

E-Government Developments

e-Government for Development Information Exchange

The University of Manchester's Institute for Development Policy and Management has established the e-Government for Development Information Exchange, under the leadership of Richard Heeks, (www.egov4dev.org) that provides online resource materials for e-Government practitioners in developing and transitional countries. It addresses a series of topics of general interest and suggests solutions to issues in relation to these topics. The topics are:

- (1) e-Government Successes and Failure,
- (2) ICTs for Government Transparency,
- (3) Public Health Information Systems,
- (4) m-Government, and
- (5) Building e-Government Websites.

The solutions are developed through a mix of research at the Institute, research in local partner institutions, and discussions on the egov4dev email list. Two of the topics that are focused on are summarized as follows:

Success and Failure in e-Government Projects

e-Government projects can have three main outcomes: total failure; partial failure, and success. Of e-Government projects in developing/transitional countries, it is estimated that 35% are total failures, 50% are partial failures, and only some 15% can be fully seen as successes. (Links in the text provide more detailed information) This high rate of failure is a major problem. It brings serious direct and indirect financial costs. It damages morale, credibility and trust. And it prevents the benefits of e-Government from being delivered.

Failure could be used as a basis for learning and knowledge generation, helping to improve later projects. However, there are many barriers to learning from failure, and little of it appears to occur.

To help explain why e-Government projects fail (or in some instances, succeed), the Exchange provides access to more than 30 newly-commissioned cases of e-Government from around the world. These are classified according to outcome, the type of reform, the sector, and the geographic region involved. From analyzing these and other cases, the Exchange explains the causes of e-Government failure and successes. Two models for understanding these causes have been developed. The Factor Model identifies a set of ten key factors, external pressure, internal political desire, overall vision/strategy, project management, politics/self-interest, design, competencies, technological infrastructure, and other. Presence or absence of these factors will determine success or failure.

The Design-Reality Gap Model identifies a gap that exists for all e-Government projects between the design assumption/requirements and the reality of the client public agency. The larger the gap between design and reality, the greater the risk that the project will fail. The smaller the gap, the greater the chance of success.

Practical Techniques for E-Government Projects

Practitioners involved with an implemented e-Government project are often unclear whether it should be classed as a success or a failure. The Exchange provides a five-step outline guide to evaluating the outcome of an e-Government project.

If the project is a failure, then it can provide a valuable base for learning. The Exchange provides an outline guide – recognition, knowledge capture, knowledge transfer, knowledge application – to learning from failure.

The Exchange also provides detailed practical guidance on understanding why a particular e-Government

project has failed. This guidance helps practitioners understand what critical success factors were absent. It also helps them understand where there were overly-large gaps between application design and local reality.

The needs of those involved with e-Government projects that are still in the planning stage, or that are in process of being implemented, are also addressed.

Practitioners often want to perform risk assessment, in other words, they want to understand whether their project is likely to fail and, if so, why. Online resources on the Exchange give clear guidance – though a structured set of quantified questions – to help practitioners identify strengths and weaknesses in critical success factors. Guidance is also provided on how to assess gaps between project design and local reality. Worked examples and real-world cases are provided to support the practical guides. Links are also given to alternative risk assessment techniques.

Perhaps most importantly, practitioners want help in addressing risks in making their e-Government projects more likely to succeed and less likely to fail. The Exchange provides a step-by-step guide to reducing the gaps between design and reality. With the guide are a set of real-world examples. Also presented is a set of ideas on how to address specific factors identified as important to project success. In addition to this material, the Exchange provides a training guide that shows how to use the Web resources in training sessions.

m-Government: Mobile/Wireless Applications in Government

m-Government is a subset of e-Government that is designed to improve public sector organizations. In the case of m-Government, ICTs are limited to mobile and/or wireless technologies like cellular/mobile phones, and laptops and PDAs connected to wireless local area networks (LANs). M-Government can help make public information and government services available “anytime, anywhere” to citizens and officials.

m-Government should not be seen as something brand-new: for example, wireless technology has always been an important part of law enforcement. Only today, police officers are as likely to use a laptop wirelessly connected to the Internet as the two-way radio. When officers spot a suspicious vehicle they can directly search databases that provide information on who owns the vehicle, if it has been reported stolen or has been reported as a crime scene, and if the current owner is wanted by the police or has jumped bail. Health and safety inspectors can now file their reports from the

field in real time using a Pocket PC or handheld terminals, eliminating paper forms and the need to re-enter the data collected when they return to their office.

Citizens are able to save time and energy by accessing the Internet and government networks through mobile phones and other wireless devices. In Malaysia, for example, citizens can verify their voting information, such as the parliamentary and state constituencies where they are to vote, using SMS. Alternatively, citizens can request that real-time information is sent to their mobile phone, PDA, or pager as an e-mail or text message. The California state government has established a Web page where citizens can register to receive wireless PDA and cell phone notification services for energy alerts, lottery results, traffic updates and articles from the Governor’s press room.

m-Government is not only about efficiency but also allows for citizen activism. In the Philippines citizens are able to help enforce anti-pollution laws by reporting smoke-belching public buses and other vehicles via SMS. SMS is also being used to get citizens involved in the fight against crime and illegal drugs.

m-Government is particularly suited for developing countries where Internet access rates are low but mobile phone penetration is growing rapidly, particularly in urban areas. Globally, the number of mobile phones has surpassed the number of fixed/wired phones. This is also the case in many nations, including 49 middle-income and 36 low-income countries. Among these are Burkina Faso, Chad, Honduras, Indonesia, Jordan, Mexico, Mongolia, Nigeria, Philippines, Saudi Arabia and South Africa.

m-Government and e-Government

m-Government is not a replacement for e-Government, rather it complements it. While mobile phones excellent access devices, they are not suitable for the transmission of complex and voluminous information. Despite the emergence of more sophisticated handsets, mobile phones do not have the same amount of features and services as PC-based Internet applications. For example, SMS limits messages to 160 characters whereas email allows a nearly infinite quantity of characters and multimedia content. Even PDAs or Pocket PCs that support e-mail have display and other limitations. Internet-connected PCs are still the preferred device to take part in online political discussions, to search for detailed public sector information, and to transact most types of e-Government services. Mobile applications also rely on good back office and ICT infrastruc-

tures and work processes: government networks and databases, data quality procedures, transaction recording processes, etc.

m-Government is like ATMs. In both cases, the device used by the public is quick and convenient. But

it is just the tip of an iceberg: just the final delivery channel to the citizen. Underneath is a complex and costly infrastructure that is required in order to make that final delivery device work.