In September 2004 and thanks to a small grant offered by the University of Hull in the United Kingdom, an interdisciplinary research group called “E-government and Local Integration with Sustainability” (ELIS) was set up with colleagues. Its original aim was to look at how we could make e-government more inclusive and participative. At that time, e-government had been defined as an ideal to be achieved in many countries. As such, it was involving the use of technology by citizens and government officers. In the initial meeting we exchanged ideas and possibilities. There was a group of academics from Spain, Venezuela, Poland and the UK, and a council officer (Shaun Nicholson). In one way or another, we have continued working together. Despite geographical and ideological distances have inspired the development of this book which brings the best of both systems-thinking and e-government.

The ELIS group met again in Hull in 2008, and an idea of a collection of chapters to critically assess e-government with systems thinking was put on the table. Alejandro Ochoa and myself took up this challenge and began spreading the word from our bases in UK and Venezuela. As a result, we got the interest of people in several countries and the theme of e-participation. Systems-thinking has become vehicle through which we have travelled together in this journey. It has enabled us to pull contributions together, and to make our voices heard now that we see many democracies trying to emerge whilst others have not fulfilled entirely the aspirations of citizens. As the group of contributors, we want to highlight that whatever conditions surround a particular society, citizens find ways of using technologies to make their voices heard. The book is our way to show how we can move forward any effort to facilitate societal participation with information and communication technologies in mind and acknowledging that technologies are becoming critical in the conduction of society as a whole.

We aim to provide a series of perspectives on how we see the uptake of electronic resources (systems, technologies, websites, open software tools, etc.) in civil societies and the state, and how this can be conceptualised with the help of systems thinking, a collection of ideas and concepts to help us select appropriate methods to pursue societal improvements. In the book we have strove to provide a comprehensive set of perspectives which show how electronically mediated systems of participation could provide answers or even more questions to current issues. We have coined the term e-participation to account for all these perspectives.

Since the original idea was on the table we have seen that what we see as the official face of e-participation (e.g., electronic government or e-government) has spread across the world and continuously every day. New systems are continuously created to facilitate meeting of government requirements by citizens. Despite a degree of sophistication in the technologies being used, as well as in the integration of data sources from government offices or citizen’s mobile devices, we still have not seen other forms empowerment than those pre-determined by design and justified by security and confidentiality concerns. This leads us to think carefully before claiming a positive degree of success in the implementation of electronic government. In the academic quarters related to e-participation (or to e-government as its officially adopted name), it makes us think on how we need to make sense of a diversity of experiences
around the world, and how we can be more explicit about underlying theories used as well on rigorously obtained and useful recommendations for action (Heeks & Bailur, 2007).

A key issue derived from what we believe should be a healthy degree of scepticism in relation to e-participation is that of societal governance, and how as an attribute it is to be exerted by people. To many, modern societies are just surveillance camps where, in the name of democracy the use of technology has spread across areas of intimate life, touching upon our identities, consumption habits and even political affiliations. This is only one possible side of the story of governance. The other is one in which we involve ourselves and the rest of our fellow human beings in the pursuit of better societies for all, which we call improvement. The chapters of the book reflect accounts that might lead us to lean more towards one side or the other.

We leave it to the reader to do so, although the editors share the view that it is important to step aside from official versions of electronic participation and engage in constructing our own one(s). As systems thinkers, we also advocate a critical stance towards the design and implementation of electronic systems that forgets about the social context in which such systems are to be used. The form of this stance can take many avenues, each being helped by different systems-oriented approaches to planning and evaluation.

A GUIDE FOR THE READER

To help the reader we have divided our book in the following main sections:

Section 1. Systemic conceptualizations of e-participation, e-governance, e-government, technology or society. We include here the use of systems ideas to interpret phenomena related to e-participation and to open up new avenues of enquiry into this phenomenon. Córdoba and Ochoa-Arias begin by presenting two perspectives on e-participation (official, unofficial) and to open up the discussion on possibilities. Gregory follows on and discusses the problem of governance using the ideas of autopoiesis and complexity theories. This is a provoking account that sets the tone of systemic discussion in the book and helps us raise awareness about the role of citizens in societies, as well as the use of information systems and technologies in it. Ochoa-Arias then looks at technology and government as being historically conceived phenomena which together reinforce a way of looking at the world as a tool for control and use of resources. With his account, Ochoa-Arias is suggesting alternative interpretations of government. Along similar lines, Córdoba presents a number of patterns to help us understand and deal with e-government with a view that these patterns could be used in different social contexts to guide enquiry and action into electronic government implementations. Finally, Córdoba and Orr present a combination of analytical tools to develop alternative conceptions in relation to local government; it is a combination of the ideas of systems boundary critique and traditions, which generates an interesting synergy to facilitate a deeper degree of critique into local e-government projects.

Section 2. Mediation in the context of e-participation. This section aims to raise awareness about the type(s) of (democratic) citizen-based systems in which uses of technologies emerge, as well as on how other elements of such context can be addressed in the practice of setting up electronically mediated systems. Using systems thinking, Chowdury and Mehdi present a framework to facilitate the implementation of a public health information system in India and its access by illiterate people. Their framework proposes a number of principles which find support in the commitments of critical systems thinking as previously defined by Midgley (1996). The authors also propose an architecture to handle the diversity of requests from users and thus reflect their commitment to promote diversity and social inclusion. Their architecture is in some respects similar to the one proposed by Savvas, Pimenidis and Sideridis in the following chapter. These authors envisage electronic government systems as composed
by different levels. Flexibility of and communication between these levels can help attend a variety of audiences with appropriate information services.

Leaning more towards the organisation of electronic participation systems, Espinosa and Al-Maimani give us an account of a research project in Oman in which they look at the organization of national e-government projects, and how it could be improved using ideas of Beer’s Viable System Model (VSM) and other systems-based methods. They present us with an example of how one of these projects is being improved with the help of other systems techniques including Checkland’s soft systems methodology root definition. The unfolding of complexity in e-government projects can be well managed by VSM according to the authors; an adequate degree of autonomy can be developed. Autonomy is also something that Junqueira, Diniz and Fernandez highlight in their account of the electronic invoice project “Nota Fiscal Electronica” (NF-e) in Brazil. They reflect on this experience using some of the key project areas defined by the project management book of knowledge (PMBOK) to this project. The project, as the authors say, was managed in a somehow informal but impressive way regarding its results. With the experience there are also many challenges ahead, one of them being the development of successful (e.g., autonomy based) working environments between organisations concerned with implementing an electronic service for the public.

In the realm of small and medium enterprises (SMEs), Córdoba and Cegarra present a framework to assess and further develop the provision of electronic services to this type of business. They argue that current provision needs to consider how SMEs acquire and manage knowledge, in a way that new electronic services can be integrated to such processes. The authors draw on the use of systems methodologies to facilitate the development of knowledge processes and with it the improvement of existing services. They also interpret some preliminary results of using ideas from this framework in the Spanish telecommunications industry. Results indicate a number of opportunities to conceive of and implement e-government services to help businesses improve.

The above accounts offer us a stance that makes emphasis on the exploration of the context of electronically mediated participation systems and reflect different ways to go about such exploration. However, and as is often the case, technologies move very dynamically and we have then to consider how best to use their potential and create appropriate environments for their use. With new technological arrays mediating between citizens and governments, new forms of organisation emerge. Electronically mediated systems have spread very rapidly and have contributed to new forms of relation between people, in many cases replacing old ways of relation.

Section 3. Emerging forms of community interaction: Groups and tools. A broader notion of governance that is not (in principle) related to that of formal government helps us to acknowledge the existence of new forms of interaction between people; in those technology is still a mediating element, but people are not pre-determined in how they can use it or constrained by existing forms of organisation. Loureiro-Koechlin begins this section by focusing on the dynamics of online communities and how such communities fulfil certain purposes. She then discusses their features and ways to facilitate their development, and suggests connections between the dynamics of online communities and how such communities are understood as governance in the public sector domain. The notion of community is a powerful one that we have found when looking systematically at e-participation. Such a notion can pervade geographical locations, jobs or sources of expertise and even the political sphere of societies.

Petrizzo and Palm give their account of what it means to politically engage through the Internet. They introduce the notion of e-citizenship to show how people can use the Internet to participate politically in their societies, and how their development of social networks is a key goal as well as a medium to facilitate deliberation. Their chapter also brings a notion of proactive citizenship which in our view is holistic and can inform the improvement of relations between citizens and their government institutions.
In conjunction with such notions of ‘e’ citizenship and governance, governments are also reviewing their own governance practices. This is shown by Dávila and Reyes’ chapter. In it, they propose a form of *articulated planning* for government affairs in Venezuela to be best developed through information and communications technology (ICT) use. The authors portray an example of how their proposal works in practice, showing also how citizens were engaged from the grassroots, and how they interacted with different government organisations with friendly and simple to use ICT tools. The new configurations of people and technology do not have to be sophisticated but meaningful and easy to ‘use’. At the heart of their chapter Davila and Reyes aim to rescue some ideas of *socialism* which they see appropriate to help citizens face contingencies and share their knowledge. Their proposal challenges what we see as a dominant view of e-government which aims to gradually transform government institutions which often results in missed opportunities.

**Section 4. E-configurations, citizens and the state.** Moreover, a form of ‘gradual change’ to e-participation does not sit easily when governments have to accommodate their offline and online operations, in other words the ‘old’ and the ‘new’. Criado begins this section by providing a thorough and thoughtful account of the development of e-government in the Spanish “comunidades autonomas” under the lenses of administrative modernization. This is an account which shows the multifarious nature of e-government which requires equally multi dimensional perspectives to study it in its richness, as it generates dynamic assemblages and arrays of technology, people and institutions. Two further chapters reinforce this point. Firstly, Monteverde shows this more clearly by reviewing the development of e-government in Uruguay. In his chapter and using the ideas of Kindgon he shows how different ‘streams’ (political, technological, etc.) historically converge into *windows of opportunity* to give possibilities for the improvement of participation. Monteverde concludes by suggesting that the framework developed can help an exploration of conditions surrounding e-government prior to its implementation. The framework makes it clear that within what appears to be ‘anarchical’ situations, there is scope to act. Secondly, Barbosa et al show the development of e-government in Brazil, and account for a number of factors which usually do not belong to the technological domain but which contribute to create a path through which influences the adoption of e-government policies and plans. These factors range from previous projects (the millennium bug) to leadership of key individuals in taking ideas forward. These factors generate conditions and with them possibilities for action.

In a similar way to a possibility of ‘scoping to act’ on e-participation that is derived from the above accounts, Kromidha and Córdoba review the unfolding of e-government in Albania, making emphasis on the importance of evaluating e-government projects in a non-traditional way. Their discussion provides an overview of dominant e-government evaluation approaches (e.g., cost-benefit based), and the challenges ahead if alternative evaluation approaches are adopted. The case of Albania shows a number of possibilities to make use of existing e-government configurations through e-government evaluation. Speaking also of different configurations, in their contribution Araya, Barria and Campos show how the use of Internet based technologies has pervaded the political arena in Chile. There is a variety of technologies being used within and outside websites of political parties. Interestingly, these and other communities created around the use of technologies for political purposes can provide much more open spaces for citizens. The authors also make the point that technologies can help people to operate ‘outside’ traditional systems. This confirms what many other book contributors have raised and what intends to be a key message of this book: *the phenomena of e-participation goes beyond technology use, and invites us to re-consider how we engage with it.*

To make this point more clear and conclude our book, Ochoa-Arias and Petrizzo disclose a meaning of citizenship by addressing some of the issues confronted when e-democracy and e-management are conceived to be closely related in spite of analytical efforts to keep both fields separated. This opens
up a number of possibilities for the future of e-participation, and the authors reformulate an ‘official’ (stage-based) model of e-government within a new conception of citizenship.

With these insights, we reconsider what has been said in relation to e-government research by Heeks and Bailur (2007). They aim to enrich the discussion by proposing that e-government research should be more explicit about the theories used, with new and innovative methods to collect data, and with clearer implications for action from studies on this area. They also advocate adopting a more inter-disciplinary approach to research, and to value existing research in e-government as an emerging area. We think that this book contributes to enrich theoretically and practically informed discussion and also to provide a ‘system’ of accounts on e-participation. By doing the latter and by showing how systems thinking can inform practice and reflection, the book can help researchers and readers to review their own assumptions in research or intervention; to be critical about e-participation phenomena; and to appreciate the complexities derived from the use of information and communication technologies in this domain. The door remains open to continue engaging with e-participation and to pursue societal improvements with the help of information and communication technologies.

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