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E-GOVERNMENT PRACTICES AND ORGANISATIONAL PERFORMANCE IN MALAYSIA LOCAL GOVERNMENTS

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ABSTRACT

E-Government is implemented to enhance the quality and performance of services in the public sector. Malaysia faces various issues and challenges in developing e-Government, including weaknesses in organisational performance. To manage the services, continuous effort and cooperation from all parties involved in administration are necessary. This study explores the literature on e-Government and organisational performance to see the breadth of e-Government's contribution to the performance of the local government sector. An empirical study using quantitative research methods was conducted on local government in Malaysia. A total of 149 questionnaires were distributed to local authorities in Malaysia, from which 87 questionnaires were completed and returned. The study findings indicate that the implementation of e-Government does not have a significant impact on organisational performance. The difference results may be attributed to variations in the e-Government development index between developed and developing countries. Additional factors, such as the difference acceptance level and challenges in implementation may further affect the outcomes. It is possible that other intermediate factors or variables exist within the relationship, which could allow for the study to be tested indirectly.

Keywords: e-Government, Organisational Performance, Malaysia Local Governments

INTRODUCTION

The functioning of public sector organisations remains an argumentative issue due to their vital roles in promoting socioeconomic growth. The public sector is unique with a wide range of stakeholders including the public, government agencies, suppliers and politicians (Azmi, 2008). Performance issues are still a major problem (Zakaria & Razak, 2011), and they show up in both service delivery and overall organisational results. Governments have responded by implementing a variety of strategies to address these issues. One of the approaches focuses on the implementation of e-Government as a management step to improve service quality and subsequently the organisational performance of the public sector. The organisational performance varies significantly depending on the organisation whether profit-driven or non-profit. Previous literature has discussed the system of measurement to be considered for evaluating performance, such as non-financial and financial. According to Yaacob et al. (2008), non-financial measurements, such as customer happiness, staff contentment, and service quality are more pertinent to government organisational performance and are necessary to meet performance goals (Zakaria et al. 2017). Furthermore, non-financial dimension is essential for financial performance, as they provide a more comprehensive view of organisational performance (Kloot & Martin, 2000). Therefore, based on the discussions from previous studies, this research employs both financial and non-financial measures as dimensions to assess the performance of local government organisations in Malaysia.

LITERATURE REVIEW

Organisational performance plays a crucial role in a nation's development and economic growth. Several studies have highlighted that the primary objective of enhancing an organisation's performance is to achieve sustainable growth and competitiveness. Improving performance can lead to increased efficiency, better resource management and higher levels of customer satisfaction. Therefore, improvement is closely tied to an organisation's ability to tolerate and adapt to environmental changes. The organisational performance emphasises enhancing its capability to address challenges effectively. By identifying and understanding potential obstacles, organisations can develop strategies that not only mitigate risks but also turn challenges into opportunities for growth. Furthermore, e-Government has emerged as a significant component for both organisations and government entities, enabling them to effectively address the needs of citizens and users. E-Government encompasses not only the internal functions of organisations but external applications that pertain to a wide range of operations and services (Moon et al. 2014).

E-Government practices have been used as one of the new instruments in interactions with the public, business community and other government departments (Husin et al. 2017). This e-Government practice has shifted the paradigm from a more traditional approach to a more electronic and systematic one (Husin et al. 2018). Accessing government information is made simpler for citizens via the e-Government application (Kurniawan et al., 2023). Hence, performance efficiency is the key to e-Government, which is seen as more accurate with efficient information access. This efficacy illustrates how information technology can provide highly valuable capabilities in the era of knowledge-based economic competitiveness (Husin et al., 2017). According to Kumbakara (2008), information technology (IT) investment is now considered vital for supporting long-term planning and initiatives. In addition to investments in other assets like transactions, information and strategic resources, IT investment is especially critical for expanding infrastructure. Therefore, in the context of this study, e-Government represents a key initiative and expenditure by the government to shift from a traditional to an electronic form of governance.

The success or failure of an e-Government initiative relies on various challenges and accomplishments that both the government and implementers must address (Abdulnabi, 2024). The implementation of e-Government project was affected by various issues and difficulties, determining its success or failure. Human resources, legal concerns, lack of political, social factors, technical infrastructure, finance, vision and strategy, security and privacy, effective coordination, leadership, skills, and change management are some of the significant factors that impact the use of IT in the majority of countries (Abdallah & Fan, 2012; Dada, 2006; Pudjianto & Hangjung, 2009).

Despite the issues and challenges, e-Government was still successfully rolled out at federal, state and local level (Moon et al. 2014). According to Walker and Andrews (2015), local level is the level that implements many reforms in order to further improve the quality of services. E-Government at the local level offers a means to deliver services to the community and introduce innovation into the government’s internal operations. The advantages of e-Government at this level demonstrate that its implementation can: i) increase efficiency, ii) improve internal communication, iii) provide better customer service and iv), taking care of the people's requests and expectations (Cook et al., 2002). Cook et al. (2002) outlined four key dimensions of e-Government at the local level: e-services, e-management, e-democracy and e-commerce. However, the dimension is varied and the difference depends on the area of the research itself. The table below shows the dimension of e-Government discussed in previous studies.

Table 1.0

E-Government Dimensions

Authors	E-services	E-management	E-democracy	E-commerce
Akesson et al. (2008), Siau and Long (2009), Al-Shehri and Drew (2010), Safeena and Kammani (2013).	✓		✓	
Kumar et al. (2007), Bwalya (2009), Al-Sobhi and Weerakkody (2010), Zampou and Pramatari (2011), Othman et al. (2011), Krishnan (2017).	✓			
Wangpipatwong (2009)			✓	
Kefallinos et al. (2009), Srivastava and Teo (2011), Krishnan and Teo (2012), Odat and Khazaaleh (2012), Alawneh et al. (2013), Sharma (2015).	✓	✓	✓	
Wang and Lio (2008), Krishna and Teo (2011), Alenezi et al. (2015).	✓	✓		
Sahari et al. (2011).		✓		
Oh (2013).		✓	✓	

Source: Develop for this Study

Based on the Table 1.0 above, there are four main dimensions discussed in the study of e-Government. Most of the past studies focus on the dimensions of e-services, e-management and e-democracy while less focus on the e-commerce aspect. In the context of e-Government at the local level, there are four main dimensions discussed by previous researchers (Cook et al. 2002; Moon, 2002). This study focuses on how

e-Government services interact with local government performance. For this purpose, three key dimensions of e-Government were chosen to assess its implementation at the local level. These dimensions, namely e-services, e-management, and e-commerce, are relevant to the context of the study. The operational definition is: e-services refers to the delivery of government information, programmes and services via the internet, e-management refers to the use of IT to improve government administration by enhancing the flow of information between government offices and e-commerce refers to the exchange of money for goods and services over the internet.

The literature review indicates that e-Government and public sector performance are related in terms of cost reduction, productivity enhancement and process and administrative efficiency (Pang et al. 2014; Ramli, 2017). The organisational performance of public sector is significantly positive relationship with the e-Government (Twizeyimana & Andersson, 2019). According to Joseph and Kitlan (2008), there are several potential advantages to e-Government implementation in the public sector, including lower administrative costs, more efficient government operations, closer and stronger ties between the public and the government. In addition, e-Government has significantly increased accountability and transparency in public sector (AlMulhim, 2023) and can reduce corruption by providing the public with a wealth of information about corruption (Bizimana, 2020).

Studies on local government are indeed scarce, even though there is widespread recognition that e-Government initiatives impact all levels of government office: national, state and municipal. Most research on current e-Government practices primarily focuses on the national and state levels (Snead & Wright, 2014), with an emphasis on non-economic performance (Pang et al., 2014). This is often examined from the perspective of factors such as employee productivity, work performance, cost reduction, process effectiveness, and more (Ramli, 2017). This perspective does not meet to evaluate the organisational performance of the public sector (Luftman, 2000). Therefore, recognising the existing gap, this study focuses on local government to examine the relationship of e-Government implementation on the organisational performance. The core of the discussion encompasses both financial and non-financial perspectives, aiming to provide a comprehensive understanding of how digital initiatives influence service delivery, efficiency, and community engagement.

METHODOLOGY

This study employed a quantitative research approach to analyse how e-Government associated with organisational performance. This approach is closely associated with survey research techniques and experiments, enabling researchers to gather measurable information on various variables (Saunders et al. 2019). Therefore, a descriptive study was conducted to explain the relationships between variables and test the hypothesis. This approach aligns with the nature of the planned study, which seeks to provide a clear understanding of the phenomenon under investigation (Saunders et al. 2019). By focusing on how e-Government implementation relates to the organisational performance of local government, this study aims to explain key factors that influence outcomes, especially to collect data to describe humans, events or situations.

This study focuses on relationship analysis and hypothesis testing in alignment with its objectives, specifically examining the relationship between e-Government implementation and organisational performance, and it was conducted cross-sectionally or as a 'snapshot' across time (Saunders et al. 2009). IT managers and higher-level employees were among the participants in the study. Each research model construct is measured on a six-point Likert scale in the questionnaire. The q-sort approach has been applied

to the questionnaire development process. The q-sort process is used to refine the statements based on real respondents and to enhance the selection of items for each construct.

One of the most widely used and thorough methods for evaluating organisational performance is the Balanced Scorecard (BSC) approach, which is used as the dimension for the dependent variable (Molina et al., 2014). Kaplan and Norton (2007) created the BSC, which takes non-financial indicators in an organisation's reporting (Mehralian et al. 2017). The four performance perspectives of the BSC include financial, customer, employee and internal processes. Therefore, the instrument was taken and adapted from Yaacob (2008); Chan (2004); Fuentes et al. (2004); Kaplan and Norton (1996); Kanji (1998), which consists of 17 items. Organisational performance was measured using 17 items adjusted to a 1-6 Likert scale. The measurement items are shown in Table 2.0.

Table 2.0

Dimensions and Items for Measuring Organisational Performance Variables

Dimension and Item	Sources
<u>Financial</u>	(Yaacob, 2008a); (Chan, 2004); (Fuentes-Fuentes et al., 2004); (Kaplan & Norton, 1996); (Kanji, 1998).
1. The organisation successfully managed the budget well.	
2. The organisation successfully achieved savings in operational costs.	
3. The organisation's productivity shows consistent improvement.	
4. The cost of services provided by the organisation is always increased.	
<u>Customer</u>	
1. The services provided by the organisation have high community demand.	
2. The level of customer satisfaction with the services provided by the organisation is high.	
3. The department successfully provided services to customers within the targeted timeframe.	
4. The organisation's reputation among customers is satisfactory.	
<u>Worker</u>	
1. The level of staff motivation is always at a high level.	
2. The training programme for the department staff is not running effectively.	
3. The safety and health risks of staff on duty are guaranteed.	
4. Our staff have a high level of job satisfaction.	
5. The work environment can support the achievement of organisational goals.	

Internal Process

1. Organisations are sensitive in identifying changes in customer needs.
 2. The organisation took a short time to introduce the new service.
 3. The technology used to carry out the task is outdated.
 4. The organisation successfully established work procedures to improve the quality of the services provided.
-

In this study, e-Government is treated as an independent variable, focusing on its role in the provision of services through digital IT. This includes aspects such as automated exchanges between the public, business and government sectors, enhanced democratic public communication, and streamlined administrative transactions (Hameed & Al-Shawabkah, 2013; Moon et al. 2014). However, for the purposes of this study, e-Government is defined as digital IT encompassing three main dimensions: e-services, e-management and e-commerce. Therefore, e-Government is operationalised using a total of 19 items, which are measured on a 1-6 Likert scale. The measurement items are presented in Table 3.0.

Table 3.0

Dimensions and Variables Items in E-Government Measurement

Dimensions and Items	Sources
<u>E-management</u>	
1. Electronic (digital) documents are provided to reduce paper usage.	(Hameed & Al-Shawabkah, 2013); (Kareem & Haseeni, 2015b); (Oh, 2013); Shi (2001); (Papadomichelaki & Mentzas, 2012)
2. Electronic (digital) documents make our staff's work easier.	
3. Our organisation provides services online (example of bill payments, taxes, fines and so on).	
4. Electronic (digital) management reduces administrative complexity.	
5. Electronic (digital) management enhances our staff's ability to deal with customers more effectively.	
6. Electronic (digital) management increases our staff's productivity.	
7. Electronic (digital) systems reduce the budget for resources.	
<u>E-service</u>	
1. Our organisation's website features attractive visuals.	
2. The interface of our organisation's website is well-organised.	
3. Transactions through the website can be completed easily and quickly.	
4. We respond to user requests easily.	
5. The security of our organisation's website is trusted by users.	
6. The information provided on our organisation's website is accurate, up-to-date and easy to understand.	

E-commerce

1. E-commerce transactions can reduce organisational costs.
 2. E-commerce applications enhance the quality of service delivery.
 3. E-commerce applications increase user trust in the government.
 4. E-commerce applications can improve communication with users regarding public issues.
 5. E-commerce applications enhance user satisfaction.
 6. E-commerce applications increase job satisfaction.
-

RESULT AND DISCUSSION

A research objective that analyses e-Government (as the exogenous variable) and the performance of local government organisations (as the endogenous variable) aims to uncover how e-Government initiatives influence various aspects of organisational performance. The relationship is analysed based on the hypothesis:

Hypothesis: There is a significant relationship between e-Government and organisational performance.

Table 4.0 shows the relationship between e-Government and performance as hypothesis, along with the path coefficient (β), t-value, and p-value. The results indicate that the hypothesised relationship (H_1) is not supported with $\beta = 0.075$, $t = 0.532$, and $p = 0.595$. The results show that the implementation of e-Government does not have a significant relationship on the organisational performance of local government.

Table 4.0

e-Government Results and Organisational Performance

Relationship	Coefficient (β)	Standard Deviations	t - value	p- value	Result
e- Government -> Organisational Performance	0.075	0.141	0.532	0.595	Not Significant

These findings are contrast with those of studies by Yang and Rho (2007), Mungai (2017) and Hameed and Shawabkah (2013), which demonstrated a significant positive relationship between e-Government applications and the organisational performance. Variations in the results of this study can be attributed to implementation-related issues. The competence of an organisation to manage IT is one of the key pillars that present difficulties and barriers in the development of e-Government (Ndou, 2004). According to Zheng et al. (2013), the growth characteristics of a nation significantly impact the development of e-Government, leading to varying effectiveness in its implementation. For instance, countries with robust economic growth and higher levels of technological adoption often see more successful e-Government initiatives, as they have the necessary infrastructure and resources to support such programmes (Susanto & Makmur, 2024). The degree of information technology use, and knowledge management techniques,

play crucial roles in the successful implementation of e-Government (AlMulhim, 2023). For that reason, the factors mentioned above could lead to differences in the study's results compared to previous research.

CONCLUSION

The implementation of e-Government is a strategic method for enhancing the performance of public sector services. However, in order to achieve the government's vision, several challenges must be overcome, particularly those related to infrastructure, as well as social and cultural factors. The findings from the studies and analysis clearly demonstrate the relationship between e-Government and organisational performance does not show the significant relationship. The results suggest that additional research is necessary to determine the most effective strategies for successfully implementing e-Government in developing countries, particularly at the local level. A significant relationship may emerge if it is measured indirectly, involving other variables such as IT capabilities, knowledge management, total quality management, and other factors that are considered relevant to e-Government practices and performance. Therefore, this study is expected to provide an insight on the relationship between e-Government and organisational performance in Malaysia.

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