermore, such criticism could be incorrectly presuming that statistical generalizability is the only form of generalizability.

Reference to statistical generalisability brings up the issue of qualitative data which are usually the single data collection source of interpretive studies. Qualitative research can be positivist, interpretivist or critical depending on the researcher's philosophical assumptions (Myers 1997). Walsham (2006) underlines that interpretive research doesn't equal qualitative and that quantitative data might offer useful additional sources, especially when it comes to survey methodology data. Mingers (2001, 2003) discusses in detail the concept of mixed-methods research.

This section introduced the basic principles of IS interpretive research. It underlined that there is no application of principles or "good practices" to guarantee an interesting and high quality outcome. The research in this thesis is based on a case study methodology which is not the only possible one; other interpretive research strategies include

ethnography, grounded theory or action research, (e.g. Denzin, Lincoln 2000). The next section explains the relevance of the case study methodology and its use in this research.

4.4 Selecting the case study methodology

Researching into contemporary phenomena and addressing questions related to how and why such phenomena occur within their real-life settings define the appropriateness of a case study methodology (Yin 2009). When examining the design and impact of ICTs, as in this study, a case study is particularly relevant to examine the organisational context in which technologies are embedded and their interactions with associated social processes (Darke et al. 1998). Case studies can also help improve the relationship between theory and practice when this is not adequately established (Dubé, Paré 2003).

In digital governance research, the case study methodology has been established as the leading paradigm (e.g. Heeks, Bailur 2007). However, as Heeks and Bailur note, a case study research should provide deep explanations of the phenomena under investigation and not limit to mere descriptions of specific technologies. The importance of conducting meaningful case studies has been underlined by Lips (2007, p.250):

Qualitative case studies demonstrating fundamental changes in public administration as a result of using technical artefacts are very useful to stimulate further public administration research and provoke wider public debate.

A case study investigation can be based on various epistemological grounds, depending on the researcher's philosophical stance (e.g. Klein, Myers 1999, Darke et al. 1998). This of course has implications on the case study design and objectives. For example, a positivist researcher would seek to act as a neutral observer while the same is not relevant for an interpretive or critical researcher. In IS research, case study investigations are well explored (Dubé, Paré 2003, Paré 2004, Darke et al. 1998, Benbasat, Goldstein 1987, Lee 1989). Although most of those guidelines imply a positivist epistemology, they can be quite useful for a broad range of case study issues such as data collection and analysis. The empirical phase of this research is based on the objectives 2 and 3 as stated in chapter 1:

Objective 3 — Uncover new insights that this perspective can elicit on digital governance initiatives led by governmental agencies (chapter 5).

Objective 4 — Uncover new insights that this perspective can elicit on digital governance initiatives led by non-governmental communities (chapter 6).

Each objective calls for an independent case study investigation. Combining the two studies aims to provide an integrated answer to objective 5:

Objective 5 – To holistically examine the impact of ICTs, combine and evaluate conclusions from the two case studies. On this basis, develop implications for theory and practice and future research directions (chapters 7 and 8).

The two case studies were informed at different stages by the main institutional theoretical perspective. Before describing the cases and the research process details, it is necessary to establish the relationship between the case study investigations and the institutional theoretical perspective.

4.5 A guiding institutional framework

Chapter 2 presented the technological background of this study. Chapter 3 reviewed the institutional perspective whose analytical concepts are operationalised here with the help of a guiding framework portrayed in figure 4.1. The aim of the framework is to systematise the concepts introduced in chapter 3 and further discussed below. Following the interpretive tradition, the framework does not seek to develop or test a particular theoretical view, but to assist in demonstrating the practical use of the theoretical perspective. It acts mainly as a sensitising device that facilitates and guides data analysis and interpretation (principle of abstraction and generalisation). Theoretical flexibility at the beginning of a case study investigation is a recommendation believed to reduce bias towards the conduct of the study and its findings (Eisenhardt 1989).

Considering the points analysed in chapter 3 and the three motivating questions from chapter 1, there are three main groups of elements to guide the investigation: (1) the way institutional influences are understood and balanced according to their types and level of context (DiMaggio, Powell 1983, Robey, Holmstom 2001, Avgerou 2001), (2) the

relationship between current institutional structures and technologically-triggered configurations (e.g. Davidson, Chismar 2007, Baptista 2009, Gasco 2003) and (3) the involvement of key actors and the strategic initiatives that they might take, which in turn shape the ICT outcome with respect to the other two groups of concepts (e.g. Kim et al. 2009b, Lowndes 2005, Wang, Swanson 2007).

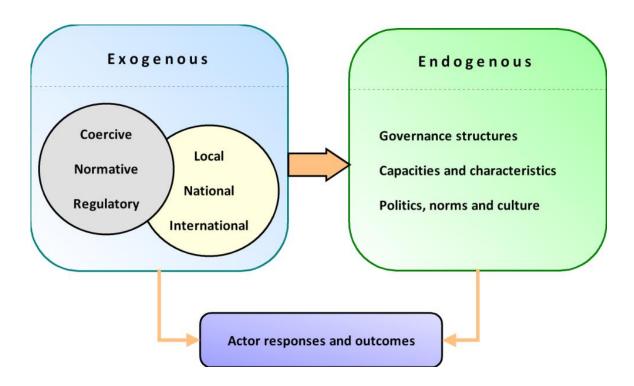


Figure 4.1: A guiding institutional framework.

Looking at this framework with the lens of policy studies theory, it was suggested that the institutional design of technologies should not only be based on the specific functions (or the technical problems) with which they are expected to fit, but also on the institution's environmental adaptability (Lowndes, Wilson 2003). In chapters 1 and 2, it was argued that our knowledge of the organisational use of ICTs in public engagement is limited due to the lack of systematic understanding of the institutional adaptability aspect. Therefore, it seems reasonable to focus the empirical investigation on synthesising the elements that will guide the examination of the impact of ICTs in policy making based on their institutional adaptability.

As a starting point for the investigations, this framework is generic enough to be applicable in all engagement tools and in different formal policy making contexts. Due to this holistic

characteristic, the framework can be suitable for covering both the objectives 2 and 3 of this study (see section 4.2.3). The framework systematises the institutional background as the group of environmental risks and opportunities associated with the use of ICTs by involved actors (Avgerou 2001). It mainly distinguishes between the two main groups of institutional elements, exogenous and endogenous to organisations, and views them with respect to involved actors:

- Exogenous influences can be separated in coercive, mimetic and normative forces and can also be seen with respect to their level of context source (local, national, international). Perceptions on macro-institutional influences on online engagement can contribute to understanding practical conditions (e.g. Kim et al. 2009b). Organisations managing online engagement need to balance exogenous influences, initially in terms of assessing their meaning. For example, the need to build new public participation institutions might result as a pressure from eGovernment programmes mixed with the needs of ICT companies to promote their technical solutions. At the same time, engagement efforts are in many cases a political response to citizens who want to see a growing culture of public transparency and openness (e.g. Bertot et al. 2010).
- Endogenous characteristics are those which reflect the institutionalised behaviours of actors and structures in organisations. Political organisations incorporate particular localised characteristics, norms, capacities, history, path-dependencies, formal and informal institutions. The combination of those structures defines organisational settings which accommodate technological initiatives. Such organisational features are not exclusively formal, but also related to the cultural-cognitive pillar of institutions (Scott 2008). At the organisational level, it is possible to focus on how institutional and technological changes interact and complement each other (Davidson, Chismar 2007). Local understandings create the differences between micro and macro institutional expectations which do not always converge (Mekonnen, Sahay 2008, Jensen et al. 2009). Gronlund's (2003) case studies of local government eDemocracy implementations in Sweden are indicative of the struggle between the institutional top-down and the bottom-up perspective, namely institutional agendas and the actual use of ICTs in public engagement.

Institutional *actors* can be seen either as internal or external to organisations. When ICTs are being used, individuals continuously assess their usefulness according to perceived opportunities and risks; this has been for example the case with politicians or civil servants (e.g. Gronlund 2003, Mahrer, Krimmer 2005). Actors interpret new technologies and might perceive them as solutions or as less important to their engagement context (see section 3.3). The role of organisational individuals becomes especially important for explaining the different forces for persistence and change when influences are interpreted according to localised situations and interests (Robey, Holmstom 2001). A stakeholder approach is particularly advised in digital governance research (e.g. Flak, Rose 2005, Murray et al. 2004, Scholl 2001) and can also be useful for institutional analysis.

Having established the research approach, section 4.6 discusses the study design details. Especially coming from the interpretive tradition, it is important to exemplify the research process and justify emerging choices by the researcher.

4.6 Case study research design

There are different types of case study investigations: descriptive, exploratory (theory building), explanatory (theory testing) and others (Yin 2009). Exploratory research is particularly useful in underexplored areas where the relationship between theory and practice is not adequately established (Yin 2009, Darke et al. 1998). Exploratory research is more relevant to studies defining new research questions or proposing constructs or theories (Dubé, Paré 2003). This study is exploratory because it addresses a particular set of new questions in empirical investigations. It seeks to examine the impact of ICTs in public engagement and expand the scope of this analysis to formal policy making organisations across different settings.

The research is designed as a multiple case study which follows theoretical replication logic (Yin 2009). It is not a priori hypothesised that contradictory findings will occur from the case investigations. The two cases aim to uncover different aspects of the online engagement problem and examine similarities and differences. Both justify a single case study on their own as unique and revelatory for different reasons analysed in the following

two sections. As explained in chapter 1 (figure 1, p.22), the two case studies form the empirical part of this research (objectives 3 and 4) which follows the theoretical part (objectives 1 and 2). The combination and evaluation of conclusions from both case studies forms the analysis and discussion part (objective 5). The next two sections provide an overview of the case studies.

4.6.1 Research in the English local government

The first part of the empirical research was conducted with two London local authorities, the Royal Borough of Kingston and the Borough of Hillingdon, and focused on their ePetitioning initiatives which were the unit of analysis (Yin 2009). The two case studies were complemented by a national assessment of local government ePetitioning websites which is introduced in section 4.6.1.3.

4.6.1.1 Kingston's ePetitions

Kingston-upon-Thames is a small borough in the south-west part of Greater London with a population of about 167,000. Kingston is a perceived prosperous area and benefits from the highest employment rate in London. The authority's principal motivation to consider digital engagement comes from certain social characteristics: high Internet usage (around 90%) and youth presence within the borough. Since 2004, Kingston and Bristol were the first councils to experiment with an online petitioning service through their involvement with the Local E-Democracy National Project (2005). The aim of this exercise was to support traditional petitioning channels to the council and examine public responses.

Kingston's case is unique from a historical and innovative perspective since it was the first local authority in the UK and probably in Europe to develop an ePetitioning website. The system's operation for more than six years provides a developed case in comparison with the usually more limited experiences. Hence, the case has the potential to reveal important insights about the impact of ePetitions. Kingston's ePetitions are a notable eParticipation example and can be important for authorities considering such activities. Additionally, it serves as an informative guide for most English local authorities which, according to the Local Democracy, Economic Development and Construction Act (2009), were expected to

provide "a facility for making petitions in electronic form to the authority" (further details are provided in chapter 5).

The qualitative data from this case were collected between January and September 2010. They included a choice of sources outlined by Yin (2009) with interviews, archival records and documentation being equally important. Appendix 1 provides the details of the data collection process. Following the documentary analysis, semi-structured interviews were conducted with key informants who were selected with respect to their role and influence in the system's use and adoption.

In general, and given the council's continuous involvement and attitude to experiment with public participation initiatives, the study was welcomed by most participants who wanted to reflect on their experiences and understand broader issues of online engagement, especially concerning research in the ePetitioning topic. Feedback was provided to the organisation during and after the research interviews summarising the main findings and also making suggestions for improvements; key interview participants also had the chance to comment on academic papers produced. As Walsham (2006) notes, providing feedback through personal communication instead of a written report enables researchers and practitioners to construct each other's knowledge.

4.6.1.2 Hillingdon's ePetitions

The follow-up study with the London Borough of Hillingdon started in June 2010. It was completed in March 2011 following the first months of the council's ePetitioning system use since December 2010. Hillingdon is a large borough in the west part of London with a population of about 250,000. It is home to Heathrow airport and host to an international community. Paper petitioning was an established channel to the council before the introduction of the online component which was decided in summer 2010 as a response to the statutory requirement introduced by the 2009 legislation.

The authority was in the process of installing a new intranet which, with small modifications, could offer the ePetitioning functionality. Hillingdon was selected to complement the Kingston study in an average case authority where petitioning was an existing activity and ePetitioning was considered due to the regulatory arrangement. A

documentary analysis and interview schedule were also devised (for details see Appendix 1). Most participants were interested to reflect on their experiences with paper petitioning and discuss issues around the online component both at local and national level. This discussion also included other aspects of online engagement especially in a period where cuts to public budgets required careful decisions by local authorities.

Compared to the Kingston case, this study provided the opportunity to examine ongoing configurations to the new technology and dynamically examine the authority's response to the new regulation. In fact, it was noted that an increasing average of 250 petitions per year was being received by the authority since 2006. Most petitions concerned issues of parking, planning applications and parks. Feedback to study participants was provided through research material of immediate interest which was available throughout the study.

4.6.1.3 The March 2011 national assessment

The 2009 Act presented a unique occasion to assess a national eParticipation policy, examine the responses of local authorities and complement the two in-depth case studies with overview data. Motivated by this opportunity, an overview web content analysis was conducted in March 2011. All the 353 English local government websites were visited and coded with respect to a specifically developed framework which examined the implementation and use of ePetitions. For the scope of this thesis, the quantitative data collected contribute to understanding the connection between the two cases and the national environment. As Walsham (2006) explains, quantitative data can be a valid secondary input for interpretive studies. The details of the study are presented in the Appendix 3 and discussed in chapter 5 following the analysis of the two case studies.

4.6.2 Research with the trade union organisation

The Greek Federation of Bank Employee Unions (hereafter referred to as simply "the union") is a federation of trade unions representing about 60,000 employees from about 20-25 different public and private banks. Following the two general unions of Greek employees in the private and public sector, it is believed to be the most powerful syndicate in the country in terms of size, available resources and political influence. It is also probably the only one continuously investing in new technologies, such as developing its website

since 1999. The union's involvement with the online engagement idea started in early 2009 following the wider dissemination of digital governance concepts in the Greek society, as well as international influences which were becoming increasingly promising. Since then, the idea of using online tools for member engagement has taken various forms and triggered debate among the union's officials.

The author first engaged with the organisation in 2008 as a research assistant in a European funded project aiming to develop a roadmap for social dialogue in the European banking sector (INE-OTOE 2009). His involvement focused on the project's roadmapping methodology which touched upon all the different union functions related to negotiations with employers, obtaining feedback from its members and so on. This project provided an excellent opportunity to understand the existence of those organisations within the European context and come across their broader challenges (particularly following the banking sector financial crisis in 2008). The union's decision to explore Web 2.0 tools in 2009 led to the author being established as an external associate, complementary to acquiring data collection permission for the scope of this research.

The data collection period for this study spans over 21 months, as shown in figure 4.2, from May 2009 to January 2011. Starting mainly from summer 2009, the effort to operationalise union's decisions to exploit social media was intensified. The author was invited to edit an issue of the union's newsletter where the Web 2.0 engagement concept was introduced and linked with the union's context and capabilities. Since then, the project was officially established and took many forms until the end of the study. During those 21 months, the author closely monitored progress in the organisation and had the chance to benefit from numerous visits to the study site. This is mostly where he engaged with the union's officials within their everyday working environment and concerns. Additionally, he was able to visit affiliated unions and observe union leaders in their offices in banks. Data collection for this study also included a wide range of documentary material and more than 20 interviews with key stakeholders. The data collection details are explained in Appendix 1.

Overall, the author's close involvement with the organisation facilitated gathering a very rich set of material over almost two years, but also inevitably biased him to a certain degree. This is because the researcher also drew, reflected and was constrained upon his own experience from this type of organisations in the Greek context. Furthermore, his

familiarity with the organisation and professional relationship with certain participants beyond the research scope allowed him to build upon a satisfactory level of confidence where the union's current and past actions were openly assessed by interviewees in most cases. This helped reduce the artificiality of interviews and the potential lack of trust to someone who is completely outside the organisation (Myers, Newman 2007).

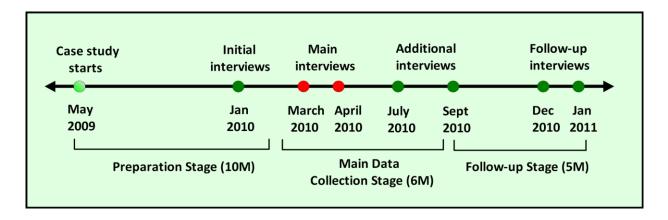


Figure 4.2: Data collection over a period of 21 months.

As Bygstad and Munkvold (2011) explain, informants' feedback at all research stages increases the study validity. Here, effort was placed not only to involve interviewees with secondary study material, but also to engage them in the dissemination phase which included a series of presentations, articles and reports to union officials. As part of the project, the author was invited to contribute to the union's newsletter and presentations on informatics topics. In this way, feedback to the organisation was provided constantly through the project and to participants who wanted to reflect to their experiences. While conducting the interviews, it was obvious that actors had diverse interpretations, views and interests over the topics discussed. For example, many of them estimated that to achieve the potential of social computing, a change in the organisational culture was necessary, although this was something they had difficulties specifying in practice.

This longitudinal study can be characterised as unique and revelatory (Yin 2009). It is unique in the sense that no previous literature has reported on trade unions as the unit of analysis in digital governance research. The trade union choice, according to the thesis objectives, spans the research debate into institutional policy making organisations within the broad public sector. A trade union community seems to be an appropriate choice since

union organisations are traditionally important stakeholders in issues of technology development and dissemination, especially in the socio-technical design tradition (Mumford 2006). Furthermore, the case is revelatory in the sense that few previous studies have managed to expose issues related to the question addressed: the long term nature of the study, as advised by Macintosh et al. (2009), facilitates an in-depth analysis of how the organisation's decisions to use Web 2.0 tools were dynamically shaped.

4.6.3 Data analysis

Having collected various materials from the case studies, the preparatory step before the analysis was to organise them in the form of an individual case study database (Yin 2009). The database included interviews notes, transcripts, archival records and additional material connected with the case contexts. Data analysis was developed in two stages: a within-case analysis was followed by a cross-case synthesis. Data analysis within cases was based on the guiding institutional framework (section 4.5). The framework data-theory link initially guided each analysis, but care was taken not to get locked-in categories that could constrain the interpretation (Walsham 2006).

Based on the initial theoretical perspective, the principle analytical technique used was thematic analysis. Thematic analysis is a flexible and widely used qualitative analysis technique which is based on identifying common themes or patterns within sets of data (Boyatzis 1998). It can be applied either deductively when the themes are somehow preestablished (as in this research) or inductively when themes rather emerge from data themselves; the latter is close to a grounded theory approach. Although thematic analysis is widely used, there is little methodological guidance and in many cases its application tends to be idiosyncratic (Braun, Clarke 2006). To systematise thematic analysis in this study, the six-step methodology proposed by Braun and Clarke (2006) was used as a guiding principle. Although the authors come from the discipline of psychology, their technique is relevant for the whole range of qualitative research; examples in IS studies include Jensen et al. (2009) and Constantiou et al. (2009).

The technique recognises that the number of thematic instances within a set of data is not important on its own. What really matters about the importance of a theme is its contribution on capturing something essential in relation to the research question. This

rule is fully consistent with the principle of the hermeneutic cycle which highlights the iterative connection between interdependent meaning of parts (themes) and the whole that they form (research question). The six-step thematic analysis methodology was used in the following way (Braun, Clarke 2006):

- Familiarising with data. The initial step is reading all material. It should not be taken for granted as less important since it involves interpretive skills so that, through active reading, the researcher searches for patterns, inconsistencies, meanings, relations, contradictions and so on.
- 2. Generating initial codes. After familiarising with the data, an initial coding process takes place. A code at this stage is a data feature that appears interesting as a basic element of the phenomenon under examination. After repeating this for the whole data set, each code segments is collated together. Data extracts might belong to more than one category.
- 3. **Searching for themes.** After the initial coding process, codes need to be sorted and collated into potential themes. At this step, it is advised to use some form of visual representation to help organise and understand the significance of individual themes and sub-themes. Appendix 2 includes examples of thematic maps which are used to support the discussion in chapters 5 and 6.
- 4. Reviewing themes. This review step needs to establish that the extracted themes are revised so that they are consistently meaningful and distinct. Theme review should be performed within themes and then with respect to the whole data set. Given that this stage might keep identifying new themes continuously, the researcher decides on a code-fitting balance where further refinement is reasonably unnecessary.
- 5. **Defining and naming themes.** This step begins with a satisfactory overall thematic map which defines and refines the essence of each theme. Themes should not be too diverse or too complex; each individual theme should have a particular story to "tell" with respect to the research question and in relation to the others.

6. **Producing the research outcome.** Having completed the thematic analysis, the writing part should illustrate the story beyond data description and translate the thematic findings into arguments which address the study research question. Here, the thematic analysis outcomes are chapters 5 and 6.

The thematic analysis in each individual case summarises the key institutional features and establishes certain common ground for the cross-case composition. The cross-case synthesis is a flexible technique which can be applied whether the individual cases have been conducted independently or as a priori part of the same study (Yin 2009). When there are a large number of cases or a significant amount of findings, their aggregation might require some quantitative or qualitative analysis on its own. This was not relevant here, since the synthesis was conducted at the conclusions stage and involved a manageable amount of individual case findings.

Another part of the data analysis process involved interim and final feedback to study participants. Especially in the trade union case, the research was of immediate interest to the organisation's leadership and feedback was ongoing throughout the whole study. The interim analysis also guided part of the research process for example in terms of seeking participants with particular profiles. In the cases of the English local authorities, the initial interviews with the civil service acted as a guide for the rest of the research and provided the initial list of potential study participants.

Finally, it should be noted that computerised data analysis was not chosen for three main reasons. First, as Walsham (2006) notes, computerised analysis might constrain the interpretation, especially since an initial data-theory link has already been established. Second, the advantages offered by this method, such as counting the occurrence of themes did not offer any particular benefit related to their actual significance. Third, an important part of the interview data and complementary material were available in Greek and/or in non-electronic form in both cases (notes, union newspapers and other). Transforming them into computerised form would require substantial effort which could be instead allocated in performing a deeper manual analysis or even collecting additional data.

Appendix 2 contains seven figures which are derived from the latest reviewing parts of the thematic analysis process. They depict complementary information to the analysis in chapters 5 and 6.

4.6.4 Alternative approaches to methodology

The two case investigations were selected to enlighten the research from two distinct and supplementary perspectives. As with epistemology, discussing alternative approaches to methodology can make research choices even more explicit. An alternative approach to data collection for the case studies is related to quantitative data which would provide a better overview of the research context. Although the research question could not be addressed in equal depth using a survey methodology, quantitative data could help better examine institutional factors related to systems' integration. This has been for example the focus of previous work presented in section 3.4.3. Such an approach for this study could be a mixed-methods research, for example, by focusing on the national evaluation of local government ePetitioning in England and combining the overview assessment with the two case investigations. This approach would reduce the significance of the holistic perspective of ICTs in public engagement that this thesis seeks to develop.

A prospective alternative to case study without major changes in the research aim could be action research. Action research is another potential qualitative interpretive methodology which emphasises the synergy between academic theory and practice. Action research is established upon certain guiding principles which make it different than consultancy in academic terms (e.g. Davison et al. 2004). The main problem with pursuing an action research project has to do with the organisational context in which this research was carried out: the nature of public sector organisations, compared to the private sector, has limited the conduct of action research studies which seem very difficult to organise. Furthermore, action research would have limited the empirical context to a single case study, thus removing the dual objective of this thesis.

As Walsham (2006) notes, case study research can directly help improve practice through feedback to the organisations under study. For this research, especially with the trade union case, the researcher was in close involvement with the organisation. However, this project could not be formed into an action research one. The union's management would

not guarantee the translation of academic advice to action for such a novel and to some extent immature concept for the scope of their traditional activities.

4.7 Summary and conclusions

This chapter introduced the research approach and acts as the connecting glue between the theoretical background and the empirical part. First, it was explained that IS research is a diverse community where different paradigms and philosophies co-exist. After presenting the main attributes of the most important philosophies, interpretivism was selected due to the nature of the study and the analytical insights that it seeks to offer. A synthesis of the main principles that guide interpretive research highlighted the role of the researcher and the way he/she actively interacts with study participants while treating them as interpreters of information. Following literature suggestions and the limited extent that previous studies have analysed online engagement, it was argued that such an approach could illuminate the impact of those tools on policy making institutions.

This is addressed in the thesis empirical part in two different contexts: the English local government and the Greek trade union organisation. The research process details along with the choices and opportunities encountered by the researcher were described here and in Appendix 1. For the data analysis part, a within-case thematic analysis was followed by a cross-case synthesis. The theoretical perspective reviewed in chapter 3 guides the interpretation while also leaving the researcher with flexibility. Its purpose in the form of a guiding framework is to systematise the important concepts that can be useful in examining the impact of ICTs in policy making. Alternative methodologies and philosophies to the chosen approach were also discussed.

Chapter 5 - Public Participation through ePetitioning

5.1 Overview

Public participation in local affairs can arguably be less challenging since the distance between the public and the authorities is significantly reduced compared to the national government (Gelders et al. 2010). Since scale seems to be one of the major engagement challenges, increased opportunities for establishing sustainable interactions with citizens can be cultivated locally (Macintosh 2004). Furthermore, as noted by Gronlund (2003), enhancing local democratic processes becomes even more desirable because central planning authorities around Europe seem to be increasingly re-allocated locally.

This chapter presents the cases of the two English local authorities. As explained in the previous chapter, the London Borough of Hillingdon (LBH) case acted as a follow-up study to the London Royal Borough of Kingston (LBK) one in an attempt to trace how conclusions from the LBK initiative were transferred at national level through the introduction of the 2009 Local Democracy, Economic Development and Construction Act. The institutional analysis presented in this chapter (section 5.5) is based on the framework outlined in chapter 3. The analysis shows how institutional influences were balanced at the local level and interacted with technological configurations. The next section presents the study background prior to the two case descriptions in section 5.3 and 5.4 respectively. Section 5.6 comments on the results of the national web survey evaluation (details in appendix 3). Section 5.7 summarises and discusses the chapter content, whose implications are further discussed in chapter 7.

5.2 Background

EPetitions and their benefits as part of formal policy making were discussed in chapter 2. Before presenting the cases, it is important to examine the institutional environment which affected the initiatives and led to one of the most important digital governance experiments: the 2009 legislation by the British Labour government. A detailed background, apart from contributing to the study's analytical potential, also serves the interpretive principle of contextualisation (Klein, Myers 1999).

5.2.1 The English local governance context

Scholars from policy studies have examined the particular characteristics of UK local governance; a quite unique system in the way it balances centralised control and local autonomy. A brief look at the history of the British local government can be useful (Lowndes 2001). Since the 1980's, the British local government became more fragmented when non-elected agencies developed into public sector collaborators; this shaped a transition from local *government* to local *governance*. The institutional frameworks of governance were put at the forefront, for example, by introducing network-style arrangements to account for new partnerships. This institutional change replaced a governance system where councils were in absolute control of local democratic processes (Lowndes 2005). Following those arrangements in the 1980s', the next historical point of radical change was the 2000 Local Government Act which produced English local governance in its current form. Gains et al. (2005) describe the most important change this Act introduced as (p.26):

A system in which formal decision-making power rested with the whole council gave way to one where, within a broad policy and budget framework agreed by all councillors, the executive of the council may make decisions, although these are subject to challenge and scrutiny by non-executive councillors.

In other words, decision making powers of the full council were transferred into specialised executive committees backed-up by formal scrutiny processes. Pratchett and Leach (2003) inform us that, although its purpose in theory, the scrutiny element of this new structure did not actually increase transparency for the majority of authorities.

English local governance is led by the Department of Communities and Local Government which seized many of the duties that used to belong to the Office of the Deputy Prime Minister. This highly institutionalised, centralised and bureaucratically controlled environment is uncommon to the rest of Europe, especially with respect to its target-driven characteristic (Medaglia 2007b). Although it is based on the principle of control and homogeneity, it also allows local authorities to decide upon their particular response to new requirements whenever they are introduced. The system consists of an interesting

mixture of rules which guide local authorities by granting them autonomy to interpret central government regulations within their local political and organisational context.

Pratchett and Leach (2003) characterise English local governance as a mixture of intentional *diversity* to account for localised settings and a set of auditing processes for rewarding or punishing local performance selectively (*selectivity*) as a means to distribute funding and differentiate. One example of what this system means is practice can be viewed with respect to eGovernment efforts escalated in 2005 with the introduction of the *Transformational Government* policy (Cabinet Office 2009). Despite the existence of a centralised eGovernment strategy, important patterns of selectivity and diversity occurred amongst local authority implementations (Pratchett, Leach 2003). The outcome of those patterns was visible for many years in council websites which varied with respect to their quality and information presented.

Another characteristic of English local governance is the diversity of actors that it hosts. Lowndes (2005) provides some examples of such actors in terms of organisations (political parties, private contractors and voluntary organisations) and individuals (politicians, service professionals, community activists and business people). With respect to the role of those actors it seems that due to the 2000 change, according to Lowndes (2005), councillors became more incentivised to seek additional forms of legitimacy since other local organisations increased their role. Having established the basic rules characterising English local governance, the next section introduces the Local eDemocracy National project which was one of the most extensive of its kind internationally in 2004.

5.2.2 The local eDemocracy national project

The Local e-Democracy National Project, starting in 2003, was funded with £4m by the Office of the Deputy Prime Minister to take advantage of emerging technologies for local democratic processes. It was part of an £80m national programme focusing on the multi perspective exploitation of ICTs in the UK public sector. The project piloted a variety of about 20 eDemocracy local applications around England and produced considerable practical and theoretical results. A series of reports inform us on the outcome of the pilot applications and the conclusions that they generated (Whyte et al. 2005b, Macintosh et al. 2005, Whyte et al. 2005a).

Bristol and the LBK were responsible for leading many of the project's pilot applications; Hilton (2005) describes how the project developed as a synergy between academic research and practice. It helped to operationalise the notion of eDemocracy when different aspects of the project focused on information sharing practices, council website restructuring, webcasts and others. Arguably for the first time in such scale, there was a comprehensive evaluation of potential tools that could be useful for online engagement spaces, but also fit with the authorities' institutional constitution and IT capacities (e.g. Macintosh, Whyte 2008).

In 2004, ePetitioning was not at all unknown at the national level. The Scottish Parliament had long since been using the E-Petitioner tool which was developed by researchers from Napier University (Macintosh et al. 2002). The idea of experimenting with ePetitions felt natural for the two authorities which had established paper-based process for handling incoming petitions to the council. The LBK, later joined by Bristol, were the first authorities to pilot this activity. This part of the project was led by a LBK councillor who recalls this experience as probably the earliest international attempt to introduce ePetitioning at the local level. The E-Petitioner tool went live for the first time in LBK in September 2004. It was rather obvious from the beginning that the central government was particularly interested in this aspect of the national project. Indeed, in 2006 Tony Blair introduced a series of public engagement initiatives organised by the Prime Minister's office; ePetitioning was as one of them.

5.2.3 The no.10 ePetitioning website

The UK government's ePetitioning website has arguably been the most popular and controversial eParticipation initiative so far (e.g. Chadwick 2009, Dutton 2009). The idea of petitioning the UK government was not novel; it was another case of how existing practices acquired an online form pushed by the availability of new technologies (Saebo et al. 2008). According to the British National Archives (2009), the earliest petitions date from the middle of the 13th century. At the national level, paper petitions are also received by the Westminster Parliament.

Petitions are historically embedded in the UK political culture and the Oxford Internet Survey has demonstrated that signing a petition is the most frequent form of online political participation (Dutton et al. 2009). No.10 ePetitions had their own contribution to this outcome. The website was run by mySociety, a charity partisan organisation well-known for its innovative grassroots eParticipation websites such as FixMyStreet.com and TheyWorkForYou.com. The success of the no.10 website in terms of participation volume has been unquestionable (mySociety 2007):

The No 10 Petitions website is now perhaps the largest non-partisan democracy site by volume of users ever, with over 8m signatures from over 5m unique email addresses, representing something like 10% of the entire UK population.

A key element of this popularity was a 2007 petition against the government's road pricing plans which attracted an astonishing number of 1.8m signatures! Tony Blair (2008) responded on the Guardian that this petition demonstrated how the web can be healthy for democracy. Despite millions of signatures in thousand different topics, the website raised vast controversy even within the government. A negative "public relations" exercise was one of the gentlest comments expressed by sceptical ministers.

From the public's perspective, although the website had always been very popular, there were concerns that citizens found the process ineffective. According to Miller (2009), the answer for many petitions has been a stronger link to governmental policy but in only few cases did the government respond positively to suggestions. In fact, there was even a petition to free petitions from government meddling by moving the system to a non-governmental website (Kolsaker, Lee-Kelley 2008). Apart from particular petitioning outcomes which were in many cases not convincing, the main shortcoming had to do with the fact that the response process was organised in an uncertain and perhaps confusing way. This contradicts Carman's (2010) study on the Scottish Parliament's ePetitions where it is emphasised that great care should be taken so that citizens who decide to engage with authorities perceive the process as politically neutral and fair.

The new coalition government elected in May 2010 had pre-announced plans to stop using the no.10 ePetitioning website in this form. After committing to respond to petitions having more than 500 signatures, the new government announced its decision to move the system into Directgov, the main governmental portal, in 2011. Then, according to the

website itself: "In line with the commitments in the Programme for Government published in May 2010, e-petitions that receive 100,000 signatures or more will be eligible for debate in Parliament". This decision triggered extensive discussion about the fact that only the most popular requests would reach formal policy making. Critics focused on the German parliament case where very few petitions had actually reached a threshold of 50,000 (Jungherr, Jürgens 2010, Lindner, Riehm 2010).

The Local e-Democracy National project and the UK government's website drew attention on the benefits (e.g. visibility, geographical reach, ease of use) and barriers associated with ePetitioning (e.g. high expectations, a form of "point-and-click" democracy). They also demonstrated that, despite downsides, it can be a sustainable activity at different levels. EPetitioning became one of the Labour government's key ambitions for enhancing local government democracy. It motivated part of the Local Democracy, Economic Development and Construction Act enacted in November 2009.

5.2.4 The 2009 Act and the Localism Bill

The Local Democracy, Economic Development and Construction Act (2009) was the Labour government's ultimate effort to modernise local governance by introducing a range of provisions aiming to improve democratic processes and promote economic growth. An important part of Act was petitioning and ePetitioning which were both made mandatory for local authorities. Not only authorities had a duty to respond to paper petitions based on a coherent process that they had to design, but also they were expected to "provide a facility for making petitions in electronic form to the authority". This online component established the 2009 Act as possibly the most prominent attempt of institutional change of this kind internationally.

The Act was followed by the consultation on how the duty to respond and the online facility had to be implemented (Communities and Local Government 2009). For example, it was at the authorities' discretion to receive petitions in additional online forms outside their own facility (e.g. organised in other websites). Authorities were also expected to decide on potential thresholds over the number of signatures that constituted a valid petition and the eligibility of citizens to sign. In an effort to enhance local transparency, other additional types of petitions were introduced: petitions requiring a full council

debate over a topic and petitions holding council employees accountable. Those petitions were advised to be set on higher signature limits around 1% and 0.5% of the local population respectively.

What did this arguably ground-breaking Act mean in practice? Before the Act, less than 50 of the 353 English local authorities were making plans to provide an ePetitioning facility or were doing so already. Others had a somehow established process for receiving paper petitions, but were far from considering the online route. Finally, the remaining authorities (possibly the majority) were neither systematically accepting petitions nor had they clarified how response processes could be triggered. Effectively, the 2009 legislation was not difficult to implement in some cases, but in others it constituted innovation in local democratic processes. How would citizens react to this participation opportunity? What would happen to the volume of petitions? How long would it take to organise and manage the new activity by the authorities? Would petitions become a matter of controversy in local affairs?

The solution to some of those evolving issues will remain unanswered. As part of the new coalition government's efforts to reduce public expenses, it was decided to withhold central government funding to the authorities for implementation of the Act. The statutory guidance on the duty to respond to petitions and the accompanying consultation were removed in September 2010. This decision created ambiguity about what authorities had to do. The ambiguity was expected to be dissolved at later stages, but since most petitioning schemes had already been agreed by full council debates, many authorities felt they had an obligation to implement it unless clearly told otherwise. Others found the opportunity to escape from this mandate and take their time to consider an engagement strategy or abandon such efforts completely.

In December 2010, the new government formally introduced the Localism Bill (2010) which was an extensive piece of legislation aiming to change the functioning of local government. The focus on localism was implemented through a series of actions such as "empowering communities to do things their way". Although the Localism Bill maintained the idea that a petition signed by 5% of the population could trigger a local Referendum, it clearly repealed the duty to respond to petitions as mandated by the previous legislation. The reason was that, due to the emphasised decentralisation aspect, the new legislation sought

to allow local authorities more autonomy on organising their democratic processes. In this way, although petitions are still considered an integral part of local democracy, it seemed that the new government was against top-down efforts to impose local ePetitioning in particular directions.

5.3 Case study: Kingston's ePetitions

EPetitions in the LBK were expected to strengthen local democratic processes while providing an opportunity to examine the impact for different community groups. Kingston residents traditionally had the opportunity to petition the authority either individually or through support by elected representatives. Civil servants and politicians interviewed agree that ePetitions were viewed as another, yet important way to connect citizens with formal decision making processes and increase participation. From the beginning, emphasis was placed on supporting the existing petitioning practice in terms of providing an additional channel to submit petitions to the council. In 2004, engagement numbers were grasped as the main benefit since the barrier to entry in this political process were lowered compared to paper petitioning. An additional motivation was Internet usage within the borough which is one of the highest in the country.

5.3.1 Facts and indicative examples

Since its inception, the LBK ePetitioning website has handled more than 70 petitions in addition to the more than 110 petitions received in parallel through traditional channels. Each ePetition received an average of 70 signatures and many were directly organised or sponsored by local representatives. To increase the website's visibility and invite residents to consider its use, an advertisement effort was also launched at the beginning. During the period 2004-2009, the petitioning volume has remained fairly stable.

It should be underlined that in the LBK there is no minimum number of signatures required for a petition to be considered. Varieties in the number of signatures are understandable since topics raised by petitions concern all the council's various functions and responsibilities. They might be more or less localised, e.g. issues might concern only a few streets or the whole borough. In general, more localised topics are still addressed through paper petitions and ePetitions tend to concern topics of wider interest affecting all

borough residents. This explains to a large extent why the majority of petitions are still submitted through the traditional route. Indicative petitioning topics include planning applications, traffic arrangements, energy efficiency, recycling and bus stops. Although locally focused petitions are normally signed by about 20-30 citizens, there have been cases of petitions managing to attract hundreds or even thousands of signatures. More petitions are usually received around pre-election periods, although certain restrictions might apply on topics that have to be decided after the elections.

An illustrative example during the time of our study concerns a popular petition triggered by a local residents association seeking to prevent the opening of a nightclub in their area. The ePetition received nearly 500 online and around 300 paper signatures and, after the formal hearing, the appropriate planning body was notified of the petitioners' objections. Another example concerns two opposing petitions running in parallel about a traffic application issue. In response to this sign of controversy, the council decided to collect more data on the issue before reaching a formal decision. In this case, the joint discussion of those two petitions in a public hearing prevented longstanding tensions between residents and clarified future actions to resolve the issue.

Finally, a remarkable case was a petition organised to prevent a local library closure. The petition was led by a councillor of the opposition party and it managed to prevent the closing of the library. It collected more than 700 online and 1800 paper signatures in about three weeks, surprising the council by the level of response. The leading councillor emphasised the need to increase ePetitions' visibility and effectiveness as they can become an even more central aspect of the local political life.

5.3.2 The website

An ePetition can have different statuses such as "collecting signatures", "waiting submission" or "submitted to the council". Campaigning for signatures is the responsibility of the petitioner(s) and success to some degree is affected by the number of signatures obtained. However, petitions are treated equally by the authority regardless of their popularity. When petitioner demands seem straightforward and easily applicable or when signatures are very limited, a more informal response might be generated by an appropriate officer. EPetitions aim to provide an all-encompassing channel instead of

facilitating targeted involvement. Initially, it was thought that younger citizens would be more receptive and indeed there were some petitions initiated by them, even by school pupils. At later stages, the scope was expanded, although petitions from or about the elderly were not as frequent as expected.

Support for ePetitions is provided through assistance to draft petitions, mailing services to receive updates and links to appropriate background information on various petition topics. Furthermore, when paper petitioning campaigns run in advance of online ones, paper signatures can be visible online if desired. During the first months of operation, an online discussion forum was also available; it was suspended since moderation proved to be labour-intensive. The council's intention is to view ePetitions in a broader e-engagement context where more spontaneous activity by citizens is encouraged. In this sense, the authority has also been willing to consider ePetitions from other sources apart from the official website. The underlying concept is that all activities which can help people connect with the council in a manageable manner are desirable.

It was noted that although additional functionalities might enhance the experience of some users, others might find the process more complicated. Keeping the process as simple as possible maintains its main advantage. As one of our interviewees stated, if the system involved complicated extensions, he might had decided to use a paper petition instead. Issues of digital divide also remain relevant to eParticipation exercises in this aspect; such initiatives are not solely addressed to savvy Internet users and should not favour the technological and political elite (Macintosh et al. 2009).

The current system is provided and hosted by Public-i, an organisation with high expertise in local democracy applications. Collaborations between the civil service and the provider have been established through continuous partnerships in different projects. These collaborations involve: (1) officers from Democratic Services ⁵ who receive training and

⁵ Democratic Services is a team in every UK local authority responsible for providing assistance in all decision making activities of the authority, for example, by preparing and publishing information about the council and committee meetings, organising public consultations, managing petitions, administrating election processes and facilitating contacts with councillors and other council departments. Democratic Services are apparently vital to an authority's transparency and accountability.

updates about the system use and its new features and (2) the IT department which is responsible for integrating the outsourced system into the council's website interface. The system is based on open code principles and updates are applied centrally to all the about 35 authorities operating this service. Apart from customising graphics, the system also has other embedded features which can be optionally offered, for example commenting facilities or, in the future, connection with popular social networking sites.

Although the website is the space where all ePetitioning activity is coordinated and made visible to the public, it is not the only part of the petitioning process. The effect of the website on supporting the petitioning process is explained in the next section.

5.3.3 The (e)Petitioning process

The petitioning process is the most important part of this activity as it prescribes how petitions will be processed and the ways in which decisions will be achieved and communicated to the public. Democratic Services are responsible for handling paper and online petitions. In both cases, it is not an easy task for responsible officers as it requires holistic knowledge of policy topics and authorities; certain petitions might also require legal advice. The ability to coordinate internal and external actors is also important.

Figure 5.1 provides an overview of the ePetitioning process and shows the role of the main actors involved: officers from Democratic Services who coordinate the process and administrate the website, petitioners who start petitions, citizens who sign and view them and elected representatives who act as decision makers. Officers emphasise that early intervention to petitioning topics and appropriate preparation of formal decision processes can significantly contribute to the success of the initiative. Compared to paper petitions, the website enables them to review petitions in advance and make appropriate arrangements for public meetings. They are also able to include background information on topics and finalise details while the ePetition is open for collecting signatures.

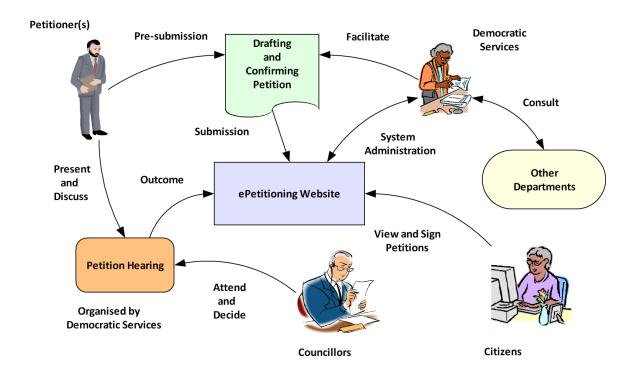


Figure 5.1: An overview of the ePetitioning process.

Figure 5.2 depicts the petitioning lifecycle. At the drafting stage and also while the petition is open for collecting online signatures (usually for a few weeks or months), officers handle the petition topic by: (1) collecting and posting previous related background information, (2) consulting other council departments (e.g. Legal Services or Planning Applications) and (3) notifying involved members of the council about the petition and the response process details. After the petition closure, officers extract signatures and other associated information for the public meeting (in case the petition is presented in one).

Other local organisations, such as the police, might also be consulted or asked to participate in the process. After the petition hearing, feedback is provided to petitioners and published; the petition status and the different stages are also visible online. Updates to the petition outcome might be made if required, e.g. following a public consultation or a later council meeting. Paper petitions, after being received, are handled in a similar way. The response process for paper-only petitions takes longer since there is usually no advanced warning about their existence. The drafting stage for ePetitions, compared to paper-only petitions, can also prevent unnecessary citizen efforts because it ensures that the topic is within the council's authority.

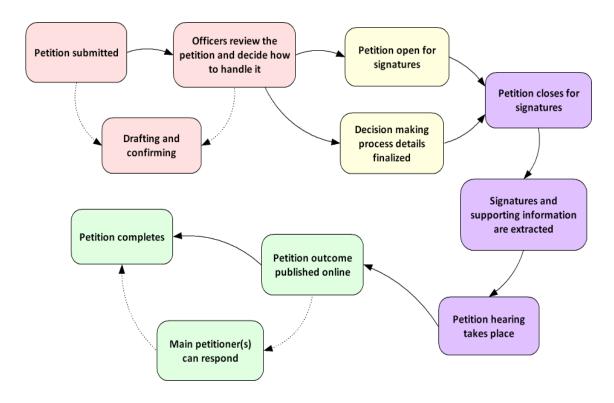


Figure 5.2: What happens to an ePetition.

The importance of having an established response process to ePetitions has been judged as vital to the success of initiative. Apart from connecting the online space with the authority's public processes, it is important that it outlines a clear proposition to citizens willing to engage with the council. This proposition aims to ensure that citizens' concerns will be taken seriously into account even when the authority might not be able to implement specific suggestions. Indeed, in the LBK case, there have been no major complaints about how petitions were handled, only some misunderstandings with citizens having the expectation that their petitions would influence formal policy making directly and in a binding way.

5.4 Case study: Hillingdon's ePetitions

In the LBH, providing the ePetitioning activity was a response to the statutory requirement which mandated the operation of the facility from December 2010. The ePetitioning implementation followed the legislation duty and timescale. It was probably an idea which the authority would have considered sooner or later, given its positive experience with traditional petitioning and the acquisition of facilitating technology. As emphasised by all

LBH councillors interviewed, the ePetitioning implementation was seen by the council as part of an inevitable step towards web technologies.

In this endeavour, the common perception was that any kind of online or offline contacts established with citizens were valuable. The authority had already experienced positive impact from offering online services which were heavily used especially by younger citizens. For most local politicians, even the capacity of citizens to set the agenda was thought more of a right than an opportunity offered by the authority. One councillor summarised this concept by stating that: "residents have and should have the right to come to us if they feel that we are not delivering according to their expectations".

The council was at the process of installing a new intranet throughout 2010 which, with small modifications, could offer the ePetitioning functionality customised into the council website. The intranet was offered by a service provider along with training, maintenance and integration consultancy. The ePetitioning component workflow was predominantly based on the process shown in figure 5.2. Furthermore, as part of the intranet, the ePetitioning feature had an important advantage: it could connect petitioning management with the rest of the council's internal operations. Hence, it could facilitate communication between the different departments involved in the response process and also provide the opportunity to easily set-up alert services for councillors and politicians.

Furthermore, the intranet facilitated the retrieval of information related to the petition background from the council's database. This advantage, apart from accelerating the response process also assisted to improve it. Councillors heavily involved with petitions thought that this would offer a very good opportunity to their colleagues for increasing their interactivity with citizens. Of course, all councillors were notified and had access to paper documentation on current petitions, but the system would certainly facilitate overviews and receiving ad hoc notifications.

The authority was distinguishing, and continued to do so regardless of the online component, three types of petitions: planning, licensing and cabinet member; the latter consider all topics not related to planning and licensing applications. There is a threshold of 20 signatures from borough residents for a petition to be considered (there is no age limit), but it is common that popular petitions might exceed the number of 2000 signatures. An

average of 250 petitions per year was received by the authority during 2006-2010. Regular petitions are open to those who live, work or study in the borough. As one of the councillors explained, during petition meetings everyone has a right to talk and petition details are published about a week in advance. This gives the opportunity to petitioners even to propose guidelines about how they think their petition should be dealt with.

The response process mainly follows the figure 5.2 scheme. The details for the council's new petition scheme which would incorporate the online component were decided in October 2010. The changes this introduced were prepared by responsible officers from Democratic Services and an effort was made to be communicated to the rest of the council. Training sessions involved officers from most departments who needed to have access to petitions; officers from Democratic Services were additionally trained in all ePetitioning management steps.

During the first months, residents were only notified about the possibility of running their petition online if they called the authority to get additional information about petitioning. Naturally, only one petition was launched within the first 45 days of the system's operation. The system's low initial visibility was probably attributed to the IT department's slow response to implement the changes, combined with the wish to establish the system's regular operation before increasing its visibility. The council periodically runs publicity campaigns on different topics. It was thought that, depending on priorities, the ePetitioning website could be an aspect advertised at a later campaign after a few months of pilot operation. Implementing additional functionalities was also left for a later stage, for example, notifications services for system users.

Although for this study it is not possible to examine this systems' long-term impact, as in the LBK case, it does offer the opportunity to draw certain complementary insights to the LBK case. EPetitioning in both local authorities raises a set of interesting questions. How was the introduction of this activity motivated by the institutional environment? What kind of changes did it bring to the established petitioning process and how did local actors react to those changes? Finally, if petitioning was already well-established in both authorities, is there any real evidence of institutional change?

5.5 A view through the institutional perspective

Due to their close geographic distance, it is normal to expect that the two authorities, both part of the London Councils local government association, are subject to similar institutional influences. The case analysis first examines the exogenous influences which were significant mostly at the national level. Then, it focuses on the system's configuration within local mechanisms. Finally, it explains how actors reacted to this online activity and the initiatives that some of them took towards its enactment.

5.5.1 Setting the institutional grounds

The institutional environment that influenced ePetitioning for English local authorities was significant at the national level and stimulated by all types of isomorphic forces. Before looking at the interesting connection between the national and the local, it is important to examine the international context leading to the project introduction in 2004.

5.5.1.1 The popularisation of the eDemocracy idea

When the LBK ePetitioning activity of the Local eDemocracy National Project started in 2003-2004, the "citizen engagement" norm was an innovative addition to the developing eGovernment idea. Also responding to societal demands, policy makers realised that advances in ICTs could have a positive effect on governance processes. The 2004 OECD report hosting contributions by Macintosh and Coleman is indicative of how citizen online engagement in policy making was seen as an actually emerging part to the eGovernment idea (Macintosh 2004b, Coleman 2004).

In 2004, the UK was already at the heart of international eDemocracy efforts. For example, the Scottish Parliament was not only offering ePetitions to its public since 2000, but it was also webcasting its proceedings since 1999 and maintaining biographical information about elected representatives (Seaton 2005). The Westminster Parliament was at the process of organising a full database of proceedings since 2001 for both the House of Commons and

the House of Lords⁶. Coleman's (2003) remarkable study examines the impact of televising the House of Commons in comparison to the Big Brother television show, wondering how technology could help "political democracy liberate itself from its current cultural ghetto" (p. 758). In this context, and few years before the emergence of the social networking phenomenon, the aim of the Local eDemocracy National Project was to identify and test a number of ideas that could advance the newly-shaped eDemocracy agenda in England.

5.5.1.2 Institutional entrepreneurship at the national level

At the beginning of the LBK ePetitioning project in 2004, participants recall a sense of innovation which would naturally fit with the council's mission to treat existing petitions as carefully as possible. At the local level, the anticipation had mainly to do with the system's impact on the volume of petitions and the level of response by the public. Officers handling petitions were alerted to potential changes in their traditional duties and were also responsible for gathering feedback from citizens experimenting with the new service. One of those officers explains that the LBK was actually "lucky" to get involved with the ePetitioning pilot in 2004. At the national level, LBK's ePetitions were significant as actively supported by the central government which funded the national programme and arguably considered this activity its leading experiment. In turn, the project's perceived success had a considerable influence at the institutional environment itself. It facilitated the regulatory change by acting as a kind of "best-practice" that guided the 2009 legislation.

In fact, the central government's consultation for implementing the ePetitioning mandate partially encouraged a guiding *mimetic* mechanism for other local authorities, which was nevertheless not binding in its details. The LBK, Bristol and a few other authorities had acquired growing experience from ePetitioning within their local democratic processes. They were subsequently in a position to contribute to the new legislation guidance details. Although their experience assisted in drafting a basic set of requirements that such systems could follow, it still left ambiguous parts which other local authorities had to decide within

⁶ The popular TheyWorkForYou.com website (developed by mySociety) aggregates content about elected representatives from many sources the most important of which are the Hansard records of the UK Parliaments (House of Commons, House of Lords, Scottish Parliament and so on).

their own context. Perhaps, the most important decision had to do with the minimum threshold of signatures that could trigger a petition. Removing the threshold (as in the LBK) or setting a quite low one (as in the LBH), was thought to be something many authorities would hesitate to do. Those implementation decisions were left at local discretion according to the English local governance framework and its selectivity and diversity structures (Pratchett, Leach 2003) (also see section 5.2.1).

In the LBH, the ePetitioning implementation followed the Act's mandate and timescale, although it was probably an idea which the authority would had considered sooner or later, given its positive experience with traditional petitioning and the acquisition of facilitating technology (the intranet). The LBH is an indicative example of authorities which were pushed to ePetitioning by the regulation, although this activity might have developed on its own in some form (it would had been interesting to see how). Nevertheless, it was an unchallenged decision to keep providing the ePetitioning facility even when its implementation ceased to be mandatory and audited by the central government. From the results of the web content analysis (section 5.6 and appendix 3), it is not irrational to assume that there was some sort of anticipation logic in local authorities such as the LBH.

5.5.1.3 The national-local implications

The 2009 legislation was *prominent* as it introduced a dual novelty: before the Act quite a few authorities did not even have a sustainable petitioning scheme in place and were usually treating petitions on ad hoc basis. After the Act, not only did they have a duty to respond to petitions, but they also had to make the response process *clear* and *explicit*, including the online facility. This institutionally-triggered regulatory change to enforce local government petitioning was independent, but also complementary to ePetitioning. The duty to design a coherent petitioning scheme became enforced in June 2010 which was a few months before the expected launch of ePetitions. Hence, technology was treated as not the leading variable that could facilitate the institutional change, but it did acquire a specific role for local authorities establishing their petitioning schemes (Meijer 2007).

The rationale for the Act was related to the UK *Transformational Government* policy which emphasised the objective of citizen empowerment enabled by the use of ICTs (Cabinet Office 2009). It was also influenced by the popularity of the UK government's ePetitioning

website. Despite the controversial nature of this initiative, even within the Labour government, it was an indisputable indication that ePetitions could attract and sustain a significant volume of participation. Although at the national level the influence of petitions was debatable, it was thought that in localised issues, petitions could acquire a more practical meaning and be connected with decisions that affected citizens' everyday life.

One councillor from the LBH interestingly pointed out: "We get it, we deal with it, we meet the people, we decide about! If you don't interact with people who make decisions, the whole process becomes too formal and impersonal.". Such statements reflect the foundations of local government democracy in the UK which are encapsulated in the political norm of "interacting with local communities personally on a daily basis". It is normal to assume that personal interaction is correlated with political survival given the fact that UK councillors are elected by a rather small audience in small wards within much larger councils. Effectively, compared to the national government, personal interaction becomes vital part of local democratic processes even in large London Boroughs such as Hillingdon (about 250,000 residents).

Indeed, experiences since 2004 have shown that the conditions of engaging through petitions at the local context can be more meaningful for involved citizens. Still, different hierarchies and levels of granularity are also applicable within local authorities. For example, petitions might concern a few streets or issues affecting the whole area. The rationale for setting a low or inexistent threshold of signatures in the two authorities examined was related to this: important localised issues would still find their way to local decision making through the petitioning channel and not be marginalised at the expense of other more popular topics.

Without the positive experiences of the two authorities piloting ePetitions since 2004, it would have been impossible for the Labour government to promote this activity as an enabler of their online engagement political vision. The months from the May 2010 elections to the December 2010 official announcement of the Localism Bill led to confusion among local authorities trying to make decisions about their petitioning schemes and online facilities. As in the LBH case, for some authorities, the regulatory ambiguity resulted in a waiting period where the system was typically implemented but not actually promoted.

Yet, in the LBH, despite the uncertainty at the institutional level, the authority had unarguably decided to maintain the online facility even in low profile at the beginning. Since the LBH study covered the first few months of 2011, the impact of the upcoming Localism Bill was still not clear. Although interviewees warned that it was too early to be specific, they anticipated massive impact from the new legislation at the point where all engagement activities would have to be rethought. One of the councillors expressed his opinion that, in this redesign effort, ePetitioning could facilitate more integrated ways of citizen participation. In any case, this activity had to be conducted within the broad regulatory implications of the policy landscape.

5.5.2 Configuring institutional mechanisms

Unlike other popular ePetitions organised ad hoc by Internet users and submitted to various authorities, receiving and handling petitions for the English councils is a *formal* process. The well-developed experience in the LBK helps us understand why formality and institutional responsiveness is vital to the success and sustainability of such citizen engagement activities. It was highlighted by most interviewees that what really matters is *"the response process to petitions"* and not the website itself which maintains simple characteristics. It is interesting to examine how this challenging institutional alignment process was achieved in the ePetitioning cases based on the authorities' structures, capacities and political environment.

5.5.2.1 Enacting the process

Since petitioning was an existing activity both in the LBK and the LBH, the councils had arrangements for receiving petitions in place; otherwise new internal processes would have had to be designed. The online channel acts as complementary support to the existing petitioning practice. The core of the petitioning process remained almost the same, but the website enabled some new interesting features. With ePetitions, the pre-submission and drafting stage, apart from ensuring that the petitioning topic is within the authority's remit, also provides advanced warning to officers responsible for handling the petition. It allows them in parallel to prepare and post online background information related to the topic. While the petition is at the collecting signatures stage, there is sufficient time for public

hearing arrangements to be finalised. It is also possible to link the ePetition with a corresponding paper petition when this runs simultaneously or precedes the ePetition.

After the petition has been submitted, the public hearing is the actual decision making event which determines the petition outcome. It connects the online and the offline part of the process by granting a deliberation space where petitioners and decision makers can engage in public dialogue. During the hearing, the arguments for and against the petition can be discussed where usually, apart from the petitioners, citizens opposing the petition also have a chance to express their concerns. Publishing the outcome and all related information online ensures the transparency of the process and increases the visibility of all the petition stages. The system also offers the opportunity to update the status of closed petitions, archive them in a separate page and optionally post a response by the leading petitioner.

Overall, the institutional response process is simple and flexible enough to account for all the different petition topics. It leaves no ambiguity to the fact that there is a consistent mechanism to support it by the authority. Although this formal response process is organised and managed by the council, petitions themselves are led by citizens who are enabled to gather around single interest issues in a convenient way. The council impression is that, in their great majority, petitioners seem to be convinced about the fairness of the process, even when not pleased with the actual outcome. The activity is manageable by the authority regardless of the scale (number of signatures) and can be sustained even with an increase in the volume of petitions due to the ease of access and coordination provided by the online system⁷.

In the LBH case, the similar gains emerging are complemented by the ePetitioning website being directly connected to the council's intranet. This feature facilitates internal communications and accelerates the response process while ensuring that other involved entities are efficiently alerted (councillors and officers from other departments, as shown in figure 5.1). It also makes the response process visible to all council departments which

⁷ The long term experiences from authorities receiving ePetitions indicates that no dramatic increase in the number of petitions should be expected.

can be involved if it is an issue of their authority. The impact of the new system on officers' petitioning duties had to do with reviewing and approving requests for new petitions, processing signatures and reporting on petitions.

In the LBH case, it was quite obvious that involved stakeholders from the council anticipated rapid institutionalisation based on the existing petitioning practice. One of the councillors handles about 80-100 petitions annually which is almost half the total petitions received by the authority. He predicts that after a few months, when the system *embeds itself*, it will make an easy space to interact with and accelerate the existing process. After examining the impact of the online component on the process, it is important to view the process as a whole within the local governance context.

5.5.2.2 Institutionalisation within the local context

Following Davidson and Chismar's (2007) study, it is interesting to point out how institutional and technological changes interacted and complemented each other. In both cases, the system's enactment within the council processes evolved as an environmental adaptation exercise which enforced the authorities' public participation norms (Lowndes, Wilson 2003). This argument is mainly related to how the system and the process were linked through the public hearing meetings at different council committees along with the opportunity to trigger a full council debate if necessary.

Going back to the notion of path-dependency and historical continuity of public organisations, there is an evident link between the existing local decision making structures and the ePetitioning efforts which makes the participation exercise meaningful and consistent. The cabinet/scrutiny system guiding English local governance mandates the existence of thematical and regional committees which provide the appropriate deliberation spaces at different levels of authority. For the different committees, discussing petitions is an important part of their normal meetings, especially since it draws attention on emerging problems pointed out by citizens themselves. In many cases, petitions facilitated rather than impeded the regular work of council committees, especially when grouped together (if relevant) and discussed within regular agenda items.

The overall impact of the ePetitioning website on the engagement process generated some particular effects. In connection with the institutionalisation challenges and factors reported by previous studies, the following could be particularly noted (Macintosh 2006, Macintosh 2004b, Gronlund 2003, Callanan 2005):

- Establishing continuity. The benefits provided by the petitioning systems enabled more integrated and accelerated response processes. Since departmentalism has been identified as an institutional characteristic which acts as barrier to public systems (e.g. Barca, Cordella 2004), the process coordination aspect is certainly not negligible. With regards to the policy making lifecycle, the role of petitioning and ePetitioning posed a clear proposition.
- Skills for managing ePetitions. Knowledge of regulatory arrangements, authorities
 and previous policy debates are essential skills for managing petitions; not to
 mention technology literacy and communication skills with involved stakeholders
 which are also highly valued. Although in our study no such problems were
 identified, those skills should not be taken for granted specially at the early stages
 of implementing such systems.
- Decision-making costs. In both cases examined, the project start-up costs were covered by the central government and particularly in the LBH case, the ePetitioning component was a feature of the already purchased intranet. Within the study period, no additional costs had been reported on any aspect of the process changed due to ePetitions. Due to the website, more petitions can be processed by the same officers. As a result, although not substantially, it does reduce decision making costs as observed by Kumar and Vragov (2009). In this case, no major resource allocation for handling public input was required (Andersen et al. 2007), although providing enhanced support services such as discussion forums would probably inflict additional personnel costs.
- Engagement numbers are not affecting the process. Unlike the majority of
 eParticipation exercises, involving a smaller or larger audience has no effect on the
 process. No matter how many petition signatures, issues are treated equally by
 authorities and the level of support might only have an effect during petition

hearings. Furthermore, verifying the originality of every single signature is not considered necessary. Nevertheless, following the new provisions such as the one stating that 5% of the local population can trigger a referendum, a more analytical cross-examination of a larger number of signatures might be required, thus removing this advantage over regular petitions.

- Citizen motivation pre-existed and is sustainable. UK citizens are historically motivated to submit petitions. Apart from ease-of-use and traditional popularity, sustainability is related to the bottom-up character of the participation process which allows citizens to set the agenda. This logic is consistent with the suggestions to enable bottom-up innovation by networked individuals (Dutton, Eynon 2009). Furthermore, ePetitions are easily connected with everyday Internet practices such as mailing lists and social networks which grant petitioners opportunities to organise their campaigning (e.g. Panagiotopoulos et al. 2011).
- The process is formalised enough to be computerised without major changes. Gronlund (2003) has possibly been the first eDemocracy scholar to note that such initiatives presume high administrative control over participation processes so that they are implementable by electronic tools. For traditional petitions to be computerised, no major changes in the administrative control part of citizen involvement was required. The introduction of the new pre-submission stages for ePetitions is also beneficial for petitioners as it ensures correct wording and appropriateness of the topic. There is no evidence that the elimination of the "surprise" element of ePetitions has discouraged petitioners.

Finally, an important aspect of the system's impact is related to the responses of local actors and their role with respect to the ePetitioning initiative. Bearing in mind the analysis by Lowndes et al. (2006) on the significance of formal and informal political engagement institutions, the leading involvement of local actors reveals a key aspect of the petitioning systems' impact.

5.5.3 Strategic initiatives by local actors

In the emerging eParticipation literature, two main groups have been involved at the local level institutionalisation processes of such systems: politicians and the civil service. Their relationship and impact seems to be controversial. Gronlund (2003) indicates that in several local government cases in Sweden, politicians were marginalised because the civil service maintained total administrative control of participation initiatives. Participative mechanisms should not marginalise elected representatives who might not be able to devote resources and time even when they seek to encourage citizens to take part in decision making (Callanan 2005).

Rose and Saebo (2010) add that the management of such initiatives can be more or less pervasive from public administrators, but the objective remains the same: motivating politicians and citizens to interact and develop a sense of ownership of the political process. In contrast, limited promotion and poor understanding of stakeholders' motivations might lead to officers setting up public agendas although this is not their institutional position.

In both cases examined here, the community leadership role of elected representatives was actually reinforced due to the mediating involvement of the civil service. This is because, due to the formality of the traditional process, the role of involved stakeholders was well-defined, especially with respect to politicians and the civil service. In addition to those two groups, the thematic analysis identified a range of stakeholders involved with ePetitioning in different roles. Figure 5.4 presents the thematic map from the LBK initiative.

As a result of new technology availability and central government funding, initial collaborations in this case were formed during the system's launch in 2004. Since then, they evolved dynamically, mainly due to the change in the system's provider from an academic partner (Napier University) to a private company (Public-i). The central government, apart from initial research and funding, was responsible for the 2009 regulatory framework. The LBK, already complying in practice with the new arrangements, participated in national consultations led by the Department of Communities and Local Government.

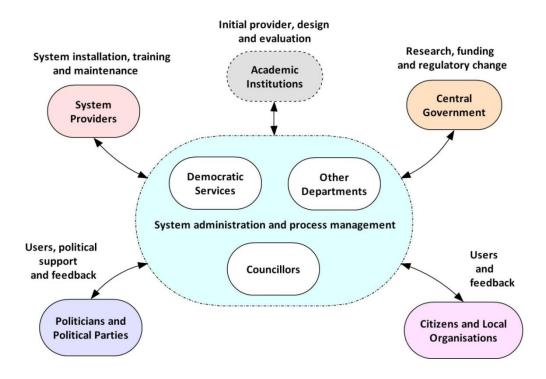


Figure 5.3: Thematic map showing the role of involved stakeholders.

Local political parties and especially the party leading the council (Liberal Democrats) were to a large extent supportive of the idea and hence provided political legitimacy. Quite a few local councillors and non-elected local politicians were eager to promote the initiative by commencing or openly sponsoring petitions. In this way, they found a means to stimulate their institutional duty of facilitating public dialogue. In addition, in both cases, some of them took further civic engagement initiatives. For example, in the LBH, a councillor responded to some petitions submitted by students and organised the hearing in local schools as a citizenship education exercise.

In the LBK, political initiative by councillors from both the main local parties helped overcome resistance from a minority who were in principle supportive of petitioning but considered the online aspect to be unnecessary back in 2004. In fact, politicians participating in the study were vastly supportive of the idea and reported that their colleagues who were not equally sympathetic were either aged, had no previous experience of ICTs or both. Many councillors saw ePetitions as an opportunity to exploit new media and expected to reconnect with members of the public which were more or less indifferent to traditional politics. Younger citizens were the most indicative group.

Political leadership was also a decisive factor in the system's first period of use. The pilot activity of the national project was chaired by a LBK councillor who envisioned and designed the integration process for ePetitions. As Kim et al. (2009b) note, official leadership can significantly facilitate institutionalisation processes. In turn, public managers seized the opportunity to demonstrate improvements and innovation in their role by facilitating the system implementation, especially since it didn't require any major organisational modifications. Petitions are single declarations over a public issue, but in some cases require broader policy examinations and discussions between the different parties involved. In the LBK case, stakeholder interactions were handled by the Democratic Services, the IT department and in some cases by councillors directly.

The mediating role of the civil service remains critical to the quality of the response process since it ensures coordination and communication between the involved entities (politicians, petitioners, other departments and the public). It also led to ongoing configurations in the implemented technology, for example by considering connections with social networks or proposing new functionalities for future upgrades. Following the remark by Brewer et al. (2006), it is important that active support by public officers helped bridge the gap with technology specialists. For example, during the pilot implementation, the emerging requirements for reviewing and managing petitions became more or less a standard for future commercial ePetitioning systems.

Experimentation and open mindedness proved the best path to achieve citizen acceptance and sustain participation. Citizens and local community groups used ePetitions and also provided design and improvement feedback during and beyond the pilot evaluation. Since 2004, most petitions have been initiated by individually motivated citizens who probably do not have access to extensive traditional dissemination mechanisms as local organisations might do. As a result, the website enabled them to address their concerns to the local audience. Furthermore, some of the more successful petitions have been organised by regional or local residents' organisations. Even when such community groups possess limited resources, they are usually able to publicise their campaign in a combination of offline (e.g. leaflets, announcements at events) and online means (e.g. mailing lists, social networks). An integrated campaign can be visible on the web since paper signatures can be scanned and published online.

Overall, the combined efforts and involvement of officers and local politicians were prominent to the perceived success of the initiative: they shaped a suitable institutional environment where, for citizens, it was clear how they could engage with their council and what were the potential outcomes of this engagement (Lowndes et al. 2006). Clear objectives resulting in integration within political processes, as identified by Coleman (2004) and confirmed in the two cases, were fundamental principles to the success of the initiatives. The achievement of such a coherent engagement proposition was strongly related to the supportive everyday behaviour of public officers who were asked to act within rules, take ad hoc case by case initiatives and, above all, reflect a culture of responsiveness which was crucial for the council's public image as an institution.

5.6 The March 2011 national assessment

Following the two case studies, this section provides some overview remarks over the actual outcome of the 2009 Act which has been a landmark piece of legislation for digital governance researchers and practitioners. The methodological details and the findings of the overview assessment are explained in Appendix 3 and briefly discussed here.

Before the Act, certain overview studies had attempted to explore the extent and type of eParticipation adoption in European countries (Medaglia 2007b, van de Graft, Svensson 2006, Pratchett et al. 2006). Those studies, despite identifying a set of interesting hypotheses, were not presented with the opportunity to examine the implementation of an institutionally enforced eParticipation tool at national scale. Close to the December 2010 deadline, there was uncertainty over what local authorities would decide to implement. Assumptions indicated that some would decide not to offer ePetitioning channels at all or discourage petitioners in other ways, for example, by setting high signature thresholds to generate the petition response process or by keeping the new website away from publicity.

This study can certainly be interpreted from several perspectives. The results question whether the legislation actually achieved its purpose yet since they indicate minimum efforts of institutional compliance and low actual use of those tools. It seems that many local authorities had not seen the need to introduce the systems and may therefore have

"silently resisted" promoting them. The confusion over the future of local government ePetitioning was also reflected in the results. Apart from the about 280 authorities complying, 21 more websites stated that the ePetitioning implementation is "in progress". Although in about 25% ePetitions suffered from apparently low visibility, in about 45% of them, locating the system required at most one click from the council home page. Furthermore, despite initial expectations, the study did not find signature thresholds being a real barrier for prospective petitioners.

In many cases, it is evident that councils allocated the minimum possible effort and resources to this new initiative. Two observations are pointing to this direction: limited implementation of the features examined in the appendix 3 table 1 and low actual use of ePetitions. The first observation shows that councils did not wish to or possessed the resources to enhance the online petitioning process with support characteristics such as notification for new petitions and commenting facilities. The second observation illustrates that, regardless of most systems operating for less than three months, in most councils the initiative was not advertised or promoted; the absence of even a single petition in 192 out of 277 websites seems like a clear indication.

On the whole, the existence of so many facilities partially promises that they might be actually used in the future, especially in a period when citizens feel the need to petition authorities to avoid the closure or reduction of public services due to budget cuts. Certainly, this study was conducted in rather short time after the December 2010 deadline when it is normal to expect that the new practice will not be yet fully embedded in the majority of authorities. However, this outline view provides a complete background for the case studies presented in this chapter. Furthermore, as Medaglia (2007b) notes, assessing a new policy at the early stages can be important for its future impact due to the usually high cost of changing initial decisions or path-dependency. As seen in the case analysis and further discussed in the next section, the LBK and the LBH have been directly affected by the 2009 legislation in different ways.

5.7 Summary and discussion

This chapter presented the two local government cases supported by additional evidence on the adoption of ePetitions in the UK. In 2009, ePetitioning tools were institutionally enforcing at the national level. This influence implied a mimetic mechanism from the perceived successful cases such as the LBK to the rest of the English authorities; those authorities belonged in two categories: those who had a paper petitioning process in place, such as the LBH, and those who didn't⁸. This mimetic mechanism resembles the one reported by Kim et al. (2009b) where a successful anti-corruption system was transferred from the capital Seoul to the whole range of Korean government applications. In the UK case, the legislation's impact was hindered by institutional uncertainty when a change in government created ambiguity about its implementation.

At the organisational level, examining the system integration revealed that its enactment was facilitated by the decision making structures of English local governance where deliberation spaces for petitions were available within official council committees. Discussing petitions with local decision makers in person made this participation exercise more meaningful as less bureaucratic and impersonal. The nature of the petitioning activity also contributed to its sustainability both from the authority and the citizen perspectives. With ePetitions, the response process is coordinated by the authority, but citizens themselves set the engagement agenda by deciding on specific petitioning topics. This feature fits well with the imperative of converging spontaneous citizen-driven activity on the web with organised politics (e.g. Macintosh et al. 2009, Dutton, Eynon 2009).

Finally, the involvement of key actors in both cases was decisive to the success of the initiative. Apart from many councillors seizing the opportunity to organise or support petitions, some of them were responsible for promoting the systems or deciding on a large number of petitions especially at the LBH. Furthermore, as discussed, the role of public officers is significant in terms of bridging citizens and politicians within the process without interfering in inappropriate ways. In both cases, there was no evidence that officers

⁸ According to Communities and Local Government (2009), only about a third of all councils would guarantee a response to paper petitions in 2007.

handling petitions resisted the system. The fact that it mostly facilitated their traditional duties without increasing their workload was certainly helpful.

In connection with previous studies, for politicians and public officers, not only the new technology did not challenge their professional identity (Jensen et al. 2009), but it also enabled them to perceive gains from the new situations and have a sufficient picture of its potential effects on their traditional roles (Gasco 2003). On the contrary to the observation made for enterprise systems by Gosain (2004), public officers were fully aware of the necessary technological configurations. Particularly in the LBH, the timing of the study allowed capturing the configuration details and training processes within the management team. Despite certain working difficulties with the IT department, officers handling petitions were able to coordinate the process through the system at different levels, for example, by alerting other council stakeholders.

An overall conclusion from the two cases is that the institutional environment did not inhibit, but mostly supported the change from the national to the local level and then back to the national level with the 2009 legislation (Avgerou 2001). The LBK participated in the 2004 project and received central funding, research and support. The LBH was pushed by the 2009 regulation to implement an activity that would probably consider sooner or later for the reasons explained. Despite the regulatory attempts to promote ePetitioning, there is no evidence that many English local authorities are achieving the same degree of institutionalisation, especially since the March 2011 assessment indicated that the majority of those systems were poorly implemented and not used at all.

The LBK and the LBH are quite wealthy London Boroughs which benefit from high Internet adoption and strong youth presence in their areas due to local universities. Furthermore, especially in the LBK, the idea of "facilitating public participation in every possible route" seems to be deeply embedded in the local culture and petitioning is not the single route for realising this plan. Interviewees from the LBK were highly supportive of the 2009 Act and emphasised that thresholds, if any, should be set at the minimum levels so that important topics of local interest will not be marginalised.

Was institutional uncertainty the only reason why other authorities did not make progress with ePetitions within the first three months of the new policy? Going back to the forms of

legitimacy analysed by Kaganer et al. (2010), it seems that although cognitive, normative and regulatory legitimacy were not questioned, there was an issue of pragmatic legitimacy. Authorities could not see the real value of this activity compared to existing processes such as consultations. Furthermore, interviewees from the service provider teams explained that in many authorities, Democratic Services departments were understaffed and did not possess adequate resources to expand their activities, especially in a less controlled activity such as petitioning.

In terms of adoption and use of petitioning facilities, local politics also had an influence: the website analysis study found that authorities led by conservatives had their facilities less used compared to others. This can possibly be attributed to the fact that those authorities were anticipating the new government's Localism Bill to make more comprehensive decisions about the future of their local democratic processes. This should not imply that conservatives were necessarily against petitions; their main concerns with the 2009 legislation had to do with the level of detail in which it prescribed the new activity. Instead, the new government's intention was to allow local communities to organise their own decision making processes in a non-binding way. In contrast, authorities led by Labours showed a tendency to enact the Labour government's legislation and those led by Liberal Democrats had already shown strong support to eParticipation activities in general. In fact, in the two 2004 pilot cases, local Liberal Democrat teams have been traditionally strong in leading the LBK and sharing power with Labour in Bristol.

Finally, an important question about the impact of technologies in local democratic processes arises from the two cases: if the petitioning process was already well-established as an institutional norm, is there any real evidence of ICT-enabled transformation? Going back to the institutional change definition by Hargrave and van de Ven (2006), the difference before and after the system is not indisputably noticeable even in the LBK case. There is no indication that the website increased participation or that it had any sort of transformational impact on local governance. As O'Neill (2009) explains, it was less a case of "doing different things" and more one of "doing things differently".

However, "doing things differently" should not be undermined as an insignificant step contributing to the use of technical means for fostering more inclusive governance. The answer to the above question is certainly positive from the point of view that citizens

gained access to an ICT-facilitated institutional path for setting the public agenda. Although no major organisational changes were necessary for this to be achieved, the introduction of the institutionally enabled system demonstrated positive impact to the process both from the citizen and the authority perspective. Most importantly, the success of the pilot initiative in the LBK was one of the motivations for the national regulatory change.

In turn, this regulatory change not only advocated the development of ePetitioning websites by other English local authorities. It came with the duty to respond to petitions in a particular way, and mandated the design a corresponding institutional process for handling them, regardless of the online component. This is undoubtedly an indication of institutional change and, in fact, it seems to be a potential exception to the common limitation of using only those ICTs that already fit the existing frameworks of governance (Dawes 2008, Fountain 2008).

The 2009 legislation critically didn't challenge the institutional norm that "a petition requires some sort of official response"; rather it built on it to formalise what was acceptable as a response mechanism and then support this with an online facility. A quite simple technology such as an ePetitioning website highlights even more what the institutional embeddedness feature actually entails for ICTs in public engagement. In local authorities, there was a critical mass of institutional structures and stakeholders to enact this activity even possibly surviving through a reluctant start as in the LBH case. In contrast, the so popular no.10 website was eventually downgraded to a negative public relations exercise. Basing its new form on the institutional structures of the Westminster Parliament would open a new path to citizens for influencing the parliamentary agenda. Yet, it remains fundamentally different from the previous government's intention to provide an inclusive and easily accessible mechanism to regularly influence public policy. The experiences of the two local authorities underline the significance of this and provide useful directions on how it can be achieved.

Chapter 6 - Engaging Online with Trade Union Members

6.1 Overview

This chapter presents the Greek trade union federation case which was examined for almost two years. This organisation attempted to use social networking tools hoping to engage with some of their 60,000 members. Interestingly, union officials initially motivated by the social media norm, later discovered a whole set of less advanced tools that could be useful for their context. The institutional perspective in this case attempts to examine how the union's organisational and institutional complexity persistently affected efforts to develop parallel digital governance structures. Institutional uncertainties led to operationalisation difficulties due to which, although certain influential actors did perceive strong benefits in theory, achieving them in practice was possible only to a limited degree.

The next section introduces the study background in terms of the international and domestic trade union context. It explains the existence of such organisations as part of the broad public sector and political system, their need to obtain policy feedback from their members, as well as their strategic capabilities. International efforts on using Web 2.0 tools in the trade union context are also reviewed. Section 6.3 presents the case narrative which is then analysed through the institutional perspective in section 6.4. Section 6.5 summarises and discussed the study. Further implications are developed in chapter 7.

6.2 Background on trade unions

Trade unions have been characterised as social intermediate organisations whose purpose is to collectively represent employees. Hyman (2007) p. 194 explains:

"They provide a formal mechanism of collective representation, partially (though not totally) independent, to workers who are already organised collectively by the employer. Their organisational structures are thus indirectly shaped by the capitalist division of labour and by the practices and preferences of their members' employers."

Hence, trade unions are political organisations which support citizens in one of their most sensitive part of their lives: their working relationships. Depending on the specific environment in which they exist, trade unions develop their strategies as social actors. The structure, societal role and strategic challenges of trade unions create an interesting field where ICTs can play important role. The next section focuses on the organisational background of trade unions and then the following one discusses the relationship between union organisations and emerging web technologies.

6.2.1 The motivation and role of trade unions

The labour movement has been motivated by the mission to protect employees and improve working conditions. Most unions cultivate a collegial atmosphere where decisions are emotionally charged. Others are more professional organisations with various resources, extensive membership base and domain expertise. In any case, unions are not business organisations; they exist on the basis of legitimacy to represent colleagues and collectively protect their interests. Union legitimacy comes from the value of *solidarity*, a key word characterising the ethos of those collectives against individualist behaviours (Lévesque, Murray 2010b).

Union power refers to "the capacity of unions to represents workers' interests, to regulate work and to effect social change" (Lévesque, Murray 2010b, p. 335). Union power is affected by socio-political factors such as the union's density rate which is the percentage of sector employees registered with the union. In most European countries, unions are quite traditional actors, consisting of different elected groups affiliated with political parties. Trade unions are strong in places where their existence is institutionally embedded in the economic system (Hyman 2007). Depending on particular conditions, collective representation might be more or less encouraged. For example, even in the UK where unions have historically been one of the most influential civil society forces, unions are diminishing power due to the phenomenon of "semi-formal membership" where individuals participate conditionally only when it suits their ad hoc interests (Davies 2004).

Unions traditionally shape the conduct of professions in an institutional way since they become gatekeepers of appropriate ways of professionally accepted behaviour (Jepperson 1991). The main activity of European trade unions is to engage in collective negotiations

with employers and the state. Unions might provide benefits to their members such as pensions, social security or complementary medical insurances. They also engage with their members in social events (e.g. cultural, sports) and they might provide training even independently from employers.

Unions are by their nature democratic organisations where participation in collective activities is not simply appreciated, but is usually a perquisite for the union's existence. Member participation in union activities depends on factors such as union loyalty, perceived instrumentality, working position, job satisfaction, perception of differentiation from management, union leadership, political affiliation and others (Metochi 2002). For example, a left-wing ideology is usually more compatible with the concept of collective action and, thus, many union organisations traditionally operate on such ideologies.

Following the need to sustain engagement, union governance requires the instantiation of the solidarity value in appropriate participatory structures so that members can get involved in the whole scope of union activities. Hyman (2007) characterises unions as *discourse* organisations where strategic dialogue should ideally combine top-down (strong leadership) with bottom-up structures representative of the union's diversity⁹. As in any political relationship, union members need to monitor the actions of their representatives and engage in decision-making outside of election periods. Especially in large union organisations, there is a whole range of processes, activities and decisions where feedback from unions' members is required. For example, during crisis circumstances, it is important that unions can convince and mobilise their members in collective industrial actions, not limited to strikes, where the union unity is tested in action.

Despite expectations for innovation, flexibility and creative thinking, unions are in most cases highly institutionalised organisations likely to follow well-established patterns of behaviour within bureaucratic routines (Frege, Kelly 2003). Unions are institutionalised not only at their routine operation, but especially *at the cultural-cognitive* pillar. Basing their internal coherence and unity on common understandings is understandable for organisations brought into existence by the connecting value of solidarity. When union

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⁹ Union decisions can be dominated by elite demographic categories such as skilled males (Hyman 2007).

members seek to justify their existence and historical foundations, they tend to draw on narratives related to the union life and previous accomplishments in what Lévesque and Murray (2010b) describe as quasi-mythical stories.

Union leaders are expected to lead militant organisations in collective actions and engage in conflicts if necessary. They must be accountable, collegial and responsive to their members, but also maintain professional standards. Levi et al. (2009) characterise this balance as one between an "army" and a democratic forum. They add that few unions hold the institutional power to accomplish both at the same time usually leading to either professional oligarchy or ineffective management.

Unions' cultural persistence inevitably leads to resistance to change (Zucker 1991) or, in other words, organisational constrains in the form of path-dependencies (Hyman 2007, Lévesque, Murray 2010b). Unlike public administration organisations, union path-dependency comes not only from the institutional complexity and cost of change, but also from the fear of losing collective identity and legitimacy. Union resistance to change has resulted in their slow and limited adaptation to contemporary socio-economic conditions. Their resistance to modernisation within a globalised environment has put unions at a defensive stance.

6.2.2 Globalisation and the trade union movement

In general, trade union policy-makers seem to have difficulties strategically adapting to radically new labour and economic circumstances (Yates 2005). Especially in the context of globalisation, the role of unions seems to have changed dramatically. The fragmentation of the monolithic collective identify culture has led to reduced union cohesion (Lévesque, Murray 2010b). Unions are experiencing lower participation in their everyday life and limited levels of engagement through their deliberative structures. It is also a fact that unions are losing their traditional members and have severe difficulties recruiting new ones among young generations (Scruggs, Lange 2002).

Lévesque and Murray (2010b) observe that unions are more or less following a process of self-transformation after realising the need to act more professionally and strategically. Union policy-makers are now required not only to be able to exercise their traditional

societal power, but also to be able to recognise, assess and act upon wider opportunities at their local and international environment.

Scholars underline the importance of leveraging union skills and resources (Lévesque, Murray 2010a). The need to create new union competencies calls for experimentation, research and consideration of a range of potential innovations. Such examples of innovations include programmes and processes for membership engagement, the use of new technologies and methods of recruitment (e.g. training, dedicated allocation of resources and so on) (Lévesque, Murray 2010b). The necessity to increase synergies within the labour movement at the national or international levels is particularly highlighted (Hyman 2007, Lévesque, Murray 2010b). Since most important contemporary problems are now addressed to the labour movement as a whole, union embeddedness in networks can enable them to translate global problems in their local context and, respectively, understand local problems within a globalised environment.

Unions are at the process of redefining their existence and legitimacy; in this effort, communications and the new role of ICTs emerging as a critical dimension. Unions have to find improved ways to enhance interactions with their members and connect with the unlimited sources of information disseminated through web technologies.

6.2.3 Trade union modernisation through web technologies

Trade unions have been important stakeholders in technology diffusion as indicated by the socio-technical design movement (Mumford 2006). Although certain unions possess significant resources and influence, as Zhang et al. (2010) explain, considering ICTs in the non-profit sector mainly concerns organisations whose adoption is usually late, ideologically-driven and not seen as an investment leading to efficiency or competitive advantage. Previous work suggests that ICTs in unions are interwoven with their political nature. Lucio (2003) summarises this observation by stating that "the extended use of email lists, email circulars, and websites may depend on broader matters of legitimacy such as historical identity and social presence" (p.345).

Starting to consider the role of ICTs in labour organisation, Lee (1996) recognised the Internet's potential to help unions establish more meaningful collaboration channels. Since

geographical and time fragmentation had long been barriers in union communication, it is reasonable to expect that web technologies can strengthen solidarity and foster collective action (Whittall et al. 2009). Even though unions are slow adopters of ICTs, many have been using websites to introduce their organisations to society, gain media attention for their activities and positions, as well as offer services to members (e.g. Whittall et al. 2009, Diamond, Freeman 2002).

Many unions have also focused on disseminating material online, for example using organised mailing lists and maintaining virtual communities (Lucio, Walker 2005). Especially when it comes to coordinating grassroots movements, low-quality and high-volume tactics such as mailing lists can be useful to mobilise member interest around top priority topics that require multiple levers of engagement (Karpf 2010). In regular union operations, mailing lists can be used for policy updates, newsletters, announcements communicating officials' positions and so on.

Apart from building the union's front-end and coordinating actions, ICTs have inevitable implications on the institutional structure of the labour movement. Can interactive forms of web communication co-exist with traditional union governance? Hogan's (2006) detailed studies illustrate that union governance based on top-down communications can hardly exist on the web, hence positioning the challenge of exploiting new technologies in the heart of the unions' transformation agenda.

Indeed, current bureaucracies can little respond to the challenge due to their cultural incompatibility with the open nature of new media tools (Diamond, Freeman 2002, Kaganer, Vaast 2010). Inevitably, moving union organisations online, more or less requires thinking outside their institutional boundaries of power (Hogan 2006, Pulignano 2009). In turn, unions' politics and history is probably the key explanatory variable with respect to their diverse responses to the challenge of virtual networking (Pulignano 2009). Lucio (2003) also explains that communication systems need to be approached with respect to their effects on power relations within unions.

For example, as Lucio and Walker (2005) note, ICTs usually emerge within union communication departments led by younger individuals who have not followed traditional union career structures. Their role as "evangelists" of the Information Society unavoidably

comes with changes resisted by more established colleagues (also seen in this study). One such aspect concerns using websites as a substitute of traditional leaflets versus maintaining open spaces where the union's management might be subject to public criticism.

Generally, it is suggested that ICTs in union modernisation should be considered along with issues of generational, social and organisational change. Lucio and Walker (2005) summarise the research dimensions unwrapped by this statement as (p.150):

The social, regulatory, resource and political dimensions of the labour movement are still important in shaping the use of new forms of informational processes, but how they interact with new forms of networks sustained by the internet and more open modes of communication is a matter for further research.

If ICTs imply a change in unions' identity, do they undermine their historical advantage as civil society institutions? Davies (2004) argues for a negative answer to this concern by explaining that a decentralised way of distributing information does not endanger union's physical presence in society. He further emphasises the duality of top-down and member-led structures by arguing that (p.8): "the key benefit offered by the internet is to release the ethos of unionism into the grass roots, rather than to replace unionism with bottom-up, incoherent angst.".

This statement, although based on a sound theoretical and practical base, assumes that union policy-makers are in a position to understand, assess and unleash the effects of new media on their activities. As emphasised throughout this thesis, integrating engagement tools emerges as a problem of institutional adaption. Are trade unions in a position to undergo such processes? The Greek case examines Davies' motivating question in a complex organisation connected with the country's public sector. Before proceeding to the case, the next section presents an important international effort to transfer Web 2.0 tools to union practice.

6.2.4 Unions 2.0 and the e-UNI campaign

A leading effort to promote Web 2.0 tools in the trade union context has been initiated by UNI Global since 2008. UNI Global Union (2010) is an international trade union federation whose affiliated members include 900 unions worldwide; a figure which gives access to about 20 million workers. UNI's mission is to foster international solidarity and provide a voice for its members within a globalised environment. UNI's organisation is divided into regional groups spanning in all continents, such as UNI Europa, as well as sectoral groups such as UNI Finance. Apart from providing networking, legal and other support to its affiliated members, UNI coordinates international campaigns mainly related to the functioning of multinational companies. For example, the UNI Tesco Global Union Alliance is an initiative aiming to unite Tesco workers globally and reveal the diverse employer practices that the company deploys in different countries.

Recognising the benefits and potential positive impact of Web 2.0 tools on union communications, UNI launched a campaign in 2008. The e-UNI initiative focuses on the use of new media for trade union activities and their perspectives for connecting UNI members world-wide. This initiative is supported by the Communicators' Forum (UNI Global 2011), an online space where union officers can seek advice on issues of technology. Instructions are provided for each tool and its usefulness for union organisations; those tools include blogs, Facebook, Twitter, RSS feeds, Flickr and Second Life. Virtual worlds such as Second Life have been particularly interesting. In 27/09/2007, UNI organised the first Second Life "virtual" trade union industrial action against IBM Italy. The demonstration was highly successful having about 1850 participants from 30 different countries. It received wide traditional and Internet media coverage. As informed by Blodgett (2010), follow-up strikes were organised in other virtual worlds creating a whole new agenda of issues around online organised protesting; for a review of the topic see Garrett (2006).

Following the Second Life demonstration, Bibby (2008) attempts to specify the Enterprise 2.0 concept for unions by promoting the *Unions 2.0* term. This is not limited to the practical use of networking tools, but extends to the unions' responses to the social and cultural transformation proposed by the Web 2.0 concept. Especially aiming to approach younger generations, Bibby argues that unions' online involvement should bear fundamental changes to current practices. He further identifies one major issue concerning the ability of

union members to use such tools in their workplace. In many cases, such use is discouraged by employees or even considered unacceptable practice. This fact should not be surprising given that organisational policy makers seem to have conservative understandings of any applications which are not controllable by them (Kaganer, Vaast 2010).

6.3 Case study

Considering the above background, it is important to understand the particular challenges faced by the Greek union federation. The following case description traces the union's efforts to exploit ICTs for member engagement during the study period.

6.3.1 Organisational background

The Greek Federation of Bank Employee Unions was founded in the 1950s due to the need to coordinate the individual unions operating in each bank. Following months of negotiations among unions, the federation took its official form in 1955. Since then, it has played a decisive part in the banking sector through its actions in a broad range of working, social dialogue and security issues. Due to the significant resources it holds, especially compared to other Greek union organisations, it is considered one of the most influential civil society actors in the country. One of the main reasons justifying the federation's power, apart from its key position in the financial sector, is its high union density rate which comes to approximately 85% of the total Greek bank employees. This figure comes close to 100% in public sector banks where unionism has traditionally prospered compared to private or small-sized banks. In total, the federation represents about 20-25 individual unions which adds up to about 60,000 employees. The number of individual unions varies due to constant mergers, acquisitions, closings and bank openings in the country.

The union's structure and decision making processes maintain a certain degree of complexity indicative of the number of diverse actors represented. Figure 6.1 depicts the federation's structure. Every three years, the individual unions elect representatives who participate in the General Assembly. The assembly is the most important decision making body as it frames the federation's main policy for the next three years. It also elects the 75 members of the General Council whose mission is to implement the main policy guidelines, manage the federation and decide about the most important activities such as collective

actions. It is also the authorised body to approve and sign collective agreements with bankers following annual negotiations.

The 75-member council elects the 15-member Executive Committee which decides upon the particular official's duties and assigns the leaders of each of the 11 thematic secretariats which coordinate the federation's everyday activities. The president, vice-president, general secretary and treasurer are also elected among the Executive Committee members. The 11 secretariats are equipped with their own resources and authorities so that they can implement and monitor the unions' policies. For example, one of those secretariats is responsible for issues of social security, benefits and pensions while another coordinates the union's social events. Apart from the thematic secretariats, regional departments also exist and operate across the country dealing with employee issues at local levels. Regional departments are coordinated by a specialised secretariat.

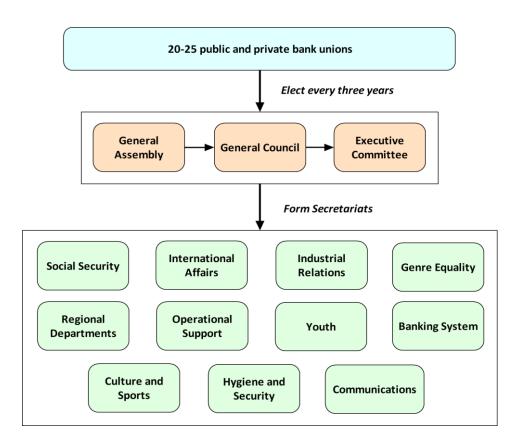


Figure 6.1: The union federation structure.

Finally, the union maintains its own research centre: the Labour Institute. This semiindependent organisation assists union activities through scientific and consultative support including publications in a broad range of topics. The Institute is affiliated with experts in different industrial relations topics. Its leading team consists of both elected and non-elected members. It also coordinates the union's participation in research activities related to social dialogue. Overall, the union's complicated hierarchical structures come from the will to ensure that all affiliated parties can participate in management decisions, even at the expense of flexibility. This resolution directly relates to the organisation's political balance as analysed next.

6.3.2 Organisational context

The union federation belongs to the broad spectrum of Greek public sector organisations. Although neither a public authority nor a government-funded agency, it does maintain most of the national public sector's characteristics. Probably the best resource describing this socio-political context is Avgerou and McGrath's (2007) longitudinal study on the social security organisation IKA. The public sector's organisational dysfunctionality has been judged as the country's main obstacle for development. It is also one of the main factors leading to the national debt crisis. Avgerou and McGrath recognise the problem's routes to the public sector's control by political parties. Efforts to promote modernisation and innovation have been politically inspired and traditionally reflected governments' political ability to handle social conflict through proposing and applying state reforms.

A significant part of societal conflict in the Greek society has evolved around trade unions which have developed a long tradition of dynamic industrial actions such as massive national strikes. Greek unions are regarded as highly institutionalised and resistant to change organisations. Their leading officials are normally registered with political parties and, in some cases, seize top-level political positions subsequent to their union career.

Many unionists have traditionally been members of PASOK, the socialist party holding the Greek government since 2009. The unions' political nature is reflected not only during elections, but also in all their everyday decisions which might resemble a microcosm of national politics. Strong links with political parties are thought of as one of the main reasons why trust in union leaderships is steadily declining¹⁰. Other reasons, in line with

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¹⁰ Those links should be confused with other more formalised cases where unions have influenced the political life. For example, in the UK, the relationship between unionism and formal politics has worked in the

international challenges, have to do with the unions' actual difficulties to protect workers and improve working conditions. Greek unions have specific problems approaching younger employees and their membership composition seems to be biased by factors such as gender, sector, age and ethnicity (Matsaganis 2007).

During this study, the effect of the international 2008-2009 banking crisis was outstanding. As part of the European project DialogoS+ led by the union, a diagnosis of major future issues reveals the intentions of unions to work in more integrated ways so that they can better understand and react to complex international problems (loannou et al. 2009). Furthermore, the union is affiliated with UNI Global Union and in particular with UNI Europa. Union officials regularly take part in international events and have the opportunity to learn from the experiences of their fellow colleagues in different topics. The union also collaborates with many fellow European banking sector unions, especially those located in the Balkan or Mediterranean region. Its aspirations to play a leading role in the area have been practiced through hosting international events and coordinating several European initiatives. The next section describes the union's online engagement project, covering the period before and during the 21-month study.

6.3.3 Case description

interests of organised workers.

The description follows the idea of a historical narrative since the study does not focus on a particular system implementation. It examines the continuous efforts of union's officials to seize the Web 2.0 opportunity. Looking retrospectively at the turn of events facilitates the institutional analysis in terms of connecting practical decisions with their rationale. Furthermore, a case narrative is recommended for longitudinal case studies where a vast range of collected material can be presented at chronological order. Throughout the study, it is possible to devise three main periods as follows.

opposite way with the Labour party which was founded by unions themselves to represent the political

6.3.3.1 Phase 1: the establishment of the Unions2.0@otoe project

Figure 6.2 summarises the main events around the beginning of the union's efforts to exploit social media. The union's involvement started in late 2008 and was generated from the union's research institute and its participation in an e-UNI Web 2.0 promotion conference. Since its establishment, the institute's mission is to review new ideas and inform the union management on potential innovations. The idea of Web 2.0 tools was judged as particularly appealing and led to immediate dissemination efforts within the federation hierarchy. Although for many the idea was still vastly immature, others found it a remarkable opportunity to rethink traditional engagement problems.

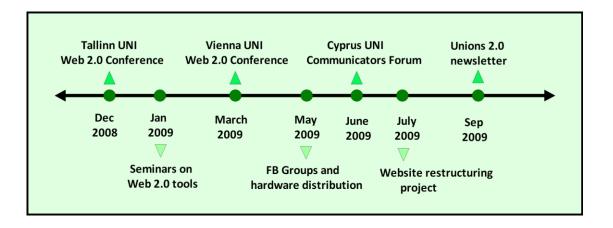


Figure 6.2: Main events in phase 1.

Within the next few months the following actions were taken:

- A core of enthusiastic union members, mostly younger ones, was selected to take
 ad hoc initiatives to outline potential responses and identify further steps. Those
 members were selected based on geographical and thematic criteria corresponding
 to the union's secretariat structure.
- In order to foster regional and thematic networking, a number of Facebook groups were created. The Facebook group on social security topics rapidly gathered a growing audience of more than 400 people, surprising the union's officials by the level of response. The group was led by an influential member of the union's executive committee and head of the relevant secretariat.

- Given the restrictions posed by the Greek island geography, distance communication tools were examined. This led to an effort of connecting isolated communities with the union's central management through regular videoconferencing. The action was supported by hardware distribution to a few small island communities of about 10-15 members.
- A blog was created by the research institute officials aiming to gather and further disseminate material around the union's international activities, as well as promote networking with non-Greek colleagues.

In June 2009, the project results were presented at the UNI's Communicators Forum where unionists also came across their colleagues' international efforts. Around that period, it was decided to group activities under the internal project Unions2.0@otoe. To consolidate the project's rationale and disseminate its activities, a newsletter was published in the summer of 2009. This newsletter also featured a debate on the usefulness of social media tools in the union context. It was emphasised that the project was inspired by an international campaign and that its objective was to complement, but not in any case replace the union's traditional activities. The newsletter also mentioned that research and experimentation would be necessary steps to determine future actions. The newsletter's rhetoric could be summarised in the following core sentence:

The new means provide useful tools for colleagues to communicate, interact, engage with the union's management and seek opportunities to participate in the union's policy making agenda.

Finally, the project's first phase initiated an effort to restructure the union's website. This website was the first to be launched by any Greek union in 1999 but it was little upgraded since then. Emphasis was placed on better laying the content and updating the website graphics with the help of a designer.

6.3.3.2 Phase 2: the project restructuring

Figure 6.4 summarises the main events during the project's second phase which was certainly not a straightforward one mainly due to dramatic national economic circumstances that led to the country seeking support from the International Monetary Fund (IMF) and the rest country-members of the Euro zone. The massive national debt resulted in a period of social conflict where employees both in the public and the private sector experienced severe income reductions and financial hardship. The debt crisis peaked during the first six months of 2010. It was mostly handled by the October 2009 elected socialist party government.

In parallel, the union's tri-annual elections were organised in November 2009. During the pre-election conference, the Unions2.0@otoe project was mentioned as a strategic priority. However, it did not receive high visibility due to the national crisis situation. As emphasised a few months later by an official: "simply put, for the last year, we are having much more important things to worry about than innovations to our traditional ways of working". The union's elections did not lead to major changes in the management group. However, the new leading team was not consolidated until approximately March 2010.

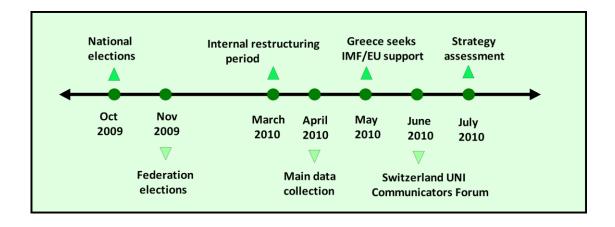


Figure 6.3: Main events in phase 2.

Subsequent to the union's elections, the next major event relevant to the project was data collection for the scope of this study. The 12 interviews conducted with union officials during April 2010 contributed to rethinking progress internally. Feedback to the union's research institute was useful as it recognised potential sources of resistance and distinguished motivational and organisational issues in the project's course.

The project's first phase ad hoc evaluation incorporated certain controversial aspects. The blog disseminating the institute's activities did not receive adequate visibility from domestic visitors while efforts to connect with remote communities had hindered due to the internal restructuring period. Most social networking groups did not benefit from considerable membership apart from the one focusing on social security and pensions. This group's membership stabilised to about 650 members. Apart from some small scale discussions, its main activity was generated by the leading official. Although personally congratulated by colleagues due to the initial level of response, the group's objective remained somehow unclear.

Important questions were raised especially by other union officials such as: who are those joining the group? Did they join this particular group due to the topic significance? Should high numbers be our main concern? Did the group have any effect apart from disseminating material? Are social networks an appropriate space for union deliberations or should be used only for informal networking? Should group administrators attempt to stimulate discussions or this might stimulate conflict? Did the group indeed promote a more interactive profile for the union management? The group's leading official stated: "although in our Facebook group I represent the official voice, the official and unofficial do not seem to be so much separated. I was myself convinced for the group's usefulness when I saw it actually happening."

The perceived success of this group raised some general questions about evaluation, having mainly to do with quality versus quantity discussions. At this stage, many officials realised that they had little idea what union members expected from them and what they were willing to support. In parallel, the new website development project was restored and the graphics were finalised leaving the technical part implementation. In the summer of 2010, the officials also rethought previous suggestions about organising and administrating mailing lists as probably the most effective way to support communication with members on a more regular basis.

6.3.3.3 Phase 3: the new priorities

The project's third phase, whose main events are shown in figure 6.5, followed the summer 2010 strategy re-assessment. Although the Unions2.0@otoe name was not further

promoted, the subsequent efforts picked up from its main rationale. In September 2010, it was decided to conduct a membership survey in one of the federation's individual unions. The survey would explore hypotheses related to the adoption of social networks by members, their expectations from the union and their intended level of engagement.

In the meantime, the October 2010 local government elections contributed to the importance of online political campaigning; an idea especially promoted by the socialist party government. The government had already implemented a deliberation space in its main portal where draft laws could be uploaded and left open for public consultation. This initiative generated wide debates within the Greek society with many pointing out the openness of the new government and their "good" intentions, while critics underlined that a few spare ideas on the web did not make any difference at all. In any case, the legitimacy of online deliberation was becoming a political issue with most government supporters promoting the main party line.

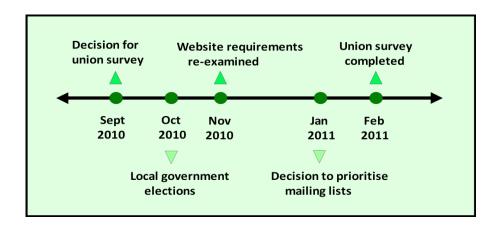


Figure 6.4: Main events in phase 3.

In November 2010, the requirements for the new union website were again put under consideration. The website objectives still focused on graphic re-design and the provision of an interface for facilitating uploading information. The points of contact within the union and the type of information to be uploaded remained unclear. It was also decided that the new website would not integrate all individual secretariat websites and could only provide a link to them. Other proposed additions were not well received. For example, the idea of incorporating a blog-style space where union officials could post opinions was considered difficult to manage. Two further suggestions put into consideration related to: (1)

implementing an RSS feed facility and (2) defining what sort of statistics could be collected from visitors.

While the website implementation was ongoing, the idea of organising mailing lists was prioritised in January 2011. A pilot initiative attempted to collect regional email addresses and populate a few ad hoc lists. Following the marketing concept of targeted advertisement, it was thought that the union's contacts could be separated according to individual unions, regions and thematic entities corresponding to the union's secretariat structure. The initial decision was to experiment with simple tools and, according to progress, proceed to the implementation of a mailing lists management system. The effort to collect email addresses raised some important issues: member privacy, consent and, most importantly, whether professional addresses could be used or banks would not allow such a use.

The last major event during the study period was the membership survey and their implications for the union strategy. The details of this survey are presented in the Appendix 4 and briefly discussed here. The online survey administration produced a sample representative of the audience upon which an online communications strategy could be based. It was found that for the individual union organising the survey, a core audience to support such an effort did exist as indicated by three factors: high broadband adoption by survey participants, high Facebook adoption and 63% of respondents seeking communication with the union outside working hours. Furthermore, those who believed the union can be part of their personal life perceived more benefits from the union's social networking presence. Offline participation in the union's activities and trust in the union's mission were not found to be important predictors of attitudes towards the union's presence on social networks.

6.4 A view through the institutional perspective

6.4.1 Influences from the environment

Decisions for online membership engagement in the union were to a large extent affected by professional norms which mainly came from the call for union modernisation. The institutional analysis identifies differences in terms of levels of context, mainly between domestic and international. Interviewees were particularly asked to comment on the effect of the e-UNI campaign at the international level and the government's role at the national level. Further influences from affiliated domestic unions were identified (local context).

6.4.1.1 International influences

International efforts to promote Web 2.0 tools within the union context were not unknown, but they were quite indefinite for union officials. Surprisingly, interviewees expressed limited interest to find out if there is any *actual impact* from international efforts to build online union communities. The state-of-the-art was not well-understood in detail and was mostly perceived as a vague concept of "people commenting about issues related to the union life online". The implications, details and outcomes of online spaces were not under systematic consideration. Interviewees more or less focused on the way the formal unionism movement is organised abroad and the cultural differences that seem to exist with some of their European colleagues. Starting from the cultural differences, for certain officials, the role of the e-UNI campaign was positive, but for others it was an initiative rather irrelevant for their own organisation.

Critics highlighted the fact that union organisations such as UNI are formally and bureaucratically run compared to Mediterranean unions where collegial atmosphere is an inherent part of the organisational life. This informal atmosphere demands that union leaders are not official *managers*, but predominantly members elected from the union base to represent their colleagues. Critics also related the unclear nature of public engagement to its failure to currently demonstrate widespread positive results. One official noted that: "Union interaction on the web is too formal for our context compared to North Europe. Only through dynamic mobilisations actual outcomes can be achieved in our situation."

On the contrary, the e-UNI campaign and relevant efforts provided an argument for some within the union who believed that their organisation should seek modernisation following international innovation and "good practices" (mimetic influences). For them, the Unions 2.0 idea could be at the front line of seeking more open governance structures, promoting new ideas and engaging particularly with younger colleagues. In this sense, the

professionalism norm of international unions did not imply lack of enthusiasm or bureaucracy deprived of solidarity values. Cultural differences were not seen as necessarily preventing adapting to innovative international ideas. Despite those differences, the legitimacy of organisations such as UNI to set international normative practices was uncontested. A union official stated that, behind the ideas and their potential, the adaptation process should not be taken-for-granted:

"It is clear that, compared to what people are trying to achieve abroad, we more or less attempt to transfer our existing problematic structures online."

Those two opposing trends maintained a common ground: international influences were decidedly linked with the union's organisational identity. On this basis, discussions over the use of particular tools for specific audiences had limited effect compared to the broad implications of the "new" organisation achieved through online engagement. Similar messages were also conveyed about the role of the government, Greek politicians and societal demands.

6.4.1.2 National influences

As explained, during the study time, longstanding management problems in the Greek public sector were escalated due to the national debt crisis and the country's efforts to seek international assistance. Although unions were not part of the Greek public administration, they were facing severe difficulties motivating their audience since: (1) they were blamed as one of the factors leading to the crisis due to their strong links with political parties and (2) they were unable to prevent the government's plan to implement significant cuts in salaries and employee benefits. Those cuts were mostly mandated and closely monitored by the IMF as the country's last opportunity to avoid bankruptcy. The government, in parallel to focusing on solving the escalating debt crisis, also tried to promote initiatives that could finally manage to promote transparency and reduced public sector influence from political parties.

An important part of this effort was the digital governance concept and its anticipated positive effect on public sector modernisation. The government's online consultations were combined with the pervasive adoption of social media by Greek politicians at all levels.

Most union officials responded to this normative influence according to their personal political background. Government supporters emphasised that, despite little actual impact, the government's message is clear and needs to be applied in the union movement as strategically important. "Adapting to the new spirit of national administration" were some of the actual thoughts by a member of the union's executive council. Other officials believed that, regardless of national efforts, unions had to systematically mobilise themselves in this direction.

Nevertheless, most officials remained sceptical to the usefulness of consultations; hence, they were negative to consider this idea for union-related topics. They pointed to the fact that, even within the government: (1) conflicting opinions existed, (2) they had been too slow with their efforts and (3) actually considered those ideas to demonstrate efficientliness. As one interviewee stated: "a lot more needs to be done otherwise you are only left with the minority which was enthusiastic from the beginning". A few more added that the government should have no effect on unions since it is only an issue of politicians' personal marketing instead of an honest interaction effort. Thinking of the union's position in relevance to its fellow domestic union organisations complements this view.

6.4.1.3 Entrepreneurship at the local context

ICT adoption in the Greek trade union context has traditionally been limited to a few poorly constructed websites. Apart from some sparse collectives attempting to maintain small social networking groups and blogs, there has been little evidence of Web 2.0 tools being used by influential unions. As emphasised by one of the interviewees, the political nature of those organisations does not facilitate working outside existing structures and promoting new ideas. Consequently, membership engagement online was not simply adding new communication channels, but came along with broader implications about the labour movement in the Greek society.

Due to the difference in international and local norms, issues of organisational identity were prominent. The fact that fellow unions were not pursuing the direction of online engagement not only did not set the example, but also made the union's official accountable for the legitimacy of their plans in the union's national institutional field. As a result, experimenting with online tools belonged to the sphere of institutional

entrepreneurship and was subject to broader debates about how influential Greek unions were required (or not) to modernise themselves. Nevertheless, the union was not prepared enough to promote an organised vision at the national level especially during critical national circumstances. Important issues of pragmatic, normative and cognitive legitimacy had to be resolved first. Examining in more details this concept with respect to the union's structures and politics indicates what actually emerged as the major source of resistance to online engagement.

6.4.2 Engagement mechanisms and culture

This part of the analysis discusses the use of engagement tools with respect to the union's structures, capacities, politics and culture. This part of the analysis focuses on the institutional alignment aspects which help identify practical and theoretical barriers to the use of engagement tools.

6.4.2.1 Governance processes and organisational capacities

As explained in section 6.3.1, due to the need to maintain cohesion and participation by all collectives involved in the federation hierarchy, its organisational structures are quite complicated. This fact had a profound effect on receiving membership feedback in union decisions. Most interviewees expressed concerns that current structures were too fragmented, ad hoc and disorganised. Others added that insisting on old-fashioned media such as leaflets was driving away the union audience. Problematic governance mechanisms were not necessarily attributed to inefficient management, but also to factors such as the country's complicated geography (with which the union had to cope), as well as the absence of facilitating institutional frameworks.

The limited existing opportunities for feedback created pessimism with regards to the ability of integrating any kind of membership interaction activities, especially in previously unexplored online spaces. The view that the union is not prepared to use new media led to the perception that they are "simply incompatible with our current governance structures". Furthermore, it was also evident that few actors within the union were comfortable with the idea of engagement channels which cannot be bureaucratically organised. The fact that public spaces were unfamiliar and difficult to control provided the opportunity to possibly

engage with new audiences, but also created a fear of exposure which had been reduced in existing structures.

Apart from the need to avoid substantial open criticism by members, the reluctance had to do with the fact that the union was simply not used to handle and respond to continuous feedback. This was not desired by many who believed that there is plenty of need for feedback as long as they find ways to listen and respond to members. This particular aspect led to contradictory opinions about the necessity of a new engagement culture within the union. Although the inefficiency of current structures was uncontested, few believed that social media was an actual solution to the engagement culture problem. Even for those who did agree, it was clear that it was necessary to foster engagement opportunities "somehow connected with our particular political style and ways of working". This also included the dimension that the official union voice should be discrete from what members say in online spaces.

Thinking about governance structures also led to considerations concerning the broad societal role of influential unions. A leading official from the union's council added that certain actors in society "would not wish unions to possess powerful communication channels that would radically increase their ability to promote their positions". Supporters of online engagement emphasised that unions should develop mechanisms to build upon their role in society as a linkage institution. This objective also entails seeking wider societal acceptability and legitimacy apart from membership engagement itself, particularly within the turbulent Greek society environment.

Finally, capacities and capabilities emerged as a topic related to the ability of managing institutional participation structures. It was also connected with the wider call for managing union resources more strategically (Hyman 2007, Lévesque, Murray 2010b). Whether the union actually possessed resources and skills to develop and sustain engagement initiatives was under consideration. Union officials acknowledged that leveraging existing skills to form new capabilities was essential before thinking about improvements in interactions with members. Lack of computing skills, people and knowledge were mentioned as barriers in this direction. They were further complemented by the view that the need to maintain collegial atmosphere hindered the development of general management skills.

6.4.2.2 Politics and norms

Local politics, leadership and shared understandings seemed to be important factors in any union decision making process or outcome. An overview of the union's history could identify various examples where, in line with Avgerou (2000), ideas were assessed primarily by their source, even irrespective of their potential or actual contribution to the union's efficiency. As an effect, as stated by one of the interviewees: "organising and mobilising the federation for new ideas has always been a difficult task". The difficulty to cultivate open innovation culture could not be uncritically attributed to organisational difficulties. It was a more complex phenomenon related to the union's political background and culture.

Despite resistance sourcing from political fragmentation, leadership had traditionally been strong to the extent that personal leader perceptions in many cases formed the union's actual strategy. This contrasts previous opinions about complicated decision-making structures affecting efforts of organising new initiatives. As far as the leadership itself was concerned, many recognised the fact that the whole Greek unionism movement had to renew its leadership base with younger colleagues who could potentially focus on promoting new ideas. One interviewee particularly explained that "we need to offer the young actual leading opportunities, not just a space to have their say." This brings to the discussion elements of organisational and institutional change based on the assumption that younger leaders bear new ideas in the profession.

From the political to the cultural-cognitive aspect, there was evidence of a clear trend among union officials with respect to social networking technologies. Also following the professional norms explained above, it was more or less taken-for-granted that online or any kind of technical means were unable to replace personal contact as the main communication method. This statement was also linked with what many considered as the essence of the labour movement: widely disseminating the union's positions, societal conflict and dynamic mobilisation whenever necessary. In this objective, online engagement could a priori only acquire secondary roles, even by contributing to circulating the union's positions and supporting the union's mobilisations.

In fact, interviewees implied that a potential risk from social networking was that members would address their concerns online, but then not participate in the more important offline

union events. However, existing offline participation was considered problematic by many, especially in the environment of dramatic socio-economic circumstances in the Greek society and the low ability of unions to effectively intervene. Even for those not at all enthusiastic with social networking technologies the message was apparent: existing unionism did not motivate people to participate and the union's mission was at stake. As a result, new ways of membership engaging, whether web-based or not, were in any case necessary.

This part of the analysis shows that yet there were no clear ways in which the use of networking tools could balance and emerge between institutionally and technologically-triggered changes (e.g. Boudreau, Robey 2005, Davidson, Chismar 2007).

6.4.3 Responses by union actors and project evaluation

The previous analysis could be briefly summarised to the observation that, for mixed reasons, the strategic potential of the Unions 2.0 concept was recognised by some and disregarded by others. Examining the particular responses by union actors and their perceptions of the project evaluation helps to better develop the connection between the theoretical analysis and the actual project outcomes. An apparent conclusion is that the project's impact on existing union structures was limited. Despite entrepreneurial efforts by certain influential officials, the project's benefits were sporadic and even confusing as to where the union should focus future efforts.

The case findings point to the fact that there was not a systematic effort to develop legitimising arguments within the union. Although officials were aware of those efforts and not in a position to directly oppose them, they kept a neutral status waiting to observe and interpret actual outcomes. Union actors had mixed opinions on the potential direction of an online engagement strategy. Most summarised its desired priority as an expectation to "engage with as many as possible in as many topics as possible". This view was supported by the belief that the more engagement culture is cultivated through numbers, the better dialogue and quality opinions can eventually be achieved. On the contrary, others emphasised that only the quality of opinions is important since union topics are sensitive and it is necessary for members to have to access to informed opinions.

This evaluation perspective first emerged when the popular Facebook group managed to gather around 600 members. As a result of this popularity, questions were raised about its importance and next steps. One interviewee thought that it was the significance of the social security that motivated people to find out more about by joining the group. It was also a topic more relevant for older members who were considered more difficult to engage online. From the group's leader perspective, popularity was attributed to leadership in the form of the official union voice being continuously present.

Nevertheless, many still considered this an isolated case and Internet tools more suitable for leisure activities or simply for getting useful information online. In general, concerns were also raised about the existing limited knowledge of what the audience wants and if members were actually ready for online engagement. Sparse evidence from individual banking sector collectives and the project results could not clearly indicate potential responses from members. The results of the survey conducted in January 2011 underlined the usefulness of online surveys as a quick means to assess union's activities and measure member satisfaction, but not necessarily important to respond to particular concerns expressed by members.

After more than 20 months of experimentation and debate, the only widely accepted project activities were the ones related to establishing interactions with remote communities. All officials recognised the benefits of supporting distance collectives as a need coming from the union's geographical situation. Few were in a position to recognise that online spaces might abolish bureaucratic constraints, thus making people feel more socially eager to participate and offering opportunities for convergence between the official and the unofficial.

Supporters underlined that "we need learn more and employ long term efforts". Some of them directly distinguished the need to understand how those tools work better through research and consultation. For example, it was unclear what kind of acceptable use of those tools could be developed in workspaces. The first messages indicated that employers would seek to block advanced union communications if they have the opportunity. This remained an aspect of pragmatic legitimacy that had to be investigated further.

The project's course derived a useful lesson for those trying to promote it. Progress towards the union's strategic use of ICTs had to proceed through some necessary interim steps. Although at the beginning the focus was on social networks as the international state-of-the-art, after about 15 months it was more widely recognised that, beyond Web 2.0 tools, restructuring the union's website was even more important. There were also some efforts to assign more centrally specific tasks to union departments in order to establish a continuous flow of information. For example, having someone responsible from each secretariat's thematic entity would ensure contact points that could regularly update online information, administrate mailing lists and filter useful information from the endless web. This structure was of course strongly connected with existing mechanisms.

Finally, for many it is surprising that, at the national institutional field level, even 20 months after the union's first efforts, the element of entrepreneurship was still there: similar efforts by other Greek unions were yet to be recorded during the period of the study. This was an argument that kept most officials sceptical as to future actions that could expose the union to its fellow organisations in case of negative publicity. Thus, we can see that isolation from the national institutional field hindered the idea of tackling the field-wide problem of union democracy deficit through ICTs (Wang, Swanson 2007). In this effort, more attention would have to be given to the ability of attaching the new engagement ideas to existing norms (e.g. Maguire et al. 2004).

6.5 Summary and discussion

This chapter presented the case of the Greek trade union organisation which, studied for a period of almost two years, attempted to develop online participation structures for its members. The study focused on the underlying institutional influences behind the union actors' decision making context and their relationship with online engagement. Although the actual project's impact is limited compared to well-known international "good" practices, this case can be illuminating to the complicated effect of engagement ideas in different institutional communities; the longitudinal nature of this study also allows to capture this aspect dynamically.

On the whole, in this case, Scott's (2008) cultural-cognitive pillar of institutions was particularly relevant to explain the response of an organisation basing its existence on historically grounded collective identity and informal interactions. First of all, institutional influences reflecting on the union came from different levels of context (Avgerou 2001). Similar to Robey and Holmstom (2001), this study revealed how global pressures for modernisation and innovation through ICTs were perceived locally and eventually promoted by certain leading union actors but resisted by others. Despite the lack of regulatory forces here, normative pressures were determinant. Coming from its membership in international networks and its affiliation with leading global unions, the Greek organisation had to reconsider its need to adapt more strategically to complex sociopolitical circumstances (section 6.2.2).

Online engagement with members was strongly viewed with respect to normative calls in the trade union profession. Having yet to demonstrate explicit results, there was a clear international organising vision of enhancing union communications through ICTs (Wang, Swanson 2007, Swanson, Ramiller 1997). As indicated by previous studies (section 6.2.3), this vision was not novel; it was pushed by the availability of easily accessible social media tools which were thought of being able to facilitate ideas of open unionism. Such ideas were fully consistent with the field's norms of collegial solidarity as the basis of union legitimacy. For example, this norm was reflected in the way Web 2.0 tools enable ad hoc collaboration and informal networking, as well as contribute to organising transnational movements (e.g. Garrett 2006, Blodgett, Tapia 2010, Bibby 2008).

However, visions of modernising union practice were not uncritically reflected and understood locally. For some, the fact that unions from abroad were moving their communications online was even triggering *anti-mimetic* isomorphism. This was due to cultural differences since the bureaucratic nature of certain European organisations was not compatible with the way unions are organised in the Mediterranean region. As a result, similar to the case by Jensen et al. (2009), ICTs for engagement were challenging to some actors' professional experiences who defined their identity in terms of dynamic mobilisations based on face-to-face contacts. In this respect, online engagement was viewed as partially inconsistent with and even possibly threatening to years of union practice. Using the types of legitimacy by Kaganer et al. (2010), online communities for

union action perceived low cognitive legitimacy (not clear what they actually entail) and ambiguous pragmatic legitimacy (their usefulness was not uncontested).

On this basis, it seems clear that using Web 2.0 tools in the union case was not perceived simply as a communications improvement exercise. It was part of a process of potential institutional change in which the union's character had to be reconsidered under very difficult international and national socio-economic circumstances when unionism was diminishing its traditional power.

If opposition to online engagement was evident, how did the project manage to sustain itself for more than two years despite sporadic results? Rodrigues (2006) shows how institutionalised political organisations are inherently pluralistic and oscillate between cultural integration and differentiation within particular groups or specific issues. The dynamics of this change evolve from the interaction of internal political forces with external institutional parameters. Similarly, in the union case, the project was sustained due to the capacity of key actors to balance the interests of their colleagues. Even for reluctant union actors it was hardly possible to openly oppose potential innovations in the union's communications, especially since during the two years of the study Internet tools were becoming so common in society.

Hence, this study draws attention to Avgerou's (2000) observation of online engagement developing its own rationale for being sustained in the union's agenda even regardless of formal evaluation and actual outcomes. In this case, although some aspects of the project were widely accepted (e.g. communication with remote communities, disseminating union's positions), others raised the aforementioned concerns. It might be reasonable to believe that the more high profile the project results were, the more opposition they would face. Certainly, this is an unexpected conclusion that shows a non-linear relationship between the promotion of networking technologies and their positive outcomes.

Following this view, the project was possibly sustained not only because it didn't bring negative publicity for the organisation, but also because it didn't demonstrate results visible enough to trigger further internal debates. This tends to confirm Baptista (2009) who explains that, during micro institutionalisation process, ICTs reinforce pre-existing cultural values despite efforts to develop them for changing those values. Based on

Hercheui's (2011) literature review, this study practically shows the strong link between online communities and offline organisational identity. In some cases, this link was expressed even directly by interviewees who stated that social networking groups should reflect "our particular political style and ways of working".

From the practical point of view, this study includes some useful observations about the Unions 2.0 concept and the efforts of those organisations to exploit social media tools in their communication strategies. The Greek union, motivated by online networking, discovered a whole set of previous advancements in ICTs that could be useful for their context; for example, videoconferencing with remote communities, mailing lists and website functionalities such as RSS feeds. In fact, those more classic web tools faced the least resistance from union actors.

Apart from unions, this can possibly be a valuable message for other non-profit organisations which generally (Zhang et al. 2010): (1) exist within complicated sociopolitical environments, (2) have to deal with diverse sets of stakeholders and (3) are usually drastically constrained by factors such as resources, expertise and organisational culture.

The survey organised with one of the union's collectives pointed to some interesting characteristics for the audience to be engaged online. This sample of young union members with high broadband Internet, Facebook and YouTube adoption indicated that networking tools create opportunities for reaching networked members to some extent even irrespective of their offline devotion towards the organisation and their traditional level of participation (see Appendix 4). As reflected in the survey results, for those perceiving benefits about the collective's presence online, Internet skills were the main predictor variable. This remark is not new for political mobilisation in general, but provides a direction upon which engagement strategies can be planned even confirming that younger audiences might indeed be reached (e.g. Krueger 2006).

Finally, the survey emphasises the apparent need to examine audience expectations in localised settings before using engagement tools and then be prepared for continuous monitoring of such efforts. It also points to the fact that the more members trust online means themselves the more prepared they possibly are to communicate with their unions using those means. This is a conclusion directly related to the Internet's characteristic of an

experience technology (Dutton, Shepherd 2006). This feature states that users tend not to appreciate web tools until they actually use them, and when they do so they develop a learned trust derived from their own experiences. Certainly an observation not limited to trade unions, but relevant to all online engagement initiatives.

Chapter 7 - Further Implications for Online Engagement

7.1 Overview

The last two chapters presented and discussed the findings of the two case study investigations. Here, those findings are further discussed, evaluated and synthesised to inform the main research question:

How do ICTs for public engagement impact on institutional policy making structures?

The two studies include a range of evidence indicating complicated effects when ICT-enabled participation attempts to merge with traditional policy making. During such processes, existing institutional structures of governance frame a set of constraints and opportunities for engagement tools. Developing this main conclusion leads to a series of implications which are discussed throughout the chapter. The discussion is separated into certain themes that emerged from the empirical material according to the three motivating questions raised in chapter 1 and then integrated into the theoretical framework presented in chapter 4.

7.2 Institutionally adapting online engagement

Both cases presented in this thesis examined the adaptation of online engagement tools in policy making. The theoretical review developed in chapter 3 suggests that the institutional design of policy making structures tends to be naturally resistant to change for two reasons: (1) initial balance achieved over building and maintaining institutions and (2) protecting those institutions in the future (Pierson 2000). Even in the union case, this institutional community was constrained by its complex organisational structures created to increase political consensus within the organisation and make sure all involved parties have equal access to decision making bodies.

Due to those constrains, institutional redesign is hard to control and should ideally be based on learning and adaptation instead of mere procedural fit (Lowndes, Wilson 2003). As a result, potential innovations to policy making and the changes that such initiatives seek to achieve need to be more institutional and less technical in their planning or, in

other words, such efforts should become institutionally-enabled instead of technologically-driven (e.g. Lips 2007, Gasco 2003). In fact, this seems to be the main difference between institutional policy making and any general connection between Internet and politics (e.g. Anduiza et al. 2009). So far, few studies had the opportunity to examine the impact of public engagement focusing on different aspects of this institutional adaptation feature (e.g. Gronlund 2003, Meijer, Thaens 2010, Whyte, Macintosh 2003).

As discussed in chapter 5, in the ePetitioning cases, institutional adaptation was achieved through the website and the engagement process being directly linked with the English local governance structures. Those structures were formed by the 2000 institutional change (Gains et al. 2005). They define the regular operation of formal decision making spaces (council committees) where petitions can be deliberated and decided by elected representatives in the presence of petitioners. In this way, not only it is possible to digitise the petitioning process, but also to achieve clear and distinct benefits from the online component.

The comparison with the no.10 ePetitioning website can be quite enlightening: the government had no established channels to discuss petitions and in many cases failed to produce convincing answers to the topics raised by citizens (Miller 2009). As a result, the initiative failed to sustain meaningful participation and had to be transferred to a form where only topics collecting above 100,000 signatures would be eligible for debate in the Parliament. Hence, the existing deliberation mechanisms of the Parliament were expected to cover the institutional adaptation gap.

However, one of the main advantages of the previous practice was lost: only very popular petitions would find their way to the institutional agenda and citizens or groups of citizens who don't possess extensive dissemination channels would probably be marginalised. The experience of the German Parliament indicates that, using 50,000 as the threshold, few popular petitions actually became part of formal politics (Lindner, Riehm 2010). The more than 30,000 petitions received by the no.10 website in so many different topics certainly do not make losing this plurality negligible.

In this perspective, thinking about institutional adaptation is connected with what Carman (2010) highlights as procedural fairness and neutrality. His evaluation of the Scottish

Parliament's ePetitions reveals certain very interesting characteristics about online engagement in those advocacy forms of participation. Carman (2010, p. 734) explains that: "Advocacy democracy is marked by citizen participation in the formulation of policies, though citizens are not the final decision makers". In such advocacy engagement forms, public perceptions on the engagement process seem to be the major factors contributing to attracting and sustaining participation, even beyond actual decisions produced. This is because, despite citizens contributing with their petitions, final decisions actually remain with the authority. As a result, the engagement process is not merely significant for citizens' expectations, but also contains wider inferences about the political system itself.

In the LBK case, there were almost no complaints about how petitions were handled, only some misunderstandings with citizens having the expectation that their petitions would influence formal policy making in a binding way. Similarly, in the LBH case, public opinion data collected indicated that the effort made by officers to properly organise petition hearings was recognised. In line with Carman, procedural fairness can be attributed not only to the coherent response process, but also to the political neutrality of those handling the process. Here, this attribute again comes from an institutional feature: the professional norms of the British civil service. The apolitical standard of the civil service is not applicable in other contexts; for example, Avgerou and McGrath (2007) outline a completely different environment in the Greek public sector.

This leads to an important conclusion. As Lowndes et al. (2006) explain, public engagement institutions do not only concern formal rules and participation processes. They also encompass the everyday behaviour of all stakeholders involved in governance that determine the conditions within which citizens make decisions about their style and choice of engagement. As a result, a consistent mobilisation strategy goes far beyond opening some online channels for participation, but involves drawing upon the positive pattern of behaviours that can be enacted in public participation.

The LBK case provides a first-class example of this. At the time of the study, the online component of the petitioning process was institutionalised to the same extent as the offline one. This can be attributed to the everyday behaviour officers and politicians who, after the pilot stage, treated online petitions as part of their normal tasks and not as an innovation "in progress". All interaction steps with citizens were important to ensure this.

From the beginning, officers and politicians had a plan about the details of the new activity, from assisting petitioners to process coordination using the website. As expected, parts of the plan emerged in use, for example, the online discussion forum for petitions which was eventually suspended. The system's local institutionalisation combined formal planning with emergent characteristics that allowed the technology to co-evolve with existing structures and be enacted in use (e.g. Boudreau, Robey 2005, Davidson, Chismar 2007).

In the union case, the aspect of adapting informal institutions was even more apparent. The interaction between offline and online structures pointed to the fact that the existing everyday behaviour of union officials was hardly possible to be transferred online as-is. It was based on political norms that valued face-to-face representation to a degree that anything replacing it was more of a threat and less of an opportunity. As long as engagement was so bounded by existing institutions, developing complementary online structures remained an inherent part of the internal debate about organisational mission. The debate was extending far beyond online engagement and was encompassing escalating problems in the Greek society with respect to its political institutions. More or less, all interviewees were linking online engagement with national politics and the institutional role of unions.

In this case, the resistance for institutional adaptation and its relationship with conflicting accounts of organisational identity confirms Rodrigues' (2006) findings about organisational dynamics in institutionalised environments (p.19):

"...institutional forces interact with internal political actors in organizational culture change. Institutions can create conditions that impact on the activity of subcultures by empowering or disempowering social actors and creating or deactivating the rules that foster alliances and different social formations."

Although efforts of building online communities were certainly based on existing norms, the union survey showed evidence of an audience which would value online engagement even to some extent regardless of their offline behaviour. This finding was promising for the union management, but still could not provide concrete directions on particular tools to be used and how.

Overall, in both cases, the discussion about adaptation confirms an early warning about the use of ICTs in governance: the institutional design of engagement technologies does not occur in a way that the public actually gains influence over actual decision making (Gronlund 2003). As long as institutional structures remain exactly the same, it is difficult to achieve significant impact on democratic processes, apart from exceptional cases where participation structures can accommodate online components with minor changes: ePetitioning in the UK local government seems one of them. Adapting to the new structures and cultures that public involvement bears is not something novel to digitising those processes; for example, Callanan's (2005) study about institutionalising new forms of participation outlines similar lessons without any reference to technical means.

Finally, institutional adaptation emphasises the large extent to which context and cultural differences shape participation technologies. Previous studies have warned about the embeddedness of those technologies in policy making institutions; for example, the study by Park and Kluver (2009) on the extensive use of blogging by Korean representatives or the case of the Taipei City Mayor's Mailbox (Ong, Wang 2009). The empirical material presented in this thesis adds on this direction. Although ePetitioning is certainly an activity of international interest, other national or local authorities outside the UK have implemented it different ways. Lindner and Riehm (2009, 2011) illustrate how ePetitions have been approached differently in other institutional contexts such as the German Parliament or the Norwegian local government. Similarly, fundamental cultural differences are observed with trade union communities and, possibly, they are a reason why little overview research has focused on the adoption of Web 2.0 tools in those communities.

7.3 Who is influencing online engagement

An important motivation of this research was to advance our understanding on how political actors shape engagement technologies. The theoretical background pointed to the fact that the dynamics of institutional response should be examined against influential actors who interpret the opportunities offered by new technologies and open paths for change if they perceive gains from the new situation (e.g. Gasco 2003, Meijer, Lofgren 2010, Mignerat, Audebrand 2010). Bearing this in mind, it is interesting to question who those promoting digital governance actually are. Are they only those *marginalised* within

and outside organisations that have the real incentives to think about changes (Lowndes 2005)? Are politicians still a major prohibiting factor (Mahrer, Krimmer 2005)?

The answer to the first question seems to be negative in both parts of the empirical material presented in this thesis. The principal advocates of online engagement were influential actors within organisations who possessed the socio-political legitimacy to take leading roles. Those motivated to take such entrepreneurial initiatives acted at different levels. First of all, especially in the LBK back in 2004, actors leading the pilot initiatives drew strategically on national structures to justify the change they sought to establish (Wang, Swanson 2007, Leca, Naccache 2006). They presented the ePetitioning activity as complementary to the existing practice which, apart from a potential increase in the number of petitions, did not present any other danger. Similarly, in the union case, officials promoting online engagement combined national and international circumstances that put forward the need for union modernisation and the potential of networking technologies to make such organisations more interactive.

In both cases, it is interesting to examine how other actors responded to their colleagues' initiatives. The common ground is that in all cases, most non-leading actors took a neutral stance waiting to actually see the effects of online engagement on their traditional duties. It is not surprising that when entrepreneurial opportunities emerge, actors' interests are continuously re-evaluated on-the-fly according to perceived outcomes (Wang, Swanson 2007). What is somehow surprising is that there were no actors openly opposing online engagement even in the union case. This is possibly because open opposition would have to be justified, including other alternatives to improving governance structures.

Therefore, there also seems to be an interesting implication about the updated role of elected representatives. Since the influential study of Mahrer and Krimmer (2005), Internet tools have gained a fundamentally different status in society and people's personal and professional lives. Politicians are now widely using technical means for their own campaigning purposes as well as to regularly disseminate their positions and learn from the public (Park, Kluver 2009, Wattal et al. 2010). For example, a LBH councillor explained that apart from improving our engagement process, "the ePetitioning system can help us become more interactive with the public". Furthermore, in other cases, technology has

been found to help politicians, especially non-professional ones, to gain more influence and coordination over the civil service (e.g. Hanssen 2007).

The research findings do not necessarily indicate that politicians are becoming strong supporters of digital governance. They imply that they are now more carefully evaluating networking tools and are starting to foresee benefits from their use. All the 18 interviews conducted with elected representatives for this thesis (in both cases) directly or indirectly pointed to their own personal characteristics as determining their perceptions of the usefulness of online tools. Age remains an important factor, but Internet skills seem equally or even more influential: the more experienced politicians become with technical means, the more they learn how to integrate them into their traditional activities and the less they view them as threatening. This observation inevitably confirms the Internet's attribute as an experience technology which should be examined also with respect to its effects on professional groups such as politicians (Dutton, Shepherd 2006).

Furthermore, both studies entail certain interesting findings about how the online engagement concept is transferred through institutional sharing (Lowndes 2005). In the ePetitioning cases, sharing was achieved through the national community of practice, the consultations by the Department of Communities and Local Government, as well as through the limited number of system providers who acted as integration consultants. In the union case, sharing was achieved through the e-UNI initiative and ad hoc contacts between interested organisations.

It shouldn't be surprising that a sharing culture is fostered in an IT management field. It is stimulated by barriers such as rapid technological change and the lack of global specialist skills on the problem (Lowndes 2005). Through sharing, organisations attempt to better comprehend the nature of the new tools and align them with their particular problems and implementation capacities (e.g. Currie 2004, Swanson, Ramiller 1997). Furthermore, in the broad non-profit sector, institutional sharing seems to be fostered since there is neither competition nor a pressure to copy from successful organisations in order to increase profits. Sharing feels more natural when all organisations in the field serve the same mission. As Brewer et al. (2006) note, sharing can be critical in consolidating the new role of public administrators in such efforts. It helps them get more actively involved in designing public systems so that the chasm with technology specialists is bridged.

Nevertheless, how useful sharing can be to assist organisations with their implementation efforts, it should always come with warnings about applying universal ICT strategies which neglect wider implicated forces around technology innovation (e.g. Avgerou 2001). Certainly, the balance between critical institutional sharing and mimetic practices should be taken into account. At the organisational level, it is the role of key individuals or microentrepreneurs who take the initiatives to make such plans more context-specific (e.g. Baptista 2009). This was for example apparent in the union case where the development of online communities remained a vague idea until several leading officials made their own choices of tools and audience.

Finally, with respect to actors' responses to online engagement, it is astonishing how limited our knowledge about citizens and citizen groups remains. Even compared to our understanding of systems and their integration processes, the citizen perspective is largely missing. Few studies have managed to uncover useful insights on how citizens perceive online participation structures and why they are willing to use them or not (e.g. Dutton, Eynon 2009, Lindner, Riehm 2011, Carman 2010). The results from those evaluations reveal a moderate to low level of satisfaction from online engagement processes and socioeconomic asymmetries in the audience that tends to participate online. Furthermore, there are strong indications of the continuous struggle between the top-down and the bottom-up perceptive; arguably this still remains the most important challenge in eParticipation research and practice. The next section focuses on this aspect.

7.4 Seeking engagement from the grassroots

The empirical material analysis and the combined conclusions from the institutional adaptability concept highlight that, with limited exceptions, political organisations have difficulties to engage citizens in ways that they perceive as meaningful. The Internet's nature as a trans-institutional space of open collaboration fosters new forms of collective action in activities which tend to be extra-institutional (e.g. Theocharis 2011). Citizens show strong preference to support Internet initiatives which stand at the margins of formal politics, but do not come from policy making institutions themselves.

The best examples of this kind in the UK are the websites developed by mySociety, a volunteer organisation also running the government's ePetitions. MySociety's initiatives include a series of popular spaces such as TheyWorkForYou.com, HearFromYourMP.com and WhatDoTheyKnow.com. Those websites enable a type of popular engagement behaviour where citizens: (1) acquire useful information about political processes and elected representatives and (2) participate in high-volume actions that mostly challenge those institutions from the outside.

Another example of this behaviour is the finding that Facebook users seem to join groups with ease, but then not necessarily sign the petitions that those groups were created to promote (Panagiotopoulos et al. 2011). Beyond public participation, the Oxford Internet Survey has established that networked individuals visit online spaces to find information about politics and governments without necessarily consulting the official governmental sources (Dutton, Eynon 2009).

Therefore, the boundaries of existing institutions seem to become somehow re-negotiated online when citizens' experiences of technical means enable them to circumvent existing conventions of authority and formal politics. This observation is intensified by the increasing use of networking tools by citizens who seek to directly challenge existing institutions. In those efforts, the Internet is viewed as a means of liberation and democratic freedom which permits reaching international audiences outside governmental control and traditional censorship (e.g. Ameripour et al. 2010). During the development of this thesis, such examples became progressively more important due to the so-called "social media revolutions" in places such as the Middle East and Iran. There is an interesting new balance between existing institutions and their influence over virtual movements organised with the help of networking tools (Hercheui 2011).

How does this debate relate to engagement in formal policy making? First of all, by realising that formal policy making is fundamentally different from campaigning, electioning, social movements, or other activities standing in the general intersection of Internet and politics. The fact that citizens use web tools to spontaneously gather around ad hoc and mainly single issue movements does not necessarily translate into sustainable participation in public decisions. Institutional actors are strongly advised, but actually struggle to find appropriate ways to enable bottom-up innovation or, in other words, to

engage people in ways that they perceive as meaningful in their own terms (e.g. Dutton, Eynon 2009, Saebo et al. 2009).

Is it surprising that current policy making structures are mostly unable to enact engagement from the grassroots in the line with the philosophy of freedom embedded in contemporary Internet tools? The answer is no since long before the emergence of the Web 2.0 paradigm there was clear indication of the struggle between the top-down and the bottom-up perspective.

For example, Gronlund (2003) focuses on this fragile balance in the Swedish local government case studies. He explains that standardising engagement processes facilitates administrative control as massive input from the public can be bureaucratically handled. However, administrative control hinders adaptation to local institutions and simply repulses citizens from participating in "boring" administrative processes outside their common Internet experiences. Miller (2009, p.165) directly states: "most people prefer to get involved in single-issue politics, ignoring institutional agendas that often seem alien, time-consuming and irrelevant."

Therefore, cross-examining the thesis analysis with further research identifies what seems to be emerging as the major challenge:

Can online public engagement be configured in ways that citizens will be able to meaningfully influence formal policy making while authorities maintain sufficient control of the process?

Certainly, answering this thought-provoking question lies beyond the scope of this thesis, but there are some useful directions that could help institutional communities focus their efforts. Several aspects need to be taken into account in addition to the obvious need of identifying tools and processes adaptable to existing institutional structures. At the first level, it is well-established that the proposition of online engagement should be clear to its objectives and processes (e.g. Carman 2010, Coleman 2004). Clear aims are not only a matter of effectiveness, they are also a perquisite for transparency and legitimacy as the public should be enabled to understand, contextualise and monitor policy making. It is also important that clear objectives do not prevent necessary experimentations with tools and

adaptation through learning. Building on citizens' learned trust of technical means requires thinking about their role outside the capacities of existing institutions.

In this endeavour, it is important to find the appropriate ways to stimulate planned involvement. For example, non-governmental actors have made significant progress in political mobilisation campaigns. They are using integrated participation strategies where low-quality high-volume actions such as emails and petitions are combined with more targeted involvement (Karpf 2010). Although many of those tactics are not equally relevant in formal policy making, they still entail useful lessons for authorities. Their advanced and combinatory tactics in many cases go beyond the phenomenon of political "clicktivism" where massive engagement tools are used to educate the public about issues of interest, encourage them to take easy and small steps and then try to engage them in more significant follow-up tasks (Karpf 2010). There is little evidence that authorities have managed to connect their engagement efforts in similar escalating logics that can reach people according to their availability and willingness to participate.

What authorities should also definitely look after is the citizens' need to acquire all relevant information to construct informed opinions about policy making topics beyond current constrains of time and space. At the next level, it is important that when citizens take online initiatives they have access to a plethora of mechanisms for deliberation and dissemination. For example, although disseminating petitions is not the authority's responsibility, the positive impact on local democratic processes could be enhanced if users had additional tools to effectively distribute their concerns and reflect more informed opinions on topics raised. Increasing the visibility of petitions through complementary channels could further ensure that the widest possible spectrum of local actors can be reached and consulted even if they cannot physically attend petition hearings. Possible additional functionalities could include: discussion forums, other alert mechanisms (e.g. bulletins), and assistance to campaign petitions through means such as social networks.

7.5 Thoughts on evaluation

Saebo et al. (2008) and Macintosh et al. (2009) outline the important open issues in eParticipation evaluation such as quantity or quality of participation, negative or positive

effects and so on. Certain contributions have attempted to group the key issues that could constitute evaluation guidelines (e.g. Macintosh 2004, Macintosh, Whyte 2008, Gelders et al. 2010, Rose, Saebo 2010). The material presented in this thesis builds upon those suggestions and elaborates on certain aspects.

First of all, the theoretical perspective motivating this research suggests that when actors design and evaluate online engagement tools they come across strong implications about issues of organisational identity. Those implications are the outcome of the interplay between institutional influences and their local understandings. The thesis findings correspond to the direction of interpretive evaluation which states that actors' perceptions determine the success of the outcome beyond objective measures about engagement processes and tools (e.g. Irani et al. 2005).

The union case provides an even more paradoxical example of the effects of interpretive evaluation. In this case, there are indications that the more visible the impact of social networking tools was, the more certain actors agonised to oppose it. Indeed, the benefits of digital governance initiatives should not be taken-for-granted. They seem to be highly contextual, contested and decided dynamically by political actors as part of their agendas. Apart from exceptional cases such as Kingston, operationalising the benefits of online engagement requires better considerations. Making them as clear as possible for both citizens and authorities seems to be an important first step in online engagement.

Another important evaluation dimension is the one expected to play an important role since the dawn of such efforts: political priorities. In both cases here, political affiliation motivated authorities and individuals to promote and use participation tools. Particularly the interviews with elected representatives indicate that political affiliation was covering vague perceptions of online engagement in either negative or positive ways. For example, when online engagement was a clear political priority (e.g. the Labour legislation or the Greek socialist government), support by organisational actors took into account official party lines and rhetoric. Not to mention that online engagement seems to generate controversy even within political parties promoting it. The most representative example is the Labour government's ePetitions. Despite popularity and participation, many within the government openly characterised the website as a negative public relations exercise that

escalated in an undesirable way for the government when the road pricing petition was signed by almost 2 million people.

Furthermore, another evaluation aspect receiving insufficient attention concerns the impact on decision making costs and quality (Kumar, Vragov 2009). This includes, but is not limited to, the cost of developing and maintaining participation structures (Andersen et al. 2007). Is there evidence that online engagement increases the quality of decision making and reduces its cost? There are limited cases where segments of possible answers can be provided. In the ePetitioning cases, provided that there is not a significant increase in their number, the online management of petitions is cost efficient for the council since the website allows for more petitions to be processed by the same officers. Therefore, although not substantially, it does reduce decision making costs. However, providing support activities such as the original discussion forum afterwards suspended would probably inflict considerable additional costs.

Thinking about decision making costs inevitably leads to one of the major dilemmas in online engagement: quality vs. quantity. Decisions and trade-offs between in-depth engagement and high-volume actions are an important decision to building online engagement propositions. In an organisation new to the concept, the Greek trade union, conflicting opinions were expressed, but most pointed to the dimension of quantity. In fact, research suggests that: (1) targeted involvement should be combined with more massive actions (Karpf 2010) and (2) the Internet fosters opportunities for high-volume actions but, by non-conforming to the traditional top-down communications, the effort of communicating also comes to the individuals (Krueger 2006). The implications of those are that evaluating online engagement certainly goes beyond numbers and types of stakeholders participating.

7.6 Summary

This chapter combined conclusions from the thesis empirical material and discussed important dimensions and implications. First, the concept of institutional adaptation was developed in terms of engagement mechanisms and the evolution of technology and governance structures. On this basis, it was suggested that sustainable citizen participation

in formal politics should be examined as essentially different from other online political activities. The chapter also commented on the way key actors approach online engagement. Many of those actors now form their perceptions dynamically as the effects of online engagement become explicit from theory to practice. Effectively, politicians or other traditional power-holders do not necessarily act as inhibiting factors. Finally, chapter 7 discussed certain implications about evaluating online engagement. It was suggested that, instead of attempting to develop metrics and measures, a balancing understanding of institutional characteristics and influences can provide an interceptive approach to evaluations that highlights forces of resistance and promotion.

Chapter 8 - Summary and Concluding Remarks

8.1 Thesis overview and meeting the objectives

This thesis was motivated by the widespread effects of ICTs in formal policy making and the hope that, using such tools, governing institutions can become more inclusive and transparent to their audience. The extent to which something like this is happening will certainly be the focus of research to come since ICT-enabled political phenomena continue to capture multi-disciplinary attention. The thesis attempted to put together a theoretical background as a basis to analyse online engagement tools in two different contexts aiming to provide complementary insights. The interaction between technology in use and the underlying political processes has certain lessons to teach about the desired transformative impact of eParticipation tools and, possibly, their conditions for success. Before presenting the contributions of this study along with its limitations and future steps, a thesis summary is presented as follows:

Chapter 1 provided a thesis introduction and overview. Digital governance research was outlined as a field studying the use of ICTs in governance activities beyond improving service delivery and internal administrative processes. The contemporary nature of this field had so far provided limited opportunities to examine how and why political organisations respond to the challenge of online engagement. For example, certain studies had illustrated the dilemmas of online engagement and indicated potential sources of resistance such as elected representatives. It was argued that this field requires broadening its perspective by integrating the study of institutional policy making communities within and outside governmental authorities.

On this basis, the aim of the research was stated as an examination of the impact of ICTs in institutional policy making mechanisms. This investigation was broken down in three motivating questions about: (1) institutional influences and perceptions of online engagement, (2) the adaptability of current structures and (3) the role of institutional actors in influencing the use of online engagement tools. Chapter 1 also introduced the research approach, the empirical context for this study, as well as the expected contributions and concluded with the thesis structure.

Chapter 2 briefly reviewed efforts in online engagement and particularly focused on petitioning and social networking tools. The current literature described the important dimensions such as: technologies, tools, actors, stages in policy making, evaluation, focus areas, proposed benefits and decision making costs. EPetitioning tools were introduced as simple, popular and increasingly used by many authorities internationally. Finally, an introduction of social networks explored how they emerged as spaces where citizens gather around specific interests and in many cases attempt to influence the policy making agenda.

Chapter 3 reviewed and synthesised the theoretical perspective based on institutional theory. The literature was examined in a multidisciplinary and progressive way starting from the definition of institutions as the norms, structures, behaviours or assumptions that are "taken-for-granted" within and across organisations. Such structures were remarked as both enabling and constraining individuals and organisations. The review examined this perspective in organisational and IS studies and then with regards to public sector ICTs. Useful concepts included institutionalisation processes, isomorphic influences, entrepreneurs and institutional alignment of ICTs. Apart from drawing upon those concepts to position the work conducted in this thesis, the review identified certain interesting directions for future research in the field.

Chapter 4 clarified the ontological and epistemological assumptions adopted in this thesis, as well as the details of the research processes. Interpretive case study was selected as the best approach that could examine the impact of online engagement within its actual organisational settings. The two case studies were introduced along with their data collection processes and background information for each case. Data collection was mainly based on qualitative data supplemented by two quantitative studies. Emphasis was placed on how interview participants were identified and interactively engaged in the studies. Alternative approaches to methodology and epistemology were also discussed to exemplify the choices made and illustrate how other ways of conducting this study could have had resulted in different contributions.

Furthermore, chapter 4 operationalised the useful theoretical concepts reviewed in chapters 2 and 3 and explained how they directed the empirical investigations in the form of a guiding framework for data collection and analysis. Consistent with the three

motivating questions in chapter 1, the framework attempted to synthesise an integrated institutional analysis perspective based on three major concepts: (1) the way institutional influences are understood and balanced according to their types and level of context (2) the relationship between current institutional structures and technological configurations and (3) the involvement of key actors and their strategic initiatives. Finally, the chapter explained the data analysis details: a cross-case synthesis followed a within case thematic analysis which adopted a flexible technique consistent with the nature of interpretive research.

Chapter 5 presented the application of the institutional perspective on a digital governance initiative led by a public authority. This evolved around the cases of two London local authorities and their experiences with ePetitioning tools; from 2004 in the case of Kingston and since late 2010 in the case of Hillingdon. The cases show how the English local governance context cultivated the activity of ePetitioning in a combination of formal and informal initiatives. Leadership by inspired individuals, flexibility and institutional authority enabled those tools to generate positive impact on local democratic processes. Their integration was built upon the existing norm of formally responding to petitions. Those authorities had already certain structures in place where petitions could be deliberated and decided. The website facilitated and accelerated interaction processes between elected representatives and petitioners coordinated by the civil service. Many councillors saw this as an opportunity to strengthen their role as community leaders both by organising petitions and by formally deciding on petitions created by others.

Nevertheless, the attempt to regulatory enforce ePetitioning tools at the national level produced several not encouraging results three months after the implementation deadline. Apart from the expected slow adaptation, institutional uncertainty resulted in basic implementations and most systems not used at all. Chapter 5 concluded by discussing what sort of impact on democratic processes was achieved by local government ePetitioning systems and whether this belongs to the sphere of institutional change or not.

Chapter 6 presented the application of the institutional perspective on a digital governance initiative led by a non-governmental institutional community. This was the case of an influential Greek trade union federation studied for almost two years with respect to its eParticipation efforts. In this political organisation, ideas of engaging with members online

were connected to broader national and transnational forces. The alignment of those influences with the local union culture resulted in internal debate around issues of organisational identity, leadership, union modernisation and capacities to leverage the participatory potential of technology within current structures. Online engagement was certainly not a simple communications improvement exercise. It was part of a process of socially mandated institutional change where the union's mission had to be reconsidered under dramatic national socio-economic circumstances.

Motivated individuals calling the organisation to act entrepreneurially did not manage to gain sufficient visibility and central guidance to the project. Yet, even union officials resisting the idea of technical means for reaching members did not directly challenge and reject their usefulness and potential. Interestingly, the challenge of social networks enabled the organisation to reflect on a more integrated engagement strategy using other tools such as mailing lists. Finally, it was suggested that unions increasing their influence and legitimacy as societal actors was necessarily not a situation "desired" by other stakeholders in society such as political parties and employer associations.

Chapter 7 further reflected on the empirical material from chapters 5 and 6. The discussion focused on certain common topics that frame the impact of ICTs on formal democratic processes. The first major theme was institutional adaptation of current institutions to online engagement activities. It was suggested that the planning of such initiatives should be predominantly institutional in terms of identifying the mechanisms and tools that will enable citizens to influence formal politics. On this basis, it was highlighted that, despite the widespread use of Internet tools for organising social movements, protesting and campaigning, sustainable citizen participation in formal policy making involves a set of fundamentally different activities. This is why, with few exceptions, enacting bottom-up engagement in meaningful ways can be identified as the key institutional challenge.

Chapter 7 also considered the way key actors approach online engagement in relevance to the research findings. It was suggested that politicians or other traditional power-holders do not necessarily act as inhibiting factors. Instead, as all involved actors, they attempt to benefit from those tools according to their perceived interests; a process which happens mainly dynamically as the effects of online engagement become explicit from theory to practice in each case. Furthermore, different findings converge to the fact that for all

actors, personal experience with Internet technologies is very influential. Consistent with the Internet's feature as an experience technology, the more expert individuals become with web tools, the more they are able to merge them with their traditional activities. Finally, chapter 7 discussed certain implications about evaluating online engagement.

The course of the thesis was based on a set of five objectives which correspond with the investigation progress from the background information in chapters 2 and 3, to the research approach in chapter 4, then, the empirical material presented in chapters 5 and 6 that led to the discussion chapter 7. Table 8.1 (next page) briefly shows how the research objectives were accomplished throughout the thesis. The next section presents the contributions to theory, methodology and practice.

8.2 Research contributions

There is a lot to be learned in a novel field such as digital governance research. Following efforts of less than a decade, the debate on the impact of Internet tools on democratic institutions is more open than ever. It is increasingly becoming a global phenomenon bearing transformative dimensions especially when it comes to movements seeking to promote social change. Yet, empowering citizens on a regular basis still remains a vague objective for those behind public decision making.

This exploratory research aims to contribute to the theoretical, methodological and practical aspect of this debate. The emphasis was placed on developing an appropriate theoretical perspective and then applying it in to analyse original up-to-date empirical material. The integration of the theoretical concepts and the diverse empirical material add value to those who seek to understand or use technologies for public engagement.

Research Objectives	Outcome
Objective 1: Present a concise review of the institutional perspective in organisational studies and IS research with particular focus on the intersections with the institutional study of ICTs in governance.	This objective was met in chapter 3 where the progressive review was presented with emphasis on the multidisciplinary feature of institutional studies.
Objective 2: Demonstrate how the institutional perspective has the potential to illustrate the use of ICTs in governance.	Following the background in chapters 2 and 3, the theoretical perspective was synthesised in chapter 4 and demonstrated with the help of a guiding framework (section 4.5). The framework identified a set of interesting concepts that describe the institutional use of online engagement tools.
Objective 3: Uncover new insights that this perspective can elicit on digital governance initiatives led by governmental agencies.	This was accomplished in chapter 5 with the cases of UK local government ePetitioning. The cases particularly showed how the online part of the activity achieved good fit with current policy making structures.
Objective 4: Uncover new insights that this perspective can elicit on digital governance initiatives led by nongovernmental communities.	This was accomplished in chapter 6 with the case of the Greek trade union federation. The case particularly showed the interaction between global and local perspective on online engagement and the alignment with organisational norms.
Objective 5: To holistically examine the impact of ICTs, combine and evaluate conclusions from the two case studies. On this basis, develop implications for theory and practice and future research directions.	The conclusions from the two case studies were first discussed in sections 5.6 and 6.5. Then, they were combined in chapter 7 which focused on common topics that frame the impact of ICTs in formal policy making. Finally, this chapter presents future research directions.

Table 1.1: Meeting the objectives of this thesis.

8.2.1 Contributions to theory

The theoretical insights developed in this thesis seek to contribute to digital governance, IS research and institutional studies. The theoretical contributions can be summarised as follows:

- Synthesising a holistic view to theorise the connection between technology, policy making and people. This integrative view attempts to take into account both the institutional environment and the institutional characteristics of policy making organisations.
- Developing the notion of institutional adaptability and examining its practical meaning and implications in digital governance. For example, in terms of how institutional structures are aligned with technological configurations.
- Re-conceptualising the role of the different policy making stakeholders and demonstrating their effects on digital governance agendas.
- Uncovering the non-linear connection between offline and online institutions. On this basis, explaining how sustainable participation in formal politics should be considered fundamentally different from other activities in the general intersection of Internet and politics.
- Challenging the extent to which current policy making structures can enact engagement from the grassroots as implied by the social media paradigm.

At first, the thesis adds to the value of the institutional perspective in digital governance research and practice. Synthesising a multidisciplinary theoretical view addresses the call for theorising this emerging field (Saebo et al. 2008, Macintosh et al. 2009). The theory contributes to structuring concepts related to the impact of those initiatives and their systematic examination. For example, it is a common assumption that technologies are not necessarily democratising political processes as eGovernment hasn't necessarily led to public sector efficiency. The theory identifies in what terms this is not happening by focusing on the more complicated impact of ICTs on formal politics and its mechanisms for public participation.

Weerakkody et al. (2009) and Mignerat and Rivard (2009) suggest that research should look at the political view of institutionalisation processes and the way it impacts on actors' choices. The thesis adds to the general observation that political institutions resist public participation by developing the notion of institutional adaptability and explaining its relationship with ICT-enabled efforts. This allows identifying practical attributes of technological initiatives that grant them institutionally-enabled characteristics (Lips 2007, Gasco 2003). The holistic institutional analysis framework grouping those concepts can be used a guide for future studies or trigger more in-depth investigation in some of its aspects. It is not bounded by particular tools, stakeholders or contexts. The framework is the outcome of a review process which identified core concepts from previous use in related disciplines (IS, organisational and policy studies). Its analytical potential is exploited as a theory which can show why things are happening in digital governance (Heeks & Bailur 2007). For this, the theory, as in this thesis, should be seen as process-interpreting and not as a simple study of salient structures (Yang 2003, Currie 2009); otherwise, it explains little about how and why changes occur.

In practice, this means that it should combine the study of structures and norms with dialectical perceptions over institutional influences coming from different sources (Powell, DiMaggio 1991, Robey, Holmstom 2001, Avgerou 2001). More specifically, the contribution of the theoretical perspective to the interpretation of online engagement is focused on framing the institutional environment as the source of risks and opportunities (Scott 2008, Avgerou 2001). To this direction, the integrative theoretical perspective attempts to combine the study of both the institutional environment and the institutional characteristics of policy making organisations; it adds to previous studies seeking such macro and micro connections (Davidson, Chismar 2007, Baptista 2009).

The macro and micro connections also point to an updated role of policy making stakeholders who are subject to different views and influences on online engagement. As an effect, many of them consider and re-consider the potential impact dynamically according to perceived outcomes. For example, it should not be taken for granted that elected representatives de facto resist engagement tools as threatening to their traditional power. On the contrary, many of them take leading initiatives and perceive technological advancements as significant opportunities. Others, as in the trade union study, might resist

online engagement only if its results exceed a certain level of visibility. Complementary, it shouldn't be assumed that the public is eager to seize the new participation prospects or simply ignores them and decides to remain disengaged. What actually seems to be happening is that networked citizens follow new patterns in their online behaviour which may be compatible or not with existing policy making structures.

Building upon the latter leads to interesting conclusions on the connections between offline and online institutions (Hercheui 2009b, 2011). Both studies, and particularly the trade union one, add to our knowledge on how existing institutions create and influence online spaces of interaction. In particular, it was possible to notice how those spaces should not be simply seen as communication ones since there is fear they might develop their own institutions and eventually even turn into forums of challenging the offline world. Such an observation is not novel, but it brings into attention the fact that we know little about how social structures are reflected in online spaces. Political organisations are not able or don't wish to handle non-structured participation. Therefore, it is interesting to see the ways in which they respond to the online engagement calls and if this has implications about their traditional forms of political organising.

8.2.2 Contributions to methodology

With few exceptions (e.g. Cordella, Iannacci 2010, Azad, Faraj 2009, Kim et al. 2009b), interpretive studies in digital governance topics have been sparse. The limitations of previous studies, as explained in chapters 1 and 2, provide the basis upon which methodological contributions can be claimed as follows:

- Expansion of the research field with new contexts, levels of analysis and studies which uncover more long term effects of digital governance initiatives.
- Shifting the focus on integrative analysis of people, processes and institutions. An
 important aspect is the adoption of multi-stakeholder approaches in collecting and
 analysing data.
- Re-conceptualising the position of the IS discipline in studying phenomena related to political engagement and digital governance.

First of all, this thesis focused on ICTs in public engagement recognising the fact that little previous research had addressed them in-depth as a distinct and key aspect of digital governance. From the beginning, the objective was to establish more integrated conclusions on the impact of ICTs in policy making institutions. An initial observation was that existing studies have been focusing mostly on public authorities and ignoring other political organisations. The selection of an influential trade union organisation and the multi-national approach of this research aimed at providing new insights in different contexts and with respect to different stakeholders.

Most importantly, in both case studies presented in this thesis, the focus was not on the tools but on the people, processes and institutions that interacted with those tools. By shifting the units of analysis from the tools themselves to their impact in use it is possible to uncover new aspects of their effects and argue about their transformative potential. This was methodologically possible due to the fact that institutional aspects and online engagement efforts were examined dynamically and over long term.

This was possible not simply in terms of analysing a well-developed experience as in the Kingston case, but also in terms of looking at how fundamental perceptions of digital governance changed over the last few years. In the union case, it was possible to see, even during the last two years, how this increasing legitimation was depriving those opposing online engagement from arguments about the composition of the online audience and its usefulness for the labour movement.

Another important methodological step concerns the plurality and methods of interviews conducted. Close association with study participants, especially in the trade union case, allowed a detailed reflection of the researcher's involvement with regards to the political nature of those organisations. The thesis consistently emphasises that close involvement and continuous feedback at all stages of the research process should be sought; Bygstad and Munkvold (2011) provide some more detailed general suggestions on seeking feedback which can be useful for digital governance research.

Furthermore, the case investigations were carried out conducting interviews with all the different stakeholders involved *both* from the delivery/management (civil service, service providers) *and* the political side (councillors, union officials, other elected politicians,

citizen organizations). This is also important for future research which in some cases captures only the management side of digital governance initiatives. Nevertheless, when questioning non-IT specialists, and particularly elected representatives, about technology and its political effects, extra care should be taken on conducting the interviews. Lack of trust, elite bias, artificiality of the interview, lack of time and ambiguity language are some of the pitfalls identified by Myers and Newman (2007).

Finally, a methodological contribution comes from the new conceptualisation of the role of the IS discipline in studying phenomena related to political engagement. Chapter 7 argued on the fundamental differences between formal policy making and other political mobilisation activities. Although IS research has no developed experience in studying social movements and political participation in general, it can substantially contribute to the evolving story of the transformative power of ICTs in policy making organisations. When influential actors develop their online strategies, web tools usually bear strong implications on traditional forms of organising. Institutional modernisation, resistance and the role of ICTs as instruments of catholic improvement in every aspect of organisational life have been well-developed topics in IS studies.

This new conceptualisation adds to the ePolitics agenda by Wattal et al. (2010) and arguably narrows down its perceptive to certain topics that seem to be more related to the IS discipline core. For example, interesting work has been conducted on the relationship between social networks, civic engagement and social capital (e.g. Valenzuela et al. 2009, Ellison et al. 2007). Beyond the effects of web technologies on individuals, IS studies can contribute to translating those findings into the structures and processes that could enable political organisations to foster engagement. Along with other possible connections between methodology, theory and practice, this is explained in the next section.

8.2.3 Contributions to digital governance policy and practice

The more theoretical orientation of this research does not prevent contributions to policy and practice which could be summarised as follows:

- Transferring lessons for achieving institutional embeddedness of engagement tools.
- Assessing a national eParticipation local government policy.

- Uncovering practical lessons for the adoption of social media tools as part of political engagement strategies.
- Offering further descriptive understandings within the tools and contexts examined.

Contributions to practice do not translate to devising "best practices" or directly guiding practitioners in other ways. To achieve good relevance to practice, the material presented pursues the long standing advice of focusing on successful ICT cases which can help uncover insights aligned with the key interests of practitioners (Heeks, Bailur 2007, Benbasat, Zmud 1999). This was specifically realised in the Kingston case which is one of the two local government authorities building upon its experience since 2004. The choice of online petitioning and social media communities as technologies of online engagement is also important given their popularity and widespread adoption.

First of all, institutional analysis should not be seen as simply an academic and intellectual challenge. It can provide useful suggestions as to what makes online engagement efforts successful or not in practice. From the practical point of view, policy makers can be advised to look carefully at their institutional environment and diagnose sources of potential resistance and emerging opportunities. Following this analysis, they should think first of adapting institutional mechanisms to new technologies and then about their functional fit with current procedures. The currently limited impact of online engagement provides a reason to believe that this is not be adequately happening. The institutional embeddedness of participation tools seems to remain a vague problem in the minds of individuals mostly related to technical and managerial aspects.

In the ePetitioning cases, the alignment between the new processes and the existing institutional norm was a combination of serendipity and planning. This achievement is indicative of how an understanding of the institutional norms, behaviours and assumptions has the potential to identify a path of least resistance, and then exploit it to accomplish desired changes. Effectively, it can provide a useful direction as to how institutionally-enabled use of new technologies can be achieved in online engagement initiatives. The phrase "it is not about technology, it is about the process", was used by many interviewers to explain the core concept of this alignment. The contrast, for example, with the government's ePetitions makes this practical dimension quite explicit (see section 5.6).

At the national policy level, as Medaglia (2007b) also notes, assessing a policy at its early stages can be important for its future impact due to the usually high cost of changing initial decisions. The current state-of-the-art presented in Appendix 3 demonstrates that, for most local authorities, the ePetitioning mandate was certainly not seen as an opportunity to revolutionise local democratic processes. This is an important lesson for the future of such policies which currently depend on the new UK government's forthcoming regulatory work (Localism Bill). Beyond the UK case, this overview study makes some interesting points about regulatory enforcement which might not be the ideal way to enact online engagement, even if tools used in digital governance seem to be constrained by existing institutional frameworks (Dawes 2008, Fountain 2008).

In the union case, relevance to practice was straightforward within the organisation. Although not an action research project, continuous feedback from the study and the Appendix 4 survey were important for the organisation's efforts within the almost two years of the study and beyond. Dissemination activities in which the researcher participated (e.g. union newsletter, presentations) contributed to internal promotion of ideas within the organisation, its affiliated collectives and the national union movement. The outcome of this study is also relevant for the global unionism movement and other institutional political organisations outside public administration seeking to promote online engagement.

So far, quite visible initiatives such as the e-UNI campaign have established the relevance of social networking and online membership engagement in the context of those organisations. However, they haven't been presented with the opportunity to examine how those tools impact on the organisations, potentially change their existing structures and generate debates about the future of collective representation. In this direction, the research warns practitioners about a complicated connection between offline and online norms and structures which deserves immediate attention in practice.

Furthermore, the thesis also adds to what Saebo et al. (2008) frame as the descriptive agenda: understanding the practical role of technologies and actors. Apart from the conclusions in chapter 7, several more specific contributions were made during the course of this thesis:

- Chapter 5 contributes to our knowledge of ePetitions, why they are different from other online engagement activities and their effects as grassroots engagement tools in connection with institutional contexts (e.g. Jungherr, Jürgens 2010, Miller 2009, Lindner, Riehm 2009, Macintosh et al. 2002, Whyte et al. 2005b, 2011, Cruickshank, Smith 2009). Furthermore, the overview study presented in appendix 3 contributes to research which seeks to establish connections between institutional backgrounds and public sector ICT adoption (e.g. Medaglia 2007b, van de Graft, Svensson 2006, Scott 2006, Moon, Norris 2005, Tolbert et al. 2008, Pratchett et al. 2006).
- The trade union study in chapter 6 contributes to previous efforts of analysing union informatisation particularly adding the social networking dimension (Davies 2004, Whittall et al. 2009, Diamond, Freeman 2002, Pulignano 2009, Lucio, Walker 2005). There is also an emerging field dealing with non-profit sector IT management (e.g. Burt, Taylor 2003, Zhang et al. 2010).

8.3 Research limitations

Evaluating interpretive case study research is highly subjective despite the existence of the basic principles explained in chapter 4, mainly the ones by Klein and Myers (1999). As Cavaye (1996, p.233) notes, interpretative case study research should be assessed as "logically consistent, subjective and adequate". Subjectivity refers to the ability of reflecting meaning and understanding according to the actors in the research settings. Walsham (2006) mostly agrees with those criteria and adds that focusing on specific audiences and previous literature helps to construct contributions.

The ways in which the principles by Klein and Myers (1999) guided the work here have been mentioned throughout the thesis. The principle of abstraction and generalisation was facilitated by the guiding institutional framework which assisted in linking the theoretical background with the data collection and analysis processes. The principle of contextualisation was achieved by the deep knowledge of the organisational and institutional background in all cases, as well as by the author's close involvement especially in the trade union organisation. The principles of multiple interpretations and suspicion were respected by selecting the widest possible range of stakeholders in all cases and

trying to make sense of their different views on their organisations' activities, combine them and attempt to understand how they reflect their own positions and interests. Finally, dialectical reasoning was supported by allowing participants to continuously reflect on the outcome of the investigations.

Inevitably, adherence to any set of principles cannot result in research without limitations. First of all, the work presented here is bounded by the common shortcomings of case study research. The specific study context limits the generalisation potential in both cases, although the analysis framework adopted remains inclusive enough to avoid this. Remaining inclusive more or less demands that the institutional analysis stays at rather high level of abstraction which is not necessarily context-optimal. Nevertheless, conducting an interpretive study allows for flexibility in the data interpretation in a way that the framework did not lock the investigations into particular themes.

In terms of internal validity, conducting more interviews especially with elected representatives would have been useful. There is previous experience stating that they are difficult to engage in research processes and the practical problems encountered here are no exception (Mahrer, Krimmer 2005). Time rather than lack of interest was the main reason why invitations for interviews were not accepted. In any case, care was taken to include stakeholders in all possible types related to policy making structures. The most important shortcoming to this effort was the non-systematic examination of citizens' views. As explained in chapter 7, few studies have focused on this aspect. In the ePetitioning cases, the few interviews with community leaders revealed important aspects of those opinions. In the trade union study, the survey presented in Appendix 2 revealed interesting thoughts about members' perceptions, but there was not sufficient time in the case study investigation to link those with future developments.

Finally, when researching into the impact of ICTs in an organisation's political activities, there is always a certain degree of bias about the research process legitimacy. Full disclosure of stakeholders' intentions and thoughts are practically impossible to achieve. The principle of suspicion comes clearly to the fact that political organisations will always attempt to demonstrate strong commitment of listening to the public. In both cases, and especially in the trade union one, the researcher's personal involvement attempted to minimise this effect. In many occasions, the research process even acted as a forum of

exchanging opinions within the organisation. There was even direct influence to actual decisions about the online engagement strategy; such a situation can assist the research process, but also comes with regular warnings about organisational politics.

8.4 Further research directions

Digital governance is becoming more and more relevant to every society and political community. Analysing successful or failed cases from solid theoretical basis could guide future practice in fruitful directions and increase the currently limited synergy between academic knowledge and practice. The research presented in this thesis addressed a variety of issues related to the impact of online engagement in different contexts. Therefore, it normally opens certain avenues for future research. First of all, many of the concepts drawn from institutional theory can be explored in-depth by individual studies. Certain key questions generated could be grouped us:

- How do institutional influences affect decision making in political organisations? Is online engagement perceived as an opportunity, a risk or a norm sustained in organisational agendas even with limited results?
- How should formal and informal institutions be combined to create appropriate styles and types of engagement that could motivate individuals to participate in ways that they perceive as meaningful?
- How is online engagement affected by organisational capacities, resources and path-dependencies? In turn, do such initiatives have a positive or negative effect on decision making costs and quality?
- Is the level of context an important variable in online engagement? For example, is the local government a more fruitful ground for such initiatives compared to national governments? If yes, how does this affect contemporary efforts or even result in a shift in traditional power balances?
- What is the new relationship between offline and online institutions? Are established political norms constraining online engagement or changing due to its transformative impact?

• Should online engagement be regulatory promoted? If yes, should such efforts entail detailed descriptions of tools and implementation details or leave those at the discretion of local communities? Long term monitoring of the impact of national policies can provide more solid answers to this question.

At the level of actors, also following Gronlund's (2003) earlier remarks, it seems that greater attention should be given on how online engagement impacts upon the three groups in the digital governance sphere: politicians, citizens and civil service. Supported by the thesis material, there is evidence that the relationships between those three groups are affected and even transformed by the use of ICTs. Are politicians gaining more control over the civil service? Is the civil service gaining more influence over political processes, for example in agenda setting exercises? Are citizens empowered to understand and monitor the work of public officers and elected representatives beyond their traditional abilities? Are citizens not pursuing participation opportunities because they are not inspired by the way they are organised or due to their distrust of existing institutions?

Especially concerning the latter, throughout the thesis it was emphasised how little we actually know about how citizens perceive online engagement in formal politics. It is reasonable to believe that acquiring more detailed knowledge of this aspect could improve participation efforts and, importantly, assist in identifying innovative ways of enacting engagement from the grassroots which seems to be the major challenge both in theory and practice. When it comes to individuals, a conclusion also supported in the Appendix 4 survey states that Internet skills seem to have significant influence over traditional variables for online politics. However, Internet skills are affected by traditional socioeconomic variables. How can those observations be useful for engagement strategies?

Finally, there is no doubt that an interesting direction for future research concerns the adoption and use of social networking tools in the public, the non-profit profit and other types of organisations. The Greek union case produces a set of variables that could be used for an overview study of trade unions and beyond. Indicative questions could focus on the effect of institutional influences coming from within and outside organisations. For example, are choices to adopt affected by geographical proximity or perceived success of leadership? Are wealthier organisations offering more participation options? Are there any formal evaluation efforts or what works or not is decided more empirically?

8.5 Epilogue

During the writing of this thesis, the difference between what citizens and institutions are doing online became a lot more apparent. Motivated by networking tools such as Facebook and Twitter, European citizens have been organising impressively massive ad hoc movements against government austerity measures. Such events came as a natural consequence of social movements in the Middle East and Iran which quickly gained a revolutionary nature and led to political change.

The power of online protesting and how much networked citizens are now accomplishing highlights how little formal political mechanisms have achieved. It is not unreasonable to argue that pursuing creative ways to engage online cannot any more be considered a "bonus" of legitimacy, but more an issue of survival for traditional politics. For the new generations, if you are not online, you more or less "don't exist". In turn, being online creates new accounts of transparency which becomes a non-negotiable value. Certainly, this could not have been foreseen about a decade ago when eDemocracy appeared as a new topic in the area of public sector ICTS.

Given the pace of technological and associated social change, it is not surprising that practitioners in governance organisations lack knowledge of tools and even more have difficulties in conceptualising their impact. Our mission as digital governance researchers is to pursue a critical attitude in those situations and try to communicate both the technological artefacts and their more wider implications. In this mission, uncovering the paths in which institutional structures can co-evolve with engagement tools and people is the major challenge for enacting engagement from the grassroots.

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Appendix 1 - Data collection details for case studies

1. Kingston's ePetitions

To understand the project's context and rationale, the first step was to examine the pilot evaluation reported by Whyte et al. (2005b). This included various data from interviews, statistics and a small-scale questionnaire. The pilot evaluation provided an excellent assessment of the system's initial operation in 2004 and allowed a clear illustration of its evolution. Following the examination of the pilot evaluation, a wide range of further available documentation was collected and analysed including:

- Paper and ePetition figures (petition topics, signatures, duration and outcome).
- Petitioning process diagrams and previous project presentations.
- Council structure, agendas and meeting minutes complemented with official policies (Communications and Participation Strategy, Implementing Electronic Government Statements 2002-2006 updated annually).
- Material from the EuroPetition project available at http://europetition.eu/
- Regulatory and consultation documents from the UK Department of Communities and Local Government (2008a, 2008b, 2009).

Following the documentary analysis and an initial interview with officers from Democratic Services, the approach to selecting the rest of the participants was to capture the multiple perspectives of the actors involved in the system's operation and use. This approach was also consistent with the principle of multiple interpretations (see section 4.3). Table App1.1 outlines the participants and their roles.

Snowball sampling between participants proved useful (Myers, Newman 2007), especially with elected representatives who are generally difficult to engage in research processes (Mahrer, Krimmer 2005). This is particularly important given the fact that this study enclosed the period of the May 2010 UK general elections. The choice of councillors was for those who had used ePetitions themselves or were involved in petition hearings. Councillors from the party leading the council, Liberal Democrats were generally more eager to participate in the study.

Interviews	Participant role and interview focus
Civil Service (5)	Democratic Support Services (3) Online system and petitioning process management.
	IT Department (1) System integration, technical management and collaboration with the service provider.
	Housing and Planning Applications Department (1) Many petitions received about planning application topics.
Councillors (4)	Liberal Democrats (3) Leading the council and responsible for local decision making.
	Conservatives (1) Council opposition.
Chair of a local residents organisation	Organised a highly popular ePetition at the time of the study.
Non-elected politicians (2)	Organised ePetitions at the time of the study.
Service Provider (1)	Outsourcing the system to the council and providing additional consulting.

Table App1.1: Interview participants in the Kingston study.

The interview content adjusted its focus according to the interviewees' particular involvement and role. Table App1.2 provides a set of indicative questions that were used in the interview agenda. Interviews with councillors focused on the system's engagement context in terms of intended added values, as well as with issues of resource allocation and future developments. Interviews with civil servants explored issues related to the system's management, internal collaborations and the ways in which organisational assets were aligned. Most councillors and all local community leaders and politicians interviewed were active system users. The council's strategies and policies were commented on by participants. The interview with the service provider elaborated on technical characteristics and the ways collaboration with the local authority is established.

Main interview themes explored in the Kingston study

- What is the motivation for considering online participation? How has "citizen engagement" been conceptualized in the case of ePetitions?
- Did ePetitions led to rethinking the equivalent traditional process? What kind of different activities had to be introduced?
- What is the role of citizens, citizen organisations and political parties in generating ideas for participation projects? What are the other sources of ideas? E.g. consultants, other authorities or governmental agencies, system providers or academic collaborations?
- How did different stakeholder groups responded to the ePetitioning activity during its pilot application and beyond?
- How have resources been configured to enable ePetitions (e.g. administrative arrangements)? What kinds of changes were required to configure those resources compared to the traditional petitioning process?
- What is the perceived impact on decision making costs and quality?
- How are future decisions on engagement tools considered?
- Critics of ePetitioning express their concerns that although popular, it is a form of low quality participation not sustaining a public dialogue over complex policy issues. Supporters say that is an easy and attractive form of engagement which allows tackling many of the traditional engagement problems and can also be effective. What is your opinion?
- How do you think authorities in England will respond to the ePetitioning duty? What has been the role of Kingston in advising other authorities and participating in consultations led by the Department of Communities and Local Government?
- What do you think are the differences in the Kingston case compared to other ePetitioning websites, for example, the one used by the government?
- What are in general your experiences with Internet tools in political activities?

Table App1.2: Main themes explored in the Kingston study.

A follow-up interview with the civil service supported by email contacts summarised the study findings. The iterative reflection between data collected and analysed and the interviews allowed for the desired degree of data triangulation (Yin 2009). Background data

consolidated understanding of the council's rationale to engage with citizens and the dilemmas involved with designing the appropriate initiatives to serve this purpose. The interviews were conducted in person, by telephone or email and most of them were taped and transcribed (of course after obtaining permission). Interviews with civil servants lasted around 45-60 minutes on average and interviews with politicians and community leaders around 30 minutes.

2. Hillingdon's ePetitions

As in the Kingston case, available background data about the authority's socio-political context and paper petitioning experience were collected and analysed. The interviews started and concluded with officers from Democratic Services who also identified a set of potential study participants as shown in table App1.3.

Interviews	Participant role and interview focus
Civil Service (3)	Democratic Services (3) Online system and petitioning process management.
Councillors (3)	Conservatives (2) Leading the council and responsible for local decision making.
	Labour Party (1) Council opposition.
Service Provider (1)	Outsourcing the council's intranet including the ePetitioning facility

Table App1.3: Interview participants in the Hillingdon study.

In this case, interview participants were mostly asked their opinions about the anticipated impact of the new facility and the differences it might bring to the existing process. Furthermore, the interview with the service provider provided some interesting observations about the challenges that local councils faced when integrating such systems and the possible reasons why their adoption tended not to be "enthusiastic" (Appendix 3). Table App1.4 lists some of the main themes discussed during the interviews.

Main interview themes explored in the Hillingdon study

- What has so far been your experience with paper petitioning?
- Critics of ePetitioning express their concerns that although popular, it is a form
 of low quality participation not sustaining a public dialogue over complex policy
 issues. Supporters say that is an easy and attractive form of engagement which
 allows tackling many of the traditional citizen engagement problems and can
 also be effective. What is your opinion?
- What kind of roles are played by different actors in thinking and practicing the eParticipation idea and how they affect the design of such projects? E.g. what are the different views expressed by city councillors and different council employees in relevance to the ePetitioning system?
- How does the council plan to organise and integrate the new online activity?
 How will evaluation be carried out?
- What do you think will be the impact of the online component on the traditional petitioning process? Should the council accelerate the integration process or proceed with small steps?
- What would had been the council's engagement plans if there were no central mandate on implementing ePetitioning?
- How do you think authorities in England will respond to the ePetitioning duty?
 Have you considered ideas from other authorities in the local area?
- What do you think are the differences in local government compared to other ePetitioning websites, for example, the one used by the government?
- What are in general your experiences with Internet tools in political activities?

Table App1.4: Main themes explored in the Hillingdon study.

3. The trade union study

Data collection for the union study can be divided into three stages. The first stage was the preparatory when the author spent time investigating the union's background, structure, everyday norms and culture. This stage was extended over 10 months to ensure that union officials had sufficient time to acquire an informed opinion on the Web 2.0 concept following the internal dissemination efforts in summer 2009. During the preparation stage,

through a series of informal contacts, a wide variety of documentation was collected and primarily assessed. A core of about 30-40 documents were selected as the most relevant background material and inserted into the case database. This material consists of:

- Publications from European funded projects in which the union had engaged mostly as the coordinating partner (DialogoS, Communicate and DialogoS+).
- Other publications by the union such as newsletters, issues of the former union's magazine, as well as position and research papers commenting on the Greek banking sector functioning.
- Material from the union's website, such as those related to its structure, officials'
 names, previous events and news. This online material was supported by the
 activity generated on social networks and blogs by certain officials. The websites of
 affiliated unions were also useful as sources of information.
- Presentations by union officials in domestic and international conferences, as well
 as strategic priority documents presented during the union's election conference
 every three years (the last three election periods were covered).

The main data source for this study is semi-structured interviews which started in January 2010 and covered the rest of the study period. Table App1.6 lists all interview participants and outlines their particular role. Four pilot interviews were conducted in January 2010. Their purpose was to consolidate the interview agenda for the remaining participants and also to ensure that, in a political organisation such as the trade union federation, the nature of the questions would be appropriate for potential participants.

Following those pilot interviews, a general interview agenda was devised as shown in table App1.5. The agenda followed the guiding framework established in the previous section by asking participants to assess the role of the different institutional influences in relation to the union's decision making context, the potential of Web 2.0 tools, the aspects of the project which they thought could be successful, the potential practical responses by union stakeholders and the factors that could contribute to the success or not of the initiative. The interview agenda practically adjusted to each interviewee's particular role, knowledge and availability.

Main interview themes explored in the union study

- What is your personal involvement with the union? What are your experiences with Internet tools and your understanding of the digital engagement concept?
- What is your opinion on the relationship between networking technologies and traditional union activities? Should the unions attempt to exploit tools such as Facebook? If yes, how you do you imagine their use in the union context?
- What do you think can be the impact of those tools for the organisation and your specific duties?
- What is your opinion of international efforts for digital engagement? Are you aware of international initiatives such as the e-UNI campaign?
- What is your opinion of recent advancements in the Greek society? For example, the increasing use of social networks by politicians and the online deliberations by the new government?

Table App1.5: Main themes explored in the union study.

Having adequately established the study background and the interview guide, the main data collection stage lasted from March to September 2010. A number of initial study contacts were suggested. Next, snowball sampling and ad hoc contacts pointed to further appropriate participants (Myers, Newman 2007). In order to avoid the so-called "elite bias", an effort was made to interview key actors representing all the different views (for example related to political affiliation), hierarchies, as well as thematic areas within the union (such as international affairs, culture, genre equality and so on). Interview durations varied. They lasted about 35 minutes on average and some of them extended for as long as two hours. Most interviewees were available for follow-up contacts where interview content was further enriched.

The final data collection stage covered a period of 5 months and was completed in January 2011. At this stage, an interim analysis of the material collected so far provided a clear picture of which aspects of the story needed to be elaborated on. In January 2011, a membership survey was conducted with one of the federation's affiliated collectives. The purpose of this survey was to examine members' expectations and responses to online

engagement. The survey and its results were used as secondary data for this study; they are presented in Appendix 4.

Interview Date	Role	Interview Focus		
January 2010	Labour Institute Managing Director (1st interview)	Social media and the organisation: establishing the plan.		
January 2010	Head of Social Security Secretariat	Leadership on social media adoption efforts and opinions.		
January 2010	International affairs officer (1st interview)	The international and national context and its effect on the organisation.		
January 2010	Technology management officer	The role of informatics within the union and practical issues.		
March 2010	Head of Communications Secretariat	The history of union's communications, the role of the Internet and the emerging social media.		
April 2010	Head of Youth Department	The nature of social media for political participation particularly in the union context.		
April 2010	Head of International Relations and Former Head of the Union	The history of innovation in the union context and the international dimension on social media for unions.		
April 2010	Three officials from an affiliated bank union.	Practical challenges of exploiting Internet technologies –relationships with members and the bank management.		
April 2010	Member of the federation board and active bank employee.	The history of Greek bank unionism, the future challenges and why resistance to new technologies seems to remain strong.		
April 2010	Head of Culture Department	The different union activities and how they can be supported by online means.		
April 2010	Head of Financial Observation Department	Finding useful information on the web and adoption issues.		
April 2010	Head Genre Equality Department	Union benefits, adoption of social media and personal experiences.		
April 2010	Head of Industrial	Organising online communities and the		

	Relations and Collective Agreements	benefits for unionists compared to their traditional activities.
April 2010	Union Manager (over 30 years of experience)	Union resistance to new technologies and benefits for internal organisation.
April 2010	Union journalist and website administrator	The evolution of union media and why current structures and norms do not favour adoption.
April 2010	Industrial actions' and union mobilisation official	Traditional union industrial activities and how technologies can fit in this context.
April 2010	The president of an affiliated bank union (1st interview)	Union leadership and technology strategies including practical barriers.
July 2010	International affairs officer (2nd interview)	Additional material on the union history and context.
July 2010	Labour Institute Managing Director (2nd interview)	Summarise developments from the November 2009 union elections
September 2010	Two e-UNI initiative managers	Details about the initiative's international impact.
December 2010	Web Developer	New website development, requirements and organisational fit.
January 2011	The president of an affiliated bank union (2nd interview)	Survey analysis and interpretation for union's future decisions.
January 2011	Labour Institute Managing Director (3rd interview)	Follow-up interview to summarise case material and future union plans.

Table App1.6: Interview participants in the trade union study.

The 23 interviews conducted with 22 different participants were not taped. Extensive notes were taken instead to ensure that suspicion to the author's intentions and the nature of the research were minimised. Apart from a decision mandated by the political nature of this research, it was also something advised by the union management due to ethical considerations. At the end of each interview, supportive notes were added and in most cases immediately shown to participants as a discussion summary. Many of them were very cooperative about the study and considered the interviews an opportunity to come across issues of social media studies and related advancements.

Appendix 2 - Supporting data analysis material

This appendix provides supporting material from the data analysis process. The figures are extracted from the final steps of the thematic analysis where themes were synthesised from the different sources, cross-examined and reviewed.

Figures App2.1-App2.5 are relevant to the union case analysis as presented in section 6.4.

Figures App2.6 and App2.7 complement the analysis of the ePetitioning cases in section 5.5. Figure 5.3 has been inserted in the main text.

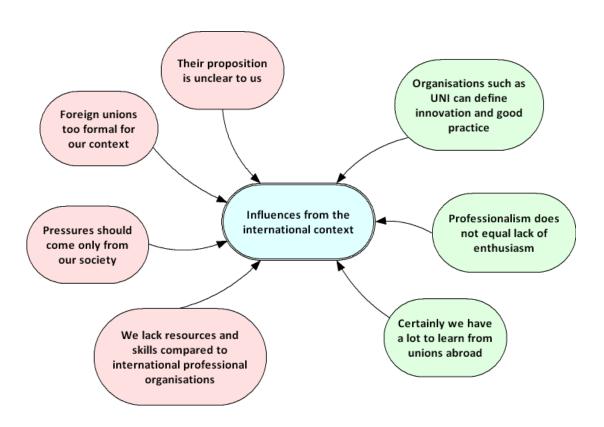


Figure App2.1: International influences in the trade union study.

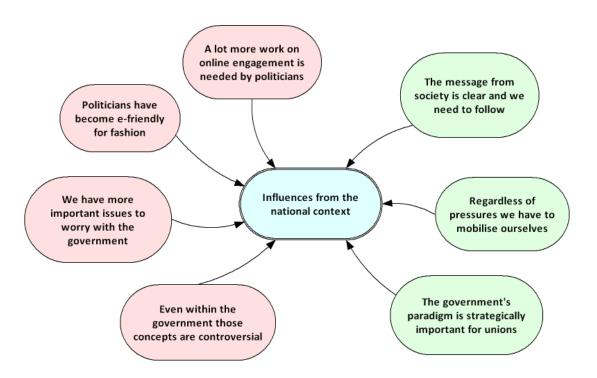


Figure App2.2: National influences in the trade union study.

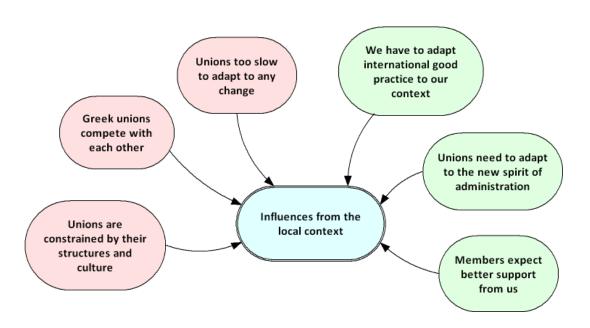


Figure App2.3: Local influences in the trade union study.

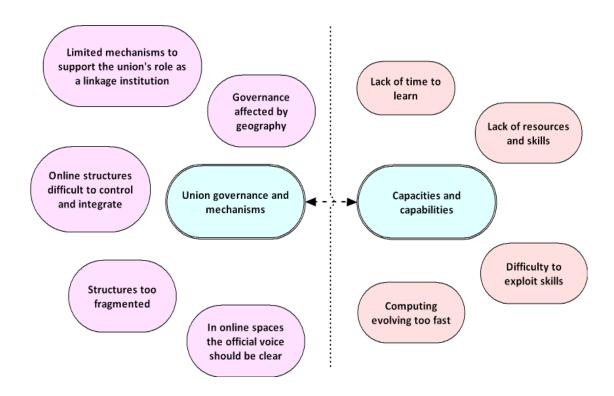


Figure App2.4: Governance structures and capacities from the trade union study.

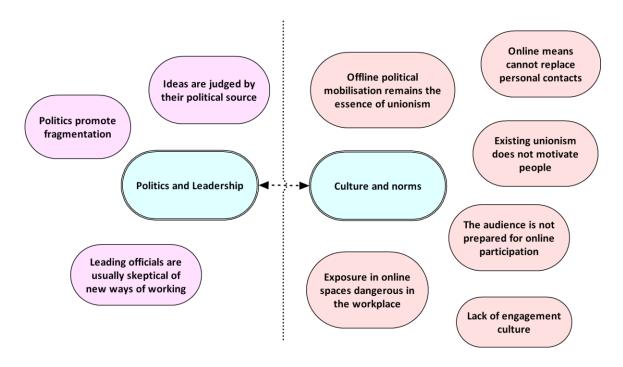


Figure App2.5: Politics and local norms from the trade union study.

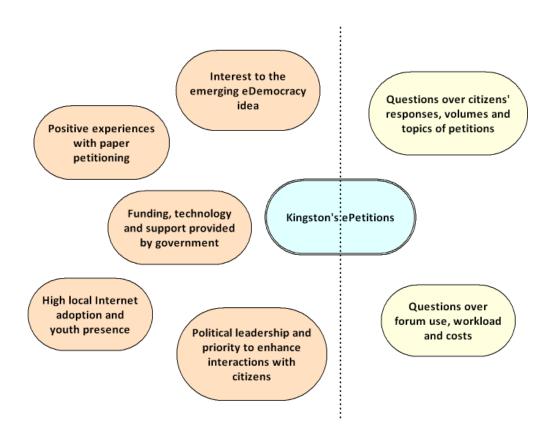


Figure App2.6: Key concepts from the LBK study.

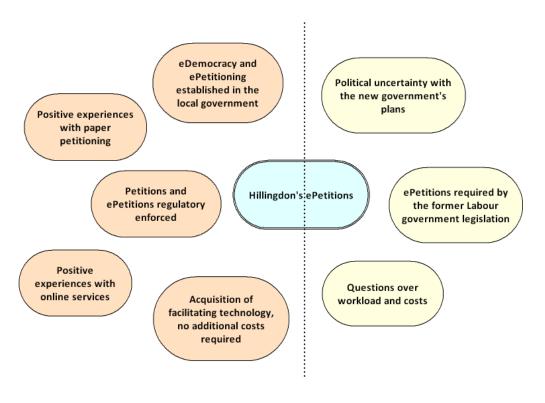


Figure App2.7: Key concepts from the LBH study.

Appendix 3 - An overview assessment of ePetitioning tools

4. Methodology

Motivated by the opportunity to examine LA responses to the ePetitioning mandate, an overview web content analysis was conducted¹¹. This broad methodological paradigm adapts traditional content analysis for Internet research. Content analysis is a systematic technique for coding symbolic content, for example identifying common patterns in media¹². This study conducted a feature analysis of all the 353 English LA websites based on a specifically developed coding framework.

The framework included 20 variables describing particular features relevant to the implementation and use of the ePetitioning facility. Those variables, as presented in the next section, were drawn from:

- Basic characteristics such as the existence of contact details within the website or instructions to assist petitioners.
- Indicators of good practice such as providing notification services for new petitions and encouraging users to offer their feedback on how this new initiative could be improved.
- Elements that could constitute innovation such launching the system before the December 2010 deadline or providing a commenting facility or discussion forum for petitions.

To indicate the system's actual use, the number of open, completed or closed without yet responded number of ePetitions was also recorded in each website. The framework further included five complementary variables assessing other eParticipation activities (webcasting, use of social media, online consultations, online forums and online surveys).

¹¹ Herring, S.C. 2010, "Web Content Analysis: Expanding the Paradigm" in *International Handbook of Internet Research*, eds. J. Hunsinger, L. Klastrup & M.A. Herring, 1st edn, Springer Verlang, pp. 233-249.

¹² Bauer, M.W. 2000, "Classical Content Analysis: A review" in Qualitative Researching with Text, Image, and Sound: a Practical Handbook, eds. M.W. Bauer & G. Gaskell, SAGE, London, pp. 131-151.

The initial framework was validated by four experts, revised and then piloted with 35 websites. Amendments were then made to ensure that the selected variables would accurately capture the most important features in a reasonable amount of time per website. A team of six coders were trained and instructed to visit each website following a specified protocol. Although most variables did not entail subjective judgements, coding disagreements or ambiguities were resolved on the spot. To prevent possible non-systematic errors between the different coders, about one third of the websites was randomly re-coded by a senior researcher.

The final dataset contained 337 usable results collected within the first two weeks of March 2011. This corresponds to about 2.5-3 months subsequent to the December 2010 ePetitioning implementation deadline. The dataset was analysed with the help of PASW Statistics 18, along with secondary background data for each LA which were collected from the September 2010 release of the Office for National Statistics 13. Those statistics included: population density, area size, population, average weekly income per household, employment rate, regional broadband Internet access percentage and political affiliation of the council leading party.

5. Study findings

The first characteristic examined related to whether ePetitioning was actually implemented or not and, if implemented, how easy it is to find from the LA's homepage. The first major observation was that an ePetitioning facility was not offered in 61 of the 337 cases (17.6%). Furthermore:

- 19.3% or 65 facilities were linked with the council's home page.
- 26.1% or 88 facilities were one click away from the council's home page.
- 12.8% or 43 facilities required further ad hoc searching.
- 24% or 81 facilities were found using the council website search function.

¹³ Office for National Statistics 2011, available: www.statistics.gov.uk/ [2011, 20/03].

In most cases, everyone working, living or studying in the area is eligible to petition the authority. Usually, a certain amount of signatures are randomly validated by responsible officers to ensure that the minimum threshold that triggers the response process is met. There are different types of petitions. Some types require thousands of signatures; for example those asking for a full council debate on a particular topic.

Most petitions fall into the ordinary category. They are usually discussed in one of the council's specialised committees. Despite expectations for high thresholds, in 178 LAs (52.8%) there was either no explicit threshold set or it was clearly stated that all petitions, regardless of how many signatures they collected, would be taken into account by the authority. Thresholds up to 50 signatures were found in 80 websites (23.7%). Higher thresholds, in the 100-500 range, were found only in 19 (5.6%) cases. In addition to the signature thresholds, as summarised in table App3.1, a set of variables representing different implementation characteristics were examined.

Variable	Found in
Is there a forum, commenting facility or other linked space to discuss petitions?	7 or 2.1%
Is there evidence that the system was operating before December 2010?	28 or 8.3%
Are there links to other council material in petition descriptions in order to assist petitioners get an informed opinion about the topic?	28 or 8.3%
Are there notification services for new petitions (e.g. RSS feed or mailing lists)?	93 or 27.6%
Are there contact details within ePetitions?	110 or 32.6%
Is there evidence of seeking encouraged user feedback on the website design or the petitioning process?	13 or 3.9%
Is there any connection with paper petitions handled by the authority?	55 or 16.3%
Is there evidence of also accepting petitions from other online sources apart from the official council website?	9 or 2.7%
Is there an adapted privacy statement about the information collected?	84 or 24.9%

Table App3.1: Summary of the main variables examined for the ePetitioning implementation.

The level of assistance and instructions offered to users about the website and the petitioning process was also assessed. Four different levels were used, spanning from "no or almost no instructions" (66 websites or 19.6%) to "detailed instructions including step-by-step wizard" (35 or 10.4%). Most websites were classified in the second level (107 or 31.8%), followed by the third (69 of 20.5%). Finally, the actual use of those systems was examined. Not a single petition was open for signatures in 192 (57%) websites. In some websites there was either one (41 or 12.2%) or two open petitions (22 or 6.5%). In the rest 22 or 6.5%, there were up to 15 open petitions. At least one petition completed, including decision by the authority, was found in only 44 websites (13%).

As summarised in table App3.2, the group of five variables examining other eParticipation activities also provided some useful insights. Although the study did not aim to capture more in-depth details, official use of social media by LAs was found in more than two thirds of the cases. Online consultations and surveys were also popular. Authorities were classified as positive in the consultation category only if there was an online route to participate in consultations without having to contact officers by email or post. Webcasting, despite its high cost, was also offered in 57 cases. Finally, online forums or community discussion groups were far less common: they were found in less than 10% of the cases.

Variable	Found in
Are council meetings webcasted?	57 or 16.9%
Are social media officially used by the authority (e.g. Facebook groups, Twitter updates, Flickr, YouTube videos and others)?	231 or 68.5%
Are there online forums or community discussion groups?	32 or 9.5%
Are there mechanisms to participate online in consultations organised by the authority (e.g. forms, questionnaires or an online commenting facility)?	147 or 43.6%
Are online surveys used to ask for citizen feedback on public services, budget decisions or other local issues?	177 or 52.5%

Table App3.2: Summary of other eParticipation activities examined.

To allow further statistical analysis, two composite variables were formed; they were named ePet1 and ePet2 respectively. Their aim is to indicate the extent of effort and creative thinking placed on implementing the ePetitioning facility by each authority (ePet1), as well as the level of system use (ePet2). Many different combinations of the available individual variables could have been selected to form those indexes. To create ePet1, the characteristics outlined in table 1 were added, also taking into account the total number of authorities implementing each variable. In this way, for example, offering a commenting facility for petitions gave an authority more points than having contact details. The system visibility within the council website (see first characteristic examined) and the level of assistance and instructions were also added without weighting. Then, LAs were classified in four categories and assigned points according to the number of petitions open, completed or submitted to the council without response yet. Adding those three variables created ePet2 which represented the level of system use. Finally, an eParticipation index was formed by combining the five variables shown in table 2. Having defined those three indexes, it was possible to examine relationships with the background institutional factors through correlations (Pearson, two-tailed) and t-tests. From this analysis, the following interesting observations emerged:

- The effort placed on implementing the system (ePet1) was positively correlated with its level of use (ePet2) (p<0.01).
- The eParticipation index (ePart) was positively correlated with both ePet1 (p<0.05) and ePet2 (p<0.01).
- Regional Internet broadband adoption, area size and employment rate were not related to any of the ePart, ePet1 or ePet2.
- The average weekly income per household was not related to ePart and ePet2, but was positively correlated with ePet2 (p<0.05).
- Population and population density were positively correlated with all three indexes (p<0.05).
- The LAs that decided not to implement ePetitions did not perform significantly better or worse in other eParticipation activities compared to those who did comply with the ePetitioning mandate. Political affiliation of the council was also not found to be important in terms of adoption or not.

- Early and late adopters of ePetitioning had no difference in other eParticipation activities, but performed significantly better in both ePet1 and ePet2 (p<0.01).
 Political affiliation of the council was also not found to be important in terms of early adoption.
- Conservative-led authorities (200 in total) performed significantly worse in ePet2 (p<0.05) than other authorities. Authorities led by Liberal Democrats (21) or Labour (50) performed significantly better in ePart (p<0.05) than other authorities.

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Notice

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Appendix 4 - Survey with union members

1. The union

The Greek trade union, founded in 2003, represents bank employees in a medium-sized commercial bank. The union represents about 40% of the total 3000 employees. The union's management consists of a team of 11 elected members based on geographic diversity. According to its official statement, the union's mission is to: (1) protect and promote the professional interests of its members, (2) improve working conditions and (3) contribute to quality of social life for members (e.g. cultural, sports). The union is led by a core team of relatively young officials who interact with members on a daily basis and coordinate the union's actions.

Since around 2008, this team has recognised the potential of web technologies and developed a website which is considered state-of-the-art, compared to the ones maintained by associate Greek unions. Their engagement with Web 2.0 followed the massive adoption of social networking and blogging applications in Greek society, as well as the immense increase in broadband adoption. In 2010, the union realised that, despite optimistic suggestions, its ability to consider an online engagement strategy was constrained by limited knowledge of members' expectations. Moreover, it was evident that the bank management desired to limit and regulate the union's online capacity. For example, most union members had slow access to the union's website during working hours.

With the help of the authors, the union decided to conduct a member survey with the purpose of obtaining feedback about the potential of an online communication strategy. Apart from its adequate experience with online tools and willingness to obtain feedback, this collective was selected because: (1) it possessed the infrastructure to disseminate the web survey (mailing lists, organised website) and (2) its members were estimated to form an audience potentially interested in such a pilot study (e.g. young, estimated high Internet adoption). The next section describes the details of the study which was conducted in January 2011.

2. Survey development

The survey development was based upon the following central questions:

- 1. What is the adoption of popular social networks such as Facebook, Twitter, YouTube and LinkedIn by union members?
- 2. Do union members draw firm boundaries between their personal and working life?

 Are they willing to communicate with the union outside their working hours?
- 3. For those who do wish to communicate with the union outside their working hours, how is their intention to interact with the union on Facebook or social networks in general related to factors such as:
 - a. Socio-demographics: age, gender, education and years of unior membership.
 - b. Intensity of Facebook use, intensity of Facebook groups' use and Internet skills.
 - c. Their trust in the union's mission (union loyalty), the union's usefulness in their working life (union instrumentality) and (3) their willingness to participate in union activities.

Table App4.1 shows how the questionnaire variables were operationalised. Union loyalty (UL), union instrumentality (UI) and willingness to participate (WP) were adapted from studies in Industrial Relations. In Metochi's (2002) study those variables were tested in a large survey with a Cypriot trade union, which is a context similar to the Greek union. The variables about intensity of Facebook use and Facebook groups use were adapted from studies conducted with college students (Valenzuela et al. 2009, Ellison et al. 2007).

This distinction was also used here because in previous studies it gave suggestions about possible differences between intensity of Facebook use and its groups. The intensity of use for Twitter and LinkedIn was not measured in more detail because their adoption was expected to be significantly lower than Facebook. It was also a choice of not extending the length of the questionnaire. Facebook, Twitter, YouTube and LinkedIn were the four social networks selected because: (1) they are important components of the e-UNI campaign and (2) their adoption is estimated to be higher in the Greek society compared for example to other social networks such as Second Life and Flickr. To measure attitudes towards the

union's online presence, members were asked about the extent to which they agree with the following (on five-point Likert scales):

- "I believe the union can benefit from its presence on social networks". (BENEFIT-SN)
- "I believe the union can benefit from the Internet compared to its more traditional activities". (BENEFIT-WEB)
- "I believe the union can benefit from its presence on Facebook". (BENEFIT-FB)

Those three statements were combined in a construct named BENEFIT and were further examined independently. Members were also asked to indicate if they maintain a profile on Twitter or LinkedIn and, in case they didn't, if they were at least aware of the website. Finally, members were asked about their intentions to communicate with the union exclusively within, or also outside their working hours.

Construct	Questions	Adapted from
Union loyalty (Five-point Likert scale)	I feel a sense of pride being part of the union. (UL1) I feel I am gaining a lot by being a union member. (UL2) I tell my friends that the union is a great organisation to be a member of. (UL3) I plan to be a member of the union for the rest of my time as employee in the bank. (UL4) I have complete trust in the union. (UL5)	(Metochi 2002)
Union instrumentality (Five-point Likert scale)	Workers need unions to protect them against unfair practices of employers. (UI1) The union's actions are good examples of what unionism can achieve. (UI2) Real improvements in working conditions can only be achieved with the help of the union. (UI3)	(Metochi 2002)
How willing would you be to: **Willingness to participate* (Five-point Likert scale) **Participate in collective action (WP3) **Frequently participate in union's social events (WP4)		(Metochi 2002)

Construct	Questions	Adapted from
Intensity of Facebook use (FB1 & FB2 scored by order of answer) FB3, FB4, FB5, FB6 & FB7 scored on a five- point Likert scale) (Responses were standardised to create an average)	About how many total Facebook friends do you have? (Less than 10, 10–49, 50–99, 100–149, 150–199, 200–249, 250–299, 300–399, 400 or more) (FB1) On a typical day, about how much time do you spend on Facebook? (No time at all, Less than 10 min, 10 to 30 min, More than 30 min - up to 1 hour, More than 1 hour- up to 2 hours, More than 2 hours - up to 3 hours, More than 3 hours) (FB2) How much do you agree with the following: • Facebook is part of my everyday activity. (FB3) • I am proud to tell people I am on Facebook. (FB4) • I feel out of touch when I haven't logged into Facebook for a day. (FB5) • I would be sorry if Facebook shut down. (FB6)	(Valenzuela et al. 2009, Ellison et al. 2007)
Intensity of Facebook Groups use (FBG1 & FBG5 scored by order of answer) (FBG2, FBG3 & FBG4 scored on a five-point Likert scale) (Responses were standardised to create an average)	On a typical day, about how much time do you spend reading and posting (combined) messages on the profiles of online groups you have joined on Facebook? (No time at all, Less than 10 min, 10 to 30 min, More than 30 min- up to 1 hour, More than 1 hour - up to 2 hours, More than 2 hours) (FBG1) In the past week, how often do you: • Read the profiles of online groups you have joined? (FBG2) • Post the messages in online groups you have joined? (FBG3) • Post the new discussion topics in online groups you have joined? (FBG4) Which one of the following best describes your participation in the online groups you have joined on Facebook? (Rarely visit profiles, Reads wall/discussion board, Mostly reads, sometimes write on wall/discussion board, Reads and writes on wall/discussion board, Reads, writes and starts new topics on wall/discussion board) (FBG5)	(Valenzuela et al. 2009)
Internet skills	Have you sent an attachment with an email? (IS1) Have you posted an audio, video, or image file to the Internet?	(Best, Krueger
(Binary answers added to form	(IS2)	2005)

Construct	Questions	Adapted from
the measure)	Have you personally designed a webpage? (IS3)	
	Have you downloaded a software program to your computer from the Internet? (IS4)	

Table App4.1: Constructs used in the union questionnaire.

3. Survey administration

The web survey was constructed in the Survey Monkey hosting system and opened for responses for a period of two weeks. An email invitation was sent to all bank employees followed by a weekly reminder. No incentives were offered apart from the assurance that substantial participation could help the union effectively reconsider its communication strategy. This followed the advice by Archer (2007) on the importance of convincing respondents about the questionnaire's benefit in order to increase response rates. The invitation was sent to all bank employees because many of them, although not officially members, do engage with the union's social activities and regularly visit its website. In any case, it is an audience the union seeks to establish interactions with. The survey was started by 398 visitors, but due to technical restrictions by the bank's network a number of them were unable to finish (some returned and completed the survey from a home computer).

The study results are based on 229 usable questionnaires. The initial response rate is around 13.3% for the 398 visitors who started the questionnaire which comes to about 16% for members with completed questionnaires (about 75% of respondents were registered members). The relatively low response rate was attributed to: the technical problem with the bank's network, the suspicion that some bank employees have blocked emails from the union (especially from the top management levels) and the lack of tangible incentives for completion.

Low response rates are not uncommon for web surveys (Evans, Mathur 2005), but they don't necessarily suggest bias. As further indicated by Fricker (2008), in web-surveys the sampling methodology is driven by the contact mode, thus de facto making inferences to a

general population difficult. This type of contact suited well the interests of this study since the survey demographics revealed an interesting characteristic. Although most control variables were representative of the bank's average statistics (years working, age and education), the survey was slightly biased in terms of men (about 65% instead of about 50%). Many studies have shown that participation in online political communities is biased by young educated males (e.g. Anduiza et al. 2009). The high participation by young males probably makes the questionnaire representative of the audience that is more likely to engage with the union online. This aspect is elaborated on in the discussion section. It was also evident that the survey attracted younger people (77.3% less than 35 years old) and single people (52.4%); however those two figures do correspond with the bank employees' average age (32 years old) and estimations about average marital status.

4. Survey validation

The results were analysed with the help of the PASW Statistics 18 software. Following Straub et al. (2004), the instrument was assessed for reliability, content, convergent and discriminant validity. To ensure content validity: (1) the questionnaire was pilot tested by 15 union members resulting in small wording changes and (2) well-tested constructs were adapted from previous studies, aware of their previous context of use. Table App4.2 shows the validity measures for latent constructs.

Construct	Number of items	Cronbach's α	Split-half correlation	Range of factor loadings
Union loyalty	5	0.87	0.75	0.70-0.87
Union instrumentality	2	0.72	0.58	0.68-0.85
Willingness to participate	4	0.83	0.70	0.71-0.80
Intensity of Facebook use	4	0.84	0.59	0.76-0.80
Intensity of Facebook groups use	5	0.88	0.79	0.74-0.86
Anticipated benefits from online presence	3	0.68	0.40	0.56-0.86

Table App4.2: Survey construct validation.

Internal consistency was assessed through Cronbach's α and a split-half test with values higher than 0.60 being acceptable for exploratory research (Straub et al. 2004). For construct validity (convergent and discriminant validity), a factor analysis was conducted (Principal Component Analysis - Varimax rotation method with Kaiser normalisation). This analysis revealed that items UI, FB1 and FB2 cross loaded on different constructs above the cut-off value of 0.40. Hence, they were dropped from the analysis. The rest of the items loaded properly on intended constructs without cross-loadings (discriminant validity) and for Eigenvalues above 1 (convergent validity). Consequently, for the items that remain, we can assume that the data coming from the instrument are reliable.

5. Survey results

Question 1 - Internet access and social networking adoption

The first noticeable result was related to an 86% home broadband adoption among questionnaire respondents. This of course exceeds the approximately 40% national and 60% European average (Gartner, 2011). It can probably be attributed to these bank employees being a young audience with sufficient financial status to afford it.

The adoption of social networks by the union audience revealed some clear tendencies. Facebook adoption was high at about 75% of respondents; a figure which dropped to 13% for those who had a profile on Twitter and 12% for LinkedIn users. Interestingly, 76% were not even aware of professional social networks such as LinkedIn, while 78% were aware of Twitter even though they didn't maintain a profile. As far as YouTube is concerned, 25% were infrequent visitors (less than once a week) and 72% regular visitors (more than once a week). T-tests between adopters and non-adopters of those four social networks indicated significant differences in terms of their Internet skills (p<0.05). Furthermore, those who had accounts on Twitter and LinkedIn were better educated. There was no significant age difference between adopters and non-adopters, only between more and less frequent YouTube visitors.

Question 2 - Union communication in personal and working life

The next step in the analysis was to examine differences between those who expressed interest to engage with the union outside their working hours (63%) and those who didn't

(33%). Table App4.3 illustrates the descriptives and t-test results for the two categories, only for the variables found to have significant differences (p<0.05). No significant difference was found in terms of gender, age, marital status, education, Internet skills, Intensity of Facebook and Facebook groups. The difference was significant for those: more loyal to the union (UL), more willing to participate in its activities (WP), more supportive of the unionism idea (UI) and those responding higher on BENEFIT-SN, BENEFIT-WEB and BENEFIT-FB. Beyond statistical significance, the difference seems to be meaningful mainly for willingness to participate (WP).

Variable	Union Communication	Mean	Std. deviation	t value	df	Sig.
111	Work only	3.71	0.66	2.04	169	0.005
UL	Also personal	4.02	0.68	-2.84	109	0.005
111	Work only	3.95	0.75	2.04	218	<0.001
UI	Also personal	4.31	0.60	-3.94	218	<0.001
WD	Work only	2.50	0.78	Г 17	216	<0.001
WP	Also personal	3.12	0.89	-5.17	216	<0.001
BENEFIT-SN	Work only	3.62	0.69	4.26	210	<0.001
BEINEFII-SIN	Also personal	4.04	0.68	-4.26	210	<0.001
BENEFIT-	Work only	3.79	0.63	2 11	200	0.002
WEB	Also personal	4.07	0.63	-3.11	209	0.002
BENEFIT-FB	Work only	3.13	0.92	2.10	206	0.03
	Also personal	3.43	0.94	-2.19	206	0.03

Table App4.3: Significant differences for the union communication variable.

Question 3 - Perceptions towards online communication

The final analysis step was to determine the most important indicators related to the benefit statements for those willing to communicate with the union outside their working hours. Regression models using the socio-demographic factors as independent variables and BENEFIT as the dependent variable failed to predict any significant differences. The rest of the variables resulted in the model summarised in Table App4.4. Although the model is significant (p<0.01), the total variance explained is about 15%. Internet skills are

the most important predictor of all variables, while union instrumentality and intensity of Facebook use were also influential.

Finally, looking at the correlations (Pearson, two-tailed) between the three components of BENEFIT and the other variables shows that Internet skills are the only one correlated with all three of them for p<0.01. Furthermore, anticipated benefits from the union's presence on Facebook are positively correlated with (p<0.05): Facebook or LinkedIn membership, intensity of Facebook use and frequency of YouTube visit.

	BENEFIT		
	В	SE	t
Union loyalty	-0.45	-	-0.367
Willingness to participate	-0.37	-	-0.448
Intensity of Facebook groups use	-0.56	-	-0.654
Intensity of Facebook use	0.198	0.086	2.305*
Union instrumentality	0.293	0.131	2.244*
Internet skills	0.209	0.069	3.025**
Final R square	0.216		
Adjusted R square	0.152		
F	3.361**		

Table App4.4. Regressions predicting anticipated benefits towards the union's online presence (Entry for F<=0.5, unstandardised regression coefficients B, standard error for model predictors SE, t and F values flagged significant at *p<0.05 and **p<0.01).

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