E-merging for E-Government

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Citizen Orientation, Policy Making, Local Governance and ICT Use

Edited by

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Tunç Durmuş Medeni and Özkan Dalbay

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PREFACE

In Turkey, Information Society Strategy and Action Plan I (2006-2010) and II (2015-2018) prepared by Ministry of Development (former State Planning Organization) paves the way for knowledge-based and ICT-supported society Knowledge Society. One of the main initiatives of the First strategy and action plan was the diffusion and spread of e-Government services, for which specific public events were organized, complementing also the official launch of Turkish e-Government portal and gateway, www.türkiye.gov.tr, in 2008.

The first of these events was a National e-Government conference, co-organized by TÜRKSAT and Public Research Foundation (Kamu Araştırmaları Vakfı, KAV). Held in Ankara in November 2008, this conference underlined the perspectives of interoperability and collaboration, as well as organizational and operational capacity development. Following this national conference, international conferences on e-Government and e-Governance were organized in Ankara in March 2009, and in Antalya in March 2010 by TÜRKSAT and Social Sciences Research Society (SoSReS, Sosyal Bilimler Araştırma Derneği, SoBiAD). Afterwards, these international conferences continued with an updated focus on e-Government and e-Business, organized in İzmir consecutively in April 2011, 2012 and 2013 by SoSReS. During these years, this conference series has become a platform that brings together practitioners and academicians working on e-Government and related fields. Unfortunately, due to certain administrative impediments and health reasons, the conference series was halted, somehow coinciding with the gap between the aftermath of the first and preparation for the second Strategy and Action Plan.

During this time, although no new conference was organized, the dissemination efforts were channeled into the establishment of an international open access journal of e-Business and E-Government studies. While this journal provides an archive of articles as part of different volumes between 2009 and 2012, the proceedings of the conferences between 2008 and 2010 were also published as hard copy books. Most of these hard copies, which included original works from distinguished experts have been unfortunately lost due to an archive cleaning that went

terribly wrong, and only a handful of these copies remain in certain lucky individuals or institutions.

Now this book, published by Cambridge Scholars (after an inevitable 1-1.5 year delay due to similar impediments mentioned above), complements these available resources by a selection of articles that were not previously available via open access. We believe this resulting selection that is very much valuable for us, the co-editors, would be also as informative and interesting for the readers.

The book brings together selected works of internationally-reputed academicians and practitioners, merging different emerging perspectives on e-Government that signify Citizen Orientation, Policy Making, Local Governance and ICT Use, among other issues and approaches:

- Ch.1 discusses limitations of what is desired and expected from e-government, electronic state and information society, benefiting from illustrative examples and underlined characteristics of technology and government.
- Ch.2 brings up the cases of T.R.N.C. and Turkey, using the concepts related with institutional isomorphism that can lead to institutions' adopting similar strategies and structures.
- Ch. 3 aims to address the significant question of whether e-Government can promote informed citizenship and civic engagement, based upon a study of local government websites in the U.S.A.
- Ch. 4 discusses current challenges and future prospects with respect to ICT-enabled public service for policy modelling and governance in Europe.
- Ch. 5 introduces an e-voting paradox, stressing the influence of agency on diffusion of innovation in U.K., and suggesting a gatekeeper model of decision-making applicable to Election Officers.
- Ch. 6 focuses on open source software and presents the reasons and restraints for its adoption by public administrations, as well as possible international scenarios.
- Ch. 7 highlights the strategic success factors and lessons learned from practice for the success of e-Government and Electronic Service Delivery.
- Finally, Ch. 8 presents the popular cloud computing case with its promises and challenges, suggesting a migration strategy for the public sector at global scale.

Starting at the national level and then stepping up to the international level, these conferences have provided a common ground for national and international e-Government researchers that represent various government, business and university perspectives. In various accounts, we recall that this dissemination and networking ground has been appreciated by the past contributors and participants.

We would like to thank Prof. C. Can AKTAN for his endless support and encouragement, without which this book publication initiative would have never started and Cambridge Scholars for their commitment and trust, without which this book project would have never been completed. We are also humbly grateful for all the contributions of SosReS, TÜRKSAT and KAV in order to organize these conference series for 6 consecutive years, by which this publication endeavor was originally triggered.

Finally, we sincerely hope this book will further the e-Government dissemination and diffusion efforts revitalized with the new Information Society Strategy and Action Plan. We also hope that the readers of this book will feel the same excitement that was felt by these conference series organizers and editors.

Ankara, Turkey, 15.03.2016
Tunç Durmuş Medeni & İhsan Tolga Medeni

CHAPTER ONE

O(VER)GOVERNMENT: E-GOVERNMENT AND LIMITS OF THE DESIRABLE

FRANK BENNISTER, DIANA WILSON

Abstract

Disagreement about the role of the state and its extent in democratic societies is a long-standing characteristic of the political landscape. One aspect of this is the debate over the intervention by government in the minutiae of citizens' day to day lives. A question that has not yet been much discussed is the longer term impact of information technology on both the scope and the scale of such state involvement in, and regulation of, the lives of citizens. Significant issues in this debate include privacy, citizen autonomy, decentralisation, devolution and potential threats that technology may enable, not just to democratic freedom, but also to the health of society. Technology is not value-free and profound debate on future characteristics of electronic state, and information society that it serves is required.

Keywords: *e-government, governance, citizen autonomy, public management.*

1. Introduction

A recent article in the Harvard Business Review (McCreary 2008) opened with the statement: "*Privacy as we know it is virtually gone*". The article in question was about privacy in general, not just the impact on the privacy of the state's increasing appetite for personal data, but the message it conveyed was a simple one. As societies become more dependent on electronic devices and communications and increasingly use the Internet

and networks generally for personal communication and for transactions with business and government, the number of people and organisations holding information about individual consumers/citizens and the amount that they know about each citizen increases in parallel.

Privacy is a subject of wide discussion and debate in academic and public spheres (OJEC, 1995; Agre and Rotenberg, 1997; Phelps et al, 2000; Dhillon and Moores, 2001), but it is only one of the many aspects of contemporary society that are subtly and sometimes not so subtly affected by information and communications technology (ICT). While most of these developments are positive; some are alarming. This paper is concerned with namely current and potential use of ICT in government and governance which may lead to undesirable outcomes, either at individual or societal level. With the purpose of exploring this theme, the impact of a number of current and potential technological developments will be examined through two related questions about whether all developments in e-government are necessarily good for citizens and for society or not. Such questions as removing 'e-'doubtlessly ancient questions, but ICT puts emphasis on them. It is self -evident that some e-government developments, including those which are misconceived or poorly designed may not be good for the citizens, society, the polity or in particular, the taxpayer. This paper is not concerned with such failures, but rather with applications and developments in e-government which are introduced for seemingly good reasons and which achieve (or mostly achieve) their intended technical objectives. It is an attempt to explore the challenging question of whether the capability to micromanage society and state ICT will deliver over the next couple of decades may, in certain circumstances, lead to a society which is, in some sense, unhealthy.

It will be emphasized in this paper that over- or *o-Government* arises from the confluence of several factors. These include the natural tendency of new technologies to give rise to augmenting complexity in behaviour and inclination of public services and provision of public goods and services to expand. There has always been a political tension between controlling state and empowering state. The difference is that technology accelerating prompt the government to use Hood's (1984) terminology, a whole new range of detectors and effectors. It is the limit of these new tools of government that need to be set.

In addressing this topic, it is difficult to avoid taking a normative, if not an outright ideological stance. Nonetheless, an attempt will be made to keep a

balanced and objective view whilst simultaneously asking some provocative questions and specifically:

- Are there any potential negative effects of e-government *per se*?
- What are the risks of current and potential deployment of ICT in government and public administration for individuals and society
- In an electronic age, how should the society balance the benefits of the social goods and services delivered by public administration against the negative effects of excessive administration?
- What mechanisms might be established to control and manage the evolution of the developments in e-government?

In what follows, various well-established trends and phenomena, any one of which might not be a cause of concern in itself are considered. However, just as otherwise harmless chemicals can be mixed to make dangerous explosives, so a combination of otherwise innocuous social and technical trends may lead to unexpected outcomes. To put what follows in context, it is useful to start with a couple of related examples: the first might be a reality; while the second might be slightly more futuristic.

2. Two Illustrative Examples

2.1 Example 1: Vehicle Control

Today, most citizens in developed countries can insure and tax their car on-line. However, a police officer or traffic warden aspiring to check if a car holds a current tax certificate often still needs to look at a certificate on the windscreen. As technology has become more sophisticated, other options for checking motorists' compliance with the law are coming into use. A wireless portable device will enable an officer to check whether the car has been taxed or not. Closed circuit television (CCTV) cameras can read the number plates of cars and report untaxed and/or uninsured cars on the road illegally. In both cases, a fine can be automatically issued to the car's registered owner. A future, almost inevitable, refinement will be performed to install a radio frequency identifier (RFID) chip in each car which will flag to a sensor (say) in the road that the car is not taxed. The same technology can be used for road pricing. This has been already done extensively in Singapore (Phang and Toh, 2004) and to a more limited extent in other countries. With such technology, it is possible (in theory) to toll all roads and have the appropriate charge directly debited from the driver's bank account or credit card. Cars without RFID chip can be

identified by CCTV. Apart from being a convenient form of revenue collection, this also facilitates selective road pricing as a means of achieving policy goals such as efficient traffic management or reduction of carbon emissions. Use of current technology could extend to check vehicle speeds or axle weights and tachographs on commercial vehicles. It is not a large jump to use such technology to police a variety of other motoring offences.

The above scenario is based on currently available technologies. Almost (though not quite) all of the elements in it can be found in various countries and cities throughout the world. This type of application has many qualities contributing to public value. It is worth itemising some of these. First, it contributes to public safety by reducing road speeds. Secondly, it reduces the rate of accidents and injuries, thus contributing to economic output and reducing public expenditure. Thirdly, it leads to greater compliance with the law by increasing detection rates. Fourthly, it saves citizens' time by improving traffic flows contributes to national productivity and reduces carbon footprint. Finally, it enables economical and efficient use of those resources and contributes to equity by charging the cost of public resources to individuals using them.

Furthermore, this can all be automated keeping costs to a small fraction of the value of the benefits and therefore creates good value for money. Opposing to such a development would seem akin to being against motherhood and apple pie. And yet some citizens may feel a vague sense of unease about, or dislike such a system (Foley, 2008). Does such unease have any rational basis?

2.2 Example 2: Health Monitoring

If some citizens are uncomfortable, possibilities of telehealth should be considered. Emerging developments in technology open up the vista of citizens wearing on-line sensors which can monitor various medical conditions (The Economist, 2008). Some scholars are convinced this is the way of the future. Warwick (2003, p131) argues that:

> "*From a cybernetics point of view, the boundaries between humans and machines become almost inconsequential.*"

Such systems do not even have to be physically connected. With modern sensor technology, it is possible to detect body rhythms from a metre or so (Jurik and Weaver, 2008). Such sensors could be linked via a wireless or

mobile phone connection to a local medical practice or hospital. Again, it will be noted that this arrangement has many potential social and individual benefits. However, just as a vehicle tracking technology can track the location of private cars, health monitoring technology can be used to track the location of individual citizens. This is a much more fundamental form of social monitoring than simply knowing the location of any car. Many citizens would be unsatisfied with such a prospect. But from a logical perspective, it is only an extension of tracking vehicles and it is possible to provide a comparable justification in terms of public value. With these two examples in mind, some important characteristics of technology and government can be easily examined.

3. Some Characteristics of Technology and Government

3.1 The Dehumanising Effect of Technology

Automated control of traffic offers several potential public benefits itemised in section 2.1 above. However, this type of application of technology is underlined to have various aspects to justify some reflection. In building such systems, society embeds its requirements, accepted modes of behaviour and its values as expressed through its laws, rules and regulations in machine code. Once the system is programmed, it can execute these rules impartially and efficiently. In effect, society has transferred some element of control of how humans behave towards the machine and, in a sense, the control of private transport has become dehumanised. This may be one explanation for unease. Another may arise from the violation of privacy which inevitably accompanies this type of technology. A third, more subtle, concern may be loss of autonomy. Cars represent a form of personal freedom (Rienstra and Rietveld, 1996; Gärling, 2002). People often choose them when there are reasonable public transport alternatives and do so for a variety of reasons (Van Vugt *et al*, 2006). When control of one's car becomes subject to detailed observation, surveillance and control, even by a machine, a part of the pleasure in driving may disappear.

3.2 Technology is not Value Free

Technology is not value free or value neutral (Winner, 1988, 1993; Loader *et al*, 2001; Chakrapani and Ekbia, 2004). Winner (1993) argues that there is a need for a rational debate on how far humanity should endorse technology. For Bunge (1979, cited in Scharff and Dusek, 2003, p177),

technology's values are predominantly pragmatic; technology is a means to an (practical) end. This is also part of Heidegger's view. But Heidegger (1977) also states that technology is a human activity, as well and belongs together with means-end rationality. He posits that, if it is a human activity, then it 'reveals' something about us. Habermas (1987) goes further and in his Theory of Communicative Action, believes that technical rationality or instrumental reasoning has, over hundreds of years, come to dominate the social/political sphere to the detriment of an emancipatory rationality (the driver of the modern project as set out by Rousseau (1968)). This can be seen in the use of technology as evidence of a government's 'modernity' and 'progress'. An example of this phenomenon is the large number of e-government benchmarks and the publicity given to them.

3.3 The Impact of Technology Lag

Technological changes often take quite a long time to emerge (Ogburn 1964; Doraszelski 2004). This phenomenon is called as technology lag. Examples from the horse drawn plough to the electric motor demonstrate that the impact of a new technology can not only take long time to become evident, but also that impact is frequently cumulative and often unforeseeable at the time of invention or discovery. The electric motor was invented by Faraday in 1821. It is fairly certain that at the time nobody would have foreseen, it would result in machines such as vacuum cleaners or DVD players. Strassmann (1985) argued that it would take many years, even several decades, before the full impacts of computer technologies were fully perceived.

3.4 The Law of Unintended Consequences

Related to the preceding point , the problem is that even if technology decisions often seem sensible at the beginning, they can, in retrospect, turn out to have been unfortunate. One manifestation of this is the so-called law of unintended consequences, where, for good or ill, the impact of a new technology is not anticipated. The Economist (2002. p61) made this point when it wrote:

> *"The two most successful new telecommunications technologies of the past decade - Internet access on fixed networks, and text messaging on mobile networks - were both unexpected breakthroughs that emerged in spite of, rather than because of, the industry's best efforts."*

To take a more alarming example, it is unlikely that those in DARPA who designed the original Internet as a method of protecting military communications against pre-emptive attack foresaw that further technology could itself be used against an entire nation as it was about to occur in Estonia in 2007 (Landler and Markoff, 2007).

3.5 Technology Encroachment

Technology encroachment refers to the tendency of technology to permeate even where it is not necessarily helpful or beneficial, i.e. complexity increases to utilise the technology available (Bannister 1984). As new technologies are developed, people and/or organisations and/or societies will generally find an area of use for them and this use often involves increasing the complexity of the way things are done or people's way of life. This can be seen in almost any modern appliance from mobile phones to washing machines and leads to what Schwartz (2005) calls 'the paradox of choice'. The Apple iPhone does not have a printed manual. Instead the user must access it on-line or download it from the Web, all 130 pages of it[1]. This is not to say that all technologies succeed or are accepted (Rogers, 2003), but many advances in technology lead to increasing complexity and sometimes radical changes in, social behaviour. This follows a basic tenet of systems theory and cybernetics that a characteristics of systems is that they all grow in complexity (Arthur 1956; Ashby 1993).

3.6 The Law of Reverse Entropy

In accordance with this, the scale and reach of government tends to extend over time. There are various ways of measuring this. A simple one is to consider government spending as a percentage of gross national product. Another is to measure the volume of laws and regulations on national statute books with which individuals and businesses must comply. A third one is to measure the ever widening range of government services. Finally, one can measure the number of people employed in public sector. Sometimes, some of these metrics shrink for a few years, but for much of the past millennium, the size of the public sector has steadily risen in most developed countries (Higgs, 2006; Garrett and Rhine 2006; Ismael Sanz and Velázqueza, 2007). Even where the size of the public sector payroll has been static or has receded over the past 30 years, technology has

[1] http://manuals.info.apple.com/en/iphone_user_guide.pdf

enabled the public sector to expand the range of services it provides and the degree of regulation and control it can exercise without a corresponding increase in public sector numbers.

3.7 Scope Creep

Scope creep occurs when services are extended beyond their original boundaries either as a matter of deliberate policy or as a side effect of technology encroachment. Scope creep occurs at the margins of existing systems. Systems simply advance, as features are added. A good example is the Irish government free travel pass. In Ireland, people over the age of 65 are entitled to free travel on all public transport. Such people currently carry a paper identity card which wears out and is easy to forge. The government proposed replacing this with a plastic card with a chip. When the call for tender was issued, it sought a chip with the capacity to store a wide range of citizen data, most of which had nothing to do with identifying senior citizens for free public transport. This led many people to ask what the real agenda was in issuing such cards? Technology encroachment means that if and when these cards are issued, governments will find reasons for using them for more and more services and the scope of the card, originally designed for managing use of free transport, will expand to take in other functions such as analysing citizens' use of such transport, tracking movements or extending into other social services, each step rationalised on the basis that it can be done.

3.8 The Ratchet Effect

The ratchet effect occurs when governments react to extreme events by extending regulation and accruing further powers. Examples of this range from terrorist outrages to outbreaks of food poisoning. This is not necessarily a bad thing; much good regulation and law is a consequence of responses to past public disasters and policy failures. However, there is also a tendency to over react. Governments have long taken advantage of transient public anger or panic to extend their powers. e-Government greatly expands both the capacity of governments to take action and widens the range of actions that they can take. Twenty years ago, a 'Total Awareness Program" would have been logistically infeasible. The Jamie Bulger case (Sharatt, 1993) in the UK led to a demand for even more CCTV cameras in public places. The Bulger case is particularly interesting in that the responsibility of the parents for the tragedy becomes lost in the

call for better surveillance as if the state can cover for every mistake a citizen makes.

3.9 The Gravitational Pull of Data Centralisation

There is a strong business and technical case for single instances of public data. The need for this is seen everywhere in the rhetoric of e-government. The ideals of e-government include integrated government, seamless systems, one-stop-shops and so on. Why should citizens have to provide the same information for government time and time again? Why should they have to go from one agency to another in order to complete a single task? While it may make sense to have government data logically dispersed, it does not make sense for those data to be physically dispersed. Unfortunately, there is a tendency with such a concentration of information, to result in a concentration of power. Although many scholars had expected ICT to lead to power dispersal in government, in two studies, the second of which was in 2006, Kramer and King (1976, 2006) found little evidence for this. In fact, the evidence tended to suggest that the tendency, if any, was in the opposite direction, i.e. towards greater centralisation and concentration of power.

3.10 Accelerating Technological Capability

Even if all technological developments tended to cease tomorrow morning, continued deployment of existing technologies would continue to create troubling questions. But technology is not standing still and any analysis of this topic needs to consider possible developments in ICT. For the foreseeable future, data storage capacity will keep increasing. Increases in communications bandwidth will continue and the possibilities for miniaturisation are by no means exhausted. RFID is still in its early stages. It is possible to say that by 2020, machine recognition capabilities will match those of humans. Data mining techniques continue to improve, as search engines do and as people's lives become ever more dependent on electronics, the ability to track citizens and monitor their lives 24 hours a day will become a real possibility. There is not necessarily anything sinister about this and many of these technologies are likely to be deployed in the name of public service, but the result of such a development would be that a suitably equipped government . Itcould have something equivalent to Harry Potter's marauder's map (Rowling, 2000), i.e. a map of a city, or even a country, which would show the location of any citizen any given time.

3.11 Technical Rationality

Technical rationality runs through most of the trends and tendencies discussed above. Mumford (1967) argues that as more systems become more 'technicised', they become inherently more complex. Technical rationality is closely linked to the dehumanisation effect discussed in section 3.1. The importance of technical rationality in thinking about e-government is evidenced by the continuing promotion of e-government as a vector of efficiency and as a way of reducing public sector costs. As part of the Irish government's reaction to a disastrous deterioration in its finances in 2008, one of the solutions proposed was more use of e-government. There are absolutely other values delivered by e-government, but value for money continues to dominate political rhetoric. The impact of such technological and administrative rationalisations needs to be balanced against wider social and human needs. Feenberg (1992) summarises the problem thus:

> "*The economic significance of technical change often pales beside its wider human implications in framing a way of life. In such cases, regulation defines the cultural framework of the economy; it is not an act in the economy*".

4. Reflections on E-Government and Citizen Autonomy

The above trends, the potential problems they present and some signs of their occurrence are summarised in Table 1.

The cumulative impact of these factors and trends risks leading to excess government. o-Government is where the government and management of the public sphere goes beyond what citizens aspire or what is good for society. There are many aspects of the above picture with potential concern. Two are concerned with privacy and the risk of abuse of technology by the state. These have been much discussed elsewhere (see, for example, Bannister 2005). This section will focus on two less discussed aspects namely citizen autonomy and the robust society.

In an ideal democratic state, o-government should not occur. Citizens determine the degree of government intervention and involvement they desire. In practice o-government results from the conjunction of several factors which tend to be outside the ambit of normal democratic controls either because they are not visible, or because the larger picture is lost in a wealth of incremental change. Debate about the appropriate role of the

Table 1. Summary of Factors

Number	Phenomenon	Potential Impact/Risk	Sign(s) of Occurrence
1	Dehumanisation of systems	Alienation of citizens from the state/administration.	Number not name; inability to get through to a 'real person'; coercion into using 'one' system;
2	Technology is not value free	The values embedded in technology become the values imposed on society.	Trust the system; enforced compliance; technocrats know best; 'cui bono?" not asked.
3	Technology lag	The long term impact of a technology is not fully understood until after unexpected change occurs.	Retrofitting of laws or procedures; Timeframe for decision making contracted.
4	Law of unintended consequences	Unexpected developments in government and society which are difficult to reverse.	Withdrawal from democratic process; retrofitting of regulation; *post hoc* justification.
5	Technology encroachment	The use of technologies in a ways that is not necessarily beneficial for society or citizens.	CCTV proliferation; Governments seeking unnecessary information; Over complication.
6	The law of reverse entropy	Increased micro management of public life with reduction of citizen autonomy and social robustness	Proliferation of regulation; increases use of sensors and electronic methods of monitoring aspects of citizen behaviour.

Number	Phenomenon	Potential Impact/Risk	Sign(s) of Occurrence
7	Scope creep	Extension by stealth of the scope of government control beyond where citizens would otherwise choose.	Manipulation of 'old' legislation to support 'new' system; Unpleasant surprises.
8	The ratchet effect	Solutions are installed in response to crises without due consideration of longer term or wider implications	Keeping of mobile phone or DNA records; failure to rescind temporary legislation.
9	Centralisation	Rationality of doing more at the centre because it is efficient to do so leads to decrease in local autonomy.	Rationalisation and standardisation; replacement of physical public services by electronic ones in remote areas;
10	Technology evolution	Takeover of ever wider range of human activities by machines. Much greater degree of micro control.	Law and societal norms constantly chasing technology; new ethical problems and dilemmas.
11	Technical rationality	Continued focus on efficiency at the expense of humanity. De-diversification.	Standardisation; specialized (rather than ideal) bureaucracy protected from accountability;

state has been observed not to be a new one. Governments have been expanding their scope and reaching for centuries (though this process is not monotonic) and there has long been a debate between those who would scale back the state and those who would expand it. The difference today is that in an electronic age, this debate has become much more acute for a number of reasons including the speed of technology development, technology encroachment and scope creep. In an industrial context, the presence of such factors lead to what is sometimes called 'over-engineering', i.e. making a product more complicated than it needs to be and/or with more features than are necessary. The same process can

happen in government. As the possibilities expand, there is a technical and political rationale that takes the use of technology beyond what is desirable. The result is what might be described as an over engineered public administration.

Three questions need to be considered. The first is how much government intrusion will its citizens accept? Consider DNA profiling. If every citizen's DNA was held on a central database and available to the police, it would greatly speed up detection in many forms of crime, increase detection rates, probably reduce crime rates and save the taxpayer money. If such records were also available to the health service, it could use them either to warn individual citizens about their genetic dispositions to certain types of illness or possibly for epidemiological planning. Thus, it could improve the general health of the population, go ahead for a more efficient health strategy and, again, save the taxpayer money. In both cases there is an ineluctable technical and administrative logic. But even making a heroic assumption that such records could be kept secure and accessible only to authorised personnel and putting aside a whole host of other concerns about misuse of such data, there is a presumption here that the state has a right to know things about the citizen that the citizen herself does not know.

The second question is about to what extent social control is good for society. Is the type of control described in the two examples in section two more effective in leading to better outcomes for society in general? These controls are not always beneficial as illustrated by work of the Dutch engineer Hans Monderman. Monderman's concept of 'shared space' is based on the theory that regulating traffic with lights, STOP signs and so on leads the people to take less responsibility for their own actions while walking or driving in towns and cities. By removing all of the traffic calming and control systems in Dutch towns, he showed that accident rates fell dramatically. Speaking to the New York Times in 2005 (Lyall, 2005), Monderman summarised his philosophy thus:

> "*Who has the right of way?" he asked rhetorically. "I don't care. People here have to find their own way, negotiate for themselves, use their own brains*."

The idea that people should "use their own brains" runs against much of the logic of modern technology driven governance. In the presence of controls, speed limits, stop signs, chicanes, etc., drivers' behaviour is orientated towards complying with the rules. When these props are removed, potentially dangerous situations are not signalled and drivers

realize they have to pay much greater attention to avoiding dangers. Monderman's point is that when citizens are forced to take over responsibility for their own safety, they will do so. When that responsibility is in whole or part taken on by the state, citizens cede this and become less careful. As governance becomes more pervasive and as society takes more control of the lives and activities of its own members by imposing more rules and micromanaging public behaviour, there is a material risk that people will increasingly tend to abdicate responsibility for their own lives and alter their behaviour to that of complying with the rules rather than thinking for themselves.

The third question is raised implicitly by Etzioni (1996, p4):

> *"…a good society requires a carefully maintained equilibrium of order and autonomy, rather than the 'maximisation' of either".*

How is such an equilibrium to be attained? An interesting approach is proposed by Ranerup (2007). Ranerup presents the problem in terms of symmetry and actor-network theory. She argues that the problem with much e-government is that it fails to balance the human and technological elements. She cites an example of a pension advisory decision support system in Sweden seeking to optimise the balance between what the machine and the citizen can contribute to the decision making process. She proposes the concept of symmetry between technology and citizen and the hybridisation of processes. Symmetry is probably the wrong word in this context; a better expression would be achieving the correct balance between the spheres of the state and its technology and the citizen. The progressive erosion of freedom and autonomy in the modern state is not solely a question of security against terrorist threats. It is a continual encroachment, often driven by optimum intentions, and in particular the motive to create a risk free society. Unfortunately, there is not a risk free society. Attempts to create one only create other risks. Societies need to have a long term vision of how they want to be, of the balance between individual freedom, personal responsibility and citizen autonomy and risks to society and citizens that inevitably arise from these. Mechanisms for monitoring, controlling and determining how far technology should be deployed are required.. In the words of Langdon Winner (1993, p374):

> "*One must move on to offer coherent arguments about which ends, principles and conditions deserve not only our attention, but also our commitment. At that point one ceases interpreting interpretations of interpretations and, for better or worse, takes a stand on choices to develop and/or limit the technologies available to mankind*".

5. Conclusion

e-Government is, and will remain, a powerful tool in the long, slow march towards better government and governance. Awareness should be raised about impacts of technology lest society sleep-walk into a dystopian future. Collectively, existing and emerging technologies could lead to some quite undesirable effects including a society that increasingly depends on the machine to function and erosion of self-reliance and personal responsibility of citizens for their own lives. There is, therefore, a continuing need to monitor technology and how governments use it. There are plenty of ways to do this. A greater emphasis on transparency and on the decentralisation of power; the greater use of disclosure as a means of enforcement (Meijer and Homburg, 2008) and above all, a respect for the right of the individual citizen to make mistakes and an acceptance that risks to him/herself and others is an inherent feature of the human condition.

Citizen autonomy is important and people have to be allowed to take their own decisions, take their own risks and make their own mistakes, provided those risks and mistakes do not create excessive hazard for their fellow citizens. This paper has argued the case for a wider public discourse on the degree of control that society should be allowed to execute over the life of an individual citizen. If this discourse does not take place and is not followed by proactive attempts to control technology, then it is likely that technology will increasingly control society. That may be what citizens want, but if so, it should be an active choice, not the result of being asleep at the wheel.

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CHAPTER TWO

EXEMPLIFICATION OF INSTITUTIONAL ISOMORPHISM BETWEEN THE TRNC AND TURKEY FOR E-GOVERNMENT STRATEGY, USING "WEB ARCHIVE": WHAT ENCOURAGES SPONTANEOUS ISOMORPHISM?

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Abstract

This study aims at reviewing the Turkish Republic of Northern Cyprus' (TRNC) e-government studies by considering Turkey's e-government best practices based on the institutional isomorphism theory with its three mechanisms, namely coercive isomorphism, mimetic processes, and normative pressures. Turkey has a lot of experience with the best practices and have successful applications with e-government projects, especially legal issues, technological systems, local and governmental authorities. Thus, the TRNC should make use of this opportunity by utilizing these practices and making its own strategic plan based on the national information policy. The requirements and adaptability points of e-government issues between the countries will be discussed in this paper. Consequently, neither mimetic, normative, nor coercive isomorphism is enough to be modeled by the TRNC e-government efforts. Instead, the concept of "spontaneous isomorphism" is created in the study and discussed as an alternative institutional isomorphism between the TRNC and Turkey based on the Best Practices e-Government Models. Finally