Has the "e-" given Government the citizen trust it longed for?

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E-government is a relatively new term in Information Systems but has still raised serious debate on whether it has lived up to expectations in obtaining the citizen trust it promised. Being generally accepted that, in order to achieve trust, transparency and interactivity are absolute necessities, how these can effectively be achieved and accepted by both bureaucrats and citizens has become the starting point of much research. This literature review shall endeavour to assess the work done by academics on analyzing the issue of trust through transparency and interactivity and describe the scene of the current debate on the subject.

1 Introduction

Ever since governments realized the highly positive effects e-Commerce had on businesses around the world, they have been trying to achieve analogous results through the implementation of e-Government (Pina et al, 2007). As the literature states, this is a product of the realization that citizen trust was declining; as observed through various sources, such as opinion polls and increasingly low election turnout (Gil-Garcia, 2005). The demand for a more electronically-driven government also comes from the new internet-driven global order with Danzinger et al (2007) stating that 80% of the public questioned found the Internet as a vital aspect of their lives. All of the reasons mentioned, in conjunction with the fact that bureaucratic institutions have become much more complex and overloaded, resulted in the adoption of e-Government (Cordella, 2007; Gil-Garcia, 2005; Heeks, 2005).

This essay shall endeavour to assess the literature analyzing the issue of trust through transparency and interactivity and whether e-Government has accomplished its difficult task of improving the internal relations of Public Administration (PA); an issue relatively complicated to measure (Cordella, 2007; Ramaswamy and Selian, 2007) especially due to the relatively small amount of theoretical research on it. Being a fairly new topic in Information Systems (IS), the various authors mostly base upon case studies conducted over the previous decade, with some claiming that e-Governance is still improving and that current failures might not necessarily be total and final (Heeks, 2005; Mossberger and Tolbert, 2006; Pina et al, 2007; West, 2004); with Cordella (2007) also arguing that what needs to be done is a change of strategy by keeping current bureaucratic structures as the basis of the electronic implementation. Various frameworks and models have been developed by scholars in order for e-Government to reach its potential; which has been characterized as being "far from straightforward nevertheless achievable" probably due to the fact that the aimed e-democracy is usually "simpler to describe than it is to realize" (Chadwick, 2003).

This literature review will be based on some core issues that need to be considered for the successful adoption of e-Government, including the relationship between technology and bureaucracy; the complexity of government bodies; the importance and interdependence of transparency and interactivity with citizens; the barriers arising due to the ad hoc politics between bureaucrats, the digital divide and security issues.

In the discussion, the various methodologies used by authors to study Information Communication Technologies (ICTs) in government are assessed and specifically how they collect data to reach their conclusions. This is followed by suggestions on what improvements should be made in research for more insightful results to be gained. The essay will conclude with a recap on what has been reviewed and an outline of impressions on the literature.

2 E-Government, its adoption and trust

2.1 E-Government

As far as defining what e-Government actually is there seems to be a general consensus within literature that, through the usage of ICTs combined with organizational change, the relations of PA and stakeholders (whether internal or external) are supported, service delivery is enhanced and the actual decision-making process is directly affected by citizens with the ultimate aim being to attain trust through transparency and interactivity (Bekkers and Homburg, 2007; Bolgherini, 2007; Chadwick, 2003; Cordella, 2007; Heeks, 2005; West, 2004;). Of course, each author emphasizes different aspects of it – economic, socio-technical, technical or political; West (2004) proclaims that it enables bureaucrats to work closer together; Mossberger et al (2003) (cited in Mossberger and Tolbert 2006:354) indicate that it provides opportunities for political participation over the Internet; Conklin (2007) asserts that its primary aim is to enable "full access to governmental activities" and online transaction-making, thus focusing on shrinking time and distance. However, significant debate on e-Government elaborates on the actual route to designing and implementing it, with authors admittedly based on the perspective they prefer.

2.2 Trust, transparency and interactivity

As previously mentioned, trust is the focal aspiration of e-Government. With governments eagerly seeking to attract citizen concern towards politics, the digital era came to rescue governmental institutions. But, as should have been expected from the beginning, things are more complex than just digitalizing institutions; hence, we find some varying focuses on where trust can arise from, on all of which this essay attempts to provide equal weight since an efficient combination of all can result in an effective implementation of e-Governance.

Trust can be considered "to emerge from the interaction of citizens with the network of government agencies as well as its effectiveness in fostering effective markets and fair social relationships" (Avgerou et al, 2005). Even though the term e-Government has been used by nearly all Governments world-wide (Ruth and Doh, 2007) for around a decade, West (2004) is not surprised that trust has not yet been increased; he attributes this to the incremental nature of change inflicted on PA structures and to the fact that technology has to compete with all those years of scandals and failures prior to its use. One of the most discussed topics that are expected to promote trust is security assurance, which gives substantial arguments to the adversaries of ICT. Based on this, Paskaleva-Shapira (2006) believes that the development of a "clear and comprehensive" legal framework is essential for the successful deployment of e-Government.

Norris (2001) (cited in Mossberger and Tolbert 2006:357) finds Information Technology (IT) as an effective ingredient for increasing trust due the mere fact that it has the capacity to provide enhanced participation portals which, in turn, enable citizens to come closer to government. In other words, transparency and interactivity promote trust by showing that institutions not only have nothing to hide but seek citizen feedback. To give this statement some more substance, it is important to note that the information provided through these portals need to be "timely" in order to provide a real-time transparency for citizen monitoring of governmental activities and total interactivity (Wong and Welch, 2004). This argument, characterized as e-Government "in its most radical guise" by Chadwick (2003), is countered by Heintze and Bretschneider (2000) (cited in Wong and Welch 2004:276) who argue that IT "often simply improves [the PA's] technical efficiency without leading to significant organizational changes"; an argument reinforced by Wong and Welch (2004) whose research shows a monitoring behaviour through controlled access to the information provided. Justice et al (2006) also add that transparency requires "accurate and sufficient" information suitable for a valid basis of government accountability, whilst interactivity necessitates channels of communication directly to elected and administrative officials; something that corresponds to the concern indicated by Welch and Hinnand (2003) that citizen's knowledge of what bureaucrats are doing is observed to be limited and that there is great need for interactivity to build a sense of mutual trust between them. These necessities are not always followed though, as Heeks (2005) finds that most of the cases he studied included a consciously reduced flexibility in design in order to retain staff autonomy – and even conceal corruption.

The above notions on the use of technology are being uncluttered and sorted by some of the literature decreeing that, in order for e-Government projects to be successful, they need a firm grasp of bureaucratic reality. Heeks (2005) states that IS designers have to be exposed to the realities of the user context and provide systems that are "reality-supporting" – we could add to this that due to the ever changing "realities" of globalization the proper flexibility will need to be incorporated in the finalized system to support it. Going even further and proposing an e-bureaucratic form, Cordella (2007) locates ICT failures in the increased complexity of today's public offices. He states that in order to tackle PA problems, they need to be directly dealt with through using ICTs as instruments that foster and "sustain existing bureaucratic organiza-tion forms". Organisational remodeling should only be imposed where serious issues of ICT incapacity to handle these forms arise. This proposal is supported by the fact that the very idea of bureaucracy was incepted in order to act as a "fundamental guarantor of equal and impartial action by PA" and that overriding bureaucracy with e-Commerce-like, economically-driven managerial practices can result in the very unsatisfying observations stated by Heeks earlier (Cordella 2007).

From the above we can identify that it might not be ICTs that are to blame for the current failures of e-Government but the approach taken for its implementation. While pursuing a balance between social factors and technology, we need to remember that the politics involved in government inscribe a hidden element of the social context – bureaucratic institutions. Trust being – or at least should be since it was the very reason of fostering IT in government – the main objective, ICTs are indeed the approach to achieve it. As Avgerou et al (2005) assert, ICTs provide a "trustworthy means of formal communication or a trustworthy context for public services provision" when the crucial importance of the social factor is recognized. Further supporting the trust conveyed is the fact that as technology penetrates in citizens' lives and they become accustomed to it they tend to increasingly expect it to be utilized by government bodies to approach them (Mossberger and Tolbert, 2006; West, 2004). Hence, the reciprocal relationship between technology and citizens is emphasized.

2.3 Barriers to the adoption of e-Government

The social barriers to the successful implementation of e-Government can be generally classified into two categories: citizen background and surrounding politics. Each category involves sensitive matters that need to be paid special attention in order for partial or total failure to be avoided.

Several studies have taken place (Belanger and Carter, 2006; Cordella, 2007; Danzinger et al, 2007; Snellen, 2002) aimed at finding the cause of the so called 'digital divide' – the "unequal access to and familiarity with computers and the Internet" (Justice et al, 2006) – that is increasingly becoming a calamity of electronic governance, crippling many of its communication channels. Some authors state that the argument that e-Government will increase participation is biased, since the "wealthier and better educated" will benefit more (Justice et al, 2006). Assuming results that would conclude to such findings, Danzinger et al (2007) conducted a telephone survey covering as much disparity of the US population as possible. Even though their initial expectations stated that income, age, education and years living in the community would play a critical role of online political participation, they concluded that none of these were of any importance – thus noting that this was an "indeed significant finding". A contradictory study undertaken by Welch and Hinnant (2003), based on data obtained by a previous study, concluded that educational levels and income are positive determinants of Internet use and that older people and African Americans are less likely to use web facilities, resulting to the finding that there is indeed a significant proportion of the population that will not benefit from e-Government; West (2004) agrees based on a study by Hart/Teeter. Bélanger and Carter (2006) provide the same results, adding Latinos to racial factors. Mossberger et al (2003) (cited in Mossberger and Tolbet 2006:361) found that African Americans show as much interest in looking up gov-

ernment information online as Caucasians, but are distinguished due to access disparities. The Jansen et al (2007) findings seem to contradict the rest of authors but when combined with the study by Mossberger et al (2006) it leaves some interesting questions on how high interest in online participation and access interrelate; shouldn't less access mean lower interest? Could it be that the internet-café boom aids and increases access, similarly to its effects in developing countries – i.e. in India (Ahmed, 2004).

The second – highly imperative – social issue is the political scene surrounding e-Government, which can in turn be broken down into citizen and civil servant acceptance. As far as citizens are concerned, surveys have shown that supporters of the political party in power tend to trust the government more – and thus give positive feedback when surveyed – demonstrating the impact of partisan control (Mossberger and Tolbert 2006; West, 2004), but also that mistrust arises due to the constant fear of possible surveillance inflicted by the government (Chadwick, 2003). Civil servant acceptance is much more delicate; transparency gives the feeling of insecurity due to the exercise of scrutiny, which can jeopardize their power basis (Coklin, 2007); citizen participation may alter or even revoke decisions bureaucrats made for their benefit (Krimmer and Mahrer, 2005). To avoid the menace of e-Government, politicians and civil servants tend to strain the highly debateable issues of security and privacy, social exclusion, digital divide and the fact that they are qualified professionals in the field and hence in a better position to know what is good for citizens than they do (Krimmer and Mahrer, 2005). Vesting from the current status quo, the actors threatened will not sacrifice their advantage even for the public good (Coklin, 2007). As Cordella (2007) states, we know how politics works – with power games. To add to this, comes the "battle of the back offices" that highlights the resistance in cooperation of government bodies, again due to the "ambiguous distribution of tasks" (Bekkers and Homburg, 2007). Finally, the usual case in IS of user dissatisfaction towards changing organizational order comes into the picture with resistance to learn a new way of tasking with no direct benefits (Chadwick, 2003). From the above findings that PA is deeply mediated by institutional arrangements, group conflict and individualistic beliefs and behaviour may be one more reason to bring ICTs in to monitor the situation (West, 2004).

3 Discussion

3.1 Methodology

This section assesses the various methodologies used by authors to study Information Communication Technologies (ICTs) in government and how they collect data to reach their conclusions. Probably due to the quite recent establishment of e-Government projects, the literature seems to be rather inconsistent in terms of the perspective to be followed in order to measure their success and failure; this is explicitly indicated by Cordella (2007) and also Ramaswamy and Selian (2007). In the literature selected for this review, practical research was found to be undertaken both through case studies of running projects (Bekkers V. & Homburg V., 2007; Heeks R., 2005; Justice et al, 2006; Krimmer, R and Mahrer, 2005; Pina et al, 2007; Snellen I., 2002), surveys in the form of either interviews or questionnaires (Belanger and Carter L., 2006; Gil– Garcia, 2005; Jensen et al., 2007; Mossberger and Tolbert, 2006; Welch E.W. and Hinnant C.C., 2003) or a mix-

ture of both, with considerable theoretical research built upon findings from such sources (Bolgherini, 2007; Chadwich, A., 2003; Conklin, 2007; Cordella., 2007; Doh and Ruth, 2007; Paskaleva-Shapira K., 2006; Ramaswang and Selian, 2007; Snellen, 2002;). Recognising the fact that a great amount of effort has been put into practical research, it is what currently requires the proper attention and reforms in order to provide more representative results and findings with further depth to the theoretical research based on it. This might mean repeating the same research to ensure its validity, receiving longitudinal data and insuring that a representative sample was chosen; Belanger, F., and Carter, L. (2006) were found to base their paper on questionnaires answered by US citizens at a Russian boys' choir performance, which could imply a sample not necessarily representing the general public.

Another observation is that even though authors seem to have a similar understanding of what transparency and interactivity are, they follow considerably different routes to examining how and if they are achieved. A notable example of highly contradictory findings is between Pina et al. (2007) who carried out a case study to measure governmental websites and Krimmer and Mahrer (2005) who undertook interviews of politicians and bureaucrats – for both, one of the assessed cases was that of Austria, with Pina et al. (2007) concluding that it had the highest score of all countries, with the exception of the UK, whilst Krimmer and Mahrer (2005) reported extremely high resistance to e-Governance by bureaucrats.

3.2 Further thoughts

For research to conclude to less diverse findings on trust towards e-government, more research should first be put into establishing more accurate measurements of trust suppliers – transparency and interaction – and how these directly relate to citizen-bureaucrats relations on trust. Additionally, due to the degree of socio-technical, legal, organizational, political and even power distribution issues in government, the fact that it may be required to combine even further the knowledge of IS, political science and law scholars emerges from examining the literature, in order to achieve more promising and sustainable results. Nonetheless, it is also concluded that, as with all new themes, e-Government needs some time to mature for the proper results to come to the surface. Now that we have been acquainted with the term for a more or less a decade, more reality based solutions are obtained, such as the fact that we should not be moving away from bureaucracy for sustainable results (Cordella, 2007) and that more reality-oriented solutions should be provided (Heeks, 2005).

4 Conclusion

E-Government was called up at a time when citizen trust in government was at an alarming decrease. ICTs were seen as ideal to aid the situation due to the revolution they had brought to businesses and commerce. But just like technology was rushed into organizations in the seventies and it took some time to realize the importance of taking under consideration the social factor as much as the technical, something similar happened here too; social factors extend much deeper into the bureaucratic system, which in turn relies on law-based policies. Having now reached a point where we can see the various problems that surface from using e-commerce-like techniques in implementing technology projects in government institutions and authors relying on varying measurement techniques for success and failure factors, it has become an

absolute necessity to review the way literature has been dealing with the subject of e-governance.

Literature on e-government is not at a point, yet, that can be assessed according to how it has evolved over time since the actual term has only been around for around a decade. Through reviewing it though, we are provided with the positive notion that authors have grasped its importance and are searching for the golden solution of its implementation. The "silver bullet" (Brooks, 1986) might take some time to be found, but there seem to be very interesting proposals from the academic field that, associated with the literature on the socio-technical nature of ICTs, can provide highly promising solutions.

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