

E-government Model as Information Centre for Society and Community to Support Public Services Base on Mobile Technology

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Abstract

The government issues many regulations and public services for society and these regulations continue to change along with changes in people's lives. However, not all societies are aware of changes in government regulations that have the potential to cause public dissatisfaction and violations of government regulations. E-government is a system built by the government which one of its functions is to provide public services for society and the community. With the increasing use of information technology, the government can use this technology to improve public services to society and the community by building a system that focuses on distribution and updating of information, especially information related to changes in government regulations and public services. On the other hand, with the increase in mobile technology used by society, the distribution of information from the government to society can use mobile devices. The purpose of this research is to help the government socialize regulations and changes to government regulations to make it easier for society to manage relations with the government. The research method uses a qualitative approach through observation to identify problems with government services to society. Literature studies are used to find alternative solutions with an information technology approach.

Keywords

E-Government, Society, Government Regulation.

1.Introduction

The relationship between the government and the community in a country is very important because the condition for the establishment of a country is the existence of a people or community, in addition to the conditions for the existence of territory and recognition from other countries. The people or society and the government have rights and obligations as well as the government and the people have the same thing. Public service is one of the most important elements for public institutions, including government agencies for society. Therefore, public services by government officials must always be directed at the public interest which substantively realizes the public interest and pays attention to service quality towards society (Mukhammadsideqov 2020) (Morgan 2019) (Masuku et al. 2019).

This shows that the quality of services provided by the government has not shown satisfactory results to the community. Complex service process, inefficiency, slow, unfriendly, unclear service time and cost. the quality of services provided by government officials is still low and the quality of public services is tangible evidence that is not good. Several factors that affect the quality of public services are staffing, bureaucracy, management, thinking, organizational performance, bureaucracy, bureaucratic innovation and information technology, and bureaucratic behavior (Ramadhan et al. 2021) (Sofyan et al. 2020) (Napitupulu et al. 2018) (Li and Huping 2020).

Thus, we need a system that integrates all types of public services by the government to the community which is part of e-government to make it easier for the community to take care of their needs for government public services. The purpose of this research is to help the government improve public services using mobile device-based information

technology. The research method uses a qualitative approach to identify public service problems by the government. To find alternative solutions using information technology, namely e-government combined with mobile technology.

2.Literature Review

Information technology has been evolving in many fields, for example in business (Hayardisi et al. 2018), education (Ramadhan et al. 2022) and government. Public service is every activity carried out by the government for a number of people who have every activity that is profitable in a group or entity and offers satisfaction even though it does not support a physical product. Another definition of public service is the fulfilment of the wishes and needs of the community by state administrators. The state was established by the public (society) with the aim of improving the welfare of the community (Xudoyberdiyeva 2019) (Canel and Vilma 2018) (Skokova et al. 2018) (McGann et al. 2018).

In essence, the state in this case the government (bureaucrats) must be able to meet the needs of the community. Needs, in this case, are individual needs for individual needs that are actually expected by society, for example the need for health, education and others. public or public service activities include:

- a. Goods Service
Goods procurement and distribution services can dominate all services provided by the government to the public. This category of public services can be carried out by government agencies whose funds are partly or wholly state assets that cannot be separated or managed by government-owned enterprises whose funds are partly or wholly derived from separate state assets. Goods services, namely services that produce various forms or types of goods used by the public, such as telephone networks, electricity supply, clean water and so on (Petersen et al. 2022).
- b. Administrative Services
Public services in this category include administrative actions required by the state and regulated in laws and regulations in the context of realizing personal, family and property protection as well as administrative activities carried out by non-governmental agencies that are required by the state and regulated by law and implemented. based on an agreement with the recipient of the service. Administrative services are to produce various forms of official documents needed by the public, such as ownership status, ownership or ownership of an item and so on. (Writz et al. 2019)
- c. development service
Development services are community services related to the provision of facilities and infrastructure to provide facilities to the community in their activities as community members, such as providing roads, bridges, ports and others (Manggat et al. 2018).
- d. Utility Service
Utility Services is the provision of utilities such as electricity, air, telephone, and transportation (Homsey and Mildred 2020).
- e. Basic Needs Service
Basic Needs Service is a service that provides basic necessities for the community and housing needs, such as the provision of rice, sugar, oil, gas, textiles and low-cost housing (Veeramootoo et al. 2018).
- f. Community Service
Community services are services related to the nature and interests of which are more emphasized on social activities such as health services, education, employment, prisons, orphanages and others (Moses 2022)..

3.Methods

The number of public complaints about the low quality of government services requires a comprehensive and sustainable solution. This condition became the initiation of the start of the research. The problem finding is reinforced by some literature that shows the low quality of government public services. The research is continued by identifying more deeply the root cause of the low quality of public services. After finding the cause of the low quality of government services, the research was continued by looking for alternative solutions using information technology.

the final stage of research is to build an e-government model for improving public services using mobile technology. Figure 1 describes the research method.

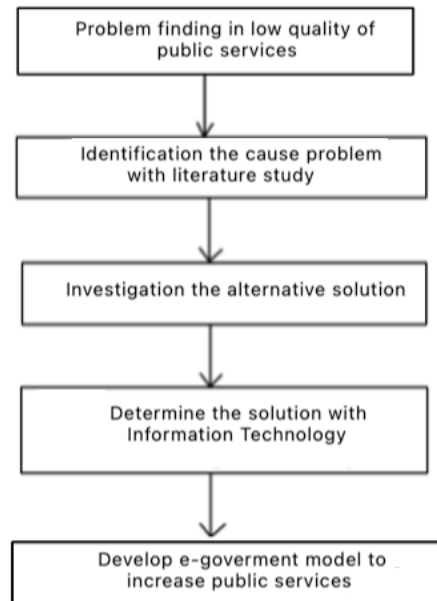


Figure 1 Research Method

4.Results and Discussion

Figure 2 show the e-government model for public services with mobile device. On the left side is the regulation database where this database includes all public services provided by the government to the community such as community services, administrative services, goods services, utility services, basic needs services and development services. Each service database includes all regulations, mechanisms, procedures made available to the public.

The middle part of the model describes a web site that provides information retrieval features for the public. This feature is a very important part because all information needs, and others can be obtained with the capabilities of this feature. The public can filter the required information from all public services provided by the government. The public can also track the service needs that have been submitted to the government's public service.

The next part of this model is the citizen presentation layer where this layer is a mediation between the web government and mobile devices that are used to access public services through people's smartphones. On the other hand, government officials and system administrators can update information and service progress via the update information service portal. Whenever there are changes in regulations or changes in the progress of public services, government officials can update information and the public can find out the changes in real time.

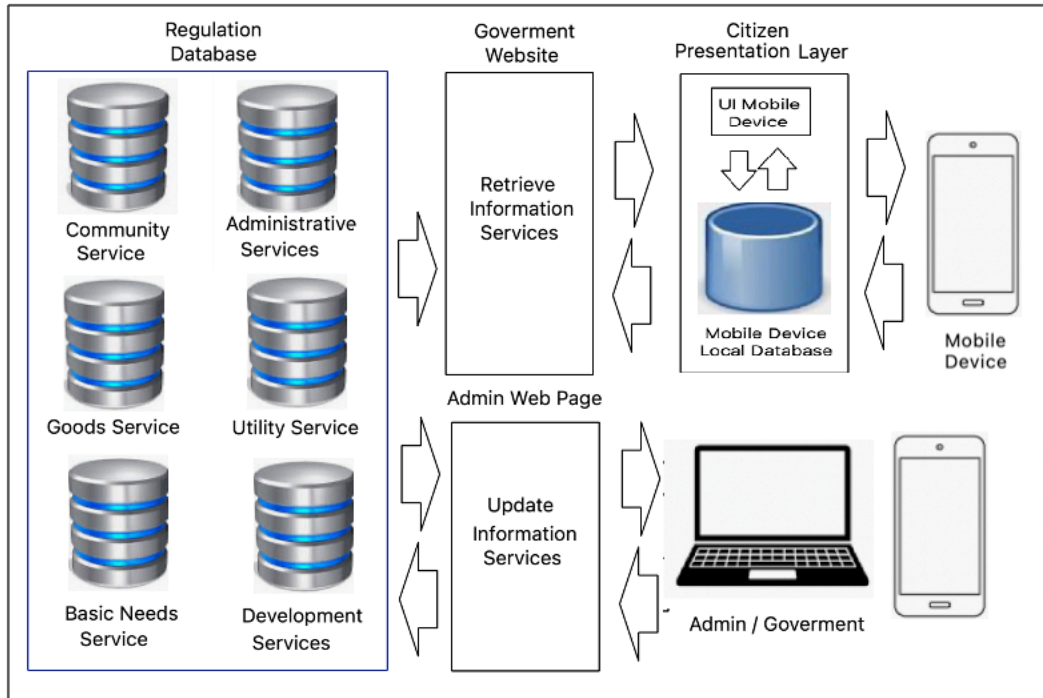


Figure 2. Proposed Model

5. Conclusion

The low quality of public services is caused by several interrelated factors that create an ineffective and inefficient process. The adoption of e-government that focuses on improving the quality of public services creates a system that will eliminate processes that were not effective in the previous process. Factors that hinder the quality of public services will be eliminated automatically with the adoption of e-government. The use of mobile devices in the proposed model will make it easier for people to use public services because smartphones have become part of people's daily activities.

References

- Canel, María José, and Vilma Luoma-aho. *Public sector communication: Closing gaps between citizens and public organizations*. John Wiley & Sons, 2018.
- Hayardisi, Gananda, Kudang Boro Seminar, and Arief Ramadhan. "Analysing Signal Strength and Connection Speed in Cloud Networks for Enterprise Business Intelligence." *TELKOMNIKA* 16.4 (2018).
- Homsy, George C., and Mildred E. Warner. "Does public ownership of utilities matter for local government water policies?" *Utilities policy* 64 (2020): 101057.
- Li, Yan, and Huping Shang. "Service quality, perceived value, and citizens' continuous-use intention regarding e-government: Empirical evidence from China." *Information & Management* 57.3 (2020): 103197.
- McGann, Michael, Emma Blomkamp, and Jenny M. Lewis. "The rise of public sector innovation labs: experiments in design thinking for policy." *Policy Sciences* 51.3 (2018): 249-267.
- Moses, Mark. "Discovering the Value of City Government." *The Municipal Financial Crisis*. Palgrave Macmillan, Cham, 2022. 109-121.
- Mukhammadsidiqov, Mukhammadolim. "The importance of regulating the relationship between the state and religion in ensuring the stability of society." *The Light of Islam* 2020.2 (2020): 12-17.
- Manggat, Incham, Rajwani Zain, and Zakiyah Jamaluddin. "The impact of infrastructure development on rural communities: A literature review." *Sciences* 8.1 (2018): 637-648.
- Morgan, Douglas F. "The public interest." *Handbook of administrative ethics*. Routledge, 2019. 151-178.
- Masuku, Mfundo Mandla, and Nokukhanya Noqinisele Jili. "Public service delivery in South Africa: The political influence at local government level." *Journal of Public Affairs* 19.4 (2019): e1935.

- Napitupulu, Darmawan, et al. "Analysis of student satisfaction toward quality-of-service facility." *Journal of Physics: Conference Series*. Vol. 954. No. 1. IOP Publishing, 2018.
- Sofyani, Hafiez, Hosam Alden Riyadh, and Heru Fahlevi. "Improving service quality, accountability and transparency of local government: The intervening role of information technology governance." *Cogent Business & Management* 7.1 (2020): 1735690.
- Petersen, Ole Helby, Mads Dagnis Jensen, and Yosef Bhatti. "The effect of procurement centralization on government purchasing prices: evidence from a field experiment." *International Public Management Journal* 25.1 (2022): 24-42.1.
- Ramadhan, Arief, Achmad Nizar Hidayanto, Ghina Almira Salsabila, Intan Wulandari, Jessica Alexia Jaury, and Nadia Nabila Anjani. "The Effect of Usability on the Intention to Use the E-Learning System in a Sustainable Way: A Case Study at Universitas Indonesia." *Education and Information Technologies* 27 (2022): 1489-1522. doi: 10.1007/s10639-021-10613-0.
- Ramadhan, Arief, Aniati Murni Arymurthy, Dana Indra Sensuse, and Muladno. "Modeling e-Livestock Indonesia." *Heliyon* 7.8 (2021). doi: <https://doi.org/10.1016/j.heliyon.2021.e07754>.
- Skokova, Yulia, Ulla Pape, and Irina Krasnopolskaya. "The non-profit sector in today's Russia: Between confrontation and co-optation." *Europe-Asia Studies* 70.4 (2018): 531-563.
- Veeramootoo, Narvadh, Robin Nunkoo, and Yogesh K. Dwivedi. "What determines success of an e-government service? Validation of an integrative model of e-filing continuance usage." *Government information quarterly* 35.2 (2018): 161-174.
- Wirtz, Bernd W., Jan C. Weyerer, and Carolin Geyer. "Artificial intelligence and the public sector—applications and challenges." *International Journal of Public Administration* 42.7 (2019): 596-615.
- Xudoyberdiyeva, Dilafuz Abidovna. "MANAGEMENT OF THE SERVICES SECTOR AND ITS CLASSIFICATION." *Theoretical & Applied Science* 10 (2019): 656-658.

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