



Revitalizing Urban Governance: A Comprehensive Evaluation of E-Government in Padang City's Urban Villages through the Lens of the Five Pillars E-Government Framework

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ARTICLE INFORMATION	A B S T R A C T
<p>Received: June 5, 2023 Revised: 03 October, 2024 Available online: January 30, 2024</p>	<p>The e-Kelurahan services program is one of the leading innovative programs in Padang City, which aims to realize the convenience of essential services at the urban village. The result of research in 2022 shows that the implementation of e-kelurahan has yet to be effective, and this study is a follow up research that aims to evaluate e-Kelurahan services using Maturity e-Government Models. The evaluation model used the Five pillars of e-Government framework put forward by Fietkiewicz, Mainka & Stock in 2017, which consists of Information Dissemination, Communication, Transactions, Interoperability, and Participation. The research method used qualitative descriptive through collecting data, interviews, observation, and documentation. According to the findings of the study, that four pillars must still be fulfilled. communication pillar through the website that is not presented to the public, the transaction pillar has decreased function because the community can no longer submit letters online, interoperability is not fulfilled because integration with Dukcapil is interrupted and the participation pillar of e-Kelurahan utilization is not used for more democratic things. The Government of Padang City has only reached the stage of providing online service applications to produce the documents. The weakness of this theory is that the analysis only focuses on website development, ignoring other factors such as organization, resources, and supervision, which are also implementation problems.</p>
<p>KEYWORDS</p> <p>Communication; Policy; Social Media; Tourism</p>	
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INTRODUCTION

The trend of e-Government applications and the results that several developed countries have achieved show that every country that wants to improve its public services must upgrade its service management and enhance the quality of public services through e-Government. The e-Government framework refers to the use of digital technology for various functions (Leonidas, 2014). It starts from providing services and information to more participatory and interactive activities through e-Government hope that it can improve the performance and expectations of people in enhancing the quality of public services.

E-Government efforts in Indonesia were published through Presidential Instruction Number 3 of 2003 concerning the National Policy and Strategy for developing e-Government. Presidential Instruction No. 3 of 2003 contains instructions for developing e-Government by optimizing the use of information technology. The condition of e-Government in Indonesia in recent years has significantly increased yearly. Based on the e-Government Development Index (EGDI) survey conducted by the United Nations to measure the state of e-Government Development in member countries, Indonesia has increased 11 ranks from 2020 to 2022 to 77. It explains that in 2020 Indonesia ranked 88, and in 2018 has rank 107 (United Nation, 2022).

One of the local governments that has implemented the concept of e-Government is the government of Padang City, West Sumatra Province. The Government of Padang implements e-Government through the innovative city concept, which elaborates the application of the e-Government concept. In 2018 the center of government chose the government of Padang City as one of 100 smart cities through the Movement Towards 100 smart cities program. Through this program, Padang City is helping

compile a Smart City Masterplan, which will become a guideline for the Padang City government to implement a smart city.

Padang City has launched several digital application-based service innovations to accelerate intelligent cities to help work in each agency, from the publication of information via websites to interactive services such as online payments, permits, and online creation of population documents. In May 2022, 88 Websites and Applications were launched by the Padang City Government. From the complexity and benefits aspects, which type of service transaction is the highest level that has been established? One of the examples is the e-Kelurahan service. E-Kelurahan is the application that produces the documents online through the ekelurahan.padang.go.id website page.

The e-Kelurahan service was launched in January 2020 to realize the convenience of essential services in the urban village through a well-managed system that can be accessed quickly and accurately. The background to the launch of the e-Kelurahan is that the public service in the urban village uses the old method, which is inadequate. The urban village inputs community data needed one by one and repeatedly; meanwhile, in the e-Kelurahan application, the urban village can get the document automatically, quickly, and accurately. This is compatible with the principles of quick and accurately service without any time limit. The use of e-government provides an opportunity to implement these public service principles (Putera, 2009).

The e-Kelurahan service has been used in stages by 104 urban village and 11 sub-districts in Padang City. In 2020, only 14 services were available, but until now, 32 types of services can be accessed through e-Kelurahan. The number of certificates issued through the e-Kelurahan application from 2020 to 2022 can be seen in the following table:

Tabel 1. Number of Certificates Issued via E-Kelurahan.

Month	Year	Total Number Completed
January-December	2020	16101
January-December	2021	98619
January-May	2022	44464

Source: *Departmen Communication and Information Padang City, 2022*

The table above shows that the use of e-Kelurahan services is quite significant from year to year. The launch of the e-kelurahan program is in line with the demands of the people of Padang City for effective and efficient services. Based on the publication of BPS West Sumatra Province in 2021, it was recorded that 63.61% of the 909.04 thousand residents of Padang City are internet users. This proves that digital transformation has occurred widely in the people of Padang City and has become one of the great potentials for implementing e-Kelurahan. However, during its implementation, this e-Kelurahan experienced various obstacles and problems, which made its performance ineffective (Rusnita, 2022).

Research conducted by Widya Cancer Rusnita in 2022 (Rusnita, 2022) describing the effectiveness of e-Kelurahan services according to the theory of Six Dimensional Assessment tools, Timothy Dollan (2013) shows that implementing e-Kelurahan services could have been more effective, especially in terms of application functions. Based on the results of the researcher's analysis using Timothy Dollan's 6 DAT theory, the three basic dimensions are well implemented, including: The security of the e-Kelurahan system as the leading dimension continues to be improved; e-Kelurahan has been built on a credible and up to date integrated database and is the key to service efficiency in the urban village; and the lateral relationships built through joint partnerships are running smoothly. Meanwhile, the other three dimensions related to user experience have proven to be problematic, where the means of communication to internal parties are not presented to the public.

The launch of the e-kelurahan program is in line with the demands of the people of Padang City for effective and efficient services. Based on the 2021 West Sumatra Province BPS publication, it was recorded that 63.61% of the 909.04 thousand residents of Padang City were internet users. This proves that digital transformation has occurred widely in the people of Padang City and has great potential in implementing e-Kelurahan. However, this e-Kelurahan experienced various problems which made its implementation ineffective.

Based on this, further research is needed regarding the evaluation of the e-Kelurahan service program to assess the data and information on the results of the appraisal that researchers have conducted in previous studies. Assessment of the ongoing program can correct errors and provide changes so that the program can be implemented better. To discuss more deeply about this matter, it can be elaborated on using e-Government Maturity Models or e-Government maturity models. The E-Government Maturity Model is an e-Government evaluation stage model developed to assess e-Government conditions in a mature state. Maturity assessment, in this case, means assessing the developments that occur in the implementation of e-Government. The maturity model shows the extent to which e-Government implementation has been successful. Maturity is the result of the process of Development towards a higher level. This maturity can be assessed from several aspects, namely technology, organizational operations, resource capabilities, and

organizational processes themselves (Bouty, Koniyo, & Novian, 2019).

Evaluation of the e-Government maturity level is needed to determine the extent to which the government has successfully implemented e-Government services following applicable regulatory standards (Hasan & Arief, 2018). The e-Government maturity assessment aims to provide primary data, follow-up data, and all that is needed to improve and develop e-Government strategies. A maturity assessment (Maturity) helps identify priorities for strengthening e-Government to increase competitiveness and fulfillment of information for the community (Supriyanto A. & Khabib, 2016).

Several E-Government Maturity Model models formulated by experts, such as the Layne & Lee Model, the Gartner Model, the Hiller & Bellanger Model, the United Nation Model, and many more, analyze e-Government maturity through instruments that describe step by step or stages that evolutionary. Such as the 4 stape by Layne and Lee (layne & J, 2001) which consisted catalogs, transactions, vertical integration and horizontal integration which is a stage-based growth model for e-Government which shows that this is an evolutionary phenomenon. This means that this instrument will provide an overview at which stage is the use of ICT in the governance process. This approach has received a lot of criticism that e-Government development is not limited to completing levels gradually and linearly, and there needs to be evidence that these stages are passed in an orderly and orderly manner in application development. However, despite the criticism received.

In this study, researchers used the Five pillars of the e-Government framework proposed by Fietkiewicz, Mainka & Stock in 2017 which consisted of information Dissemination, Communication, Transactions, Interoperability, and Participation (Fietkiewicz, Mainka, & Stock, 2017). This model is one of the latest evolutions of the E-Government Maturity Model, which was born due to reflection and consideration of the Development of previous e-government maturity models (the Hiller & Bellenger model, Moon Layne & Lee, and many more). Fietkiewicz et al use the term "pillar" whose main purpose is to assess the maturity of e-Government in which each element of its construction is part of the progress of e-Government development. This research shows how the theory of the E-Government Maturity Model evolves and how this new model can elaborate on the evaluation of e-Government programs. So the purpose of this study is to evaluate the e-Kelurahan service program in Padang City using the Five pillars of the e-Government framework by Fietkiewicz, Mainka & Stock.

E-Government Maturity Model evaluation studies on e-Government applications have been carried out before, including those conducted by Aziz Bouty et al. regarding the evaluation of electronic-based government systems using the E-Government Maturity Model (Case in Gorontalo City Government) using indicators contained in the government system electronics based based (Bouty, Koniyo, & Novian, 2019). Muhammad Miftahul Akbar et al. evaluated the maturity level of e-Government on community participation and public services by applying the Gartner Framework with an analysis focus on system and technology integration (Akbar, Winarno, & Haryono, 2021). Nyoman Sutrisna Janureksa carried out the study discussing the evaluation of e-Government regarding the Evaluation of E-Government Implementation by combining the Maturity Level Model of Electronic-Based Government Systems and the E-Govqual Method with case studies at the Denpasar City

Investment and One-Stop Service Office (Janureksa, 2021). Cintantya Adndhita Dara Kirana researched the Monitoring and Evaluation of the Surabaya Single Window (SSW) e-Government Program application with the CIPP evaluation model (Context, Input, Process and Product) (Kirana, 2018) Furthermore, research conducted by AriefRahman regarding the evaluation of e-Government success using the e-Government success element theory (Rahman, 2011). Researchers also refer to research on e-Government conducted by Roni Ekha Putera (Putera, 2009) regarding E-Government and Bureaucratic Reform in the Context of Improving Public Services in the Regions, and research conducted by Jalma et.al (Jalma, Putera, & Kusdarini, 2019) regarding E-Government with the use of openside web in public services in Nagari Tanjung Haro Sikabukabu Padang Panjang.

The evaluation of the e-Kelurahan program will be the first study to discuss the review of the e-Kelurahan program. In quantity, research on the e-kelurahan program has been found, but researchers have not found studies evaluating the e-kelurahan program. In the city of Padang, there is research by Ira Mayenti regarding the implementation of the E-Kelurahan innovation (Maiyenti, 2020) and Reno Fithri Meuthia, Ferdawati, and Gustati regarding the analysis of User Experience in the E-Kelurahan Application (Meuthia, Ferdawati, & Gustati, 2021). In several other areas in Indonesia, there is research on the effectiveness of e-Kelurahan by Endah Mustika Ramdani in 151 sub-districts in the city of Bandung (Ramdani, 2019). Verdico Arief and Ade M. Yuardani (Arief & Yuardani, 2018) and Fristiza Dwi Tami and Nora Eka Putri in Padang Panjang City. In Palembang City, there is Waniszhal's research on the implementation of the e-Kelurahan program (Waniszhal, Sobri, & Ermanovida, 2018). Furthermore, in Tegal City, Budianto conducted research on the level of community satisfaction with the implementation of e-kelurahan (Budianto, 2020). Some of the research described here only reaches the stage of measurement, analysis, and assessment. No researchers have reached the evaluation stage of the e-Kelurahan program in Indonesia. Then the evaluation of the e-Kelurahan program in Padang City will be the first study to evaluate the e-Kelurahan program.

METHOD

The research method is a scientific way to obtain data with specific purposes and uses (Sugiyono, 2008). This study uses a qualitative research approach using descriptive methods. Descriptive research aims to describe problem-solving following existing facts systematically and accurately. The steps in collecting data in this study include interviews, observation, and document collection. Informants include the urban village head, government head and e-Kelurahan operators. The selection of informants used a purposive sampling technique, which was carried out deliberately or pointed directly to people who were considered to know the best and could answer research questions. The observations in this research were observing the work process of implementation e-Kelurahan services at the urban village office and observing the e-Kelurahan apps. Document analysis was carried out form of archives, reports, regulations, meeting minutes, as well as documented photos related to the e-Kelurahan program, including reports on the development of the e-Kelurahan application, recap data on the use of the e-Kelurahan and mayor regulations relating to e-subdistricts by padang city government.

In qualitative research, data analysis is often called ongoing analysis (ongoing analysis). Data analysis was carried out from the data collection to the report writing stage (Afrizal, 2014). Technical data validity uses triangulation of data sources, in which this triangulation compares and checks both the degree of trust in information obtained through different times and methods. The triangulation informants included the Departmen Communication and Information Padang City, Department of Population and Civil Regisration Padang City, Head of sub-district government section and the community who accessed services e-Kelurahan.

RESULTS AND DISCUSSION

Information Dissemination

The first pillar of information dissemination shows how the information is presented on the e-Government website and the usability and ease of access of e-Government applications for users. The difficulty of accessing website services is often caused by website designs that could be more user-friendly. E-Government services that could be more user-friendly will disturb the convenience of the community and related stakeholders, affecting user satisfaction and service productivity. Therefore, the indicators of the success of this pillar areAvailability of clear and easily accessible information to support the smooth running of e-Kelurahan services, ease of operating e-Kelurahan: accessible via various media, namely personal computers, smartphones (IOS/Android), and the use of e-Kelurahan provides benefits for users.

The e-Kelurahan application is a website-based digital service application accessed via smartphones, iOS, or personal computers. E-Kelurahan can be accessed via the same URL address, namely e-kelurahan.padang.go.id, anytime and anywhere, using the internet network. The e-Kelurahan application already contains information that can support the implementation of e-Kelurahan services, such as descriptions of e-Kelurahan services, service procedures for e-Kelurahan, instructions on each service menu, and information on checking the status of e-Kelurahan services which shows the progress of completion of documents submitted. Filed. Each menu displays information according to user needs which is expressed as follows:

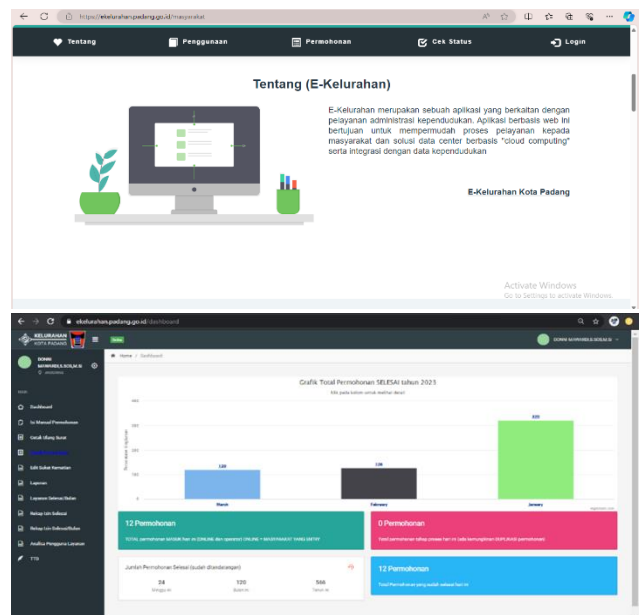


Figure 1. Display of e-Kelurahan Source. Ekelurahanpadang.go.id

The list of service menus in the e-kelurahan application has been arranged in stages, and their functions follow predetermined service flows. Each feature presented supports the document issuance service process in the village, followed by clear information on each menu. Design the e-kelurahan application is simple and easy to understand by the urban village. As stated by e-Kelurahan operator below:

“The e-Kelurahan application is easy to use and easy to understand. We are greatly helped after using e-Kelurahan, the process of issuing letters is faster, and work is more structured” (Interview with Ferra Harma, e-Kelurahan Operator of Kuranji Urban Village, on Friday, February 24 2023)

Based on the interview excerpt above, it is known that the design of the e-kelurahan application is generally easy to use and for the Urban Village to understand. such as the features presented followed by usage information, easy service procedures. E-Kelurahan can also be accessed via Android/IOS anytime and anywhere. By design, the application is also designed with an attractive and consistent appearance.

However, the problems, in this case, are things outside of the application, namely the unstable network and the lack of outreach to the community, and the Urban Village to increase knowledge capacity for e-Kelurahan services. Therefore the network must be repaired so that Urban Village who use the e-Kelurahan service program do not return to the old paradigm of using services manually. The Urban Village party can propose replacing the device with a newer version from the sub-district level or procuring an additional network different from that used by the Padang City Government as a backup. If the network from the government has problems.

Communication

The second pillar is communication, where the government takes advantage of the appearance of social media as two-way communication in online service applications such as information dissemination and public communication through Facebook or Twitter media. The government can adopt it in digital-based public services by providing chat features that the public can use for two-way communication. Directions or submit a complaint. Then the indicator of the success of this pillar is Availability of sub-district social media links such as Facebook, Twitter, and email on e-Kelurahan and the Availability of chat features on e-Kelurahan to ask questions or complaints to service providers.

Based on the results of observations, in the use of social media, there is a button bar column that includes the email address and website in the e-Kelurahan service application. The email, website, and telephone number listed is the Departmen Communication and Information Padang City. The website and email information displayed should belong to the urban village as the service provider because the community will deal directly with the urban village administration regarding services in the Urban Village. The appearance is as follows:

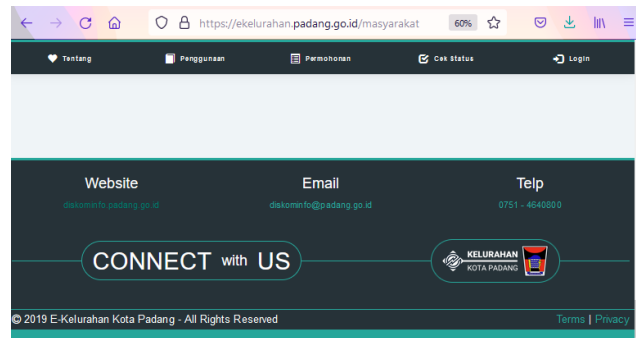


Figure 2. Use of Social Media in e-Kelurahan
Source: Ekelurahanpadang.go.id

This pillar also emphasizes that e-Government applications should provide a space where people can communicate directly with service providers through applications. Based on observations, in the e-Kelurahan, there is no chat feature or area for the public to share through the e-Kelurahan. The e-Kelurahan application has yet to be developed for this kind of function. For public complaint services, you can use a unique application for service complaints in the City of Padang, namely the "padangkiniko" application as stated computer Manager Young Expert in the Field of e-Government, Departmen Communication and Information Padang City as the party that designed and developed the e-Kelurahan application as follows:

“There is no chat feature, and it could be a suggestion for Development. If anyone wants a service complaint in the city of Padang, including e-Kelurahan, they can make an online complaint through the "padang kiniko" application for online complaints in the city of Padang at this time.” (Interview with Robi Amilario, Young Expert Computer Manager in the Field of e-Government, Departmen Communication and Information Padang City, on March 13, 2023)

From the interview above, adding chat features or complaints to the e-kelurahan application can be one of the notes for future improvements. The chat feature can effectively make communication faster and more practical. This can provide convenience and increase community satisfaction with using the e-Kelurahan application. For public complaints, you can use a unique application for service complaints in the city of Padang, namely the "padangkiniko" application. Apart from the inadequate application infrastructure, there are also areas for improvement regarding resources at the Urban Village. This makes the implementation of e-Kelurahan as a new service cannot be carried out optimally or improved to carry out two-way communication through the application. Two-way communication via the website does not occur due to limitations in inadequate technological infrastructure and the need for more human resources to support this. The Urban Village has yet to fully utilize e-Government services to a higher function. Even though it has been the third year of implementing e-Kelurahan, the Development of e-Kelurahan infrastructure still needs to be carried out.

Communication between stakeholders is carried out directly outside the e-Kelurahan. The Urban Village administration and the Ministry of Communication and Informatics are conducted through WhatsApp, Group hosted by the Departmen Communication and Information Padang City The sub-district cannot directly coordinate with Departmen Communication and Information Padang City matics Office if viewed hierarchically. The Urban Village is under the sub-district structure, and the

Urban Village should be able to communicate first with the sub-district and then the sub-district coordinates with the Department Communication and Information Padang City. However, to cut long lines of communication, communication between the Padang City Communications and Informatics Service and urban villages in Padang City, especially the Head of Village Administration, is carried out through one WhatsApp group. Because communication between the two parties is considered vital because it is the urban village that uses the e-Kelurahan application and the Kominfo Service as the manager of the application, this is supported by the existence Perwako Number 86 of 2022 concerning Handling Community Complaints Through Padang Fast Movement where if referring to the perwako it is permissible to carry out direct coordination between the Communications and Informatics Agency and the village administration.

Based on the description above, it can be concluded that the communication pillar still needs to be fulfilled in e-Kelurahan. Because there are no social media links from the Urban Village and no chat features for the e-Kelurahan to ask questions or submit complaints. This theoretical study does not include communication outside the application carried out by stakeholders because it only focuses on two-way communication presented through the website.

Transaction

The transaction pillar explains how the website can be a medium for public service financial and non-financial transactions. Financial transactions such as paying taxes through applications, paying fines through applications and other payments through government applications. Meanwhile, non-financial transactions are features that allow users to fill out and send service results forms online through the application. According to Fietkieicz et al., including the transaction process on the government's website measures public trust in the government and increases the usability of the website. This indicates that the more people enjoy the benefits, the higher the opportunity to develop e-Government. Then the indicator of the success of this pillar is the Availability of forms that can be filled out and sent online via e-Kelurahan and public trust in the government's commitment to the use and Development of e-Kelurahan and trust in stored data.

As an online service, e-Kelurahan is currently only used by the kelurahan to issue documents. E-Kelurahan cannot be classified as an interactive e-Government application because there is no online submission and service delivery service to the public. The community can no longer submission of letters via e-Kelurahan. This is caused by changes to the Technical Instructions for Using the Web Service and Web Portal for the Departmen of Population and Civil Regisration Padang City so that the e-Kelurahan application is no longer connected to the Departmen of Population and Civil Regisration Padang City database. Usually, when people apply for a letter, after typing the National Number Identity (NIN) and the biological mother's name, the personal data will be filled in automatically from the data returned by the Padang City Civil Registry Registration. As a result of the disconnection of the integration, the information letter service entry form on the e-kelurahan page accessed by the public needed to be filled out immediately, and resulted in an error. Because people cannot submit applications online, they cannot fill out forms as expected. Because after typing in the NIN and the biological mother's name, the e-kelurahan application will

immediately get an error and cannot continue the stages of submitting a letter as it should, like the following picture:

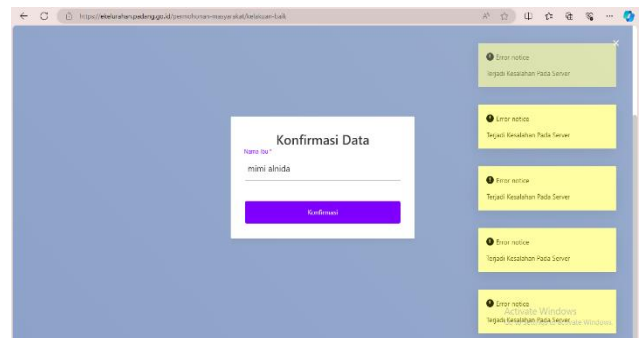


Figure 3. Application page for submitting an error letter
Source: Ekelurahanpadang.go.id

This was confirmed by the e-Government Division of Departmen Communication and Information Padang City Service as follows:

“In the past, when people submitted letters via e-Kelurahan, the verification was with the National Number Identity (NIN) input and validation of the birth mother's name; after that, the data was retrieved from the Departmen of Population and Civil Regisration Padang City. At present, it is no longer connected with Departmen of Population and Civil Regisration Padang City, so today's society does not can again submit letters via e-Kelurahan and must come to the Urban Village Head office. The integration has been broken. Because there was a change in the centralized SIAK rules, we made another custom for the e-kelurahan application to be entered manually. What we have just customized is the e-Kelurahan for the e-kelurahan operator. If you want to issue a letter, the community data must be re-typed by the operator. Meanwhile, we haven't updated the community letter submission page, given the community's low cost and access to submitting letters. So, for now people cannot submit letters online. Our obstacle in redeveloping this e-Kelurahan is a funding problem because we are limited in that regard” (Interview with Ajo febra, Young Expert Computer Officer in the Field of e-Government, Departmen Communication and Information Padang City, on March 13, 2023)

From the interview above, it is known that the page for submitting letters to the public has yet to be repaired by Departmen Communication and Information Padang City, so until now, it cannot be accessed. The e-Kelurahan application can be redeveloped so people can submit applications online, but their lack of financial resources constraints this Development. The e-government development budget in Padang City, including e-Kelurahan, is centered on management on one side. This is because it relates to information and communication technology infrastructure. E-government is also a center, namely at the Departmen Communication and Information Padang City in the Field of e-government. For each Development, it is necessary to apply for funds in advance to the City Government, which sometimes is insufficient for all applications. E-Kelurahan is not the only e-Government application developed by the Departmen Communication and Information Padang City, and there are other applications developed, such as e-Payment, whose budget is also centered at the Departmen Communication and Information Padang City, especially in the e-Government sector. The Field of e-Government determines what application priorities need to be developed first. In this case, the Padang City Government's financial commitment is required to support e-Government so that it can run as well as possible. The budget for

achieving e-Government priorities must be maximally arranged to achieve the desired target.

The orientation of the e-Kelurahan service, originally so that people could access online services from anywhere and at any time, has yet to be fulfilled. Therefore, people keep returning to the old paradigm, where people come to the kelurahan with requirements and register manually at the administration desk. If any requirements are lacking, the community must return to their homes and return to the urban village office to provide the criteria that still need to be met. After that, the Urban Village uses the e-Kelurahan as a means of printing letters. The Urban Village inputs community data through a form available in the e-Kelurahan application then prints the letter to give to the community. The following is the documentation of the results of observations of researchers in the urban village office:



Figure 4 Communities Accessing Services Without e-Kelurahan
Source: research documentation, 2023

The picture above shows people who come to bring the required documents, such as family card and other documents needed to the urban village office. In contrast, only the urban village head accesses the e-Kelurahan service to issue documents. The e-Kelurahan service level has yet to progress from the previous year. On the contrary, it has gotten worse with no access for the public to submit letters online. So that currently, the e-Kelurahan is only used as a means or container for the kelurahan in printing documents to make it more structured.

Furthermore, the transaction feature is expected to increase public trust in the government, including public confidence in the government's commitment to the use and Development of e-Kelurahan public services and public confidence in data stored in e-Kelurahan. The interviews and observations show the community believes in the Urban Village in using and developing e-Kelurahan services and believes that the data stored in the e-Kelurahan will be secure. On the contrary, the government does not believe in the community's ability to access e-Kelurahan services. There is an assumption from the government that society still needs to be more technologically literate so that it will be challenging to use e-Kelurahan services themselves. There are concerns that the community will misuse the e-Kelurahan

application. So that there is no effort from the Padang City urban village to invite the public to use the e-Kelurahan service. This is as conveyed in the following interview excerpt:

"If people use it, why are there urban village officials? And if the e-Kelurahan is given to the community later, they can also issue their own letters. So it's better if our e-Kelurahan uses it. People just have to come to the office to bring the required documents" (Interview with Nani Wahyuni, Chief of Government of Kuranji Urban Village, on February 24 2023).

From the interview excerpt above, it is known that there needs to be government trust in the public to use e-Government services. This is contrary to what was stated by Timothy Dollan (Leonidas, 2014), that one of the fundamental requirements for a credible e-Government initiative to be launched is the citizens' capacity. The community must be given an adequate proportion to realize that they are legitimate citizens who can participate and contribute to the progress of improving government public services. The urban village government in Padang City has carried out the task of issuing documents following established procedures. If the community also carries out their duties as service recipients, then the intended public service can run smoothly and be completed quickly to improve service quality (Jalma, Putera, & Kusdarini, 2019).

From the description above, it can be concluded that the transaction pillar needs to be fulfilled in the e-Kelurahan service. E-kelurahan does not allow sending documents online; besides that the change in the centralized SIAK data policy means that people can no longer submit applications online to the kelurahan. Thus, e-Kelurahan is only a means or place for urban village officials to issue documents. The aim of e-Kelurahan, which is to make it easy for the public to access services from anywhere and at any time through the e-Kelurahan application, has yet to be achieved. Suggestions for improvement so that this pillar can be fulfilled is that the Padang City government can provide a sufficient budget for the Development of e-Government in Padang City, including e-Kelurahan so that the e-kelurahan application in the letter submission service section can This must be followed by government awareness to give trust to the community and encourage people to use e-Kelurahan services because the role of the community is one of the keys to the success of e-Government services.

Interoperability

One of the keys to e-Government is data integration and application integration so that one data or application is interrelated and can be used simultaneously by government agencies. More than that, interoperability means that one website links pages between governments where each agency provides different services. Then the indicator of the success of this pillar is there is data integration in the application with other agency databases, and there is application integration between the e-kelurahan application and other government agency applications.

Currently, e-Kelurahan services are not integrated with any service applications or with databases of other agencies. Previously, the e-Kelurahan application was combined with the Department of Population and Civil Registration Padang City database for the Padang City because the basis for the Urban Village in issuing documents was population data. This integration is so that the data in the documents issued by the Urban Village can be pulled directly from the Department of Population and Civil Registration Padang City database for the

City of Padang so that the population data is up to date and valid according to the data at the Dukcapil Office. In May 2022, there was a change in the Technical Instructions for Using the Web Service and Web Portal for the Padang City Civil Registry Service. The main difference is that the Department of Population and Civil Registration Padang City no longer provides return data in the form of Family Card Number, Full Name, Gender, Place of Birth, Date/Month/Year of Birth, Marital Status, Type of Job, and Current Address when the user types in the National Identity Number (NIN). This is due to the policy of the Ministry of Home Affairs of the Republic of Indonesia regarding access to SIAK data. The Indonesian Ministry of Home Affairs implements a centralized SIAK system, which means that population data for Department of Population and Civil Registration is connected online nationally. As a result of this policy change, applications in the regions previously integrated with population data in the respective Department of Population and Civil Registration were disconnected, likewise, with the e-Kelurahan application.

This is as conveyed by the e-Government division of the Department Communication and Information Padang City as follows:

“Currently filling out forms in the e-Kelurahan application is not filled in automatically like before. Because there is a change in the centralized SIAK rules, we are customizing the e-kelurahan application again to be entered manually. So the e-kelurahan application is not integrated with any database or other applications within the Padang City government. E-Kelurahan also does not have its own population database because there is no legality for it” (Interview with Ajo febra, Young Expert Computer Officer in the Field of e-Government, This is as conveyed by the e-Government division of the Departmen Communication and Information Padang City, on March 13, 2023).

This statement was confirmed by the Head of the PIAK Department of Population and Civil Registration Padang City as the party collaborating in the integration of the population database, as follows:

“The central government currently limits the utilization of this data. The regional or district can only confirm whether the person's NIN is registered. In the past, we were given data by name by address. When we first opened this data by name by address, we found many negative things that outsiders used; some of them sold this data. Therefore, the center cannot provide access like this to regional governments. So it's partially closed either because if it's all closed, then the NIN verification doesn't exist in the area. So we can't be sure if the National Number Identity (NIN) is correct or not. Between the dukcapil and the urban village head office, if I'm not mistaken, there is already a partnership regarding this web portal. So when the urban village enters the NIN, the e-kelurahan has a verification code of whether this NIN is correct or not. If not, (Interview with Burdefira, To the Population Administration Information Management Section, Departmen of Population and Civil Regisration Padang City, on March 14, 2023).

Based on the interview above, the disconnection of this integration has become a new shortcoming for e-Kelurahan services. If the e-Kelurahan wants to be integrated with centralized SIAK data again, the e-Kelurahan must improve its security system to ISO standards. International Organization for Standardization or ISO is a body established to determine international standards used to measure the quality of an application. Companies can use international standards that ISO has set to measure their capabilities or conditions if they want to compete globally. Having ISO standard certification indicates

that the application is ready to compete globally, has high security, and is trusted by consumers. But getting an ISO certificate is a challenge. For one application, the Departmen Communication and Information Padang City must pay an application upgrade fee of approximately Rp. 100 million. This has burdened Departmen Communication and Information Padang City so that after the integration was terminated, the application was repaired again so that it could perform manual input on the certificate form. As is well known, Departmen Communication and Information Padang City has budget constraints for application development, especially if it has to provide funds worth Rp. 100,000,000 -, only for e-Kelurahan. In addition, the applications that will be developed are not only e-Kelurahan; there are other e-Government applications developed by the Departmen Communication and Information in accordance with their duties and functions in terms of IT in Padang City, which of course, also requires a large budget to develop.

So, the e-Kelurahan service does not meet the interoperability pillar. To cover the deficiencies in this pillar, as a suggestion for future improvements, e-Kelurahan should be integrated with the official website of the Padang City government or other service applications in Padang City. Thus there is shortcut access for users to the e-Kelurahan application, e-Kelurahan can be better known by the wider community. This can also improve the quality of e-Kelurahan as an e-Government application because one of the keys to e-Government is that in addition to all data being used simultaneously, more than that, e-Government is expected to link inter-governmental website pages.

Participation

Participation is a form of implementing democratic governance where public participation must be considered. Community flexibility to participate in website Public services must be regulated by the government. The benchmark for the participation pillar is the Availability of online questionnaires on e-Kelurahan services, which contain questions about community satisfaction after using e-Kelurahan services which resemble the Community Satisfaction Index survey, the Availability of facilities to accommodate participation from the community through e-Kelurahan such as the existence of a criticism column and suggestions and assessments. Assessment, in this case, is a feature that allows users to give ratings or grades to e-Kelurahan after using it.

Based on the research results, the utilization of e-Kelurahan services still needs to be improved in terms of public participation because there are no online questionnaires, assessment features, or columns for user comments and suggestions. The e-Kelurahan service user satisfaction questionnaire was made separately from e-Kelurahan through a smart city evaluation survey in Padang City. Still, it is distributed separately through a survey evaluating the implementation of a smart city in Padang City through the Smart Governance dimension. Evaluation of the performance of the intelligent City Padang City is a self-assessment carried out by the Padang City government to measure public perception of the implementation of a shining city carried out by the Padang City Government. The assessment was carried out on 6 dimensions of a smart city, namely smart economy, smart mobility, smart governance, smart people, smart living and smart environment. For smart governance assessment, the leading program to be evaluated is the e-Kelurahan program. This should be an integral part of the e-Kelurahan application so that e-Kelurahan users can be quickly involved in government

administration through the e-Kelurahan website, whose access is not bound by space and time. In addition, adding service features such as IKM in government applications is mandatory, but again this has just been a priority in the Development of e-Kelurahan.

Therefore, it can be said that the government has lost the opportunity to encourage utilisation-Government as an opportunity to mobilize people's aspirations for democratic decision-making. To fulfill this pillar, the suggestions for improvement for the e-kelurahan application in the future are to add an online questionnaire feature to the e-kelurahan application accompanied by a column for comments and suggestions.

CONCLUSION

The e-Kelurahan service program has been successfully tested using the maturity e-government model: five pillars e-Government framework by Fietkiewicz et al. The evaluation results using the five pillars of e-Government framework by Fietkiewicz et al. show that not all pillars have been fulfilled in e-Kelurahan services, especially the pillars of communication, transactions, interoperability, and participation. So there has been a decrease in the e-Kelurahan function from the previous year, and the Padang City Government missed many features in developing e-Kelurahan. Researchers found that the lack of preparedness for the kelurahan, especially regarding human resources and lack of support in terms of the budget, became an obstacle to the Development of e-Kelurahan. As a result, the aim of implementing e-Kelurahan to make it easier for the public to access services online anytime and anywhere is not achieved. As well as improving the quality of service in the urban village is also not achieved optimally. The Padang City Government has only reached the stage where the government provides an online service application in the town to meet the needs of the village in issuing letters.

Maturity e-government model: The five pillars of e-Government framework by Fietkiewicz et al. can evaluate e-Kelurahan service programs. As for the advantages of this theory, even though it does not directly attempt to rank each stage linearly, one can still conclude at what stage of application development is being tested after a thorough analysis of this theory. So the variables are not limited to standard step-by-step rules like other e-Government maturity models; they can stand alone even if other variables are not met. As for the drawbacks of this theory, like other e-Government maturity theories, the analysis only focuses on developing applications or websites, ignoring other factors such as organization, human resources, and supervision, which are also problems that cannot be elaborated on due to limited theory. Because basically, e-Government is a broad concept that cannot only be limited by internet and website users. As for suggestions to cover the deficiencies of the maturity e-government model theory: five pillars e-Government framework by Fietkiewicz et al., the researcher recommends combining the use of this theory with other ideas that discuss organization, human resources, or supervision according to the needs of the researcher's analysis.

REFERENCES

- Afrizal. (2014). *Qualitative Research Methods: An Effort to Support the Use of Qualitative Research in Various Disciplines*. Depok: Raja Grafindo Persada.
- Akbar, M. M., Winarno, W. W., & Haryono, K. (2021). *valuated the maturity level of e-Government on community participation and public services by applying the Gartner Framework*. *Jurnal Media Informatika Bididarma*, 5(1)99-107.
- Arief, V., & Yuardani, A. M. (2018). The Effectiveness of Applying the E-Government Concept in the Form of Village Electronic Applications in Sungaibangkong Village, Pontianak District, Pontianak City, West Sumatra Province. *Transformasi: Jurnal Manajemen Pemerintahan*, 155-163.
- Bouty, A. A., Koniyo, M. H., & Novian, D. (2019). Evaluation of Electronic-Based Government System Using E-Government Maturity Model (Case in Gorontalo City Government) the Evaluation of Electronic-Based Government System Using E-Government Maturity Model. *Jurnal Penelitian Komunikasi dan Opini Publik*, 16-24.
- Budianto, A. (2020). *Analysis of Community Satisfaction with E-Kelurahan-Based Services in Margadana District*. (Doctoral Dissertation, Pancasakti University Tegal).
- Fietkiewicz, K. J., Mainka, A., & Stock, W. G. (2017). eGovernment in cities of the knowledge society. An empirical investigation of Smart Cities' governmental websites. *Government Information Quarterly*, 34(1), 75-83.
- Hasan, A., & Arief, A. (2018). Local Government of Islands. *Jurnal Protek*, 05(1), 31-36.
- Jalma, H., Putera, R. E., & Kusdarini. (2019). E-Government with the use of openside web in public services in Nagari Tanjung Haro Sikabu-kabu Padang Panjang. *Publik (Jurnal Ilmu Administrasi)*, 8(1), 24-37.
- Layne, K., & Lee, J. (2001). Developing fully functional E-government: A four stage model. *Government information quarterly*, 18(2), 122-136
- Leonidas G, AnthopolousL. (2014). *Government eStrategic Planning and Management*. New York: Springer.
- Janureksa, N. S. (2021). *Evaluation of E-Government Implementation Using Maturity Level Models of Electronic-Based Government Systems and E-Govqual Methods (Case Study: Investment Service and One-Stop Integrated Services in Denpasar City)*. *Doctoral dissertation, Ganesha University of Education*.
- Kirana, C. A. (2018). Monitoring and Evaluation of the "Surabaya Single Window" Program as a Form of Electronic Government in the City of Surabaya. *Journal of Development and Public Policy*, 8(1), 43-52.
- Maiyenti, I. (2020). *Implementation of E-Kelurahan Innovation: Electronic-Based Kelurahan Services in Kelurahan in Padang City, West Sumatra Province*. *Community Engagement and Emergence Journal (CEEJ)*, 1(2), 70-76.
- Meuthia, R. F., Ferdawati, & Gustati. (2021). User Experience Analysis in E-Kelurahan Applications Using the Ux Honeycomb Model. *Jurnal Akuntansi Keuangan dan Bisnis*, 342-351.
- Putera, R. E. (2009). E-Government and Bureaucratic Reform in the Context of Improving Public Services in the Regions. *Jurnal Demokrasi*, 8(1).
- Rahman, A. (2011). Evaluation of E-Government Success: Studies in Sleman and Tulungagung Regencies. *Jurnal Akuntansi dan Auditing Indonesia*, 15(2).
- Ramdani, E. M. (2019). Analysis of the Effectiveness of E Government Implementation at the Kelurahan Level. *Sawala J. Adm. Negara*.

- Rusnita, W. C. (2022). The Effectiveness of Implementing the E-Kelurahan Program in Padang City. (Thesis, Andalas University)
- Sugiyono. (2008). *Quantitative Qualitative Research Methods, and R&D*. Bandung: Alfabeta.
- Supriyanto, A., & K. M. (2016). , E-Gov readiness assessment to determine E-government maturity phase. *Proceeding-2016 2nd International Conference on Science In Information Technology* , 270-275, IEEE.
- United Nation, U. (2022). *Country Data E-Government Development Index*. publicadministration.un.org.
- Waniszhah, R. G., Sobri, K., & Ermanovida. (2018). Implementation of the E-Kelurahan Program at the Plaju Ulu urban village, Palembang City (Doctoral Dissertation, Sriwijaya University).