The Implementation of Ict Towards Improving Service Quality in Public Sector

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Abstract: The purpose of this study is to evaluate the implementation of ICT in the public sector and to what extent it has improved the public sector service in Malaysia. In realizing the importance to increase the capabilities and quality of e-service, public service nowadays has taken further steps to enhance their quality of service and increase the effectiveness of organizations. The paper infers e-service quality which can reflects the government activities to encourage robust and effective governance in sustaining developmental policies. Invariably, the idea of e-service transcends business networking it is all encompassing in the modern global arena. This makes the call for embracing ICT in human endeavors as imperative task for viable growth and development.

Key words: ICT · E-service quality · Malaysian Public Service

INTRODUCTION

The relevance of Information, Communication and Technology (ICT) in the global arena cannot be over-emphasized. In fact most countries of the world try to embrace ICT in running activities of government. It is believed that ICT enhances better connectivity between the government and the people [1, 2, 3]. Thus, bringing government closed to the people. The operationalization of service delivery to the people has been made easier through the adoption of ICT [4-6]. Unlike the traditional system that was characterized with time wasting and red-tapism in public service, the modern ICT application has really enhanced smooth and effective governance with invariably improves service delivery to the populace.

Nowadays, the government has taken a huge steps in implementing ICT in public sector [7]. This is parallel to adapt with the world wide changes of information technology to promote more efficient and cost-effective government, facilitate more convenient government services, allow greater public access to information and make government more transparent and accountable to citizens.

On the other hand, the new technologies being deployed and adopted by the public sector are creating an innovative ways to enable citizen-friendly environment and interactive relation public authorities, which new ways of working for administrations themselves; and providing new business opportunities through the re-use of public sector information and collaborative production of services.

By taking a huge initiative, many governments have invested huge amount of money in developing IT infrastructure and deploying the use of ICT to serve their stakeholders in an efficient and effective way [8]. Reforming public sector through the adoption of ICT is not only to satisfy or meet the ever-increasing demands of the masses but also to help establish trust between the government, civil servants and the people they serve. Hence, the government has taken initiative to improve the public service delivery to the limit and promoting the easy and fast service.

The traditional approach for defining service quality emphasizes that service quality perception is a comparison of consumer expectations with actual performance [9] and the term has been very much popular in the private sector [10] whereas the public sector has been slower in adapting the concept into their practice [11]. Later, the fast changing world has seen many improvements in the way of delivering the services; e-service quality has becoming one of the topics in the academic arena.

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Problem Statements: It is an established fact that ICT improved the quality of service delivery in both public and private sectors [12-15]. Service quality has often found its greatest applicability and widest use in the private sector than public sector [16, 17]. However, there is still no standard definition, of the concept and vagueness about what exactly e-service is, creating confusion and comparability issues and making it difficult for researchers to build on their work [18].

[19] state that ICT strategy in Malaysia is still at a growing stage even though it has been introduced since 1996. The biggest challenge that Malaysia has to face is to compete with other countries such as Singapore and South Korea in term of ICT [20]. The major challenges of effectiveness of ICT in Malaysia public service is attributed to bureaucratic tendencies which has led to inefficiency, red tapism, lack of flexibility, ineffective accountability and poor performance [21].

To some extent, public sector organizations always be seen as lack of capabilities and often carry connotations of bureaucracy and inertia and it has negative impact on public mentality [22]. This has been a major concern for every government in the world to create more efficient and trusted administration. Several technological innovation towards improving public services such as e-mail, document imaging and electronic data interchange the internet which have penetrated into the public sector market [23]. There are several challenges which affect service quality due to the traditional bureaucratic ways that people still practicing [24-27].

According to strategic IT plan (2011-2015) by Malaysian Administrative Modernization and Management Planning Unit [28], there are initiatives to enhance the quality of public service including zero face-to-face service delivery, paper less, inculcating information sharing and interoperability, cross-agency collaboration, government shared services and skills and expertise internalization of public sector ICT personnel [29-32].

Kaliannan, Awang & Raman *in* Kaur & Bahri [33] has stated several challenges to e-government in Malaysia have hinder the achievement of these initiatives and they are standard, privacy and security, data integration, legacy system maintenance, mindset change, processes and collaboration between agencies. Although the government's effort to increase the technology-based service, the assessment of quality in electronically delivered public services has been relatively lacking [34]. Indeed, it has been more initiatives to make the public service delivery to be on their way toward an excellent service. Despite of having the technology in the organization, the internal client should be assessed with their knowledge level and commitment in handling the technology itself.

Research Objectives:

- To investigate the factors that influence the use of ICT in public service
- To examine the relationship between the use of ICT and service quality.
- To investigate the benefits of ICT to the citizens in term of service quality.

MATERIALS AND METHODS

The study will be involved employees in 11 municipalities in Kedah and also the citizens in the municipalities. They will be given the questionnaire and all the data will be analysed and interpreted by using Statistical Package for Social Science (SPSS). In the context of this study, the respondents will be classified according to the educational level such as professional group, senior management level, entry level and junior level. This study is going to identify the relationship between variables by using Pearson correlation. Meanwhile, secondary data was taken from the data collection of the others such as social websites, articles, theses, books, newspaper, magazines and so on.

Literature Review
ICT Adoption in the Public Service: Over the past decades, the implementation of the ICT has giving impact in most of sectors in public service organizations [35]. The government had given their effort to bring the quality of service into public service. Prior to this initiatives, the development of ICT from enabling the data storage, to data processing and management of public data [36].

Later, recent developments have diversified and improved the provisions of public services level of government administration. People and organizations are increasingly able to monitor and control their interactions and environments in near real-time with their clients [37]. The ease of interaction is the main formative dimension of service quality of e-government public administration [38]. Government transformation and public sector reform through the application of digital government is leaning forward to achieving further productivity gains and

meeting public demand for better public service delivery [39] and promoting the transparency of government [40] [41]. This bring a significant factor to the development of public service performance has been improved from traditional practice which is taking time to respond, strict bureaucracy and increase the transparency to the public and taking a step further to meet the demands [42].

According to [43] a public organization today must be effective, lean, fast on its feet, responsive to their customer, capable of adjusting to constant change, able to improve productivity continually to be entrepreneurial rather than bureaucratic which has been a major concern nowadays. He also emphasized that an organization must be very practical and effective to respond to customers' need within an acceptable time, moving fast to perform the task effectively and efficiently.

While it is clear that ICTs are potential drivers of growth in the business area, as well as public service delivery, there still remain many barriers to the successful application of these technologies in government processes [44]. Also, there is little evidence to prove claims made for decreasing bureaucracy with the increased use of ICT. They argue government is in something of a quandary in that public sector reform has typically involved devolving responsibility and control to autonomous government units. However, information age governance may involve re-centralizing control to achieve the joined-up working necessary for efficiency gain [45]. Essentially, government is seeking the way out to be more effective when come to service delivery.

In the twenty-first century, governments worldwide are under pressure to change and innovate the way in which their bureaucracies relate to citizens [46]. Therefore, the implementation of ICT has enabled the innovation in public sector and e-government also allows the public service to be more efficient and enhancing the communication internally and externally [47].

ICT and Organizational Performance: Some studies has concluded on the importance of the alignment among business strategy, information technology and organizational performance [48]. Recent researches have drawn on a variety of theoretical perspectives to explain the wide range of ICT impacts on organizational performance [49]. In addition, the impact of using ICT on firm performance have demonstrated the existence of complementarities between technological and organizational changes as ICT encourage the knowledge work productivity that lead to performance [50]. [51] found there is a positive relationship between of ICT

adoption and all the measures of perceived performance analyzed.

Service delivery quality and productivity can be improved and it is possible to process and retrieve more information in less time increases the quality and efficiency of service delivery and reducing time [52-54]. The speed of service delivery also increases when the civil servant who handles a specific case has real-time access to databases which are located in other units or organizations [12]. Perhaps more importantly, while improving the delivery of services to users and citizens is at the core of the reforming agenda, it is often in conflict with the dual focus of driving down costs such as doing more productivity with less spending [51, 55, 56].

E-Service in the Public Sector: Many authors that deal with e-service in the public sector rarely use the term preferring "e-government" [18]. However, there are some papers has categorized e-service in the public sector into e-public service and e-government [18] [57]. E-services is a capability that enables citizens and businesses to conduct transactions through online and provides easier access to government agencies such as the Road Transport Department, the Ministry of Health and utility companies [14]. The implementation of this project has resulted in significant improvements in service delivery, such as the provision of free services for summons and utility bill enquiries. While in [19] elaborated on local government initiatives of using e-service to improve the task such as checking and payment of assessment tax in United Kingdom.

The ease of access to these services has also encouraged users to be more responsive in paying bills, summons and other transactions which can take few minutes than going to the counter. In governmental agencies, e-service refers to the delivery of information and improved services online through the internet or other digital means to all stakeholders referring to citizens, businesses and other members of the society [18]. The efficiency benefits of e-service should be clearly emphasized to citizens especially the fact that e-government provides citizens with relatively inexpensive, real-time access to consistent, up-to-date information and transaction facilities [58].

Research Model and Theories: In the understanding to see how ICT being used in the organization to improve public service delivery, there's a model and some theories that will be used in the research and also the theories that citizens as far as individual's intention to adopt the ICT.

E-SERVQUAL Model: [59] has stated that service quality is referring to the quality of service provided to customer and their interactions and experiences with the company. By the fast changing in the business environment today, the concept of service quality has been extended to another level which is called service quality online or e-service quality or known as E-SERVQUAL. There are many studies have been done to determine the dimension of e-service quality. The dimensions are; reliability, responsiveness, access, flexibility, ease of navigation, efficiency, assurance, security, price knowledge, site aesthetics and customization.

[60] state four dimensions that are used to measure e-service quality and the dimension are; efficiency, fulfilment, system ability and privacy.

Unified Theory of Acceptance and Use of Technology (UTAUT): This theory was formulated by [61] to understand direct determinants of user acceptance and usage behavior such as performance expectancy, effort expectancy, social influence and facilitating condition. Many of researchers adapt this theory to study the user behavior towards the use of information technology [62]. [63] discuss further in their paper that there such a limitation from past research indicated that focusing on single subject in term of a community, culture, country, organization, agency, department, person, or age group.

The UTAUT model is the most comprehensive and parsimonious theoretical framework at present as it captures all essential positive and negative indicators of the TRA, TAM, TPB, MM, MPCU, CTAM and TPB, SCT, IDT models. [64] later further extended TAM and developed UTAUT2, adding price value and habit were introduced as three additional predictors of intentions and that voluntariness of use as a moderator to fit the consumer technology use context.

The UTAUT model postulates that four constructs act as determinants of behavioral intentions and usage behavior [61]:

Performance Expectancy: The degree to which an individual believes that using the system will help him or her attain gains in job performance.

Effort Expectancy: The degree of ease associated with the use of the system.

Social Influence: The degree to which an individual perceives that important others believe he or she should use the new system. Social influence is system- or application-specific, whereas subjective norm relates to non-system-specific behavior.

Facilitating Conditions: The degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system.

The UTAUT model also considers moderators influencing the four direct determinants: gender, age, experience and voluntariness of use in determining the intention of use and the actual of use. Im, Hong and Kang [65] in their work showing that the result of using UTAUT model is vary across different countries such as United States and South Korea. They found that how much culture influences the adoption of the technologies.

The same model also adopted in the research of non-western context [66] in particular Arab countries which the model showing positive result under condition of voluntary use and experienced user.

CONCLUSION

Public service has faced many challenges in the present world especially in service delivery. While it is clear that e-service have been widely adapted in most of marketing purposes in private sector, less of the studies showing how e-service is giving high impact on public service performance. Later, the idea of e-government has become an initiative to develop smart services created online and providing opportunity to citizens to interact with government offices. This research is intended to evaluate the quality of service in public sector in term of service online, as a step further to fill the gap about quality improvement of e-service in governmental departments. This is very important part to boost the productivity of public service to the high level of world class e-service.

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