

**EGovernment for Good Governance in Developing Countries: Documenting
the eFez Project learning through a Book Writing**

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Final Progress Report

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Synthesis

This document represents the final progress report of the IDRC Project no. 106103/001 related to writing a book on eGovernment for Good Governance. This book mainly rests on indigenous experimentations and praxis; capitalizing on the authors' involvement in/ and reflection on research findings and lessons learned of the award-winning IDRC-funded research projects eFez and Wman@Fez.

The idea of writing this book came in response to the realization that the learning and good practices evolved in the above-listed projects will be useful to practitioners and decision makers in other developing countries. The underpinning reasoning is the above listed projects have generated invaluable material with their participatory real-life approach. The idea of writing this book was further endorsed with the literature review revealing a noticeable lack of practical books targeting decision makers with respect to principles and good practices guiding the design-implementation of e-Government for Good Governance, and any other sector-specific ICT4D for that matter.

In an attempt to consolidate the indigenous feature of our Research experiences we decided to design this book as a story recitation with a focus on important decisions, events, problems, etc. that characterized the projects. And, in order to highlight the acquired knowledge and give it the right value it deserves, we decided to formalize it as a framework that practitioners can use to design and implement eGovernment Systems and to measure the outcomes/impacts these systems are expected to have on the governance process.

After more than 18 months of work (and a lot of challenges and learnings), we can confirm that the results are satisfactory and that the book we intent to publish will be of a good quality for scientists, practitioners and decision makers.

Research Problem, Objectives and Motivations

Information and Communication Technologies (ICT) have a tremendous potential to enhance the living of people in general and especially in the developing countries. They can boost businesses, support education and health systems and also enhance the governance that is a major and vital factor in the development process. Nowadays, it is difficult to imagine our lives without computers. They are just everywhere, in cars, in phones, in aircrafts, in banks, in schools, etc. Several factors contributed to this invasion and transformed the computer into an essential tool, not only to do business but also to support/boost social/personal activities of individuals. Indeed these factors include the apparition of the Internet, the integration of Informatics devices and Telecom infrastructures, the miniaturization of devices and the considerable decrease of acquisition costs. Gradually, in developed countries, the society's perception of computers has progressively shifted from a purely technical device to "an all in one" support tool for almost all human activities.

Unfortunately, and in contrast with the exciting and promising opportunity that ICTs offer to DC, Developing and Less Developed Countries (D/LCD) in general have not yet embarked in the digital era. Most of them have not yet developed their back office component (records related to the civil state, to education track, to health, etc.) which is a fundamental pre-requisite to any e-application. In many situations, eGovernment systems have been adopted just for façade purposes since it is “politically incorrect” not to have a web portal, an email address and/or a face book/twitter account for governmental agencies. But when you assess these web portals you quickly realize that they aren’t of any use for the citizen (no online services, no localization, no local/appropriate content, no e-engagement, no precisions, no update, etc.).

Our Research Team (the ICT4D Laboratory at Al Akhawayn University in Ifrane Morocco) decided to carry out a number of actions to contribute to this important issue, concentrating its work on Morocco’s ICT-related concerns. The idea received support from the IDRC and the research partnership started in 2004 with a pilot project for the city of Fez. This pilot aimed at building an e-Government system to electronically enable the service delivery of a set of actively used citizen-oriented services: Etat-civil services, delivered at the local government office known as Bureau d’Etat Civil (BEC). Specifically, the project automated the BEC back office and electronically enabled the front office via a web portal and a related touch screen kiosk, available for public use and adapted for the illiterate.

Since its deployment in November 2005, the eFez platform has had a far-reaching organizational capacity-building impact on Fez’s local government. The ICT-based system not only revolutionized and transformed the BEC functioning and the workflow associated with it but also enabled an unprecedented citizen-friendly instant service delivery, and eliminated conditions leading to ills of bad governance (queue jumping, tipping, abusive and citizen-unfriendly treatment etc.). Pursuing ICT4D innovation in a research-practice environment has made eFez generating and producing assets and resources feeding intellectual capital. eFez led to the realization that ICT4D implementation is extremely slow in developing countries, especially in Africa and in the Arab World (at least according to the UN Global reports). eFez learning experience enabled the research team to recognize that though the ICT4D situation in developing countries is troubling and distressing, it is not hopeless. Rather, developing countries (once favorable conditions are met) can turn in a region where ICT4D stories are flourishing and rolling out. Thus, eFez underscored the need to further disseminate the good practices and lessons learned to inform and influence the decision makers in the developing countries.

At the end of the eFez project, a huge amount of ideas, knowledge, know how, views, etc. had been generated. Part of it has been published in different conferences, journals and books and another part was waiting the right time (since the authors were very busy doing hundreds of thousands of things to make sure the project will succeed!). Furthermore, most of the eFez publications that are released are fractal and related to a specific aspect and/or a specific life cycle phase of the Project. Finally, the global vision and approach of the eFez Project was never addressed as such in a publication, and a direct link between this vision and the specific

objectives and/or milestones that have been set to achieve it, in the 2 phases of the project, has never been made. Hence the writing of this book is mainly the result of two important factors:

- ↳ The success of the eFez Project (phase 1 and phase 2) and the authors' realization that the learning and good practices evolved in this project could be useful to practitioners and decision makers in other developing countries, thanks to the invaluable material and findings it generated using a participatory real-life approach. In fact, the 'ingredients and recipes' of this project's success were so simple and accessible that we thought it is worth it to share them with others.
- ↳ The noticeable lack of practical books targeting decision makers with respect to principles and good practices guiding the design and implementation of e-Government for Good Governance, and any other sector-specific ICT4D for that matter.

The Book writing idea was further strengthened with the intention to design it in a textbook format elaborated to be ultimately utilized as material for modular training programs. This will contribute to South-South dialogue; where authors' Southern experience in ICT4D will be disseminated to inform, guide, and inspire their Southern peers in the developing countries, both in Africa and the Arab World (increasingly cautious of the need to build "knowledge society").

More specifically, this book intends to:

- ↳ Document/Disseminate the eFez Project experience in all its aspects (approach, methodology, test beds, etc.);
- ↳ Present the knowledge and know-how (roadmap, impact assessment framework, design issues, lessons learnt and best practices, etc.) that the authors developed (and published in many journal papers and conference proceedings) thanks to their involvement in this project and their systematic quest to turn its indigenous experimentations/findings into a formal framework to propose to academics, practitioners and decision makers ;
- ↳ Offer a practical supporting material to decision makers in developing countries with respect to ICT4D, and specifically eGovernment implementation;
- ↳ Review, analyse and synthesize a comparative study between the eFez Framework and a numbers of other frameworks from the open literature.

E-Fez was an action research project where academics, politics, employees and citizens acted as researchers. The knowledge body generated by the different actions/activities of the project is intrinsically of interest for anyone who wants to know/learn more about the reaction and behavioral evolution/changes of these stakeholders, the impacts/outcomes of the implemented system and how to measure those to make sure the system is serving its ultimate purpose, that is

good governance and finally, how to succeed an ICT4D project based on/using a generic roadmap we are suggesting in this book. Accordingly, the main target of this book is Politicians and Decisions Makers. In other words those who detain the power to include ICT4D in the national political agenda and allocate the adequate resources for it, and those who instruct, manage and implement the actual ICT4D Program. It is important to mention that the research described in this book, and all associated discoveries, recommendations and observations, has been performed in a typical developing country context (Morocco) with all the constraints/constants surrounding such context. So further to politicians and decision makers in developing countries, all organization (Donors/Funders, NGOs, International Cooperation, etc.) and individuals (practitioners, researchers/academics, people at large, etc.) with a particular interest in development (specifically through ICT) should find something interesting for them in this book.

This book contains enough original and structured ideas that make it also a good reference for teachers in the field of eGovernment/eGovernance. It is designed in a format which is appropriate for dissemination to development organizations. The objective is to provide a practical guide to ICT4D implementation where the focus on theoretic matters is minimized while ensuring a balance between rigor and practice.

Book outline and contents

The final book outline is as follows:

- **Preface**
- **Chapter I: Context and Motivation (12 pages)**
 - Global context of the book and linkage with eFez Project
 - Main messages of the book
 - Targeted population
 - Book contents and Structure
- **Chapter II: The 2 facets of ICT4D (25 pages)**

The goal of this first chapter is to provide the reader with the essential background that allows acquiring the terminology and understanding the concepts related to the main topic of this course: eGovernment applications in Africa. We consider that eGovernment falls within the heat of ICT4D (Information and Communication Technology For Development) and, as such, before tackling eGovernment it is important to define ICT and ICT4D, how they link to each other and how they apply in Africa (successes, failures, problems, constraints, examples and possible solutions). As we'll see, ICT represents a real opportunity for Africa to recover and to catch up but,

unfortunately, due to a number of complex and interlinked factors; this opportunity is not well exploited/seized leading to a very dangerous phenomenon that is the digital divide: developed countries run extremely fast thanks to the enabling infrastructure they possess whilst most African countries are lagging behind because of the lack of the basic infrastructure such as electricity, connectivity, hardware, data, etc. as well as the poor level of available human resources to invent, plan, implement, support and manage ICT4D systems. The e-Readiness and e-Awareness at all levels appear to be key factors to fight the digital divide and to succeed any ICT4D project/initiative.

The sections of this chapter are:

- The Ubiquitous and Pervasive Nature of ICT
 - The Transformative Capabilities of ICT
 - The ICT and Development Correlation
 - ICT is not an option, it is Either a Threat or an Opportunity!
 - E-Government Applications in developed countries: successes, flops and perspectives
 - Leap frog as a mechanism for developing countries to capitalize on past experiences and lessons learnt
- **Chapter III: Governance, eGovernance and eGouvernement (20pages)**

Generally, eGovernment refers to the use of ICT to automate government operations in order to improve effectiveness, efficiency and service delivery. It involves the computerization of existing paper-based procedures that will prompt new styles of leadership, new ways of debating and deciding strategies, new ways of transacting business, new ways of listening to citizens and communities, and new ways of organizing and delivering information, new ways of... **Governing. eGovernance** is a wider concept that defines and assesses the impacts technologies are having on the practice and administration of governments and the relationships between public servants and the wider society, such as dealings with the elected bodies or outside groups such as not for profits organizations, NGOS or private sector corporate entities. EGovernance consists of three major building blocks: e-Administration; e-Services and e-Society, which match the 3 fundamental governance services: Government to Government (**G2G**), Government to Citizens (**G2C**) and Citizen to Government (**C2G**).
 - **Chapter IV: The eFez Story (Re)Narration (15pages)**
 - **Chapter V: The eFez Roadmap (20 pages)**

This chapter will present the method (or a **Roadmap**) that we have elaborated and tested in the eFez Project. This Roadmap should not only provide practical guidelines during the different phases of the project, but also provide means to raise the awareness of the various stakeholders involved in the project with respect to the impacts of their decisions on the governance desired changes. The underpinning motivation is the recognition that “The design of e-government information systems (both hardware networks and software) is more than instrumental plumbing. Design decisions are not merely technical or even merely administrative. They are political acts that have important implications for the conduct of public administration and democracy” (Brewer et al, 2006, pp. 473); this is because “Although it may not be possible to force desired outcomes, public officials may be able to facilitate their emergence by using democratic values as design elements” (pp.473). Unlike those who advocate designing and implementing e-Government systems with technology-centered approach and believe democratic outcomes will naturally follow, defenders of “democratic theory” believe that “democratic values do not permeate all societies. These values must be planted in fertile seedbeds and nurtured to fruition” (pp.492). This means that excluding/or failing to involve public administrators in e-government design and implementation leads to situations of having “democratic values, processes, and outcomes may be in jeopardy” (pp.494). This means technology-centered approach runs the risk of compromising the desired outcomes. Therefore, “It is imperative that public administrators, who have solid grounding in democratic values and concern for the public interest, be involved in these steps to help achieve administrative efficiencies and improved democratic governance” (pp.494). In this respect, to improve local good governance conditions, there is a necessity for a method (or a **Roadmap**) to enable the emergence of good governance outcomes with the e-government implementation.

- **Chapter VI: The eFez impact assessment framework (25 pages)**

Although it is widely agreed upon that e-government systems enhance governance, there is a notable lack of empirical/experimental evidences to justify such a claim. In this chapter we propose a systematic analysis and design method to develop and deploy e-government systems with a special emphasis on good governance. In this method, specific tasks enable designers and stakeholders to develop a common project vision and to identify project’s outputs and outcomes which are clearly related to the improvement of governance. Other tasks aim at collecting data during the project and at systematically evaluating it in relation to governance enhancement. This method has been used to develop a pilot e-Government system for the city of Fez in order to

facilitate citizens' access to governmental information and services. In this chapter we present this as a method that emphasizes good governance at each step of the development of an e-Government project and enables the assessment of the outcomes of the resulting e-Gov system in relation to governance. Using such a method, decision makers and politicians are able to justify their decisions in relation to the use (or not) of eGovernment systems to improve Governance as a whole.

- **Chapter VII: Literature Survey and comparative study (50pages)**
 - **Chapter 3.1:** Best practices in planning and implementing of ICT/eGov Projects
 - **Chapter 3.2:** Change and transformation through ICT
 - **Chapter 3.3:** ICTs impacts on Governance and Societal evolution

- **Chapter VIII: Technology Enablers for eGovernment Systems (40pages)**

A successful implementation of eGovernment systems requires a solid and consistent vision cross all over government departments and services, set by the highest level of authority in any country. This vision should emphasis technology as a means to boost the human and economic development. Three fundamental building blocks should be addressed in this vision: Infrastructural issues, Integration/interoperability matters and the transformational features of ICT. These three fundamental blocks have to evolve within the right regulatory environment and the appropriate e-Strategy which could benefit from good practices and lessons learnt in successful eGovernment projects.

- **Chapter IX: Recommendations and Way forward (5pages)**
- **Chapter X: Conclusion (3 pages)**

A digital copy of the final book contents has been sent to IDRC, along with this report.

Research Findings

The Research focus on this project is not on new findings and/or discoveries but rather on consolidating and organizing activities in order to make of this book a valuable support/reference for decision makers and practitioners. However, as our research team has been involved in many eGov Projects, we were/are extremely happy to realize that a number of our ideas and guidelines, included in the roadmap and impacts assessment described in this book, uniformly apply. Noticeably, the favorable conditions creation/maintenance during all project's life cycle, targeting good governance as the main driver for the system specifications, design and implementation, awareness about the transformational feature of ICT, importance of local capacity building, leadership and initiative spirit, e-readiness/e- awareness and e-ownership.

Fulfillment of Objectives

Most of the contractual tasks that have been agreed on between our research team and IDRC have been achieved, namely, the book design and structure, the book editorial line, the book contents, the fieldworks, the data gathering, etc.

What has not been done yet (and that we deeply regret) is:

- The final editing/proof reading which we did not plan for in the initial project proposal since we did not expect our (not native) English to need improvements (and now we know it!);
- The translation to Arabic and English because of lack of time. Would we have more time (about 3 other months), we would definitely deliver it.

The following table tracks the formal millstones of the project and indicates their achievement status:

	Milestone Description	Achievement	Comments
May 30th 10	Final table of contents with a description of all parts, chapters and sections of the book, including an executive summary of each in the three languages of the book; in Arabic, French and English	Done	Sent to Dr Adel El Zaïm in June 2010

June 15th 10	Identification by IDRC, in cooperation and with the agreement of the PI (Dr Kettani), of the best editor to publish this book	Done	Several emails have been exchanged but we still miss and need information about this item
June 30th 10	First mission of Bernard Moulin to support and feed the local team in Morocco	Done	One week, in May 2010
Aug. 30th 10	Mission of Asmae El Mahdi to Laval University in order to closely work with Bernard Moulin on the book	Done	One week, in July 2010
September 30th 10	Submission to IDRC Project Officer of a first draft of the book, including at least 50% of the whole final book contents (ideas and format)	Done	Sent to Dr Adel El Zaïm in November 2010 (only the English version)
October 30th 10	Reception of IDRC Project officer feedback	Done	Several emails exchange and a face to face discussion with Dr Adel El Zaïm in Nov. 2010, in AUI
October 15th 11	Finalization by IDRC, in cooperation and with the agreement of the PI (Dr Kettani), of all aspects related to the book publishing including the quality of the print, the number	Done	See Book Publication document sent to Mr. Bill Carman

	of copies, the distribution mechanism, the copyright issues, the reproduction, etc.		
Jan. 15th 11	Second mission of Bernard Moulin to support and feed the local team in Morocco	Done	January 6 th – 16 th 11
Aug. 30th 11	Submission of the final draft to IDRC for a last review and foolproof reading	Done	Only the English Version will be ready
-	Launching the translation process	Pending IDRC Decision	The process of translation should take around 3 months
Oct. 30th 11	Reception of comments and suggestions	Done	The comments on the English version should feed the French and Arabic versions
Oct. 30th 11	Submission of the final version to be published by IDRC	Done	Sent to IDRC with this final report
-	Book Launching Event	-	If we want to launch all three languages in the same time, we may anticipate some delay

Given the progress status in the writing of this book (which is globally satisfactory for the authors), and the fact that we are still willing and strongly hoping and determined to publish it (with IDRC), in the three languages, we are discussing different options to make up the one year delay that we acknowledge and that we are terribly sorry for.

Capacity building

Writing a book is quite a new experience for the ICT4D laboratory Researchers. During the past years, we have been able to publish a number of peer reviewed papers related to different aspects of our projects. The originality of this book rests on its ability to actualize, consolidate, integrate and “lift” an existing material and enrich it with new ideas/views of the authors and/or adapted from the latest publications. Accordingly, the authors needed to gather and revisit all the material that has been produced by the Research team and to perform, in parallel, a deep literature survey to make the necessary comparisons and linkages. This allowed us to be aware of the latest theories models and tools related to ICT4D, eGovernment and eGovernance and to better situate/contextualize our own contributions.

Another important finding for our research team (although it is not a new discovery!) is that it is extremely complex and time consuming to write a book in such a rich and evolving area even if you have contents and ideas.

This project has had so far a big impact on the PI and Co-PIs ability to design, plan, write and integrate scientific contents and present it in a way that is easy and simple to understand.

Overall Assessment

The truth is that closing this project without publishing the book is very frustrating for the authors (and for IDRC for sure too!). We have been working very hard in this book’s realization but the management of three agendas (three authors) in parallel was very challenging to us and had a serious impact on the global delivery schedule. We believe though that the work done is of a good quality and has served one of the main purposes of this project which is to structure and centralize the outcomes/documentation related to the Award winning projects Fez-eGov and Wman@Fez. We are still confident that an agreement will be found with IDRC to continue its support to us in the last remaining/pending activities in this book: the Editing/Proof reading, the Translation and the Publication.