Electronic Government – The Key to Good Governance
in less Developed Countries?

Jakob Hesse
Candidate for M.Sc. in Analysis Design and Management of Information Systems
Information Systems and Innovation Group
Department of Management
London School of Economics

International development agencies carry out development projects in order to promote 'good governance' standards. Increasingly, electronic government (e-government) projects are being initiated in Less Developed Countries (LDCs) with the goal of 'e-enabling' good governance in the public sector. However, the contribution e-government can make to achieving good governance is not without controversy. This essay classifies the relevant literature according to the predominant schools of thought, categories of good governance, available empirical support and theoretical perspectives. On the basis of this classification, an evaluation is carried out. The areas of analysis are scope/focus of the research, empirical foundations and term definitions. The essay concludes that the revealed research gaps show that an adjusted problem focus and more empiric underpinning is required.

1 Introduction

Information and Communication Technologies (ICTs) and Information Systems (IS) are not only used in private organisations but also in the public sector. Since its emergence approximately 15 years ago, e-government is increasingly being seen as an influential driver in supporting the development of Less Developed Countries (LDCs). Furthermore, many international organisations regard e-government as being a driver for good governance in LDCs, and fund e-government projects in LDCs accordingly.

While there are claims that e-government implementations lead to development 'leapfrogging' of government institutions in LDCs – thus achieving good governance – , it can also be argued that the usage of e-government as such does not directly result in an improved functioning of the public sector according to good governance standards. Furthermore, review of the literature also shows that these discussions are often based on different definitions of the terms e-government and good government .

The literature on this field will be categorised to get an overview of the current status of the debate. A classification framework will be used to show the contrasting views found in the literature and to identify research gaps. The definitions of good governance and e-government by international organisations will be discussed, as they have significant implications for the type of e-government initiatives which are being launched.

Beginning with the definitions and interconnections of the terms good governance and e-government (section 2), the following section (section 3) will look at the current arguments. The essay will conclude with an evaluation and outlook (section 4), stating the needs for further research. Many reviewed articles lack empirical support and often focus on only one e-government aspect. Furthermore, the meaning of the terms good governance and e-government should be reassessed.

2 The terms 'good governance' and 'e-government'

The term good governance emerged in the 1980s, as the World Bank began to describe factors and requirements for market-oriented growth in LDCs (Haldenwang 2004). In the "Monterrey Consensus" (2002), international development agencies (IDAs), non government organisations (NGOs) and governments agreed on a set of development aid policies and guidelines, stressing the importance of good governance (Ciborra and Navarra 2005).

The World Bank defines 5 dimensions of good governance: public sector management, competitive private sector, structure of government, civil society participation and political accountability (WorldBank 2006). Similarly, the United Nations (UN) define good governance as having 4 different dimensions: economic, political, administrative, systemic (UN 1997). In even more general terms, good governance can be described as a "commitment to democratic values, norms & practices, trusted services and just & honest business" (Okot-Uma 2001, p. 2).

In summary, it can be concluded that the core concepts of good governance are better *accountability*, improved *transparency* and increased *citizen participation* (Okot-Uma 2001). *Accountability* refers to the fact that public servants are being held accountable for their actions (Heeks 2000). *Transparency* refers to a more transparent process of decision making within government institutions. Greater *citizen participation* means that citizens should be able to interact closer with the government and that government-to-citizen (G2C) communication should be increased (Seifert and Bonham 2003). For many rich states and IDAs, good governance has become the *conditio sine qua non* for supplying aid to LDCs (Ciborra and Navarra 2005).

Following the Monterrey consensus, e-government projects began to be regarded as a catalyst for wide ranging reforms of the public sector in LDCs (Haldenwang 2004). The main sectors of e-government are government-to-government (G2G; this includes sharing data between government institutions), government-to-business (G2B; improved procuring and streamlined regulatory processes) and G2C (improved accessibility of government services via ICT) (Seifert and Bonham 2003). Okot-Uma (2001, p.9) defines e-government as "the processes and structures pertinent to the electronic delivery of government services to the public". The OECD has a more narrow definition: "The use of information and communication technologies, and particularly the internet, as a tool to achieve better government" (OECD 2003, p. 23). Although the plethora of definitions show that e-government initiatives may take on many forms, summarising the definitions points towards the importance of using e-government not only as a tool for improving citizen interaction and involvement with

public services, but also towards using e-governance as a means to change process structures within government institutions. Because of this, e-government is viewed by some as being a tool for achieving good governance.

3 Classification of relevant literature

Drawing from the definitions of good governance from section two and the classification into the categories *accountability*, *transparency* and *citizen participation*, this section will introduce different points of view in regards to using e-government to lead to these three characteristics of good governance. Items will also be categorised according to the type of empirical support given and the theoretical perspective used (see table 1).

3.1 School of thought: Pessimistic in tendency

Ciborra (2005) states that the impact of technology solutions cannot be viewed in isolation. The author doubts whether the implementation of e-government improves democracy and fosters development. Focussing on a field study which looks at e-government projects in Jordan, he shows that even the implementation of a comparably simple e-government application (in this case: a drivers and vehicle licensing programme) with a supposedly low risk and high yield will produce a high number of unexpected difficulties (Ciborra 2005). In sum, such a small application "turns out to be a hologram in the small of the difficulties of e-government in a developing country: extremely complex, high risk, and calling into question the role of the state in relation to its citizens" (Ciborra 2005, p. 266). He goes on to say that rather than increase transparency, the introduction of e-government offers bribery to new intermediaries. In order to achieve public sector reform, transformation and learning capabilities are needed; the roles of ICT in this context are not very significant (Ciborra 2005). This view is also supported by (Ciborra and Navarra 2005), who argue that it is unclear how the costs of transition to reformed government institutions can be re-

duced by supporting the diffusion of ICT. By using an interpretive perspective, both articles state that the biggest challenge of implementing e-government is the high complexity of the state apparatus and "[…] the push for democratic reforms without real popular participation" (Ciborra and Navarra 2005, p. 156).

A similar point is being made by (Wade 2002). He states that in many academic articles about e-government, authors wrongly generalise from successful pilot projects without paying attention to the "scaling up" of problems (Wade 2002). E-government projects may be successful for one particular set of functions, but the scope of the project cannot be easily expanded. Occurring problems on a practical level can include insufficient resources to secure proper teaching and maintenance. A far more complex problem is the already existing process structure within the government: providing G2C services in a single rural village may "just" be a technical problem. But implementing G2G projects (i.e. increasing transparency in bureaucratic processes) in a complex structured government ministry requires not only technology, but also political support. He goes on to say that ICT restructuring projects cause "drift": they tend to cause a loss of control, productivity and accountability (Wade 2002), as there are always unintended interactions between different subsystems within an ICT structure and human actors. He emphasises that ICT-for-development literature is biased towards the supply side (donor countries, international organisations), and doesn't take into account the demand side (Wade 2002). In addition, measurable indicators of the effect ICT has on human development *over time* do not exist, instead, the literature merely presents anecdotes about successful e-government projects (Wade 2002).

The issue of sustainability of e-government projects is another source of pessimism: it can be argued that even if e-government projects are successful, the long term effects are often not measured. Kumar and Best (2006) study a rural

Author	Discussed categories of good governance	Empirical support / case studies	Theoretical perspective
School of thought: Pessimistic in tendency			
Ciborra and Navarra (2005)	Citizen participation, transparency	1 field study	Interpretivist
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Wade (2002)	Accountability	Numerous projects quoted	Positivist
Kumar and Best (2006)	Citizen participation, transparency	1 field study	-
School of thought: Optimistic in tendency			
Basu (2004)	Citizen participation	3 G2C projects quoted	Positivist
Haldenwang (2004)	Citizen participation, accountability	-	-
Okot-Uma (2001)	Citizen participation	4 G2G project quoted 1 G2C project quoted	Positivist
Hammond (2001)	Citizen participation, transparency	4 G2C projects quoted 1 G2G project quoted	Positivist
Zhang (2001)	Transparency	1 G2G project quoted	-
Heeks and Davies (1999)	Citizen participation, transparency, accountability	1 G2C project quoted	-

Table 1: Categorisation of the literature

G2C project in Melur, India which is a positive example for an e-government project. Village "e-kiosks" were successfully allowing citizens to make simple transactions with the local government (i.e. order income certificates). Two years later, the project was given up because of missing political and administrative support to remain institutionally viable (Kumar and Best 2006). The authors conclude that even "simple" G2C e-government projects have no effect on good governance if such a project is being undertaken in an isolated context. Reforms can never be solely driven by technology.

3.2 School of thought: Optimistic in tendency

Basu posits that e-government, coupled with "smart and timely government policies" (Basu 2004, p. 114), has the potential to achieve development objectives in LDCs much faster than development projects that do not utilise e-government. He says that the underdeveloped ICT infrastructure in LDCs and lack of adequate training possibilities are the major constraining factors for successfully implementing G2C e-government services. However, by summarising three successful G2C projects from Brazil, Africa and Asia (Basu 2004), the paper concludes that these projects reaffirm "the faith in what has been termed 'leapfrog' technology" (Basu 2004, p. 119). In a similar manner, Okot-Uma (2001) emphasises that e-government projects must primarily support G2C projects. Both authors base their conclusions on multiple G2C projects which they cite from other sources.

Just focusing on G2C, the tasks and issues involved with implementing e-government may be clearly outlined. However, even a comparatively simple G2C project may have far reaching impact on internal procedures of public institutions, which affects the distribution of power and material resources (Haldenwang 2004). Because of these effects, e-government can be seen as being a tool for supporting existing reform programmes. E-government projects only make sense if the political, social and economic reforms are supported by reform-oriented actors in politics. The author sees e-government as a powerful tool: just as e-government can be used to facilitate change, it also has the capability to change the distribution of power within the public administration.

One may also argue that introducing e-government in a LDC will actually jump-start development. Hammond (2001) supports this argument by quoting from a mobile phone development project in rural Bangladesh: the rural mobile telephone system, having been installed in a couple of villages, became a success, providing "economic benefits" and "improving the lives of villagers in ways that put most antipoverty programs to shame" (Hammond 2001, p. 100). The author provides four further examples of how G2C e-government projects have improved the lives of people in LDCs. In contrast to Wade (2002), who believes that a successful e-government project requires backup by political actors, he argues that individual G2C projects can accelerate bottom-up development, even if the government didn't plan or expect this type of outcome from a G2C e-government project. This might even lead to improved transparency inside public sector institutions, because improved communication channels facilitate this (Hammond 2001).

Zhang (2001) shares this point of view. Looking at China's e-government project "Government Online Project" (which was started in 1999), Zhang (2001) claims that e-government will increase transparency in the public sector. Although the political motivation behind this project was to implement a system which allows for an easier communication with citizens (Zhang 2001), the use of the government intranet system has in fact sparked moves toward more transparency within the public sector, because the information exchange between communal, regional and national government bodies has been made easier.

While some view ICT as having a primary role in government reform, it is crucial to first understand what role ICT may have in a reform process (Heeks and Davies 1999). Only by initiating cultural and structural changes in government organisations it is possible to introduce technology as the "servant of reform" (Heeks and Davies 1999, p. 45). The authors call this the "integrate approach" to information age reform, and they regard that approach as being the key to successfully employing technology in the public sector: public officials must become information literate and ICT must be integrated into an overall process of organisational change. E-government projects will be part of a wider reform process, and thus contribute to achieving good governance. However, numerous structural, cultural and technical barriers make this approach a difficult endeavour, and Heeks and Davies (1999) can quote only one example from a LDC where this approach has been successfully used.

4 Evaluation and outlook

Most of the available literature on e-government projects in LDCs deals with project failure in a very narrow perspective. The aim of this literature review was to "take a step back" and look at the link between e-government and good governance, because in some cases, researchers seem to attribute a transformative potential to e-government projects without questioning this. Due to space constraints, not all available literature could be reviewed. However, the selected literature gives a good impression of the current status of research. By relating to the categorisations in table 1, the findings can be evaluated and placed in a broader picture to indicate research gaps.

4.1 Scope of research

As stated in section 1, the term good governance comprises of the three segments citizen participation, transparency and accountability. Table 1 shows that the literature concentrates on citizen participation and – to a lesser extent – on transparency issues of good governance. Only six papers discuss more than one characteristic. This indicates that current research focuses on individual aspects of good governance, without looking at the impact on government institutions as a whole. Most reviewed articles place an emphasis on improved citizen participation through G2C e-government projects. Success and failure of such a project can be empirically assessed. However, G2C projects address just one aspect of improved citizen participation according to good governance standards. The effects of G2G e-government projects on improved transparency and accountability, however, are more difficult to measure, and have not been covered in the literature to the same extent.

4.2 Empirical support and theoretical perspectives

As can be seen in table 1, the vast majority of the reviewed literature does not contain specific empirical field studies.

Most quoted case studies do not focus on long term effects and do not address sustainability issues. In some cases, conclusions are drawn from merely one project. The derived conclusions are not always appropriate, as they only selectively point out singular issues of good governance. Furthermore, these case studies are often interpreted under a positivist perspective (see table 1). But as the underlying case studies cannot be used for generalisations (they are often highly country and environment specific), the author's conclusions often lack an empirical foundation. An interpretivist viewpoint might better contribute to the understanding of the problem, as the dependencies of various actors and organisations can be exposed more clearly. As the use of new technology in the public sector is intrinsically embedded into social contexts, such a research philosophy may be more appropriate to examine this question.

4.3 Evolving focus of research

The term good governance has evolved independently from the term e-government, although some good governance definitions mention e-government. As a result, research literature often focuses only on one of these terms. While good governance has mainly been discussed in law and government journals as well as in publications of international organisations like the UN and the World Bank, e-government has been in the focus in many IS journals, with an emphasis on technical implementation issues. As a result, a coherent form of research discussion which sees the two terms entangled was missing. Since the beginning of the 21st century this has begun to change, as more articles appear that view e-government in the light of achieving good governance (see for example Ciborra and Navarra (2005)).

4.4 Definitions of the terms 'good governance' and 'e-government'

The definitions for good governance used in the literature come predominantly from international organisations like the World Bank. These definitions have underlying assumptions, one of which may be that by striving for an accountable and transparent state, achieving an efficient market economy is an important goal of good governance. Due to international organisations being the main initiators of development projects in LDCs, their definitions are often implicitly being followed in the literature. Similarly, some definitions for e-government are one dimensional (i.e. see the OECD definition in section 1). By reassessing the definitions, researchers might be able to find further (i.e. non market centred) criteria for good governance.

4.5 Outlook

The mentioned research gaps and problems of focus show that the question of whether e-government leads to good governance has not been extensively discussed, although it is a pressing issue: donor countries and IDAs heavily sponsor and initiate e-government projects in LDCs, assuming – perhaps wrongly – that this leads to good governance. Further questioning the underlying assumptions with further research and empiric foundations is one of the key issues that need to be addressed.

References

Basu, S. (2004) "E-Government and Developing Countries: An Overview", International Review of Law Computers & Technology, **18 (1),** pp. 109-132.

Ciborra, C. (2005) "Interpreting E-Government and Development: Efficiency, Transparency or Governance at a Distance?" Information Technology & People, **18 (3),** pp. 260-279.

Ciborra, C. and D. D. Navarra (2005) "Good Governance, Development Theory, and Aid Policy: Risks and Challenges of E-Government in Jordan", Information Technology for Development, **11 (2),** pp. 141-159.

Haldenwang, C. v. (2004) "Electronic Government (E-Government) and Development", The European Journal of Development Research, **16 (2),** pp. 417-432.

Hammond, A. (2001) "Digitally Empowered Development", Foreign Affairs, **80 (2),** pp. 96-106.

Heeks, R. (2000) "Information Technology, Information Systems and Public Sector Accountability" in Information Technology in Context: Studies from the Perspective of Developing Countries, (Avgerou, C. and G. Walsham eds) Ashgate Publishing Ltd., Aldershot, pp. 201-219.

Heeks, R. and A. Davies (1999) "Different Approaches to Information Age Reform" in Reinventing Government in the Information Age, (Heeks, R. ed.) Routledge, Abingdon, pp. 22-48.

Kumar, R. and M. L. Best (2006) "Impact and Sustainability of E-Government Services in Developing Countries: Lessons Learned from Tamil, India", The Information Society, **22** pp. 1-22.

Okot-Uma, R. W. O. (2001) Electronic Governance: Re-Inventing Good Governance. Commonwealth Secretariat London Last accessed: 01.12.2006 Last updated: 01.12.2006 Address: http://hasp.axesnet.com/contenido/documentos/Okot-Uma.pdf.

Seifert, J. W. and G. M. Bonham (2003) The Transformative Potential of E-Government in Transitional Democracies Last accessed: 30.11.2006 Last updated: 6.11.2006 Address: http://www.maxwell.syr.edu/maxpages/faculty/gmbonham/Transformative_Potential_of_E-Government.pdf.

UN (1997) "Reconceptualising Governance", Discussion Paper 2, New York: UNDP (Management Development and Governance Division).

Wade, R. H. (2002) "Bridging the Digital Divide: New Route to Development or New Form of Dependency?" Global Governance, **8** pp. 443-466.

WorldBank (2006) What Is Governance? Last accessed: 01.12.2006 Last updated: 01.12.2006 Address: http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/EXTMNAREGTOPGOVERNANCE/0,,contentMDK:20513159~pagePK:34004173~piPK:34003707~theSitePK:497024,00.html#_ftnref2.

Zhang, J. (2001) "China's 'Government Online' and Attempts to Gain Technical Legitimacy", ASIEN, **2001 (Summer),** pp. 1-23.

About the author

Jakob F Hesse holds a BSc in Information Systems from the Technical University of Munich, Germany. His MSc dissertation is on ICT telecentre projects in developing countries, with empirical work carried out in Kerala, India.