Chapter I
E-Government Business Models: Theory, Challenges and Research Issues

Marijn Janssen
Delft University of Technology, The Netherlands

George Kuk
Nottingham University Business School, UK

ABSTRACT

Stimulated by the need to reduce cost and improve service provisioning and client involvement at the same time, the concept of business models has gained attention in the e-government domain over the last few years. Business models can appear at the individual organization and network level and describes how an entity plans to provide services. The basic premise of business models is that it helps to understand the relation between service offering and other elements and can be used as an instrument to improve service provisioning and lowering cost at the same time. In this chapter an overview of the state-of-the-art of e-government business models, a theory integrating the various elements and research challenges and issues are presented. There is ample need for research and overcoming these challenges result in better leveraging the advantages of business models.

INTRODUCTION

Countries worldwide are developing towards online service provisioning as a logical response to technology advances. Delivering government services to the public electronically requires innovation which entails the adaptation of policy and strategy, and the associated changes in technologies and infrastructures. Often governments are imitating each other and pursuing a similar set of novel business models without careful examination of the hidden challenges. The business models is aimed at describing how organization entities plan their service provisioning and depicts the relationship among the elements (Janssen & Kuk, 2007). This chapter aims to provide an overview of e-government business models and
The business model concept has become a popular and important strand within the field of information systems and strategic management (Hedman & Kalling, 2003), specifically its application to the electronic business environment (e.g. Afuah & Tucci, 2000; e.g. Timmers, 1998; Weill & Vitale, 2001). Initially, different types of business models were experimented with and tested. The ones contributing to the financial success are widely promoted by the e-commerce and e-business practitioners. Despite the lack of a universal definition (Alt & Zimmerman, 2001) and the fact that the theory often lags behind the practice it attempts to describe and explain (Hedman & Kalling, 2003), there is little difficulty for direct adoption and transfer of the business model concept across domains and from the private to the public sector. The latter underscores the mentality that the practical rationality will compensate for the lack of theoretical underpinnings (Kuk, 2003).

The concept of business models developed and tested in the network economy cannot be translated to the public sector in a one-to-one manager. One of the notable differences is the level of inter-firm rivalry and mistrust which can limit resources and knowledge sharing in private networks (Adner, 2006). Whereas public networks which are often grounded on the non-exclusive and non-rival properties of public goods can facilitate a greater extent of resources and knowledge sharing among governmental agencies. Yet increased sharing will also lead to an increase in the coordination challenges comprising of how to route and reuse the existing silo-based types of functions and resources which are developed and resided within a public agency to a network arrangement; and crucially, how to generate new capabilities in support of developing new service offerings.

New types of service offering are made possible due to the cross-agency collaboration in form of a public service network (Provan & Milward, 2001). Different networked business models tackle different coordination challenges and will likely have other benefits. When it comes to the decision of which business models to adopt, consideration should be given to what coordination challenges that different business models may engender. Organizations should consider which ones are worthwhile to invest their resources. And by successfully tackling these challenges, organizations can acquire a new and useful set of knowledge which in turn improves the business and coordination logics of offering new web-based services.

Whilst there is a small but growing body of research on using Internet-based models as a front-end proxy of e-government business models, the concept of business models in the context of e-government is relatively unexplored. Janssen, Kuk and Wagenaar (2008) developed eight atomic business models based on e-commerce literature and existing governmental Web sites in the Netherlands. They found that a most web sites could be described using the atomic business models and the type of atomic business models found were predominantly non-interactive and non-de-liberative. Janssen and Kuk (2007) explored the components of a business model, intermediate variables and processes that translate an e-government business model into new service offerings. They developed a business model framework based on resource-based view, dynamic capability and coordination theory to provide insights into the coordination challenges and the potential benefits that accrued to a government as a result of adopting a particular business model. The rest of the chapter is structured as follows. In the next section we discuss the concept of business models as found in literature. In section three, we to present a framework for analyzing, and ultimately designing, the logic of service provisioning. In section four, three main research challenges and issues are discussed. Finally, we draw conclusions and recommend further research.