TULUNGAGUNG REGENCY HEALTH INFORMATION SYSTEM (SIKESTA) E-GOVERNMENT PRACTICE AT THE PUSKESMAS CAMPURDARAT

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Abstract: In connection with the number of services handled at the Campurdarat Health Center, it makes obstacles in accessing health information using technology such as the lack of the latest health information data if there is a change in health services. The Tulungagung Regency Health Office as part of the local government uses the e-government concept through the Tulungagung Regency Health Information System (SIKESTA) website which strives to facilitate health services at the Puskesmas Campurdarat. This study aims to explore and discuss integrated health services through the SIKESTA web at the Campurdarat Health Center. This study uses a qualitative approach with descriptive analysis. Research shows that the SIKESTA web has conformed to the stages of Layne & Lee's theory. Cataloguing, the SIKESTA health service list not only provides information online but can manage the list of available health services and can only be accessed by the health center. Transactions, transactions carried out in SIKESTA services can be carried out according to the payment terms that have been determined, Vertical Integration, the implementation of this web can be directly related to the Health Office, Horizontal Integration, the use of the SIKESTA web can facilitate health services to be more productive and optimized but cannot facilitate the flow of patient information between resource units at the health center.

INTRODUCTION

E-Government is an innovation that can be achieved by the government by using information technology to provide public services electronically (Cahyono, 2023). Acording to (Cahyono et al., 2024) given the rapid development of information technology, the use of e-Government is needed to meet people's demands for faster, more efficient, and open services.

Along with the increasing public need for quality health services, it is necessary to make improvements to the health programs implemented by puskesmas to be more effective and efficient, by paying attention to the quality, principles, suitability and ethics of health services (Saputra, 2024). Health is considered an investment in resource development for the people of Indonesia (Mindarti & Juniar, 2019).

Law No. 36 of 2009 concerning health in article 53 paragraph 2 concerns the government and local governments are also responsible for the implementation of health

services. Thus, the rights and responsibilities of the community in the implementation of health services by the government are protected, so that the government and the bureaucracy can provide quality services, regardless of service problems in community service hospitals. Communities can position communities (Ananda et al., 2020).

Related to efforts to improve health services, the Tulungagung Regency Health Office launched one IT innovation in health services, namely the SIKESTA (Tulungagung Regency Health Information System) website. The number of services handled at the Campurdarat Health Center makes it an obstacle in accessing health information using technology such as the lack of the latest health information data if there is a change in health services at the Campurdarat Health Center. This health service is guided by the Regent's Decree number 188.45/30/013/2020 as an effort to optimize better health services. This web system can be obtained through https://sikesta.dinkestulungagung.net/ website.

The development of health maint is a top priority in order to create efficient and effective health services. The Campurdarat Health Center faces various difficulties in ensuring quality health services. These difficulties are related to health services that take a long time, uneven accessibility in health services, and information gaps between medical personnel and patients which can cause miscommunication and errors in service, as well as making too many reports for only one patient, so that it is considered a waste of paper, labor and cost. This is considered troublesome in health services, so special software was created to create a more integrated, digital-based reporting system. The software in the form of the web was then named SIKESTA.

From this description, this study takes the title of Integrated Health Services Through the Web "SIKESTA" at the Puskesmas Campurdarat Tulungagung. The purpose of this study is to explore and discuss integrated health services through the web "SIKESTA" at the Tulungagung Campurdarat health center.

THEORITICAL STUDIES

DEFINITION OF E-GOVERNMENT

Updating e-Government applications requires resources, such as human, cultural, and critical infrastructure readiness. Lack of stakeholder attention can lead to failure in the implementation of e-government (Jaya, 2013). The progress of e-Government according to Presidential Instruction No. 3 of 2003 is a initiative to enhance the introduction of e-government aims to enhance the overall quality of services. public services effectively. According to Clay G. Weslatt from the site, the Government uses information and communication technology to

encourage more efficient governance, effective cost reduction, and to facilitate services to the community (Ibrohim, 2022).

E-Government is an electronic service system that plays an important role in the Indonesian government to realize quality health services (Tasyah et al., 2021). E-Government is often referred to as electronic government or information technology-based government, which refers to the use of information and communication technology (ICT) to support government processes, improve public services, and encourage community participation (K. D. A. Sari & Winarno, 2012).

E-Government is a public sector system based on digital technology and two-way interaction between the government and other stakeholders, both from community groups, business sectors, and other government institutions that this is a form of implementation of the service (Kurniasih, 2010). Meanwhile, the United States Federal Government concluded that e-government is a e-government refers to the delivery of government information and services online through the internet or other digital means (Oktavya, 2015).

According to Roger in (Rohaeti, 2024), e- usage of digital means to enable the flow on information and overcome the limitations of traditional systems. These technologies improve government access and services to communities and businesses, and transform the way leadership and transactions are conducted.

According to (Layne & Lee 2001) in (Irawan & Hidayat, 2012), e-Government is the application of information and communication technology (ICT) to improve the efficiency, transparency, and quality of public services in the interaction between the government, society, and the business sector. According to Layne & Lee, there are 4 stages in health services, including:

Cataloguing or cataloging. At this stage, the use of ICT is involved by the government in using the internet to provide information online. At this stage, the activity looks like the creation of a "catalog", as the government provides public information online, usually through a website.

Transaction. Here, the government connects internal systems through online services, allowing them to interact directly with their citizens. This phase will focus on providing public services that facilitate electronic transactions so as to improve the efficiency and transparency of public assistance. This includes the provision of online forms and databases to support the transaction process.

Vercital integration. Integrate similar functions at different levels of government to optimize the smoothness and quality of service. The purpose of this integration is to reduce the gap between different levels of government and strengthen cooperation between institutions, thereby facilitating public access to more coordinated and responsive public services.

Horizontal integration. ensure that various health units or services that are at the same level (such as, within one health center or between health centers in one area) can exchange information, work with each other, and operate in an integrated manner to provide more efficient services.
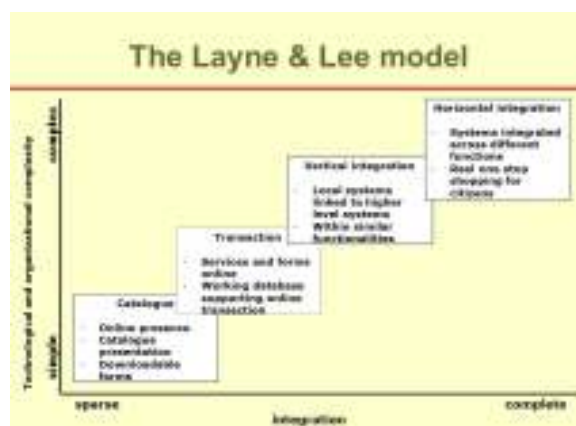

Figure 1 *E-Government Model* **(Layne and Lee, 2001)**

DEFINITION OF HEALTH SERVICES

According to Levey and Loomba in (Fitria, 2020) health services are organizational efforts to improve, maintain, prevent diseases, and heal and restore the health of individuals in society. Health services aim to maintain, improve, prevent, cure, and restore health through stages of entry, process, exit, impact, and feedback which are also included in the health service sub-system.

Health services are affected by globalization which changes people's lifestyles and choices. Fierce competition will leave the weak behind. Organizations must be innovative to attract the interest of service users (Anggraeny, 2013). Health services are efforts to maintain health so that individuals and communities are optimally healthy. There is a relationship between patients, healthcare workers, and healthcare facilities governed by legal and non-legal rules and moral and ethical values (Savira & Subadi, 2023).

Providing superior health facilities to the community is something that the government needs to pay attention to in its efforts to develop the health sector. Considering that health services are needed for all citizens, the government must strive to design programs that can improve overall health services (Anarti & Oktariyanda, 2022). Health services are invisible

activities that result from the interaction between consumers and employees. All efforts made individually or collectively in an organization with the aim of maintaining and improving health, preventing and treating diseases, and restoring public health (Ridhatullah & Bestandri, 2023).

DEFINITION OF PUSKESMAS

The Community Health Center (Puskesmas) is a health organization that serves first-level public and individual health activities (Rokhmad et al., 2021). According to Muninjaya in (Ridhatullah & Bestandri, 2023), health centers are technical service branches of district/city health offices that carry out health development in regions or sub-districts.

The Puskesmas serves as a key operational entity within the district or city office, tasked with overseeing and implementing health development initiatives within its designated area (Ekasari et al., 2017). To achieve optimal health, an adequate basic health service system is needed. Public health is an important issue that requires adequate services. Puskesmas plays the role of the main provider of comprehensive health services that are fair and affordable for the community (Novita & Anggraeni, 2023).

Puskesmas is an integrated operational institution, oriented towards the implementation of health initiatives that are inclusive, organized, objective, and easily accessible and reached to the community. Technology can be used to achieve affordable health levels, at the expense of the authorities and the general public, while maintaining the quality off personal service to achieve optimal conditions (M. Sari, 2019).

According to the policy of the Ministry of Health of the Republic of Indonesia, Puskesmas are part of health services in various regions. Puskesmas function with organizations, resources, and programs of health service activities. The goal is to improve the health of the people in their work areas, as well as create physical, mental, spiritual, and social welfare (Raharjo, 2017).

Based on the Decree of the Regulation No. 43/2019 by the Minister of Health concerning puskesmas, health centers are health service facilities (faskes) that play a role in the implementation of health regulatioms to fulfill regional health development goals (Peraturan Menteri Kesehatan RI No 43 tahun 2019, 2019). According to Satrianegara (2014: 72), Puskesmas is a functional health organizational unit and a public health development center that contributes to providing comprehensive and integrated community participation through its main activities (Ariyani et al., 2016).

RESEARCH METHODS

The research approach used in this study is using qualitative methods. Qualitative research methods as a means or strategy to investigate and comprehend a primary phenomenon. This research methodology used is qualitative, using primary data sources consisting of observations and interviews with resource persons and local communities who are interested in health data services.

Secondary data sources are images from easily accessible sources such as the Tulungagung Health Information System website. Based on the description of the empirical problems encountered, the location of the research is the Tulungagung Campurdarat Health Center. The address of the survey location is Gorda Wijaya Street No. 1 Wates, Campurdarat Tulungagung. Data collection methods can be applied through observation, interviews, documentation and especially literature review regarding the mechanisms used in data collection. Literature research is carried out by collecting and studying various theories, regulations, and information. From the data we received, it can be seen how the Tulungagung Campurdarat Health Center provides health services through the SIKESTA application (Cahyono et al., 2022).

RESULTS AND DISCUSSION

Based on a research analysis conducted on December 2, 2024, the Campurdarat Health Center has carried out health services through the SIKESTA website which aims to facilitate more effective and efficient services. In providing high-quality health services, the government utilizes information and communication technology (ICT) through e-government. This aims to make public access to adequate health services easier in the future (Farhaini et al., 2022).

Application of Health Services to Layne & Lee's Theory

The researcher uses the theory of health services proposed by Layne & Lee (2001) , where there are 4 stages in health services. Here are the 4 stages according to Layne & Lee:

1. Cataloguing or cataloguing

    The list of SIKESTA health services at the Campurdarat Health Center can only be accessed by the health center. Through this SIKESTA website, health centers not only provide information online but can also help in managing the list of available health services by registering patients. In addition, patient data between health centers in one area can be accessed by the health center. However, if people want to see their disease history, they can access it on the JKN mobile application. This web can provide convenience for

the health center in accessing health service information as well as being able to control patient data on the implementation of services.

2. Transaction

With the SIKESTA service, transactions starting from registration, treatment and payment until the patient goes home can be done through the website. In accordance with the payment conditions that have been determined on this website, patients are expected to bring an KTP, BPJS, KIS, or child card. If the patient has met the payment requirements, the health center can print a receipt on the same day.

3. Vertical Integration

In the implementation of this SIKESTA website, the health center can directly contact the Health Office, because the health center is only the implementer of the SIKESTA program created by the Health Office. But at the level puskesmas SIKESTA menggunakan web SIMPUSTA (Sistem Informasi Puskesmas).

4. Horizontal Integration

After the Health Office strives to use the SIKESTA website, the health center can make health services easier. However, in effective and efficient health services, the health center cannot facilitate the flow of patient information between service units at the health center, because the SIKESTA web system has been adjusted to their respective fields such as general poly, nutrition poly, KIA, and others.

In the implementation of SIKETSA, health centers can easily carry out health services according to the SOPs that have been determined by the Health Office, thereby increasing public trust related to their health. Here we list the display of the SIMPUSTA (Puskesmas Information System) web service.

Figure 1
SIKESTA Service Menu Display

Source: (https://sikesta.dinkestulungagung.net/)

The display of the service menu in SIKESTA is that there are several menus, including e-YANKES, Health Facilities, Management, Media, Home Visit, Simpusta, Simclinic, KIA Online, and Satu Data.

Figure 2

Display of SIMPUS WEB Menu Service in SIKESTA

Source : (https://simpusta.tulungagung.go.id/)

Services on the SIMPUS website display there are several service menus and information that can be accessed by the health center online.

Figure 3

Data View in SIMPUS Web

Source : (https://simpusta.tulungagung.go.id/)

The service in the patient data display includes data on patients who have registered at the health center, in accordance with the requirements that have been determined on this website. Patients are expected to complete requirements such as KTP, BPJS and KIA to be input into the SIMPUS web patient data display.

Figure 4

Employee Data Service View

Source: (https://simpusta.tulungagung.go.id/)

The display of employee data services is a list of employee data in the health center that is in accordance with their respective identities.

Figure 5

Receipt Service View

Source: (https://simpusta.tulungagung.go.id/)

The display of the receipt service that has been printed on the health center through the SIMPUSTA web after the patient meets the administrative requirements.

In an effort to improve performance and health services to health centers through the SIKESTA website. This website was launched to make it easier for health centers to provide services. With this, it is hoped that the health service administration process can be more effective and efficient. Although this website has many challenges faced, among them, server errors due to

the large number of users of this SIKESTA website. This patient data service is safe and private, because it can only be accessed by parties approved by the Health Office. So that SIKESTA's performance can run optimally.

CONCLUSIONS AND RECOMMENDATION

From the results of the research that we have presented in the findings and insights above, The evidence suggests that in meeting the needs of health centers, the implementation of health services according to Layne & Lee's theory has not gone well, because of the four stages of Layne & Lee's theory, one of which is in the horizontal integration stage, which cannot facilitate the flow of information between health center area units and the community cannot access the web on their own. This SIKESTA website provides benefits to the Health Office, Puskesmas and also the community. The advantage felt by the puskesamas and the Health Office is that it is easier to record the identity of patients. On the other hand, the Health Office and the health center also better understand and understand the needs needed by patients for the importance of the patient's identity. The benefit felt by the community is that it is easier to collect patient data, because there is no need to write and queue for a long time.

Even though the health services have run smoothly, the SIKESTA service still needs to be improved so that it runs more effectively in accordance with the program made.

For the SIKESTA program to run optimally, there needs to be close collaboration between health center service units and related parties such as the government, other health centers, posyandu, and the private sector. In fact, the web is important to conduct continuous evaluation and development so that health services remain effective in accordance with the desired goals and without obstacles. To deepen knowledge of health services through SIKESTA, the health center needs deeper training to expand the range of programs needed to minimize the greater impact and be long-term oriented.

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