FISEVIER

Contents lists available at ScienceDirect

## Telematics and Informatics

journal homepage: www.elsevier.com/locate/tele



# An implementation framework for E-Government 2.0



Po-Ling Sun <sup>a</sup>, Cheng-Yuan Ku <sup>b,\*</sup>, Dong-Her Shih <sup>c</sup>

- <sup>a</sup> Department of Information Management, National Chung Cheng University, 168, University Rd., Min-Hsiung, Chia-Yi County, Taiwan, ROC
- b Department of Information Management and Finance, National Chiao Tung University, 1001, University Rd., Hsinchu City, Taiwan, ROC
- <sup>c</sup> Department of Information Management, National Yunlin University of Science and Technology, 123, Section 3, University Rd., Douliu, Yunlin County, Taiwan, ROC

#### ARTICLE INFO

# Article history: Received 24 February 2014 Received in revised form 14 December 2014 Accepted 17 December 2014 Available online 27 December 2014

Keywords: Implementation framework E-Government 2.0 Web 2.0

#### ABSTRACT

The E-Government standard describes how governments work, share information and deliver services to external and internal stakeholders. It harnesses information and communication technologies (ICTs) to transform relationships with citizens and businesses and between the branches of government. The benefits may include reduced corruption, increased transparency, greater convenience, higher revenues, and lower costs. The current E-Government 2.0 describes user-oriented portal services that are integrated into and provided through one portal site using Web 2.0 technologies, such as RSS, blogs, social networks, etc., and that are accessible from various channels. However, building E-Government 2.0 is difficult because the transition from E-Government to E-Government 2.0 should be an organizational integration agenda, not only a technology one. Agencies may encounter many unpredictable design challenges and tensions that must be managed. Governments are now beginning to focus on the larger and more holistic task of service innovation in order to provide more productive and better services. One of the key observations about making progress with service innovation is that agencies need a framework to help them move forward. Our objective in this study is to propose a novel implementation framework for E-Government 2.0. This framework integrates the processes, resources, back offices, and front offices of online systems to carry out the stakeholder-oriented participatory E-Government 2.0. Finally, we use Korea, Antigua and Barbuda, and Ecuador as cases to validate it.

© 2014 Elsevier Ltd. All rights reserved.

#### 1. Introduction

To enhance the design and delivery of public services and the processes for engaging with stakeholders, as well as to increase efficiency and transparency and to foster richer interactions with the stakeholders they serve, a growing number of governments around the world are currently deploying Web 2.0 technologies in the workplace. This architecture is referred to as E-Government 2.0 that links citizens, businesses, and government institutions in a seamless network of resources, capabilities, and information exchange. However, building E-Government 2.0 is not easy. It is a strong and strategic tool for governance policy; accordingly, it will improve the efficiency and effectiveness of government functions and drive standardization. All agencies must manage the challenges and tensions they encounter. To develop broader and more integrated E-Government services, agencies must better understand how information and communication technologies (ICTs) can support their business outcomes. Therefore, current practices need to be updated to support the development

<sup>\*</sup> Corresponding author. Tel.: +886 3 5712121x57413; fax: 886 3 5723792. *E-mail address:* cooper.c.y.ku@gmail.com (C.-Y. Ku).

of E-Government 2.0. The emergence of ICTs has provided a means for faster and better communication, efficient storage, retrieval and processing of data and the exchange and utilization of information among users, be they individuals, groups, businesses, organizations or governments (Shirazi, 2008). Governments are now beginning to focus on the larger and more holistic task of service innovation; one of the key observations about making progress with service innovation is that agencies may need a novel implementation framework.

Therefore, in this paper, we propose an E-Government 2.0 architecture that uses up-to-date ICTs, namely Web 2.0, to promote more efficient and effective governments, facilitate the development of more accessible government services, allow for greater public access to information, and make governments more accountable to their citizens and businesses. A literature review and the observation methodology are used in designing an integration solution to construct a seamless and intelligent E-Government service delivery system. Later in this article, we will elaborate the importance and the place of every element and its added value to the process of integration. Then, Korea, Antigua and Barbuda, and Ecuador are selected as cases to validate this proposed framework for E-Government 2.0.

### 2. Related concepts

#### 2.1. Web 2.0 provides fuel for E-Government 2.0

The emergence of ICTs has not only made data available through multiple channels but has also made mountains of data transparent and provided them to stakeholders for various uses. The most important role of ICTs is to drive innovation through information and solve problems that a government cannot solve on its own (Sindelar et al., 2010). There has been a social evolution on the Internet referred to as Web 2.0 (Waters et al., 2009). It should be emphasized that the emergence of Web 2.0 is a social and not a technological evolution (Gareis et al., 2008). In other words, Web 2.0 is about an attitude, not a technology. Web 2.0 is characterized by enabling and encouraging participation through open applications and through services with rights granted to use content in new and exciting contexts (Chadwick, 2009; Shah, 2008; Wright et al., 2009). This framework enables the Web to shift from being a medium in which information is transmitted and consumed to being a platform in which content is created, shared, remixed, repurposed, and passed along (Osimo, 2008). In short, Web 2.0 has provided us with a world of new tools that can be employed in governments of all sizes and at all levels. Governments today are using Web 2.0 technologies to transform themselves from government-oriented to citizen-oriented organizations characterized by cooperation based on information and service sharing, new government services oriented toward the demand side, and facilitated participation of citizens (NIA, 2008). Web 2.0 also acts as a catalyst to transform the administration of government by replacing traditional ways of working with new, more efficient and effective processes, structures, and lines of communication.

To provide better services, governments need to look at how to transform themselves into more adaptive organizations capable of responding to varying environments and discovering new and better ways to fulfill their missions. Web 2.0 has become a critical part of this endeavor, giving rise to what is known as "E-Government 2.0" in this democratic era. E-Government 2.0 is a result of governments using technology to put the citizens at the heart of matters. It removes boundaries and promotes openness, transparency and user participation. Opening up the boundaries of government means inviting stakeholders to participate in government, e.g., by initiating new services, leaving suggestions, and having access to governmental data that is of the essence in E-Government 2.0. It involves a shift to a culture of openness and transparency where government is prepared to engage and listen to its citizens and to make non-sensitive public sector information available for consumption. User participation is another feature of the E-Government 2.0 model. Users have the channel to report their satisfaction with E-Government services, comment on government work and, moreover, have influence on government actions in the future. Another pillar of E-Government 2.0 is collaboration. Collaboration between governments and their users, citizens and businesses assists governments in providing better services and meeting user demands. Web 2.0 provides fuel for E-Government 2.0 because the above-mentioned goals of E-Government 2.0 cannot be achieved without the adoption of Web 2.0.

Web portals of governments around the world testify to a government's willingness to remove the veil from procedures and data and for opening up doors for the public. A successful example of such a web portal is Sweden's data portal (Körkortsportalen, 2014). The major motive for development of this portal is that the responsibility for driving license-related issues in Sweden is divided into several governmental agencies. Thus, it is difficult for citizens to find complete information and get in contact with the right agency. To solve this problem, a web portal has been developed. Not only does this portal cover several important aspects of driver's licenses but it also provides citizens with necessary information and correct access to e-services. It serves as a bridge between the involved responsible agencies and users.

The United Kingdom's FixMyStreet portal is designed to involve citizens in improving their own community by providing channels to inform the relevant government authority about the shortcomings of street lighting, delivery of mail, water supply etc. and then get these issues addressed, filed, and solved (FixMyStreet, 2014). Alternatively, citizens can also discuss the problem on the portal with others, and then together lobby the council to fix it, or fix it directly by themselves. Similar solutions deployed in many countries not only allow citizens to inform government about shortfalls but also provide a platform to submit their proposals to enhance services. RESIMAO is a system where market information from all over West Africa is gathered and made available for analysis via an Internet platform (WAMIS-NET/RESIMAO, 2014). This new platform is

# Download English Version:

# https://daneshyari.com/en/article/464367

Download Persian Version:

https://daneshyari.com/article/464367

<u>Daneshyari.com</u>