



Implementation of E-Government as A Media for Developing Potential Kresnomulyo Village Web Based Mobile

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Article	Abstract
<p>Keywords: e-Government; Kresnomulyo Village; public service efficiency; citizen participation; digital economy.</p> <p>Article History Received: July 23, 2023; Reviewed: August 2, 2023; Accepted: August 11, 2023; Published: September 30, 2023.</p>	<p>This study aims to analyze the impacts of e-Government implementation in Kresnomulyo Village, Ambarawa District, Pringsewu Regency, and to identify key challenges and sustainability recommendations. Employing a qualitative case study approach, data were collected through in-depth interviews with village officials, a survey of 75 residents, and a review of digital administrative records. Findings indicate that eGovernment has significantly enhanced public service efficiency-expediting document processing and increasing transparency of financial reporting-while fostering greater citizen participation in village deliberations and raising digital literacy, particularly among younger cohorts. Economically, the village's digital platform has facilitated product promotion for local SMEs and farmers, contributing to an average income growth of approximately 15% over two years. Despite these benefits, major obstacles persist, including limited internet infrastructure, a digital literacy gap among elderly residents, and insufficient data protection policies. Based on these insights, the study recommends cross-stakeholder collaboration to strengthen ICT infrastructure, implement ongoing digital skills training, and develop robust information security protocols to ensure that eGovernment in Kresnomulyo Village remains inclusive and sustainable.</p>

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INTRODUCTION

On time Now This, development knowledge knowledge and technology the more advanced compared to with year Which previously, where all almost can done online starting from sales transactions, purchasing transactions, marketing until with convey data and information. Sector government participate utilise technology information And communication (ICT). (Saputra, Weriza, & Mallisza, 2018) Matter This due to by increasingly increasing volume work Which There is in sector government and the allure of information and communication technology (ICT) offers promises of a efficient, productive and transparent results. On the one hand to realize the government based on electronic, Which expected can produce service public Which fair, transparent, efficient and the benefits are felt by all people without exception is one of the objectives of

developing E-Gov (electronic government) by government. (Indrajit, 2005) (RI, 2008) The e-government development policy in Indonesia is stated in the Law No. 11 of 2008 concerning electronic information and transactions. (Presiden Republik Indonesia, 2004) Then technically set up in presidential instructions Number 3 Year 2003 about policy And strategy national development of Indonesian e-government where there are five combinations, namely (1) government portal infrastructure development guide; (2) System management guide electronic documents; (3) guidelines for preparing a master plan for e-government development institution; (4) guide organization site web government area; (5) guide about education And training HR E-Government.

Based on study from (Arianto, 2021; Hamzah Alfariz, 2017) have The drawback of the website is that it only contains administrative information. village so that public Which Want to look for information other like data resident, report activity, even report finished development No Can search. Based on study (Eka Pratiwi, 2018) have weakness that is Unwillingness information about data resident on journal the Which cause public lay So Not yet know about data population in village. Based on research by Grasiana Oliva Londa, et al. (2022) has weaknesses that is System information population Which Not yet complex Which cause public not enough know the information about population in village.

E-Government has been widely used by villages in Indonesia. However, it is different with Pekon Kresnomulyo which has not used this system. Pekon Kresnomulyo in convey information Still in a way manual that is with letter shared house by house and announced in the mosque or prayer room. Pekon Kresnomulyo Not yet use system e-government because of means And infrastructure Which inadequate. So, it causes the presentation of information to still be manual. So that the need built a system e-government For serve information about potential of the village Kresnomulyo And activity government in Kresnomulyo village.

Utilization technology in a province Which There is in Indonesia Which now Already increasingly rapid every year, Lampung province wants to improve services a better smart village. Lampung Governor Arinal Djunaidi made a regulations, namely the Governor's Regulation (PERGUB) No. 36 of 2020 concerning the implementation of smart village province Lampung year 2020-2024 Which containing that in frame increase service public Which integrated, effective, responsive, adaptive And easy accessed by public as well as give room participation public in village development and empowerment of village communities, it is necessary to organize village services which is directed, integrated and programmed to create an independent, advanced and prosperous village. prosperous in the Lampung Province region.

The development of information technology in villages is currently still developing. So from That, Study time This will produce A website Which can help public Which need information about village, on website This There are four main menus, namely, profile, activity report, development report, and statistics data resident . With existence website This access information will the more easy, fast and accurate and improving services to the community will be better again with hope, the implementation of this website-based information technology must supported with infrastructure Which adequate And source Power man reliable. the process and mechanism for managing village websites as a medium for innovation village as well as commitment will importance role active operator village

in management website village as media innovation village by for operator And apparatus village. Change This is the initial capital to directly improve institutional quality. village. Based on description the, required A system information e-government based on web mobile For make it easier delivery data And information in village Kresnomulyo to the community. It is hoped that with this system, village officers can with fast and appropriate in convey information, so that No cause problems between officer Pekon with surrounding community.

(Indrajit, 2005; Solo, 2022) E-government defined in a way varies according to with focus each institution or country. Things This due to Because various matter (richard eco indrajit, strategy development And system development service public based on technology digital). e-government This is matter Which important. Because will become nation uniform for for drafter and practitioner Which interested in compiling and implementing e-government in a country. E-Government is the use of information technology by government For give information And service for its citizens. Start from affairs business, as well as things other Which regarding with government. (Cecep Juliansyah Abbas, 2016; Faza Alameka, Aulia Rahman, 2016; Holle, 2011; Paryanta, Sutariyani, & Susilowati, 2017; Sulistyowati, Candra, & Dibyorin, 2013) E-government (e-gov) the main thing is is process utilization technology information as a tool to help run the government system more efficiently. Therefore, said Andi Rachman, there are two main things In the sense of E-Government, one of them is the use of technology information such as the internet as a tool. Then the second according to he is objective its utilization, so that government can walk more efficient. The availability of transparent and anytime information can be accessed by public, Of course will create a system government more good. There are several types of E-Government relations, namely as following:

(Cecep Juliansyah Abbas, 2016; Hamzah Alfariz, 2017; Sari & Winarno, 2012) Government to Citizen is the most popular E-Government application general, that is government build and apply various information technology portfolio with the primary objective of improving connection interaction with public. Objective main built application E-Government type G2C is For get closer government with its people through various access channels so that the public can easily reach their government to fulfillment various need service daily. Application G2C enables the exchange of information and communication between communities And government, for example: tax on line, look for work, service guarantee social, document personal (birth And certificate marriage, passport applications, Director's license), immigration services, health services, scholarship, countermeasures disaster.

(Indrajit, 2005; Saputra et al., 2018; Surdin, 2016) Government to Business are electronic transactions where government provide various information Which needed for circles business for transact with government. Leading to marketing product And service to government For help government becomes more efficient through improving business processes and electronic data management. Examples of applications that facilitate interaction G2B is E-Procurement system. Government to Government is communication And exchange online information between government departments or agencies through integrated database. Examples of G2G applications include: online consultation on line, blogging For circles legislative, education in a way on line, service to public in a way integrated. Beside performance government in organization government

Which more Good sincere reform, naturally implementation E-Government This can give addition benefit Which more to public. Government to Employees intended for For increase performance And welfare for employee country or employee government Which Work in a number of institutions as waiter.

RESEARCH METHODS

This research carried out with collection method data in the form of observations, interview, And study library Village Kresnomulyo become location study Which visited by researchers For gather data And information. Researcher carry out researcher to One Pekon apparatus Kresnomulyo For needs taking data that is :

3.1. Method collection data

a. Observation

That is, collecting data by observing and taking notes. directly on the spot. This observational research covers all aspects activity in Village Kresnomulyo, including delivery, information to public.

b. Interview

Namely, direct Q&A with Pekon officials, which was carried out as follows results from interview Which Already done is In Village moment this is not yet have an official website, this research will focus on making website For make it easier public in Village Kresnomulyo Can access as well as look for information latest about Village Kresnomulyo. Activities carried out in Pekon namely like youth organizations, toddler posyandu, elderly posyandu, and activities on big days. The population in Pekon Kresnomulyo currently numbers around 7,129, data resident This managed by secretary Village Kresnomulyo.

c. Studies Library

On part This researcher will to study And gather data Which obtained on reference journal previously And results from interview what Already done by researcher For to obtain data Which in accordance in study time This

3.2. Development methods system

System development methods are needed to build a system that complex systematically and integrated so that it can guide system makers For produce a system Which standard and accordingly with need. There are several stages in implementing the system development method waterfall, following will explained stages development system on study This with method waterfall , stages method waterfall can seen on picture under This:

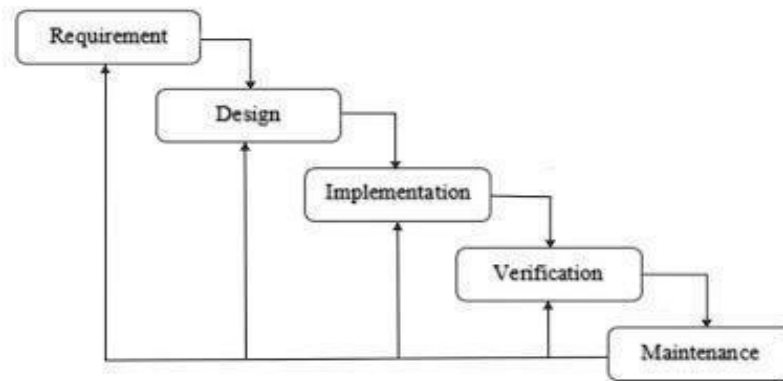


Figure 1. Stages method waterfall

- a. *Requirements* analysis, including stage beginning from stages development system on stages This own objective understanding about software Which in accordance need. As well as develop system new Which will accommodate need from Village Kresnomulyo.
- b. *System Design*, phase This determine in design appearance system, and the devices that will be used. In architectural design use model structured use case diagram, activity diagram And design database.
- c. *Implementation*, phase This including phase advanced Which will implemented testing the entire system and ensuring that the entire system is integrated For avoid failure system or system error. And So that security system more guaranteed so need use password And Change your password periodically so that the system is not easily damaged by hackers. person other.
- d. *Testing*, stages This is testing from feature Which Already made by developer. Matter This implemented For minimize error (error) And ensure output Which desired.
- e. *Maintenance*, namely step final Which functioning For repair system If happen error after use it or Forto perfect new features.

RESULTS AND DISCUSSION

Design system on design website This aiming For give an overview for determining the processes and data required by the new system. Like stages analyze system, designing system, And implementsystem Which will used.

Diagram use case is diagram Which used in modeling software to describe the interactions between actors (users) external or other systems) with the system being built. Diagram use case describe functionality system from perspective users. Use case diagrams help in understanding the overall functionality. system and the relationships between actors and use cases. This diagram provides view Which clear about need functional from perspective users. Matter This help developer device soft For planning and designing systems that meet user needs with Good. The use case system has 3 actors, namely admin, head of work, and resident. Following is tasks - tasks from a number of actor use case:

1. Admin: admin is the person responsible for managing And monitor system information on village. Admin This manage information about data resident, report activity, And report development. Admin This can input, edit, see, and look for data or information on system Which made.

2. Village Head: The Village Head is the Village Government who has authority, duties and obligations to run a household his village. Head This village also can manage information Systems on Pekon Kresnomulyo. The duties of the head of this village are almost the same as the admin namely being able to manage the system. However, this village head will be more frequent monitor the progress system Which made.
3. Residents: Residents are one of the parties involved in process taking decision And user service public Which provided by government village. Resident only Can see noCan manage system. Resident time This No Can manage system,But only Can see information about data resident, report activity, and reports development on system the.

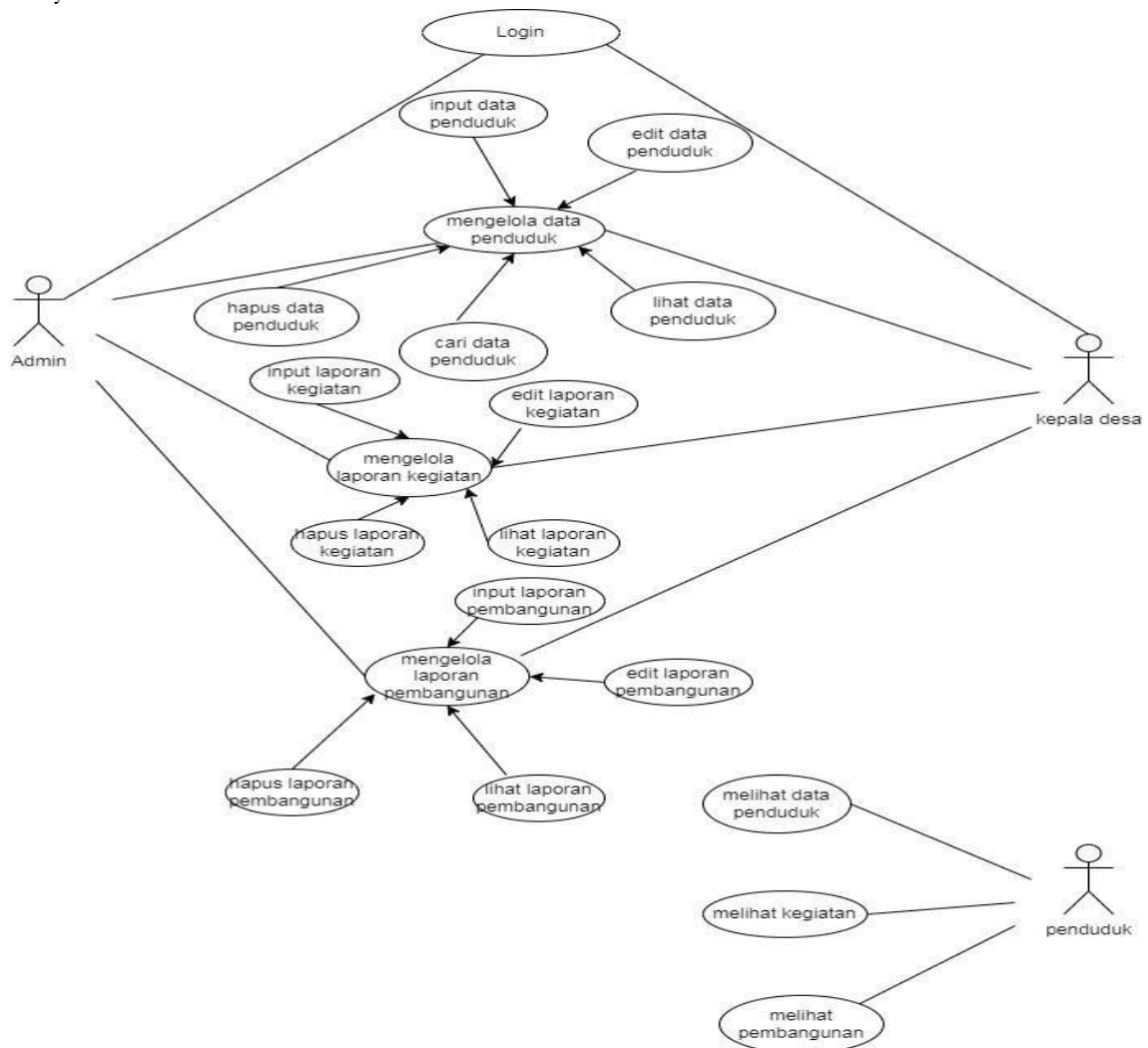


Figure 2. Use Case Diagram

Sequence Diagram

Sequence diagram is Wrong One type diagram in modeling software used to describe the interactions between object in a system. Diagram This show order message Whichsent between those objects all the time. Sequence diagrams help in understanding interactions between objects objects in the system and can be used to analyze the logic flow, identification dependence between object, And modeling scenario system use. These diagrams are also useful in the design phase and documentation device soft For communication Which clear about behavior system.

In this system has 3 entities, namely: admin, village head, and residents. Admin is responsible for managing the system completely, be it manage data resident, manage report activity, And report development. The Pekon Head has the authority to regulate the system, But head village more to monitor system. Resident No can manage reports, but can only view reports or information about village through the system

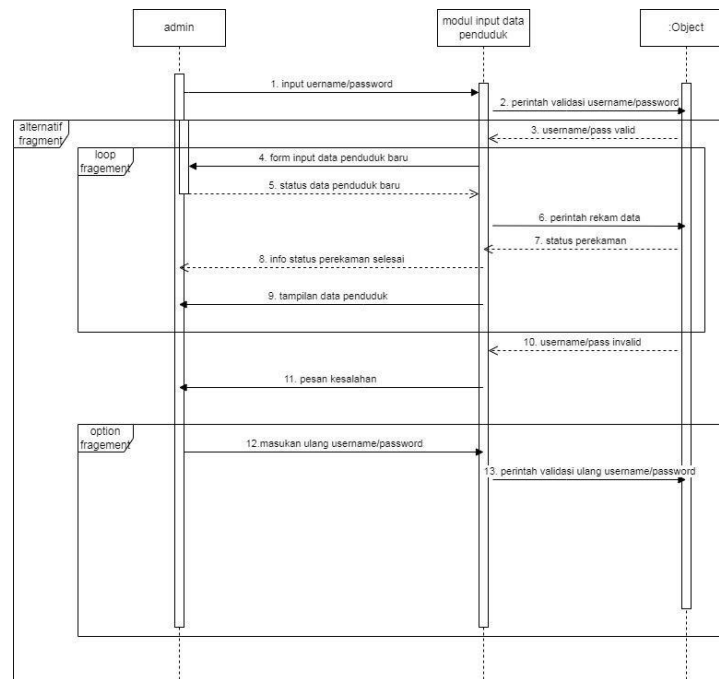


Figure 3. Squence Diagram

Class Diagram

Class diagram or diagram class is Wrong One type diagram structure on UML Which describe with clear structure as well as description of the class, attributes, methods, and relationships of each object. It is static, in the sense that the class diagram does not explain what happens if the classes are related, but rather explains what the relationship is happen. In this research, there are 3 entities in the class diagram, namely admin, head village, And resident. Admin village on duty For manage the system completely, be it managing population data, managing reports activities, and development reports. The village head has the authority to manage the system, but the village head is more concerned with monitoring the system.

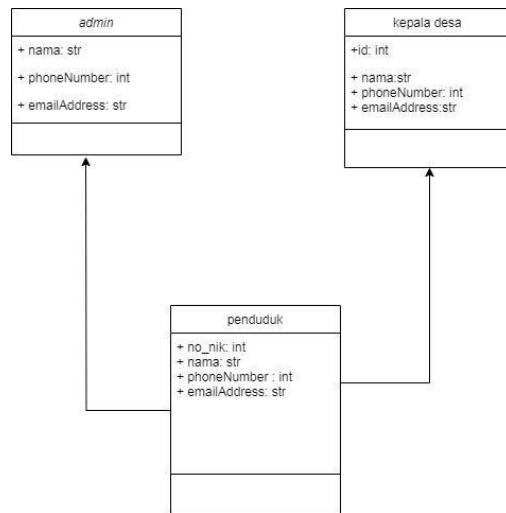


Figure 4. Class Diagram

Appearance Page News

The news page contains the latest news especially in Pekon Kresnomulyo. News menu design in e-government in Pekon Kresnomulyo can be seen under This.



Figure 5. appearance Page News

The population data page is used to view reports on population data. population in Village Kresnomulyo, For facilitate society in see information about data population. Following is appearance from data resident in Pekon Kresnomulyo.

Demografi Berdasar Populasi Per Wilayah					
No	Wilayah / Ketua	KK	L+P	L	P
1	Dusun PENGALEMAN TIMUR , Ketua RUSLI HUFRONI	265	940	481	459
	1 RW 004	265	940	481	459
	1 RT 001	85	293	146	147
	2 RT 002	180	647	335	312
	2 RW 001	0	0	0	0
	1 RT 001	0	0	0	0
2	Dusun KRESNOMULYO SELATAN , Ketua JANIAH	280	933	484	449
	1 RT 001 , Ketua AGUS TRIAWAN	0	0	0	0
	2 RT 002 , Ketua SUKERI	0	0	0	0

Figure 6. Appearance Page Data Resident

Analysis Results Study

On research Which done time This, have objective that is make website official so that make it easier public in look for know information latest in village through system Which has made. So that The community in Pekon Kresnomulyo is served quickly, accurately and also efficient. This research emphasizes that in the development of very rapid technology in the current era must pay attention to technology Which owned in Village Kresnomulyo. Researcher Also will try Formake Pekon Kresnomulyo a village that is included in the smart village in Regency Pringsewu. Research time This supported by This research aims to build a web-based system. mobile to make it easier for the Pirngadi village officials and community to access information so that apparatus can give information every moment And public can access information with easy (Budi Mr. Usmanto, DKK 2018). A draft Smart Village (Village Clever) Can made into For overcome various problems that occur in the implementation government village. With adopt component Smart City, then It is not impossible that economic power will emerge from the village national based on superior human resources, a government that clean And transparent, as well as environment social Which Good. (M. Great Saputra¹ and Auliya Rahman Isnain 2021).

Implementation of e-Government at the level village is form real from utilization technology information for increase governance efficiency government. According to theory *New Public Management*, government sued for adopt principles efficiency and service orientation public as practice management sector private sector (Hood, 1991). In Kresnomulyo Village, the implementation of e-Government systems such as digitalization administration and services village website based has speed up the service process public. Society does not Again must come to office village for look after document basic, enough through online form or communication via application message. This is in line with findings Budiati (2016) stated that that e-Government improves effectiveness service public at the level local, especially in matter efficiency time and cost.

From the side social, e-Government also play a role in build transparency and participation citizens. *Good Governance* Theory emphasize importance participation community, transparency and accountability in the process of taking decision public (UNDP, 1997). Village website and social media official become room for inhabitant for monitor activity government village, giving input, and to obtain information in a way open. Research by Rahayu & Sudibyo (2020) shows that an active village use technology information tend own level participation a more society tall in activity deliberation and development program village.

In general economy, the implementation of e-Government also provides opportunity improvement welfare community. Digital platforms managed village can utilized for local UMKM promotion, marketing product agriculture, as well as access to information assistance and training economy. This is in accordance with theory *Digital Economy*, which states that technology information become a key enabler in create mark economy new, especially in the area fringe (Tapscott, 1996). A study by Wicaksono et al. (2021) found that village that integrates e-Government with empowerment digital economy is experiencing improvement income inhabitant up to 20% in two years implementation.

However, success e-Government implementation is not off from challenge like limitations internet infrastructure, digital literacy that has not evenly distributed, and risk data security. Kresnomulyo Village Still face digital divide, especially among elderly and society with

education low. Therefore that, mentoring, training technology, as well as development ICT infrastructure is needed become attention main for digitalization village No create inequality new. Research by Setiawan & Yuliani (2019) emphasizes importance collaboration between government regions, villages and communities in build an inclusive and sustainable e-Government ecosystem.

Impact Implementation of e-Government in Kresnomulyo Village, District Ambarawa, Regency Pringsewu

Development technology information and communication has push transformation in governance government , including at the level of village . One of the form transformation the is implementation of e-Government, namely utilization technology information For increase efficiency , effectiveness and transparency service public . In Kresnomulyo Village , District Ambarawa , Regency Pringsewu , the implementation of e-Government has begun directed towards digitalization administration , provision service online based , as well as management information public through digital media. The *New Public Management theory* (Hood, 1991) emphasizes importance implementation principles efficiency and professionalism in management sector public , including through utilization technology . This is proven with increasing speed and convenience in service administration village after digital system starts applied .

From the side social , implementation of e-Government in Kresnomulyo Village participate strengthen transparency and participation public in the process of governance village . With the existence of village websites and channels digital communication such as WhatsApp or social media official , society to obtain more access easy to information village , including activity agenda , reports finance , and announcements important . This is in line with principle *Good Governance* which emphasizes importance participation citizens and openness information public (UNDP, 1997). Rahayu and Sudiby (2020) in his research mention that use technology information at the level village can increase involvement public in deliberation as well as speed up the delivery process aspirations .

The implementation of e-Government also provides impact positive in the sector economy local . Village digitalization open opportunity promotion for UMKM and agricultural actors through an online platform managed government village. In addition, the community become more easy access information related help economics, training, and marketing product. Concept *Digital Economy* (Tapscott, 1996) states that technology information can become catalyst growth economy, including in rural areas. Wicaksono et al. (2021) showed that villages that integrate digital services with empowerment programs economy show improvement income public in a way significant in term medium.

However Thus, the implementation of e-Government in Kresnomulyo Village also faces a number of challenges. Among them is limitations infrastructure internet network, low digital literacy in part citizens, as well as Not yet existence system adequate data security. The digital divide is becoming issue main, especially for group public elderly or educated low less used to use technology. Therefore that, support training and mentoring from government area and institution companion become important for ensure digital inclusivity. Setiawan and Yuliani (2019) emphasized that the success of e-Government in villages is very dependent on synergy between government, device village and community in build sustainable and adaptive system to need local.

CONCLUSION

From study Which done has succeed built application system Supporter design e-government as media develop potential village kresnomulyo, for help performance agency governmentward This based on on measurer achievement target potential Which in Pekon Kresnomulyo, from the results of research into application development engineering electronic government for empowering village government and potential web based in regency Pringsewu. Researchers will focus on the website that will be used, so that public So served with more fast and accurate. The implementation of e-Government in Kresnomulyo Village has succeeded in increasing the efficiency and transparency of public service delivery. Digitalization of administrative processes start from management letter information until report finance village reduce time Wait society and minimize potential practice illegal levies . Digital traces recorded in each process also support accountability device village, so that trust inhabitant towards governance government increased. The implementation of e- Government also raises challenges, including limitations internet infrastructure in rural areas gaps digital literacy in groups elderly, and need will policy and technology for protect personal data citizens. Therefore that, the sustainability of this program is very dependent on collaboration between government village, government regions, and institutions companion for provide ICT training, strengthening internet network, and set protocol reliable data security. With effort together said, e-Government of Kresnomulyo Village can Keep going grow and give optimal benefits for all over layer public.

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