



E- Transformation in Public Sector: Global Perspective on Social and Cultural Issues

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Abstract

In order to enhance service provision to general public, information and communication technologies are increasingly being deployed in public sector around the globe, using a combination of processes, structures and relational mechanisms. The aim is to bring general public and governments close to each other. In these circumstances, it becomes important to elevate the technical threshold of the national economy as well as the intellectual capacity of the general public, so that all the stakeholders are at the same technical and procedural level of maturity. As a result, governments around the globe are embarking on technology enabled transformation programs that aim to revolutionize service delivery philosophy of public sector. However, for the success of these initiatives, it is important to assess how people view technology and how they respond to social, cultural, economic and behavioral changes brought about by technology. Different cultures around the globe respond differently to technology, therefore, road to e-transformation in nations that are dubbed as 'melting pots of cultures' needs to be carefully planned and orchestrated. This paper contributes to the knowledge of how social and cultural issues impact on e-transformation. A literature review is conducted, exploring social and cultural issues in a number of geographical regions – The Far East, South East Asia, South Asia, Europe and Africa – and how e-transformation, in the forms of e-learning, e-commerce and e-government, is affected by them. This paper would be helpful for those researching factors which assist and inhibit e-transformation or technological change in general.

Keywords: e-government, society, e-transformation.

Introduction

E-government is not confined to the use of the web or Internet based applications in government agencies, rather, it translates to the use of all digital information technology in the public sector. E-government programmers serve the purpose of conceptualizing the role of information communications technologies (ICTs) within public sector organizations and within the shifting boundaries of the state and modes of governance. As such, resulting theoretically in a more efficient and responsive public service. Information systems have, therefore,

become a central facet of public sector organizations in recent years. Public administrations now rely on ICTs for many operations, transactions, for the development and implementation of its policies, for monitoring and disciplinary ends and for the provision of information within an organization. There are three broad roles of information in the public sector, i.e. public sector relies heavily on data to undertake its key functions; public sector is responsible for making decisions that are critical to an individual's, a region's or a nation's welfare; and, that the public sector has legal obligations to maintain data quality and

ensure accessibility to general public (Heeks 2006). While there have been some very creative implementations of electronic government in public sector organizations, there have been also some spectacular failures. Five reasons for this failure are offered by Teicher *et al.* (2002), i.e. the public sector creates an environment where outcomes are harder to measure; there is less freedom to be arbitrary in choosing ICT solutions; decisions need to be firmly based in law; there is more scrutiny from the press and public; and the pervasive influence of politics and accountability to public service appointees.

The provision of government services to citizens has undergone rapid transformation in the last decade. Government to Customer relationships has changed due to increased use of ICTs. Public Sector agencies have utilized ICTs to advance the e-Government agenda. As this agenda progresses, the concept of 'whole of government' service delivery becomes more achievable. The Australian Public Service commission (2004) defines the whole of government as 'public service agencies working across portfolio boundaries to achieve a shared goal and an integrated government response to particular issues.' In order to operationalize the whole of government service delivery effectively, ICTs strategies must be reviewed, implemented and governed effectively.

The concept of e-government has been an evolving facet of Australian government service delivery since the mid 1990's, whereas the current model is still largely focused on information provision. The Australian Government has commissioned and produced several programs in the last few years that attempt to address initiatives such as whole of government, e-government and public sector reform and government use of information communications technology. In April 2008, the Australian Government commissioned an independent review of the Australian Government's use and management of ICTs and what resulted in Gershon report. This report provides an

analysis of a wide range of issues affecting the Government's use and management of ICTs. In summary of Gershon (2008) findings, it was determined that high levels of agency autonomy in the ICT domain are expensive to run and maintain and they fail to provide joined up services. It further contends that there is 'no simple bottom line outcomes against which their success or failure can be measured' and since they are funded by the tax payer and cannot go bankrupt, reform is necessary to give citizens better value for money.

This paper is part of a larger Australian e-Transformation study aimed at e-governance. Australian population being an immigrant country and a melting pot of different cultures necessitates an investigation into how e-Transformation initiatives have been approached by cultures around the globe. The notion that a particular culture or society fits naturally into a particular e-transformation position is challenged in this paper, as it explores nuanced corners of circumstance, alliance and the vagaries of historical change. This paper examines literature relating to various e-transformational initiatives to bring about pattern and trends towards technology adoption and utilisation among various regions of the world. The focus of this paper, however, is on the social and cultural issues. This paper thus provides foundation for various strategies to develop socially inclusive e-transformational initiatives aimed at electronic service provision to the public at large.

Global Transformational Initiatives

This journey begins with two countries in the Far East, South Korea and Japan. Contrasting e-learning approaches in these two developed countries, Latchem *et al.* (2008) demonstrate that even with commensurate high levels of physical and financial infrastructure, these two countries differ markedly in their take-up of e-transformation in higher education. The reasons given by the authors are cultural,

with South Korea having made a cultural transition which incorporates Western values, whilst Japan has remained loyal to what it regards as its unique cultural realm. E-learning in higher education in South Korea has become a major government strategy to turn out competitive, resourceful and independent-minded graduates. By contrast in Japan, e-learning in higher education has never been a government strategy and has played a much more muted role. Social harmony is the overriding cultural impetus in Japan, where relationships, responsibilities and hierarchies matter. It is therefore imperative there to turn out graduates to fit into an efficient, harmonious society, exhibiting acceptable attitudes and moral values. According to Whasun Jho (2005), some of Korea's e-Transformation endeavours have faced marked opposition from civil society. Three instances of conflict arising from the introduction of ICTs are presented and analysed using a technical and social standards model. The author concluded that only if citizens are ensured that their social standards have been met by government will technical standards be accepted by them.

At the root of South Korea's approach is the Western e-transformation model, exemplified by the portrayal of e-government in the United States, by Thompson and Wilkinson (2009). Through the perspectives of individual rights and a government capable of reasserting itself in line with American democratic traditions, these authors regard e-transformation as a tool set to align governmental size and scope to the principles of liberty. To use technology to realise American social goals more effectively and to empower individuals, e-Government and the merging of the US federal departments of Commerce, Education and Labor are advocated. However the picture in the US it seems is less straightforward than the above authors would have us believe. As Weber and Khademan (2008) demonstrate with complex public policy problems, which they term 'wicked' problems. These problems do not fit into hierarchical

administrative systems nor are amenable to e-transformation, requiring instead extensive collaborative problem-solving organisational environments for resolution.

In the field of e-government, Chen and Hsieh (2009) compare another Far Eastern nation, Taiwan — also a developed country — with the US. As a former Japanese colony having a Chinese heritage, Taiwan has much in common culturally with both Japan and China. The research method used by the authors is a modification of Fountain's technology enactment framework, namely a framework for e-government performance, which is a consistent set of forces and performance measures. The findings show the relative strengths of the two countries. While the US is ahead in online citizen participation (especially Web 2.0) and business process transformation, Taiwan has the advantage in service integration, network and technical infrastructure, bridging the digital divide, use of mobile devices and the ability to engage in government-wide projects for network security and other integration initiatives.

In China, a country with a command economy, Martinsons (2008) has found that successful e-transformation ventures combine American/Western e-business models with *guanxi* (positive relationships with privileged interests, such as state/government agencies). This combination ensures a legal footing for their ventures and secures required resources. Lack of physical and financial infrastructure has been limiting factors on rule-based e-transformation in China. For instance, business-to-government-to-business models are more likely to succeed than business-to-business or business-to-citizen ones. Some regions are out of reach of privilege due to distance. Davidson et al. (2005) have found that lack of infrastructure (both physical and financial) is as much an impeding factor for e-transformation there, as it is in China as a whole. Consequently, Western China's e-transformation is seen to be dependent on developments in China and relationships

with regions beyond China, particularly Kazakhstan and Kyrgyzstan. By contrast, Holliday and Kwok (2004) map the transition of the Hong Kong Special Administrative Region to e-government. Two 'Digital 21' papers (1998 and 2001) are outlined. Implementation is traced for government-to-business and government-to-citizen initiatives. A series of parallel initiatives involving technical, socio-economic/cultural and preferential issues are also considered. A picture is painted of a relatively affluent society, which nevertheless has a digital divide.

In South-East Asia, the privileged seem to be holding their own in the e-transformation stakes. To find what factors influence e-government adoption in Cambodia, Singawong et al. (2009) surveyed 112 public servants via a questionnaire generated from a framework consisting of a modified Technology Acceptance Model (TAM), Diffusion of Innovation (DOI) model and the expectancy of Trust. The results indicated that the intention to use e-government services is positively correlated with usefulness, trustworthiness and relative advantage. The authors draw attention to the lack of explanations for respondents' perspectives and the limitation of those surveyed to Cambodian public servants, on the grounds that Cambodian public servants responses could differ from those of public servants in other ASEAN countries. Nonetheless, there are other limitations to this study. Firstly, the study is an insider's view of e-government. No member of the general public – the sort of user e-government might also wish to attract – was included. Secondly, the vast majority of those sampled were males. Thirdly, there was an age concentration with most respondents between the ages of 26 and 35. Fourthly, nearly all of those surveyed were university graduates/postgraduates. Fifthly, the majority surveyed were Internet savvy and, sixthly, the sample was small. Thus a privileged, already converted perspective was reflected in the results.

Similar remarks could be made about another survey conducted by Lean et al. (2009) of 195 Northern Malaysian Internet users about their intention to use e-government. A slightly different framework was used by these researchers for their questionnaire, consisting of the TAM, DOI model, Trust expectancy and the adoption culture effect. The response rate was 77%. The results indicated that trust, perceived usefulness, perceived relative advantage and perceived image had a significant positive correlation with intention to use e-government services while perceived complexity had a significant negative correlation. The authors draw attention to the limitations of their research – the majority of their respondents were aged between 30 and 39, had an educational level of university graduate/postgraduate and were of high social status (executive position or above); the geographical area was limited to Northern Malaysia (particularly Penang); in the questionnaire framework there were only three antecedents of trust; and the questionnaire would soon become outdated as technologies change. Again the sample was small.

Ming-Yu et al. (2009) presented a study assessing the readiness of individuals for a Malaysian knowledge-based economy. 1,839 Malaysians were surveyed via a questionnaire centred on their attitudes to economic change and awareness of, involvement in and contribution to new economic activities. The framework was a modification of the Hierarchy of ICT Literacy by Market Equity, designated the Knowledge Economy Readiness (KER) model by the authors. KER consists of three hierarchies, viz., awareness, involvement and contribution. An Individual Readiness Index (IRI) was then developed from KER using three indices – Awareness Index (AI), Involvement Index (II) and Contribution Index (CI).

Data collection consisted of both quota and convenience sampling. Results indicated that attitudes and habits as well as education and English proficiency levels are positively correlated with dependent variables in AI, II and CI, while age is negatively correlated to AI and II but positively correlated to CI. The mixed picture of the impact of age implies that older individuals lag behind changes yet, once engaged, contribute positively. Again, being privileged is an advantage in the Knowledge Economy.

Sriramesh and Rivera-Sánchez (2006) assessed the economic development and e-governmental transformation of Singapore, which seceded from Malaysia in 1965. In their study, Demographics are outlined and the terms 'e-governance' and 'e-government' differentiated. E-government initiatives in East and South-East Asia are compared with Singapore at the forefront. Singapore's e-government framework is detailed, highlighting two portals: government-to-citizen and government-to-business. The authors conclude that for e-governance to succeed, political pluralism must exist. Based on changes already in evidence in Singapore, citizen participation could evolve but is dependent on symmetrical communication between citizens and government with inputs and citizen concerns being reflected in governmental policies. Jordan is one of the countries using the Singaporean e-government model.

Ciborra (2005) reports on four fast track e-government projects launched in Jordan in 2001, involving four agencies. Drivers & Vehicles Licensing Department is one of them singled out for analysis and the challenges facing it are described. The author concludes that introducing more efficient transactions to a public security apparatus does not guarantee more transparent, efficient or commercial behaviour. Instead corrupt practices will just be in the hands of new intermediaries. In addition, e-government as governance at a distance imposed on developing countries is seen as misdirected. A more obvious target than Jordan for

Ciborra's argument against governance at a distance is Ethiopia. Pathak et al. (2007) provide results of a corruption and e-governance survey of 400 citizens from major Ethiopian regions. The study is further supplemented with additional material from in-depth interviews with officials, decision-makers and interest groups. The authors make a case for e-governance in Ethiopia to combat corruption; however, conceding it is unable to counter all structural factors contributing to corruption in the society.

Returning to our starting point, that is e-transformation in higher education, but this time in Kenya, where Getao and Wausi (2009) track the evolution of the Joint Admissions Board Information System (JAB IS), originally a legacy of a process inherited from Britain as the colonial power. The authors were participants in JAB for six years and collected data relating to it from 1990 to 2004. The admission procedures are described for four eras, demonstrating JAB IS' shift from a colonial legacy to Africanisation, exemplified by consensus-driven decision-making. The 1990/1991-1995/1996 era is categorised as bureaucratic culture (institutional choice - a university value) while the 2002-present era is categorised as adaptability culture (individual choice - a student value). National values of fairness and merit-based processes are now aligned with individual choice. Affluent parties Africa, however, are traditionally more concerned with electronic commerce. To evaluate ICTs adoption amongst small and medium enterprises (SMEs) in Nigeria, Uwalomwa and Ranti (2009) distributed 320 questionnaires among sixteen SMEs in Lagos and Ogun states, where SMEs are most concentrated. The firms were selected randomly from four different industry sectors - manufacturing, hotel and tourism, construction and agriculture. There were 297 usable responses and the findings indicated that 29% had a computer, 86% of those computers were being used but only 19% of those had access to the Internet. The hotel and tourism sector had the highest ICTs

adoption, followed by manufacturing, construction and agriculture.

To assess the state of e-readiness and e-commerce in Tanzania, Oreku et al. (2009) conducted a qualitative survey of 16 government ministries, 10 administrative regions, 5 local authorities, 63 businesses, 59 Internet cafés, 389 Internet users, 119 leaders and 60 IT development managers. The data was further analysed employing four themes – ICT access; availability of IT; the state of e-commerce; and, e-readiness. A time-series analysis was also undertaken. The preliminary results demonstrate the central role of ICTs for social and economic development; the need for more governance, business and education; barriers to e-commerce, such as offline payments and proliferation of standards, lack of infrastructure, poor exchange rates and high transaction costs, dependence on overseas countries for hardware and software (exacerbating the digital divide); and, success of e-commerce in the tourism industry, specifically marketing of handicrafts. The authors also discuss e-readiness in Tanzania using Rao's 8Cs – connectivity, content, community, commerce, capacity, culture, cooperation and capital.

In South Asia, Sri Lanka was still in the aftermath of civil war when researchers Weerakkody et al. (2009) reported these two studies, which they undertook to compare e-government in a London borough (local government) in the United Kingdom, a developed country, and Sri Lanka (national government), a developing country. The UK had been chosen because Britain was the former colonial power, with many of Sri Lanka's government processes reflecting Westminster tradition. Semi-structured interviews, conducted with those responsible for implementing e-government projects in both settings provided the main method of data collection. These were supplemented by observation and documentation review as a means of triangulation. Data analysis was achieved by comparing findings, forming themes and then collating findings under

appropriate headings. Most of the headings were common to both countries, viz., Political Context, Government Support, Financial Constraints, Technology Constraints, Paradigm Shift, Project Management, Language Problems and ICT Literacy Rate. However, the London borough had one additional heading: Data Protection and Security Constraints, while Sri Lanka also had one extra heading; that is, Lack of Awareness. The 18 findings were presented under the above headings as issues facing e-government implementation in UK and Sri Lanka. Only two sets of headings – Language Problems and Paradigm Shift – will be considered here. For Language Problems in the UK, it was found that some ethnic minorities and older members of the general public preferred face-to-face or telephone communication, while some ethnic minorities preferred hard copy in their native tongue. In Sri Lanka's case, English proficiency was non-existent among most of the rural population and was found only as a second language in urban settings, leading to the conclusion that e-services in English were unrealistic. Language in Sri Lanka is a vexed issue. The authors remark that other countries such as Japan, South Korea and Thailand have overcome language issues on their government sites. Nonetheless, these countries have not had two contending dominant languages (Sinhalese and Tamil in this case) to deal with. For Paradigm Shift in the UK, it was found that there was resistance to change among some government and council employees, while the general public remained neutral. In Sri Lanka's case, both the general public and government officials were reluctant to change. In this regard, Baines et al. (2010) presented qualitative research into the implementation of e-government/transformational government in local government in England, demonstrating this resistance phenomenon in depth. In particular, the authors considered the interplay of centrally-driven change with professionals who were producing local public services on the front line – so called 'street-level bureaucrats'. They found that

local authorities and partners were less successful in making information accessible to and gaining commitment from 'street-level bureaucrats'; centrally-imposed policy initiatives for the pilot site were frustrated by 'street-level bureaucrats'; incompatibility in joint delivery occurred due to the different ways various agencies interacted; and, technology-enabled seamlessness was seen as an over-structuring and over-integration of policy, process and resources.

Sometimes resistance involves entire agencies as Löfgen (2008) reports in his examination of e-government via a '24/7 agency' initiative released in 2000 in Sweden, where a dualist model of public service prevails. Government agencies resisted the new forms of network governance, demonstrating that a fully-integrated networked public administration is more difficult to realise than a simple technical vision. The author concludes that national institutional differences need to be considered before e-transformation is contemplated. Henriksen & Damsgaard (2007) investigated the Danish government's shift to imperative tone in its 2003 e-Day initiative. Prior to e-Day, its e-government initiatives adopted persuasive language. A brief overview of seven initiatives and their analysis follows. Because the number of government agencies employing electronic document handling systems has only slightly increased, traditional procedures still dominate in Denmark. In conclusion, the authors blame a lack of common standards for communication and interaction, for both internal and external purposes, for this lag in takeup in a country with a reputation for e-government implementation. As Anittiroiko (2005) explains, Finland is a country with an international reputation for being one of the leading mobile technology nations globally. Ubiquitous government (u-government) as well as ubiquity in IT are defined, and u-government strategic development and its uptake in various parts of the world are presented. The focus is on Finland, where the incremental user-centric approach to e-transformation prevails. Barriers to using

mobile services beyond the basic are discussed. In the absence of a national u-strategy, many Finnish government agencies and public corporations still provide u-services. Ten of such services and seven applications are elaborated. In conclusion, the author regrets the modest progress towards u-government in Finland and predicts that it will take awhile before the lessons of wireless solutions and m-government are absorbed and u-government emerges.

Gonzales, Gasco & Llopis (2007) focus on e-government in taxation administration in regional Spain. E-government is defined and problems challenging e-government implementation are discussed. An elaboration of the benefits of e-government in Spain, Spanish e-government evolution and e-government studies in taxation administration follows. Examination of e-government in Spain is undertaken, with a case study of SUMA, a public body providing taxation administration services to Alicante Province as focus. SUMA, the authors conclude, illustrates the nature of the challenge public administration faces implementing e-government – not to refrain from nor hinder activities pursued by individuals or businesses but to be proactive by anticipating citizens' needs by offering them assistance.

Vitaliev (2009) reports on a visit to Estonia in 2009 and compares his destination to its Soviet era alter ego in 1966, when he used to holiday there from the Soviet Union as a child. He describes the e-transformation of Estonia – from a country which in 1966 could only boast one camera repair shop in Tallinn, its capital, to now having the same Internet rate as Germany. He reveals Estonia as a pioneer of e-voting, e-government, the home of the inventors of Skype and with a government preparing to declare access to the Internet a human right. An E-Governance Academy, NATO's Cyber Security Research Centre and m-parking complete the transformed image. Meanwhile, Romania is still waiting in the wings. For Europe in a

much slower lane, Irina (2009) explores the concept of e-commerce through the lens of sustainable development (incorrectly referred to as 'durable development' throughout the paper). For e-commerce potential in the Romanian context, the author describes two initiatives – the Economy Based on Knowledge Project and e.Romania. Digital divide is the major e-commerce barrier in Romania. Other barriers are the lack of appreciation by entrepreneurs of the difference between traditional and e-commerce; the low percentage of computer ownership and users connected to the Internet; the slow deployment of broadband; the low acceptance of online payment methods; the lack of technical education, cyber security and regulation; the high incidence of fraud; and, inconsistent national programs.

Against the backdrop of European Union e-health strategies, one of Romania's initiatives, e-Health, is assessed by Popescu (2010). E-Health's six main objectives are outlined with proposals for implementing e-Health solutions and providing broadband infrastructure. So far 13 projects have been funded at the local level and the Ministry of Health has received funding for central implementation and infrastructure. Once underway, the project will provide real-time monitoring of pharmaceuticals, prescription error and fraud control, processing and exchange of medical information and public access to quality medicine. Though there is a feeling of a snail pace progress about Romania, where bureaucracy is alive and well, the European Union acts as the spur for e-transformation.

Finally, we turn to articles considering e-transformation issues at a multinational level. Edwards and Halawi (2008) examine antecedent characteristics influencing the uptake or adaptation to new technologies in e-commerce. Key antecedents, impacting sustainable e-Commerce initiatives, are listed. A table showing how combinations of these antecedents differ according to three geographic regions – Africa, Asia and the

Caribbean – is presented and subsequently elaborated on. Two of the most significant antecedents: information communication technologies and workforce education are discussed in detail. The authors conclude by suggesting three areas for future research.

Lenk (2006) investigated the implementation of e-government in the European Union and the difficulties it faces on encountering the national differences of various member states. In particular there seems to be a division between British and North American administrative models on the one hand and French, German and Austro-Hungarian models on the other. The latter grouping concerns itself with legal rules and depends on a reliable public service. The author does not address the impact of legacies from the former Soviet style command economies, exemplified in so many of the new European Union member states. Secondary data from 99 countries, included in both the 2004 United Nations global e-government readiness report and 2005 World Economic Forum global competitiveness report are used by Srivastava and Teo (2007) to test a series of hypotheses about e-government payoffs. Five constructs taken from the two reports were employed in the research model. The authors conclude that there are significant relationships between e-government development and administrative and resource allocation efficiencies, related to the social equity and business competitiveness levels existing in particular nations. Wilson & Welch (2004) report an empirical study, conducted into the effect of e-government accountability in fourteen countries. The openness of e-government websites in these countries was compared and the impact of contextual factors on their openness tested. The authors conclude that introducing e-government without concomitant civil service system and government agency reform results in limited success in increasing accountability. In addition, domestic factors lead to divergence in e-government accountability, both nationally and organisationally.

Discussion

The afore-going discussion gives rise to several common themes with respect to e-transformation. Despite the uniqueness of each case, the literature generally offers consensus on the fact that good governance and institutional efficiency are necessary elements in all the transformational initiatives. Good governance features management includes transparency of policy formulation and implementation, coupled with an effective measure of accountability. Good governance centers on knowledge management, and in the information age, which is fuelled by rapid advancements in information technology and electronic communications systems. It seems safe to suggest that society has evolved to a level of sophistication that reasonably expects good governance in public sector organisations and that doing things 'the way we've always done them' is no longer acceptable.

Many initiatives relating to transformation arise out of identified needs for improved performance and the necessity to adapt to change in the market place. Crawford and Helm (2007 p. 75) identify a number of catalysts for change, including: the need for increased efficiencies and cost effective measures to reduce and control public spending; a reduction in national differences in public sectors and a desire to become more competitive in a global economy; rising service quality expectations and the need to respond to external changes; and opportunities being created by emergent information technologies. Recent studies foster the notion that voluntarism and spontaneous actions by individuals are useful tools for governments in their efforts to overcome budgetary difficulties, because they are effective in the public arena. However, Wood (2006) is more sceptical and contends that governments are more likely to concentrate on system maintenance issues than people issues.

Castells (2005) believes that the most fundamental problem that we now face is

'the crisis of political institutions in charge of managing the transition'. This means that governments and public authorities around the world are faced with formidable challenges brought about by the emergent political order, amid incessant technological developments and innovations that keep redefining the way in which people interact with governments and business. It highlights that national economies around the globe recognize the problems, at least to some degree, and purport to understand the issues, but do they have the organisational tools of IT governance to control our futures? Governments need to control and manage all manner of issues as market forces promote growth and consumption. The idea of global governance through citizen participation is gaining credibility and the belief that global citizenship can exist is growing commensurately.

Having examined the transformational initiatives, and having looked at broad policy implications for the public sector, it is obvious that IT enablement is an essential part of the construction of public sector governance. Suresh (2009) elucidates the relevance and purpose of IT governance with a delightfully illuminating analogy. If we compare information handling to food handling, the process for a particular recipe might be exactly the same at a roadside café as at a 5-star hotel. Essentially, the same ingredients would be put together in essentially the same way. Suresh suggests that you would be far more likely to contract food poisoning at the roadside café than at the 5-star hotel because the quality assurances and service standards would not be the same. It is the role of IT governance to ensure that systems design, hardware and usage are of the highest possible standards in an endeavour to ensure that IT services match an organisation's business requirements.

At times, corporate governance is fully consumed with the financial aspects of governance and considers only the aspects which blatantly relate to profit and loss.

Suresh (2009) claims that many top executives do not give sufficient priority to IT governance. Whilst good quality hardware and even the best quality software might be purchased, all too often poor governance fails to ensure that maximum gain is attained from the organisation's IT systems. Just how information is handled and by whom is often neglected. It is the role of IT governance to guarantee qualitative and reliable results that further the organisation's ability to operate with maximum efficiency. Nevertheless, there are four major points that provide the foundations for a strong e-Transformation agenda, i.e.

- To counter the digital divide among communities, a hand-up is required at two levels – externally from privileged communities and internally from elites to their less well off compatriots;
- To overcome cultural bias against e-transformation, communities need to gauge their strengths, weaknesses and gaps. By seeking best practice know-how from other nations with different strengths, a full quiver of e-transformation enablers can be assembled;
- To prevent stalled e-transformations, context needs to be understood and taken into account by change agents; and
- Strong emphasis on governance of technology and management of its impacts from conception to retirements.

Conclusion

The impact of socio-cultural issues on e-transformation is manifested in a variety of ways. They can play a role to inhibit or restrict up-take of e-transformation, as with custom in Japan or privilege in South-East Asia. They can also provide unique e-transformational strengths, as in the U.S., Taiwan and South Korea. Changes in

historical relationships and demands of new administrative configurations too prove important factors, as in the UK, Estonia, Romania and Kenya. Perhaps the most telling issue though for e-transformation is the economic status of a country, with developing nations, such as Sri Lanka, Nigeria, Tanzania and Romania all lagging behind developed ones. Even so, there are counterpoint issues, wicked problems and resistance by front-line bureaucrats and entire agencies, which have the potential to cross all socio-cultural streams and the muddy waters of e-transformation. Throughout this paper it was strongly felt that often it is at the edges that blurring of definitions can manifest, taking the observer by surprise through a range of juxtaposed legacies with contrasting visions.

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