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INVESTIGATING USAGE OF E – GOVERNMENT SERVICES TOWARD SYSTEM PADU IN LINGGI, NEGERI SEMBILAN

Mohamad Shamel Aiman bin Zulazmi
Corresponding author*

(a)Faculty of Business, Accountancy, and Social Sciences, University Poly – Tech Malaysia, shamelxxi@gmail.com

ABSTRACT

The PADU system (Pangkalan Data Utama) serves as Malaysia's major database for handling government records and services. This abstract uses the Technology Acceptance Model (TAM) approach to study the link between the PADU system and the use of e-government services. The study looks at the link between the dependent variable (DV), which is the use of e-government services, and the independent variables (IV), which include things like how easy they are to use, how good people think they are, and how many people are aware of them. The study uses TAM to look at how users' opinions of the PADU system's usability, quality, and expertise affect their willingness to accept and utilise e-government services. The goal of this research is to improve the effectiveness and efficiency of e-government service delivery in Malaysia by studying these linkages. This will finally enable digital governance initiatives to go forward.

1.0 INTRODUCTION

The Malaysian system PADU (Pengkalan Data Utama) is a major component of the country's e-government infrastructure, intended to consolidate and handle primary data efficiently. PADU acts as a single database that consolidates critical information from many government departments, assuring consistency, accuracy, and accessibility of data for effective decision-making and service delivery. In the field of e-government, PADU plays a vital role in facilitating smooth digital interactions between individuals, companies, and the government by providing a dependable source of data for online services and transactions. Scholarly research underlines the relevance of centralized data repositories like PADU in boosting the efficacy and efficiency of e-government systems. For instance, a research by (Choudrie and Dwivedi, 2005) shows the relevance of integrated databases in encouraging interoperability and information exchange across government agencies, which are crucial for providing integrated e-government services. Similarly, (Heeks, 2003) highlights the relevance of centralized data management in increasing government responsiveness and public satisfaction via improved service delivery operations.

2.0 LITERATURE REVIEW

2.1   Usage of E – Government Services

The relevance of confidence in the uptake of e-government services is a major issue across numerous research. In South Africa, faith in the government's capacity to supply safe and dependable e-services is regarded as a critical feature separating users from non-users (Mpinganjira, 2015). Similarly, research in Finland underlines the sociodemographic, economic, and geographical characteristics impacting e-government service utilization, underlining the relevance of internet connectivity in bridging the digital divide (Taipale, 2013). The move towards e-government, as indicated in Malaysia, mirrors a worldwide trend driven by digital technology, with ICT teamwork, trustworthy information, and social factors playing major roles in user acceptance, as demonstrated during the COVID-19 epidemic (Lean, 2009). Challenges in local government e-service supply, such as resource limits and technology limitations, imply that Application Service Providers (ASPs) might provide a feasible alternative via IT outsourcing, possibly boosting service delivery by overcoming these hurdles (Chen, 2001). In Pakistan, an integrated conceptual model embracing trust as a multidimensional construct proposes to expand understanding of individuals' e-government adoption intentions, highlighting the necessity for governmental efforts to boost use of these services (Zahid, 2022). These studies together highlight the multiple aspects driving e-government service uptake, spanning from trust and technology access to socio-economic and demographic demographics, delivering useful insights for developing digital government-citizen interactions internationally.

2.1.1   Technology Acceptance Model (Tam)

These studies demonstrate how the Technology Acceptance Model (TAM) may help us better understand how people utilize IT and e-government services. They priorities critical characteristics such as perceived advantage, convenience of use, and trustworthiness. According to (Lederer et al., 2000), when it comes to IT utilization, value trumps convenience. Turner et al. (2010), on the other hand, demonstrate that doing a full literature study may improve TAM accuracy in organizational settings. (Shyu & Huang, 2011) apply TAM to e-government learning by including perceived value and enjoyment as important factors; and (Belanche et al., 2012) investigate how people use e-government services, focusing on the role of trust and the impact of personal values such as time management and environmental sensitivity. Together, these studies contribute to our understanding of the factors that influence people's willingness to utilize and interest in

technology. This information is essential for legislators and developers who wish to use e-government services and IT platforms.

2.2 Accessibility of E – Government Services

E-government services must be easy for people to reach in order to get people more involved with their government and make it run more smoothly. Several studies look at the factors that affect how many people use and can receive these services. (Mpinganjira, 2015) shows how faith in internet connection and government dependability can tell the difference between people who use e-government services and people who don't. Lean (2009) also talks about how ICT teamwork, trustworthy information, and peer pressure can encourage people to use e-government. Chen (2001) looks at how organizations can change, such as by hiring through Application Service Providers (ASPs), to improve the delivery of e-government services. Belanche et al. (2012), on the other hand, stress the importance of trust as a link between how easy people think e-government services are to use and how useful they are thought to be. Additionally, the Technology Acceptance Model (TAM) is a way to think about how people accept new technologies. It has been used in e-government by researchers like (Shyu & Huang, 2011) and (Turner et al., 2010), showing what factors affect how people use digital government services and helping to make policy and improve services.
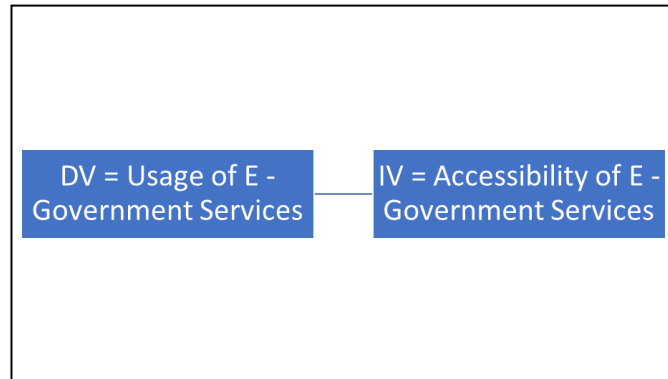
2.3   Research Framework

Figure 1

3.0 METHODOLOGY

3.1 Research Approach

This research explores the impact of e-government services on rural communities in Linggi, Negeri Sembilan. Quantitative research uses numbers and statistics to measure phenomena and establish cause-and-effect relationships, while qualitative research explores experiences, meanings, and perspectives. The study uses a quantitative questionnaire with 29 questions to gather data from the audience. The use of both descriptive and explanatory data may enhance the reliability and accuracy of the findings. Some research suggests no significant difference in citation counts between qualitative and quantitative articles.

3.2 Questionnaire Design

Questionnaires serve as a vital tool in quantitative research, allowing researchers to gather standardized data from a specific population. (John W. Creswell, 2014) describes questionnaires as sets of standardized questions designed to collect quantifiable information efficiently. They are particularly useful for studies aiming to measure trends, identify patterns, and assess group-level opinions or behaviors. In the study conducted in Linggi, Negeri Sembilan, the questionnaire consisted of seven parts, covering demographic information and factors contributing to the usage of e-government services such as accessibility, perceived quality, and awareness. Responses were collected anonymously to ensure confidentiality, with participants selecting options ranging from strongly agree to strongly disagree. A total of 150 valid responses were collected and analyzed using IBM SPSS (Version-20). Employing a cluster sampling technique as suggested by (Field Louisville, 2005), the study aimed for generalizability of findings within the target population. Multiple linear regression analysis was utilized to analyze the collected data, providing insights into the factors influencing the usage of e-government services in the area.

3.2.1   Usage of E – Government Services Survey Question

Usage of E – Government Services Question :-

1. I have a positive attitude towards the use of E-Government services (PADU)
2. I use/plan to use E-Government services
3. I often use E-Government services (PADU)

3.2.2   Accessibility of E – Government Services Survey Question

Accessibility of E-Government Services

1. I find it easy to use E-Government services (PADU)
2. I can easily identify the E-Government website (PADU)
3. The E-Government website (PADU) provides access for people with disabilities
4. I receive the assistance I expect when I need it

3.2.3   Awareness of E – Government Services Survey Question

3.3   Sampling and Data Collection

Awareness of E-Government Services Survey Question :-

1. E-Government services (PADU) provide the accurate information I need
2. E-Government services provide up-to-date information
3. The E-Government website allows me to give my feedback to the government
4. There are savings (time, money) using E-Government services
5. I can communicate with government officials through E-Government services (PADU)

IBM SPSS is a statistical software used for data analysis, with a comprehensive book for students. Cronbach's alpha is a statistical measure used to assess reliability in science education research. The study used a questionnaire-based approach to collect data on the Readiness Rural Communities Towards System PADU (E-Government) based on influential variables such as gender, age, education, income, access to internet facilities, and use of digital applications provided by the government. Independent t-tests and post hoc testing were used to determine statistically significant differences between groups. The study aimed to identify specific groups with significant differences.

4.0 FINDINGS AND DISCUSSION

4.1   Descriptive Table

Item Statistics

	Mean	Std. Deviation	N
@1.Sayamenganggapkemudahanpenggunaanperkhidmatanekerajaan	3.37	.864	126
@2.SayadenganmudahbergerakdisekitarlamanwebeKerajaan	3.60	.914	126
@3.LamanwebEKerajaanmenyediakanaksesuntukorangkurangupa	3.71	.947	126
@4.Sayamenerimabantuanyangdijangkaapabilasayamemerlukanny	3.57	.999	126
@1.Perkhidmatanekerajaanmenyediakanmaklumatyangtepatyang	3.70	.842	126
@2.Biasanyaperkhidmatanekerajaanmenyediakanmaklumatyangte	3.66	1.005	126
@3.LamanwebEKerajaanmembolehkansayauntukmemberikanpenda	3.59	1.037	126

@4.Adakahpenjimatanmasawangmenggun akanperkhidmataneker	3.71	.939	126
@5.Sayadapatberkomunikasidenganpegaw aikerajaanmelaluiperk	3.59	1.006	126
@1.PerkhidmatanEKerajaanmenyediakanm aklumatyangtepat	3.70	.879	126
@2.PerkhidmatanEKerajaanmenyediakanm aklumatyangbolehdip	3.67	.962	126
@3.PerkhidmatanEKerajaanmenyediakanm aklumatyangrelevan	3.78	.920	126
@4.PerkhidmatanEKerajaanmenyediakanm aklumatyangmudahdif	3.75	.961	126
@1.Sayarasapenyediaperkhidmatanekeraja anbolehdipercayai	3.71	.945	126
@2.Sayayakintentangperlindunganprivasisa yaapabilamengguna	3.58	1.053	126
@3.Sayarasatransaksisayaselamatapabila menggunakanperkhidm	3.70	.974	126
@4.Sayapercayabahawabolehadaakibatneg atifdarimenggunakan	3.77	.956	126
@1.Sayabolehmenyelesaikantugassyarikat perniagaansayameng	3.54	.900	126
@2.Jikasayabolehmenelefonseseoranguntu kmendapatkanbantuan	3.66	.965	126
@3.Sayamempunyaibanyakmasauntukmen yelesaikantugassyarikat	3.79	.974	126

Table 1

Table 1 depicts the Likert scale answers of 126 participants in the study to e-government services. The majority of respondents were pleased with the ease with which e-government technologies could be used. Users routinely give e-government services high marks for information quality and usability, with ratings ranging from 3.66 to 3.78. This suggests that buyers believe the content is factual and useful. People also value the chance to submit feedback via e-government services, as well as the potential savings in time and money. There were replies to questions on religion, privacy, and security, and respondents expressed confidence in these areas. There are high marks for how successfully e-government services assist with business tasks and how easy it is to receive help, such as over the phone. Scores range from 3.54 to 3.79,

suggesting that people trust e-government services and find it easy to get help when they need it. Overall, the table shows how people perceive and use e-government services in a good way.

4.2 Correlation Table

Correlations

		ACCESIBILITY	DV
ACCESIBILITY	Pearson Correlation	1	.642**
	Sig. (2-tailed)		<.001
	N	127	127
DV	Pearson Correlation	.642**	1
	Sig. (2-tailed)	<.001	
	N	127	127

**. Correlation is significant at the 0.01 level (2-tailed).

Table 2

Table 2 shows an upward trend between the accessibility of e-government services and dependence, with a Pearson correlation value of 1.0, suggesting a positive link, although this is most likely owing to the small sample size.

Correlations

		AWARENESS	DV
AWARENESS	Pearson Correlation	1	.701**
	Sig. (2-tailed)		<.001
	N	127	127
DV	Pearson Correlation	.701**	1
	Sig. (2-tailed)	<.001	
	N	127	127

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3

Table 3 shows a statistically significant relationship between knowledge of e-government services and utilisation, with a Pearson correlation value of 1.000. This shows a perfect positive correlation, however the 1.000 is most likely attributable to chance given the tiny sample size.

4.3 Reliability Table

4.3.1 Usage of E – Government Services

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.826	.827	3

Table 4

Table 4 analyzes a scale measuring E-Government Services usage across 127 valid cases, ensuring a complete dataset and a solid reliability with a Cronbach's Alpha of 0.826.

4.3.2 Accessibility of E – Government Services

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.824	.826	4

Table 5

Table 5 presents statistical analysis results for the study on "Accessibility of E-Government Services," with 127 valid cases included. The Cronbach's Alpha of 0.824 indicates good internal consistency among the four items used to measure the IV, indicating its reliability for assessing e-government service accessibility.

4.3.3 Awareness of E – Government Services

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.871	.874	5

Table 6

The table 6 shows a survey assessing awareness of E-Government Services, with 127 valid cases and 1 excluded. The tool's reliability is excellent, with a Cronbach's Alpha of 0.871, slightly improving to 0.874 when standardized.

5.0 CONCLUSION

In conclusion, the study paper examines the elements that determine how citizens in local communities use e-government services. It reveals that aspects like as accessibility, perceived quality, and comprehension are crucial for successful utilization. Gender, age, level of education, finances, internet connection, and use of digital government apps all play a role. According to the findings, accessibility and understanding are linked to efficient usage of e-government services. This adds legitimacy to concepts like the Technology Acceptance Model (TAM) and the Diffusion of Innovation Hypothesis. One of the study's suggestions is to improve accessibility by eliminating barriers and improving transportation. This requires enhancing user design and experience while also ensuring that everyone is included, including those with impairments or limited technological skills. It is also vital to improve the quality of what customers perceive as e-government services. This entails having the relevant knowledge, using the proper online tools, and having a range of ways to deliver and receive help. Finally, it should be a top priority to continue our efforts to improve knowledge. These commercials should highlight the benefits of e-government services, address common concerns, and illustrate how to access and use them effectively. According to the paper, implementing these suggestions may result in improved service, happier inhabitants, and more participation, therefore making the government more open and connected. This strategy has the ability to revolutionize the public sector and contribute to the formation of a government that listens to and responds its constituents' requests.

REFERENCES

Lederer, A. L., Maupin, D. J., Sena, M. P., & Zhuang, Y. (2000). The technology acceptance model and the World Wide Web. Decision Support Systems, 29(3), 269–282. https://doi.org/10.1016/s0167-9236(00)00076-2

Mpinganjira, M. (2015). Use of e-government services: the role of trust. *International Journal of Emerging Markets*, *10*(4), 622–633. https://doi.org/10.1108/ijoem-12-2013-0151

Shyu, S. H., & Huang, J. H. (2011). Elucidating usage of e-government learning: A perspective of the extended technology acceptance model. Government Information Quarterly, 28(4), 491–502. https://doi.org/10.1016/j.giq.2011.04.002

Taipale, S. (2013). The use of e-government services and the Internet: The role of socio-demographic, economic and geographical predictors. Telecommunications Policy, 37(4–5), 413–422. https://doi.org/10.1016/j.telpol.2012.05.005

Turner, M., Kitchenham, B., Brereton, P., Charters, S., & Budgen, D. (2010). Does the technology acceptance model predict actual use? A systematic literature review. Information & Software Technology, 52(5), 463–479. https://doi.org/10.1016/j.infsof.2009.11.005