

## Chapter 6

# Realizing E–Government: Delineating Implementation Challenges and Defining Success

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### ABSTRACT

*There is a growing recognition among scholars, practitioners, and elected officials that e-government success is not a deterministic outcome of entrepreneurial design or exacting implementation. In fact, constructing cost-efficient and policy effective e-government platforms has proved to be much more challenging than originally expected. In many instances, failed e-government experiments have led to significant financial losses and to increased dissatisfaction levels among citizenry. These latter experiences have nuanced the need for a much more thorough understanding and appreciation for the difficulties faced within the conceptualization and application of e-government platforms in successfully achieving the expected administrative and democratic outcomes. This chapter, by tracing the evolution of e-government both as a concept and as an administrative trend within the transformation of governance, delineates the main challenges in achieving the core goals and the democratic scope of e-governance. It is argued that in e-governance, success is a function of three fundamental vectors – security, functionality, and transformation.*

### INTRODUCTION

There has always been an intimate relationship between technology and the historical developments within the evolution of humanity. In a number of ways, the two are inseparable. The history of mankind is by and large a story of technological innovations. Typically, technology induced changes take time to motivate genuine transformations and they are rather incremental

in character. Some technologies, however, by their very nature, can be sufficiently powerful to re-write the trajectory of economies and societies. Although rarely, on occasions technologies do motivate immediate and dramatic shifts. In the eyes of many (Johnson, 1998; Milakovich, 2012; Nye, 2002) this is exactly the type of impact that Information Communication Technologies (ICTs) can have. Perhaps for the first time since the industrial revolution, a technology can radically and

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immediately affect not only the world economy but also the very fabric of social matrices. The Internet and all its derivative applications do indeed possess the capacity to be revolutionary in the sense that they can meaningfully recode social structures.

As a technology, the Internet is unlike any other revolutionary technological development of the past, such as the internal combustion engine or electricity. The effects and changes induced by adoption of ICTs are significantly more difficult to trace than it was ever the case with most other technologies. For instance, in the case of an engine, its power and impacts can be examined and controlled fairly easily. Its effective range and exposure is also constrained by the physical limits imposed by its design. This is not the case for ICTs. Due to their amorphous and ambiguous nature they do not lend themselves to precise evaluations nor tracking. This latter fact makes monitoring and forecasting their evolution rather challenging. Furthermore, unlike electricity, ICTs are much more responsive and can be much more easily shaped into political instruments (Fountain, 2001; Milakovich, 2012). Finally, the identity of ICTs and their applications are not necessarily defined by their technical capacities or functionalities but by the scope of their uses. For instance, social media, such as Twitter and Facebook can be used as pure communication tools similar to mobile texting or e-mailing, or they could become the mainframe for organizing and propelling social unrest. When it comes to ICTs it is not necessarily about what they can do as much as it is about how and for what they are used. In this sense, then, ICTs, the Internet in particular, is different in many important ways from previous technologies deemed as revolutionary, not the least being that it can take on an identity of its own and become controversial fairly easily.

Notwithstanding military applications, governments are usually much slower in adopting technology for purposes of governance. Given that in the public sector stakes are high and large scale

failures are becoming exceedingly scrutinized, governments typically prefer to allow others to test a specific technology and work out the bugs before they adopt it on a large scale. Furthermore, similar to most capital projects, technology implementation demands significant financial and time investments. Once a certain platform becomes implemented, its high costs will justify and impose great pressures for it to stick for the long-run. This is further complicated by the fragmented nature of the technology market and the unpredictability of technological innovation. Unlike a highway or a bridge, a digital infrastructure requires permanent learning and change. This, too, imposes costs that can rarely be realistically predicted. Most importantly, however, even the most up to date digital platforms can become obsolete in a matter of months. Yet, despite all these risks and the enormous price tags, governments cannot avoid placing ICTs at the administrative core of governance (Milakovich, 2012). E-government is no longer a choice, it is to some extent a necessity. In fact, there are now enormous pressures both from citizens and from the private sector to operationalize most of governmental services and interactions within ICTs-based frameworks. These pressures motivate governments to embark on costly ICTs projects, often without having sufficiently complete understandings of the nature of the technology or the actual scope of the projects. Administrative and political burdens are so great that doing something is often considered better than doing nothing, even if what is being done is strategically chaotic. Within this context, it becomes critical to develop clear and practical understandings of the challenges of successfully constructing an ICTs-driven governance.

This chapter examines in detail the concepts of e-government and e-governance. It provides an overview of the latest developments and trends both in e-government research and practice. The primary focus is placed on defining success. What does success mean within the context of e-governance? Why are some projects successful

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