

# **The Promotion of E-Governance in Developing Countries: Reflections on E-Government in Two Asia-Pacific Countries**

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**Abstract:** The adoption of the Millennium Development Goals (MDGs) has turned the spotlight onto wider goals than that of economic growth, even though this remains the basic tenet of the development effort. It is now recognised that equitable growth, poverty reduction, universal access to health and education, peace and stability are also key targets. The public sector management function is one of the main vehicles through which the relationship between the state, civil society and the private sector is realised. It is therefore a vital means towards achieving these higher-order development goals.

This paper is constructed on the premise that good governance is important. Improving efficiency in public sector management, by reducing costs and eradicating corruption, releases resources that can be directed towards the MDGs and ensures that scarce resources are not misdirected away. Increasing transparency and accountability in public sector institutions closes the democratic and political gaps highlighted in the Millennium Declaration and improving responsiveness to citizens' needs promotes the sustainability of MDG achievements.

Any public administration reform programme will typically include ICTs as being central to the performance improvement effort. E-government impacts on governance and e-governance can indeed contribute to the achievement of the MDGs – but this need not necessarily be the case. Good governance is not just about the way the executive branch of government (the public administration) goes about the business of governing. It is about political parties, parliament, the judiciary, the media, the private sector and civil society – and, in developing countries, the way that international financing institutions relate to national government. Government, in terms of its overall responsibility for national development, is dependent on the governance qualities of the other institutional actors as well as on its own integrity.

There is no universally acknowledged governance policy for public sector management. Each country needs to decide on its own economic and social priorities and the best people to hold government to account are those who live in the country and are most affected by its decisions. Government agendas that include the MDGs' focus on reducing inequalities and ensuring that support reaches those who need it most must be judged with the relevant information to hand. The means by which these governance processes are being managed and how these are being supported by ICT are examined with reference to two countries in the Asia-Pacific region with which the authors have some familiarity.

## **Keywords**

Development policy, e-governance, public sector reform, development informatics

## **1. Introduction: Good Governance and Development**

At the United Nations Millennium Summit, world leaders put international development at the heart of the global agenda. The adoption of the Millennium Development Goals (MDGs) as a universal framework for the reduction of world poverty in the next fifteen years unified the development effort and captured the popular imagination.

The Millennium Declaration (2000), on which the MDGs are based, recognises government as being central to the achievement of these goals. The public sector is responsible for more than half of the gross national product in the majority of developing countries and plays a major role in the provision of economic infrastructure and the delivery of services. Good governance within the public sector is therefore not only of paramount importance for the proper functioning of a nation state: it also provides the enabling environment and basic means through which a government's strategies to achieve the MDGs can be implemented.

The importance of good governance in the public sector is spelled out by the United Nations Development Program. "An efficient, accountable, effective and transparent public administration, at both the national and international levels, has a key role to play in the implementation of internationally agreed goals, including the MDGs, as:

- **improving efficiency, reducing costs and eradicating corruption** releases resources that can be directed towards achievement of the MDGs and ensures that scarce resources are not misdirected away
- **increasing transparency and accountability** in state institutions closes the democratic and political gaps necessary to achieving the MDGs within the context of the broader Millennium Declaration
- **improving responsiveness to citizens' needs** promotes the sustainability of MDG achievements" (UNDP, 2004).

The adoption of the MDGs has turned the spotlight onto wider goals than that of economic growth, even though this remains the basic tenet of the development effort. It is now recognised that equitable growth, poverty reduction, universal access to health and education, peace and stability are also key targets. The public sector management function is one of the main vehicles through which the relationship between the state, civil society and the private sector is realised and it is therefore a vital means of achieving these higher-order development goals. A continuing effort to strengthen governance through public administration reform is underway.

But "good governance" in a country is not just about the way the executive branch of government (the public administration) goes about the business of governing. It is about political parties, parliament, the judiciary, the media, private sector and civil society – and, in developing countries, the way that the international financing institutions (the IFIs) relate to national government. Recent work reporting on the initial stages of a World Governance Assessment (Hyden, Court and Mease, 2004) places emphasis on how government, in terms of its overall responsibility for national development, is dependent on the governance qualities of the other institutional actors as well as on its own integrity.

The World Bank Institute's governance framework (2007) uses six key indicators in its country assessment tool: government effectiveness, political stability, voice and accountability, rule of law, control of corruption, regulatory quality. These are based on the Institute's wide definition of governance:

"Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively

formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them." (WBI, 2007)

It is widely recognised that "in pursuing the democratic/political processes, in managing resources, executing functions, measuring performance and in service delivery, information is the basic ingredient" (Isaac-Henry 1997) and that using information and communication technologies (ICTs) can help achieve development goals in relation to government operations and governance in general. Developing country governments have been implementing computerised information systems as a vital and strategic tool for change since the 1990s. This integration of ICTs into governmental operations is captured in the concept of electronic government or – in short – e-government. E-government's link to good governance has been defined by the United Nations Public Administration Network:

"The strategic use of ICTs in government can result in a more inclusive, effective, efficient, transparent and accountable public administration, which will be key to improved economic development and competitiveness. Moreover, in enhancing the quality and delivery of public services through ICTs - especially in education, health, social security and social welfare - government may be better positioned to reduce poverty, redress inequality, and promote sustainable development" (UNPAN, 2005)

E-governance is a growing phenomenon around the world and is emerging as a significant discipline, initially within the field of public administration reform, but latterly as not only being "government business" but a societal challenge as well. Okot Uma (2000), when reviewing the direct contribution that the "e" can play in advancing principles of governance within the context of the MDGs, states "e-governance seeks to realise processes and structures for harnessing the potentialities of ICTs at various levels of government and at the public sector and beyond, for the purpose of enhancing good governance". Better governance, brought about by the application of ICTs, should "improve democracy and ultimately peoples' lives".

The governance focus of many e-government strategies in developing countries is directed to the provision of basic public services via ICTs (e-services) and the empowerment of citizens via ICT-based communication channels (e-participation). These two e-governance processes are examined in Sections 2 and 3 of this paper with particular reference to two countries in the Asia-Pacific region with which the authors have some familiarity. More generally, however, the concept of governance as the means by which power is exercised within the national and international context will be explored in relation to e-government and e-governance - with comment in Section 4 on potential implications for the global development effort.

## **2. Public Administration Reform and E-Services**

### **Evolution of E-Government Strategies**

E-government is being used to improve the public administration's internal workings and its relations with citizens. The following definition was proposed by the World Bank at a National E-Government Conference in Sri Lanka:

"E-government is a way of organizing public management in order to increase efficiency, transparency, accessibility and responsiveness to citizens through the intensive and strategic use of information and communication technologies in the inner management of the public sector (intra and inter governmental relations) as well as in its daily relations with citizens and users of public services." (Braga, 2003)

Not surprisingly, it focuses on improved governance relating to transparency and accessibility as well as to efficiency and responsiveness. Developing countries have been encouraged by the IFIs to view e-government as a lever to overcome acknowledged governance weaknesses in the public sector, notably an absence of openness, excessive corruption and weak accountability to citizens. This approach has been the hallmark of e-government efforts in many developing countries.

This is not the same in the developed world, however, where e-government is focussed on improving the business of government via better customer relations and improved service delivery. Governments have competed with each other to develop on-line platforms for service delivery and this has chronologically shaped the first decade of e-government, which is being seen as the most recent step in the evolutionary process of public administration reform, building on the legacy of Osborne and Gaebler's work (1992) and New Public Management (NPV). The technical ability to share information and integrate service offerings across different providers has brought about a more collaborative mindset in recent years and the resulting networked or connected architecture of service delivery is reflected in what the UK and other jurisdictions refer to as "joined-up government".

The OECD (2003) reported that many e-government initiatives have been refocused on how to collaborate more effectively to address shared problems within and among the government agencies, and how to build relationships with private sector partners. Drivers for integration arise at the strategic and operational levels. Typically, these encompass achieving cost savings, improving service delivery and efficiency, creating service innovation, improving central control and decision-making/resource allocation and the desire, either political or operational, to modernise public service delivery. There is a growing recognition that continued expansion in e-services is not possible without some kind of integration of back-end government systems.

The UNPAN Global e-Government Readiness Report (2005), with published indexes for over 150 countries, is based on a five stage model of e-government. This is summarised in Table 1.

**Table 1: The UN Five Stage Model of E-Government**

Stage	Description
I – Emerging	A government’s online presence is mainly comprised of a web page and/or an official website; links to ministries or departments of education, health, social welfare, labour and finance may/may not exist. Much of the information is static and there is little interaction with citizens.
II – Enhanced	Governments provide more information on public policy and governance. They have created links to archived information that is easily accessible to citizens, as for instance, documents, forms, reports, laws and regulations, and newsletters.
III – Interactive	Governments deliver online services such as downloadable forms for tax payments and applications for license renewals. In addition, the beginnings of an interactive portal or website with services to enhance the convenience of citizens are evident.
IV – Transactional	Governments begin to transform themselves by introducing two-way interactions between ‘citizen and government’. It includes options for paying taxes, applying for ID cards, birth certificates, passports and license renewals, as well as other similar G to C interactions, and allows the citizen to access these services online 24/7. All transactions are conducted online.
V – Connected	Governments transform themselves into a connected entity that responds to the needs of its citizens by developing an integrated back office infrastructure. This is the most sophisticated level of online e-government initiatives and is characterized by: <ul style="list-style-type: none"> <li>- Horizontal connections (among government agencies)</li> <li>- Vertical connections (central and local government agencies)</li> <li>- Connections between governments and citizens (including e-participation)</li> <li>- Connections among stakeholders (government, private sector, academic institutions, NGOs and civil society)</li> </ul>

In the latest UNPAN E-Government Survey (2008), the related major institutional challenges are identified. The ‘infrastructure’ challenge relates primarily to the ‘emerging’ and ‘enhanced’ stages of e-government; ‘integration’ problems are to be faced in the ‘interactive’ and ‘transactional’ stages, whereas ‘transformation’ of government operations occurs only in the most advanced stages of ‘transactional’ and ‘connected government’:

**“Infrastructure:** Creating an information infrastructure both within the public sector and across society at large, one based upon reliable and affordable Internet connectivity for citizens, businesses and all stakeholders in a given jurisdiction;

**Integration:** Leveraging this new infrastructure within the public sector in order to better share information (internally and externally) and bundle, integrate, and deliver services through more efficient and citizen-centric governance models encompassing multiple delivery channels; and

**Transformation:** Pursuing service innovation and e-government across a broader prism of community and democratic development through more networked governance patterns within government, across various government levels and amongst all sectors in a particular jurisdiction.” (UNPAN, 2008)

With respect to the transformation phase, what is now emerging is that this involves not just service innovation but also consultation on issues of concern, and participation in policy making and regulatory administration. The framework

recognises the networking presence of e-government as both an internal driver of transformation within the public sector and an external driver of societal learning and collective adaptation for the jurisdiction as a whole. The emphasis of e-government in developed countries is shifting from front-end e-services towards a focus on building and managing integrated and co-ordinated government services.

However, collaboration is viewed more as a cost than a virtue in many public administrations which continue to rely on the foundational pillars of Weberian bureaucracy that include hierarchy and specialised organisational structures. In this largely vertical world, the interface between formal structures and informal culture creates a preference for top-down management and process control. From the perspective of the more horizontal, networked governance solutions that are at the core of state transformation, the two fundamental questions that remain stubbornly unanswered are:

- “- How to motivate public managers to share data and, more generally, to work jointly for the public good; and
- How to understand and influence the range of barriers, from psychological and social to structural, political and technical, that mitigate against cross-agency initiatives” (Fountain, 2001)

These two questions are akin to those being posed by developing country governments when devising their e-governance strategies, even though the impetus for change may be different.

### **Recognition of Public Value**

Public value management (PVM) has recently been presented as “a new narrative for networked governance” (Stoker, 2005). Explicitly contrasted with hierarchical public sector traditions, as well as the competitive and customer-focused business mentality of NPV, PVM is premised on partnership, nuance and dialogue:

“The key point in understanding public value management...starts with the understanding that preferences are not formed in a vacuum and should not be taken as given. Part of the challenge of public managers is to engage in a dialogue with the public about their preferences but in a way that allows for deliberation about choices and alternatives... Discovering preferences involves a complex dialogue so that efficiency and accountability are trading partners, not the objects of a trade-off.” (Stoker, 2005)

It should be possible for the public to act as either customer or citizen, depending on the circumstances and need and Stoker argues that the legitimacy of both roles must be built into e-governance. PVM is intended to address the complexity and interdependencies of today’s governance and managerial systems that demand “a reconciliation of the often conflicting demands of efficiency, accountability and equity” through embracing a multi-faceted set of relationships, both within the public administration and between government, civil society and the private sector.

In developed countries, the changing nature and role of the various institutional actors in relation to e-government and e-governance are well-researched. A representative study, conducted by Deloitte and the Ash Institute for Innovation at Harvard

University (2004), concludes that “government agencies, bureaus, divisions, units, and offices are becoming less important as direct service providers, but more important as levers of public value inside the web of multi-organisational, multi-governmental and multi-sectoral relationships that increasingly constitute modern governance.” The potential value of PVM in relation to developing countries, where e-government implementation is generally slower and e-services is only one element of the adopted strategy, is yet to be determined.

In the latest UN E-Government Survey (2008), the e-government implementation efforts of 189 countries are assessed. The extract below illustrates the utilisation of e-services in three Asia-Pacific countries, showing the percentage of services delivered under each stage of the UN’s five stage model and an overall composite score.

	I Emerging	II Enhanced	III Interactive	IV Transactional	V Connected	Total
Cambodia	5	21	26	6	1	59
Sri Lanka	8	51	47	8	4	118
Australia	7	85	76	38	19	225

These scores indicate that Cambodia and Sri Lanka (the two regional developing country examples) have not yet embarked on the process of state transformation through networked governance. Their e-services efforts are still centred on the challenges of building the necessary infrastructure and integrating the services (stages I, II and III). Even Australia (an enthusiastic developed country proponent) has many challenges to address in moving its e-services profile to connected government (stage V).

The dimensions of change that carry the potential for state transformation are intertwined with how a jurisdiction both views and pursues e-governance as a national strategy and the ways in which the government, the private sector and civil society interact and exert influence on one another. There is therefore no single established way that will lead to successful e-governance. Whilst in broad terms the elements for success are already known, their interpretation and application must be invented locally.

However, when a government does embrace ICT-enabled public administration reform, it presents opportunities that are unachievable by any other means. This is true for “all public administrations in the world, regardless of the level of economic development, human capacities, and the social and cultural context prevailing in the country concerned” (OECD, 2003).

### 3. National Development Strategies and E-Democracy

E-government is more than e-services and e-governance is more than e-government. But how are these distinctions being translated into practice in the national strategies of developing countries? How is connected or networked governance being realised in environments where political and social power may be held by the few and democratic representation can have a different connotation?

“e-Governance differs from e-Government: the latter constitutes the way public sector institutions use technology to apply public administration principles and conduct the business of government; it is government using new tools to enhance the delivery of existing services. E-Governance includes the vision, strategies, planning, leadership and resources needed to carry this out, such as the ways that political and social power are organized and used. Included within the concept of e-Governance is e-Democracy, which deals with how the citizen interacts with government or influences the legislative or public sector process.” (Commonwealth Centre for E-Governance, 2007)

The Pacific Institute of Management in India equates e-governance with smart governance and uses the acronym SMART to define it as the "application of ICTs to the process of government functioning to bring out Simple, Moral, Accountable, Responsive and Transparent governance". The Government of India has used this as the basis for its vision statement for e-governance and for the development of strategic initiatives outlined in an Indicative Roadmap ([www.pimanagement.org](http://www.pimanagement.org)) to enact that vision.

Information sharing and institutional co-operation are identified as the means to achieve e-governance with multiple contributions to common processes and solutions. But this solution would be, ironically, both the most effective and the most disquieting for many public administrations. Transparency is the one governance policy that expanding networks can easily support. It can shift the locus of contention away from public officials and onto disputing social factions. If consultation and participation are made transparent, the diverging values that cause policy conflicts can be revealed in the public domain rather than in the machinery of government.

Today's world is more and more referred to as being "networked" due to the advancement of ICTs but also because of the growing phenomenon of the involvement of non-governmental actors into policy-making through the development of new participatory approaches. The opportunity of using ICTs for communicating on a global scale has added new dimensions to possibilities for pursuing national and local development. The transformation of the state's status encompasses changes in three separate dimensions, which are increasingly being combined with each other, according to Misuraca (2007), leading to government becoming more fragmented in terms of functions, diluted in terms of levels and outsourced to non-state actors. These three movements are identified as:

- the growing emergence of non-state actors, basically trans-national corporations and non-governmental organisations. Increasingly, the state has



to share its power with these non-state actors with such power sharing being most pronounced at the supra- and at the infra-national levels.

- the growing emergence of levels of managing public affairs, other than the nation-state level, in particular the emergence of supra-national levels (regional, global), as well as of infra-national levels (local, provincial).
- the growing differentiation of the state's three main functions, namely the service delivery function, the policy-making function and the regulatory function. When these are separate from each other, they can be shifted to different levels and involve different actors.

There is a growing awareness in developing countries that technical networks are creating a new public "infrastructure" which is the basis of e-government. Civil society and the private sector want to ensure that, as the infrastructure develops, their interests will be taken into account. This is more and more evident and enhanced with the increasing use of "peer-to-peer" systems over the Internet such as Web 2.0 applications that create an additional communication platform, often defined as Citizens to Government (C2G).

This new participatory approach to e-governance has to be developed considering the barriers and threats to its implementation. It is a complex process, articulated over time, embracing the overall system in which governments operate and interact with individuals, organisations and communities to perform their functions, achieving public value by digital means.

The resulting schism is that, while many developing countries are beginning to take seriously the prospects for reforms linking such findings with e-governance and e-government, the e-services orientation of developed countries with respect to their own e-government strategies may, in turn, influence their international assistance efforts through the IFIs. Such a risk is compounded by findings stemming from a wider set of e-government initiatives involving project sponsors and knowledge transfers from developed to developing countries. An absence of sufficient cultural sensitivity in crafting e-government within the contours of a localised setting is a common source of failure (Heeks and Stanforth, 2007).

### **Measuring E-Democracy**

One of the main reasons for the current debate is that there is insufficient insight as to the impact that e-government strategies have. E-governance includes the concepts of how the citizen interacts with government and influences the policy-making process (e-democracy and e-participation). Included in the vision of the Millennium Declaration (2000) is the reaffirmation by the member states that they "...resolve to work collectively for more inclusive political processes, allowing genuine participation by all citizens in all countries... and the right of the public to have access to information."

There is, however, no published e-democracy index in the UNPAN surveys as the e-government strategies of developed nations rarely include electronic democratic reforms, largely due to the evolution of their programmes and the emphasis on e-

services. In wider terms, democracy is a value that has a different meaning in different cultures, and it is not only participation as it is often referred to. In many cases, it is argued that introducing ICTs in government can increase democracy, because it enlarges participation to public affairs. But this is not always the case and e-participation alone is rarely sufficient to enable change.

The UNPAN e-participation index is based on the usefulness (or not) of participatory e-services, and how willing the governments are in engaging citizens to interact with them on public policy issues through ICT initiatives. The index is constructed as follows:

- **E-Information:** This describes the stage where websites offer information on policies, programs, budgets, laws, regulations, and other issues of public interest. There also exist tools for the dissemination of information, including web forums, email lists and chat rooms.
- **E-Consultation:** This describes the stage where mechanisms are provided for people to discuss public policy topics online. One can also look into the archives to see video and audio of public hearings.
- **E-Decision-making:** The last stage provides feedback opportunities for citizens to input their views on a particular decision-making process". (UNPAN, 2005)

In the UNPAN 2008 E-Government Survey, a total of 189 countries were on-line (as compared with 179 in 2005) and a greater number of countries were in the middle to top one third in e-participation than in 2005. However, 82% of the countries surveyed remained in the lower one third indicating that few countries, including our two Asia-Pacific developing country examples (Cambodia and Sri Lanka) have implemented e-participation strategies to date.

<u>Asia-Pacific Country Examples of E-Participation Index</u>		<u>Global Ratings</u>
Australia	0.8864	5 <sup>th</sup>
Cambodia	0.2273	55 <sup>th</sup>
Sri Lanka	0.0682	116 <sup>th</sup>

There were, however, some notable examples of e-participation in the Asia-Pacific region. Australia scored the highest on the e-information assessment followed by the Republic of Korea. A number of countries were reportedly starting to take advantage of Web 2.0 tools providing them with a cost-effective way of directly communicating with and involving their citizens. New Zealand scored the highest in the e-consultation assessment with an innovative use of interactive methods employed to solicit citizen opinion feedback and input.

E-decision-making evaluates the extent of a government's commitment to e-participation as evidenced by the definitive acknowledgement of an individual citizen's input and by a stated commitment to take it into account when making decisions. The Republic of Korea was the leader in this assessment. Its e-people

online participation website (<http://www.epeople.go.kr>) publicises suggestions on government policy proposals from individual users.

In general, the debate on e-democracy is polarised between those who feel that the new ICTs will enhance participation by the citizen in the government policy-making process and those who feel that it will simply be business as usual via a new medium. But as academic study of these issues is in a nascent stage, there is still very little empirical data to support either side of these arguments. A whole new domain of what to measure and how to do it is open to exploration, much beyond the rather simple and always difficult to demonstrate reality of the "e-indexes".

### **E-Readiness Index**

Perhaps adapting the UN's concept of e-readiness (UNPAN, 2005) and using it to frame e-strategies to tackle social and economic targets may offer a mechanism to help developing countries put ICT to work toward the MDGs as, according to the UN, the link between the two translates meaningfully into the e-readiness arena. In the 2008 E-Government Survey, Australia was assessed with a high composite e-readiness score of 0.8108. The major determinants of this score can be seen to be technological and, not surprisingly, Cambodia and Sri Lanka had relatively much lower scores on the web and infrastructure measures and somewhat lower scores on the human capital index.

<u>E-Government Readiness Index 2008</u>		<u>Per 100 Persons</u>	
<b>Australia</b>	0.8108		
Web measure index	0.7525		
Infrastructure index	0.6884		
Internet index	0.845	75.12	
PC index	0.848	76.61	
Cellular index	0.639	97.02	
Main telephone line index	0.506	48.81	
Broadband index	0.604	19.15	
Human capital index	0.9933		
Adult literacy	99.00		
Gross enrolment	100.0		
<b>Cambodia</b>	0.2989		
Web measure index	0.1973		
Infrastructure index	0.0118		
Internet index	0.003	0.31	
PC index	0.003	0.31	
Cellular index	0.050	7.94	
Main telephone line index	0.002	0.23	
Broadband index	0.000	0.01	
Human capital index	0.6907		
Adult literacy	73.6		
Gross enrolment	59.99		

<b>Sri Lanka</b>	0.4244		
Web measure index	0.3946		
Infrastructure index	0.0656		
Internet index	0.023	2.05	
PC index	0.039	3.54	
Cellular index	0.168	28.88	
Main telephone line index	0.093	9.01	
Broadband index	0.004	0.14	
Human capital index	0.8137		
Adult literacy	90.7		
Gross enrolment	62.75		

But the concept of e-readiness has a much wider meaning according to Heeks (1999, 2003). His research indicates that the majority of e-government projects are failures, due to a lack of e-readiness and the resulting gaps between project design and on-the-ground reality (known as "design-reality gaps"). These gaps refer not only to available technological infrastructures but also to "legal frameworks, institutional and human resources and political will."

Building on Heek's work, Misuraca (2007) advocates that the eight areas indicated in Figure 1 should be carefully analysed in order to examine the risks to e-governance success during an e-readiness assessment. These areas include four that are not within the UN e-government readiness index: namely, political conditions and leadership, regulatory framework, organisational conditions, financial conditions. This environmental analysis needs to be updated on a regular basis to reassess e-readiness not only against technological progress but also against on-going changes in the governance system.

An examination of the World Bank Institute's Governance Indicators (2007) for the Asia-Pacific country examples provides an insight into a number of the additional e-readiness indicators that Misuraca advocates. Comparative charts showing the six measures of governance (political stability, voice and accountability, government effectiveness, regulatory quality, rule of law, control of corruption) for Australia, Cambodia and Sri Lanka in 2007 are provided as Figure 2.

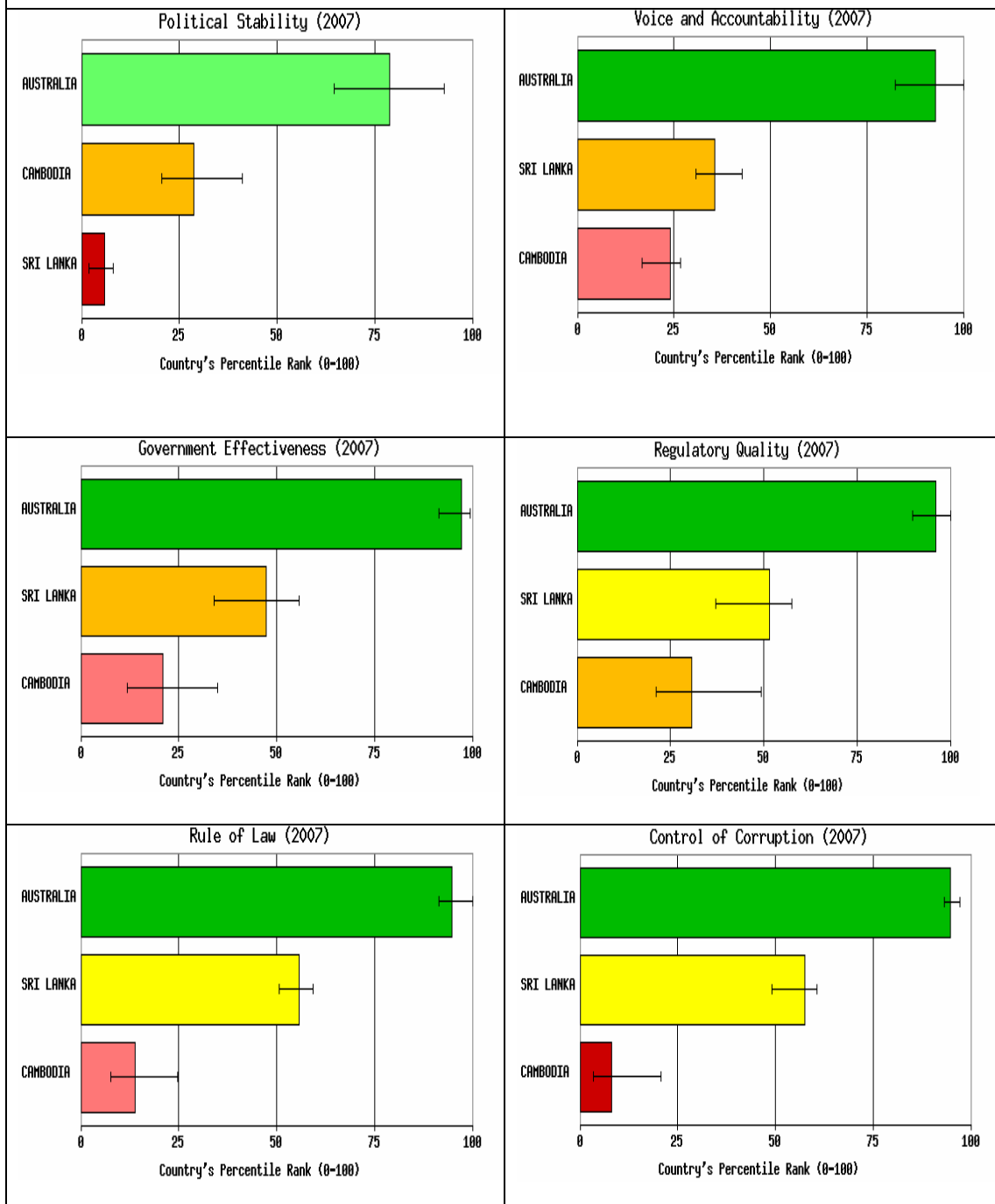
Each comparative chart shows the country's percentile rank on one of the six governance indicators. Percentile ranks indicate the percentage of countries worldwide that rate below the selected country. Higher values thus indicate better governance ratings. When viewed in colour, the charts indicate inclusion in the top 25% of countries in green, the bottom 25% in red and the mid-range (25% – 75%) in yellow. The graphs also report the margins of error displayed in the line charts by horizontal lines corresponding to a 90% confidence interval.



**Figure 1 - E-Readiness Indicators (Misuraca, 2007)**

- a. **Political conditions and leadership:** Good governance, as a condition for sustainable development, requires genuine commitment from political leaders, the private sector and organisations of civil society. In the same way, the introduction of e-government in society requires strong political will to see through the transformation process it implies to government both in its internal operations as well as with regard to its interaction with civil society;
- b. **Regulatory framework:** A proper regulatory framework is needed in order to enable secure information exchanges within government and between government, citizens and businesses. It is also needed to create the economic conditions for accessible ICTs infrastructures, services and equipment;
- c. **Organisational conditions:** International experience shows that the introduction of e-government calls for and causes profound and evolutionary change of the institutional arrangements. To guide this transformation process, appropriate management and co-ordination mechanisms are needed;
- d. **Financial conditions:** The initial costs related to implementing e-government can be considerable and governments may have limited capacity to bridge the period between the initial investment and returns. Proper resource planning and access to innovative financing mechanisms are critical for e-government sustainability;
- e. **Cultural and human resources conditions:** Positive attitudes, knowledge and skills need to be in place – especially within the public sector – to initiate, implement and sustain e-government. Cultural aspects may cause general resistance to change and information-sharing. Inadequate human resource capacity may lead to lack of customer-orientation and overall commitment;
- f. **Communication environment:** in today's world, communicating with citizens is a duty and a necessity for governments. E-government needs to be accepted and understood by all stakeholders to ensure that its benefits flow to the society as a whole;
- g. **Technological Infrastructure:** Lack of technologies is a major bottleneck for countries aiming to implement and maintain e-government. Legacy systems may also represent considerable obstacles to change. The demographic and geographic conditions of different areas, accompanied by the distribution of economic activities, may also represent a strong bias in the rollout of ICTs infrastructure if left to the market alone;
- h. **Data and information systems:** Management systems, records and work processes must be in place to provide the necessary data to support the move to e-government.

**Figure 2 - World Bank Institute Governance Indicators  
 Comparing Cambodia and Sri Lanka with Australia**



Source: Kaufmann D., A. Kraay, and M. Mastruzzi 2008: Governance Matters VII: Governance Indicators for 1996-2007  
 Note: The governance indicators presented here aggregate the views on the quality of governance provided by a large number of enterprise, citizen and expert survey respondents in industrial and developing countries. These data are gathered from a number of survey institutes, think tanks, non-governmental organizations, and international organizations.

It is noticeable that, despite the current civil war in Sri Lanka, the country is in the global mid-range ranking on all governance indicators other than “political stability”. Cambodia, on the other hand, thirty years after its civil war officially ended, achieves a mid-range ranking on only two indicators: all others are in the bottom 25%. It is not the purpose of this paper to undertake an in-depth analysis of the purported reasons for each country’s governance rankings. It is sufficient to point out that these published assessments provide important background to and a context for Misuraca’s proposed e-readiness indicators (2007).

A key point is that, while being e-ready according to the above criteria is certainly desirable, the question ‘Who should be e-ready for what?’ hangs in the air. E-governance initiatives are usually not structured with concepts of state transformation in mind: they are more often than not based on the technological possibilities. The focus urgently needs to move from “How much bandwidth?” to “How much bandwidth is needed for remote diagnosis by community-based practitioners in order to reduce child mortality?” if e-readiness assessments and e-governance strategies are to enable developing countries to make effective use of ICTs as part of their plans to tackle the MDGs.



## 4. Concluding Thoughts

E-governance should be viewed as a process: the "how" rather than the "what". It should be a reflective activity in which the way problems are tackled through building and maintaining socio-technical networks is as important as the result. In this sense, transparency and accountability are features intrinsically marking a robust e-governance process, even where e-government might only be seen as an instrument for better service delivery (e-services) or communication (e-participation)..

It is not sufficient to just introduce ICTs into government operations to solve the governance problems of today's world. For Misuraca and Rossel (2006), a mere digital translation of existing services with all the technological solutions outsourced and no particular change induced in the value chain is a Change I type. But the e-governance interaction that fits the new opportunities for alliances and partnerships is a Change II type.

“Change I is ICT-driven, Change II is basically the art of reconfiguring processes, tasks, roles and, if necessary, institutions in order to make better use of ICTs. Change I is mainly a substitution operation, Change II is a new deal to enhance each stakeholder's chances. Change I is mostly an administration-focussed preoccupation, rhetorically concerned with improving the servicing of customers or users. Change II is often multi-actor, multi-level and multi-sector.” (Misuraca and Rossel, 2006)

McCourt (2001) advocates a contingency approach to public sector management reform rather than an idealistic one. As e-governance, even more than e-government, stresses the importance of multiple actors and the socio-technical capacity of ICTs, the learning here must reside in the causality chain. For each technological implementation, for each e-service delivered, there is in fact an organisational and institutional dimension, more governance-oriented, to be accounted for. The deployment of ICTs must be defined within “the framework of a policy-compliant and inter-actor knowledge management-effective perspective” (Misuraca, 2007). This framework will allow the move from e-government to e-governance.

Society is not harmonious and simply viewing e-governance, like governance, as the transactional aspect of actor relations does not take account of the complexity of what really takes place. Society is also confrontational. Actors have to muddle their way through even when their interests are not fundamentally compatible, inter-sector-wise and inter-level-wise. E-governance can be seen as the expression of a "dynamic tension" between institutional frameworks and ICTs (Misuraca, 2007).

The following initial steps have been identified by the UNDP (2004) in the development of a framework in which e-government is to be carried out:

- Formulation of an environmental analysis (e-government readiness);
- Elaboration of the long-term vision, including the expected contribution to development foreseen by e-government;
- Formulation of the strategic goals being pursued;

- Identification of the priorities and expected impact.

It is concluded that a similar process is required to consider the e-governance implications of the e-government strategy. Coleman (2004) proposes the following three key principles for devising a progressive e-governance strategy in relation to developing countries in Africa, although the principles can be equally well applied in other regions such as the Asia-Pacific:

- 1) nationally-owned, combining traditional methods of accountability with modern techniques of e-governance;
- 2) developed in partnership with the private sector, which should be involved in providing skill training and community-level capacity building, as well as hardware and software; and
- 3) evaluated regularly in terms of its contribution to more transparent, accountable, inclusive and efficient governance.

He suggests that the developing country in question should avoid three key pitfalls:

- 1) adoption of technologies without developing human skills and capacities to manage, integrate and sustain them;
- 2) centralised use of technologies by government departments, without developing the benefit of technology to intermediary institutions, such as local government, parliament, parties, civil society organization and independent media; and
- 3) failure to link better governance to broader and more inclusive democracy which gives voice to those who cannot afford technologies, but have needs and ideas to express.

Such pitfalls exist in almost all parts of the world, including many developed countries that continue to view e-government as more a technological project than a template for governance transformation. The result is that many developed countries are poorly positioned to provide holistic advice in terms of adopting ICTs for the broader institutional building and democratic reforms of e-governance.

E-government is difficult to evaluate against effective and sustainable cost-benefit criteria. In addition, whilst progress has been made in terms of service delivery, ICTs have so far not been systematically used with regard to the other functions of the state: namely regulatory and policy-making. The potential of ICTs in linking the overall functions of the state and the different sectors and actors involved in the governance process is far from being realised or, in many cases, even started.

The challenge is that “a radically new and fully innovative vision of e-governance is needed where institutional redesign, state transformation, and organisational change, as well as networking and relationship management, are the key features of this new paradigm” (Misuraca, 2007). It is concluded that this process must be explicitly linked by developing country societies to the MDG goals of reducing inequalities and ensuring that support reaches those who need it most if effective use of ICTs is to be the adopted measure of success.

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