

تاریخ دریافت: ۱۳۹۸/۰۵/۲۶

تاریخ پذیرش: ۱۳۹۸/۱۱/۲۱

پژوهش‌های مدیریت عمومی

سال دوازدهم، شماره چهل و ششم، زمستان ۱۳۹۸

صفحه ۱۷۰-۱۴۹

A Pattern for the Requirements of Establishing Government Services in the Context of Social Media: e-Government 2.0

***Mohammad Taghi Taghavifard¹, Vajhollah Ghorbanizadeh²,
Roya Hejazinia³**

1-Faculty Member, Industrial Management Department, Faculty of Management and Accounting, University of Allameh Tabataba'i, Tehran, Iran (Corresponding Author), Email: Taghavifard@atu.ac.ir

2-Faculty Member, Public Administration Department, Faculty of Management and Accounting, University of Allameh Tabataba'i, Tehran, Iran

3-Ph.D. Student, Information Technology Management, Faculty of Management and Accounting, University of Allameh Tabataba'i, Tehran, Iran

Received: 17/08/2019; Accepted: 10/02/2020

Extended Abstract

Abstract

Nowadays, Web 2.0 technology and social media, which have paved the way for expansion of two-way interactions and communications, have been thrust into the spotlight in various fields. The government sector also needs to keep up with the latest changes and equip itself with the mentioned technology to be able to provide better services to its clients. Against this backdrop, The purpose of the present study is to investigate the factors and requirements for e-Government 2.0 establishment. In this study, mixed research method was used. In the qualitative section, by reviewing the literature and interviewing 15 experts in the field of information technology (IT) and e-government, using thematic analysis, the requirements for establishing e-government 2.0 were identified. In the quantitative section, a researcher-made questionnaire consisting of 33 closed-ended questions was used and its form and content validity was confirmed by the experts and its reliability was confirmed by Cronbach's alpha formula. The questionnaire was distributed among 250 academic and organizational experts as well as graduates in IT fields and then one-sample T-test was used to identify the factors. The results showed that considering technical, social, legal, organizational, and security factors for successful establishment and utilization of e-Government 2.0 technology is of great importance.

Introduction

Web 2.0 is one of the latest innovations in information technology. Web 2.0 applications enable Internet-based interaction and participation among users (Veljkovic, Bogdanovic and Stoimenov,2012). Currently, the social media – as one of the Web 2.0 features – is widely used. Therefore, its capabilities can be exploited in public services. Offering e-government services based on Web 2.0 and the social media yields many opportunities to better present e-services; improve relations with citizens; make citizens participate in public activities; gather ideas, solutions and innovations for service provision; make public organizations more famous; better control future crises; and enhance the government's decisions(Veljkovic et all, 2012, Bertot, Jaeger, & Hansen, 2012, Moss, Kennedy, Moshonas, & Birchall, 2015, luna and pennock, 2018, Driss,melloli and trabelsi, 2019). Therefore, new concept of E-Government 2.0 arises when the social media are used to offer public services. Building and operating the extensive interactive infrastructures of E-Government 2.0 requires governments' familiarity with its basic requirements. Meeting these requirements can lead to better and faster utilization of E-Government 2.0. Therefore, the present study aimed at suggesting a model to identify the requirements of E-Government 2.0, and investigated the items that should be taken into account to establish and utilize the E-Government 2.0 services.

Case Study

The statistical population for the qualitative part included the academic and organizational professionals and experts of information technology, particularly e-government. Given the selected qualitative method, purposive and convenience sampling methods were used. Therefore, due to the theoretical saturation by 15 interviews, the sample size was regarded as 15. To validate the model and conduct the quantitative part, the statistical population consisted of the academic and governmental professionals and experts, students, and graduates of information technology, particularly e-government. Given the selected quantitative method and the extensive population, the convenience sampling was used. Accordingly, 276 questionnaires were distributed electronically (via email and social networks) and in-person, out of which 250 were collected.

Materials and Methods

This was a mixed methods research conducted through thematic analysis and t-test. Desk-based methods, literature reviews, semi-structured interview, and thematic analysis were used to identify the requirements. In the model validation stage, a researcher-made questionnaire with 33 close-ended questions as well as a t-test were used. The face validity and content validity of the

questionnaire were confirmed according to the professors and experts' opinions, and its reliability was obtained as 0.90 by Cronbach's alpha.

Discussion and Results

The model consists of five primary dimensions: technical, social, organizational, legal, and security requirements. Each dimension is divided into several sub-components. For example, the technical requirements are hardware factors (hardware equipment, alternatives to technical equipment, and data maintenance equipment), software factors (software equipment and adequate bandwidth), and information factors (data conversion into an appropriate format, existence of high-quality data, and data integration maintenance). The social requirements are cultural factors (welcoming new technologies in the society, and the culture of accepting the changes) and knowledge factors (expertness in working with the new technology, and information literacy among the users). The organizational requirements are structural factors (the need for internal changes in the organizations' structure and the necessity of new process designs), human factors (the need to recruit, the necessity of holding training courses for the use of new technologies, managers' support of the new style of service-providing, employees' support of the intended technology, and adoption of an employee- and customer-oriented viewpoint in organizations), and economic factors (financing the purchase of hardware equipment, and funds for trainings). The legal requirements are rule changes (the necessity of ordaining new rules conforming to the new situation, and reviewing the previous rules) and rule promulgations (public promotion of instructions to use the new technology and its respective rules and regulations, and emphasis on observing the copyright law). Finally, the security requirements are soft factors (public training of security issues and civil rights, and finding a solution for security problems), and hard factors (individuals' accessibility restriction systems, authentication, and information encryption).

Conclusion

The present paper suggested a model to identify the requirements for establishing e-Government 2.0. The model consists of five primary dimensions: technical, social, organizational, legal, and security requirements. Each dimension is divided into several sub-components. For example, the technical requirements are hardware factors, software factors and information factors. The social requirements are cultural factors and knowledge factors. The organizational requirements are structural factors, human factors, and economic factors. The legal requirements are rule and rule promulgations. Finally, the take security requirements are soft factors and hard factors. It can be very helpful to notice of the identified requirements as the prerequisite to establish e-Government 2.0.

Keywords: e-Government, social media, Web 2.0, government services