

Digital Government Development

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INTRODUCTION

Effective implementation of digital government requires a well-articulated and sound strategy. Having a sound strategy is considered as the first and most important step in securing the success of information technology projects (Fletcher, 1999). Unfortunately, failures in the form of cost overruns, delays, and implementation problems are commonplace in digital government projects (Heeks, 1999). If executed properly, a strategic plan can help public organizations realize the full potential of an information technology investment. The framework proposed in this article attempts to identify the factors behind the successful design and development of a national digital government strategy, taking a normative perspective of policy and institutional design with emphasis on informing policymakers. A national strategy is the critical first step in building digital government. National digital government strategies, such as UK Online, e-Japan, and e-Korea, are commonplace.

Critical success factors have been identified in other research which examines individual IT projects at both state and local levels (Heeks, 1999; Dawes et al., 1997). Since national strategic plans provide the framework in which most digital government projects are prioritized, designed, and implemented, it is important to study these large-scale plans. However, there is a shortage of research-based frameworks for guiding the development of a national strategy. The comprehensive framework proposed in this article with a short illustration of application to a cross-country comparison offers policymakers a number of suggestions for developing sound national digital government strategies.¹

BACKGROUND

Digital government refers to the use of information and communication technology to improve the relations between government and its employees, citizens, businesses, nonprofit partners, and other agencies by enhancing access to and delivery of government information and

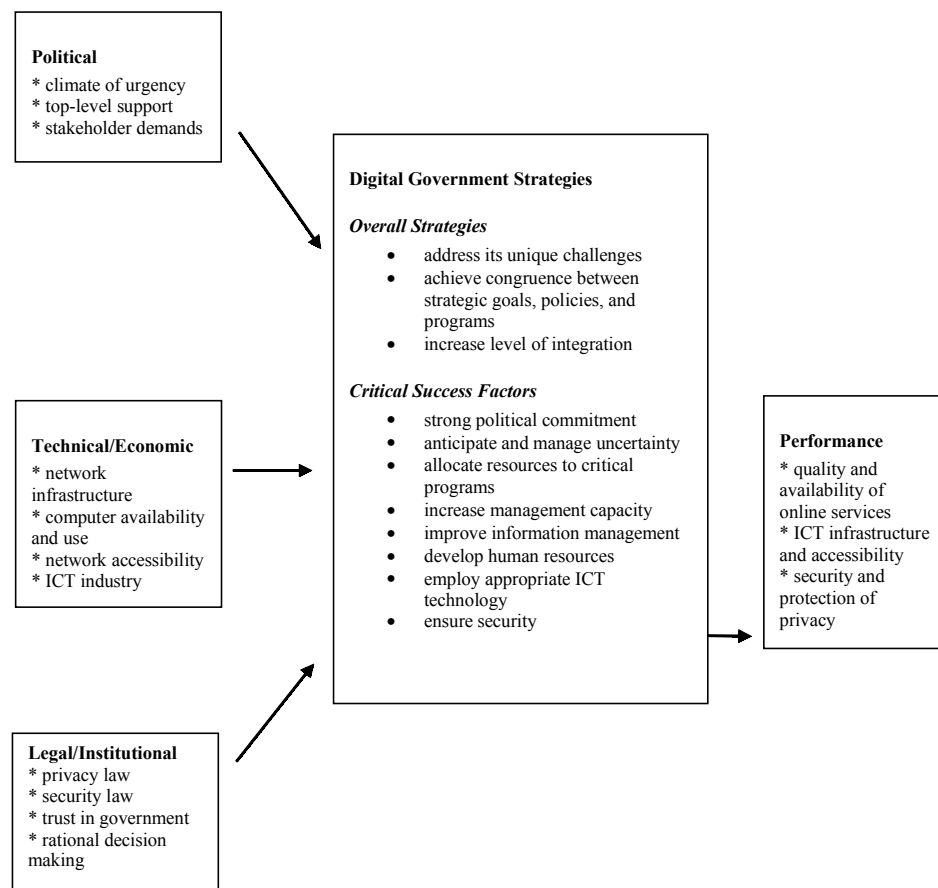
services.² Digital government strategic plans are national plans designed to guide the development of a country's efforts to deliver information and services via digital means.

To gain a better understanding of the development of digital government strategies, it is important to look at the environmental conditions under which the strategy is developed and implemented. Political forces and institutional settings play a significant role in national digital government efforts. Digital government plans and projects need to be attentive to political considerations and governmental processes at all levels of government (Rocheleau, 2003). Moreover, legal and institutional incentives and constraints shape the design and use of information technology in the public sector (Fountain, 2001; Landsbergen & Wolken, 2001). Strong administrative and legal institutions support the creation of national digital government plans, guide their design and implementation, and provide mechanisms for measuring performance as well as addressing the physical environment (Ostrom, 1990; Farris & Tang, 1993). Institutions shape not only the selection of digital government projects, but also their design and implementation (Fountain, 2001). The link between institutions as an incentive structure and performance is another important insight (Ostrom, 1990; Ostrom, Schroeder, & Wynne, 1993). Institutional incentives are critical for soliciting cooperation from individual public employees and agencies as a whole to share information and resources.

Citizens and their participation also constitute an important environmental element of digital government (Marchionini, Samet, & Brandt, 2003; UN/ASPA, 2002; Schedler & Scharf, 2001). When an active civil society and a well-established information and communication infrastructure is in place, an e-government strategy that is more responsive to citizen needs is more likely to be implemented.

In addition to the environmental factors mentioned above, a national digital government plan needs to consider several unique characteristics of government. First, every government has multiple objectives, usually in competition with each other. Second, the planning horizon needs to correspond with election cycles, so the

Figure 1. A framework for the development of a national digital government strategy



planning horizon is shorter than the one used by the private sector (Guy, 2000). Lastly, stakeholders' involvement is regarded as critical for the successful implementation of an information system strategic plan.

A FRAMEWORK FOR DEVELOPING DIGITAL GOVERNMENT STRATEGIES

The framework described in Figure 1 is organized into digital government strategies (center) in response to environmental conditions (left) to generate performance results (right). Digital government strategies describe the contents of a given plan for national development. Environmental conditions are circumstances surrounding a plan for national development that have an impact on success or failure. Performance results describe the outcomes produced by the digital government development plan.

Four principles govern the development of the framework. First, a good strategic plan addresses the unique challenges posed by the environmental circumstances facing a national digital government effort. Second, there is a set of principles and success factors which will increase the likelihood of success. Third, the framework acknowledges the evolutionary nature of digital government efforts, in which strategies adapt to and affect the environment in which they are designed and executed. Lastly, performance measurement of digital government is necessary to trace the effect of strategies on outcomes.

Environmental Factors

Political Considerations

Three political drivers, as shown in the top left box of Figure 1, set the stage for the development of a national digital government strategy. External pressures, such as

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