



Implementation of Smarat Vilage In Sendang Agung Village Mobile Web Based As An Effort to Support Law Number 14 of 2008 Concerning Public Information Disclosure

Muhammad Muslihudin¹, Febrianto Arifin², Iis Mardeli³

^{1,2}Department of Information System, Bakti Nusanatra Institute, Lampung, Indonesia
 Prodi Manajemen, Sekolah Tinggi Ilmu Ekonomi Trisna Negara

^{1,2}Wisma Rini Street, No.09 Pringsewu, Lampung, Indonesia

³Jl. MP Bangsa Raja Gumalang 27, Kabupaten OKU Timur, Sumatera Selatan

* Corresponding author: muslihudinstmikpsw@gmail.com

Article	Abstract
<p>Keywords: Smart Village; public information; mobile web; digital village; endang Agung.</p> <p>Article History Received: Jan 25, 2024; Reviewed: Feb 22, 2024; Accepted: Mar 4, 2024; Published: Mar 30, 2024.</p>	<p>This study aims to implement the Smart Village concept in Sendang Agung Village through the development of a mobile web-based information system to support public information disclosure as mandated by Law Number 14 of 2008. The lack of public access to transparent and accountable village information highlights the need for a digital system that is easily accessible to all community members. The research method used is Research and Development (R&D) with a waterfall model approach in software development. The system provides various village information features such as event schedules, financial reports, social assistance data, and online administrative services accessible via mobile devices. Testing results indicate that the application improves the efficiency of information dissemination and received positive feedback from village officials and residents. This implementation is expected to position Sendang Agung Village as a model of a digital village that promotes openness and active public participation.</p>

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INTRODUCTION

The development of technology is currently developing very rapidly and bringing progress in several fields such as government, education, trade, economy, business, and so on. Technology is one of the necessities that must exist because considering the many jobs today that must use a system in the form of a website and so on, considering the term *E-Government* in a government institution, both village government and central government, all require technology. With the existence of a village government institution, current technological advances must be utilized properly, therefore Sendang Agung Village really needs a system that can be used as a means and existing information. (Tengah, 2023) Based on data from the Central Lampung Regency BPS 2023, Sendang Agung Village is located in Sendang Agung District, Central Lampung Regency which covers 9 villages including Sendang Mulyo Village, Sendang

Rejo Village, Sendang Asih Village, Sendang Baru Village, Dendang Retno Village, Sendang Asri Village, Sendang Agung Village, Kutowinangun Village and Sendang Mukti.

Research conducted by (Saputra, Weriza, & Mallisza, 2018) Obtained a result, namely the village potential information system was built using the prototype method where this method is a method that is very often used by every researcher. This method uses the PHP programming language with a Mysql database using a third-party application to run it, namely XAMPP. Research conducted by with the presence of *E-Government* in a village is a very good effort where with an adequate system, users can easily access the information obtained and facilitate the services available in the Sendang Agung village government. The results of the study conducted by (Sulistyo, Suyanto, & Hestningsih, 2014) The prototype design produced by the village for internal administration yielded results, namely successfully creating a mobile web where there are several menus needed by users such as information about the village then the village profile, activities carried out by the village, vision and mission and organizational structure in the village.

Naturally they Already know availability technology information from study previously, where knowledge This required for get the correct data from government village moment this. The disadvantage of previous research is that the system is not perfect and can still be used inappropriately, while the advantage is that it is easy to understand by those who need information. The difference between what previous researchers did and what is being done now is that previous researchers only presented information, while what is currently being developed is not only information but more on providing a village sanitation system. The author got the idea to create a mobile web design for the Sendang Agung village information system after concluding that a system that is simple and easy to understand by some local people and can be used effectively needs to be created.

Sendang Agung Village is a village located in Central Lampung Regency. With this design, it is expected to help village officials in providing public services. The distribution of aid from the center is always directed and precise, and the services in Sendang Agung Village have used alternative methods like this, but the problem is that errors often occur in the data entered into the system used because the system used can see everything. Therefore, the author will create a system that is easier for village officials to understand to make it easier for the public to access information and services, especially in large villages, where stored data is often lost and it is difficult to recover important files when there is an urgent need.

Based on the description above, the people of Sendang Agung Village do not can access services that enable they know more far work program The Sendang Agung Village Government in development village. This is because of the system used still manual. With hope big can become example for government village other in implement technology that is currently develop moment this, research This aiming for make it easier residents of Sendang Agung Village get information in the village with fast, easy and accurate. to improve service and potential.

RESEARCH METHODS

2.1. Data Collection

a. Observation

At the stage observation this, do observation direct to management management Sendang Agung Village System, Sendang Agung District, Sendang Agung Regency Central Lampung. Then will be done system analysis for solve problems experienced by village government officials Sendang Agung, so that what is experienced and what becomes problems in village government institutions can be resolved and run smoothly with What what is desired for in the future.

b. Literature review

At this literature study stage, an observation was carried out through several journals, the internet and books that were needed as sources or references in collecting data to

find new ideas and develop them in this research and solve the problems that occurred in the government institutions of Sendang Agung Village.

c. **Questionnaire**

At the stage questionnaire This done observation with method spread questionnaire and some questions to the Sendang Agung Village government with the aim is to be more make it easier how much big A capacity Village government knowledge for users around as well as How opinion they moment This about management system management that occurs.

2.2 Design Model

Study This use method Research and Development (R&D) Because aiming produce product real in the form of system information village web- based mobile support openness information public. This method allow researcher No only design and develop system, but also do testing as well as evaluation effectiveness system in environment real, namely in Sendang Agung Village. The election method This relevant with objective main solution-oriented research practical based on technology information.

Under development system, uses the waterfall model which consists of of five stages main: analysis needs, design system, implementation (coding), testing, and deployment system. (Persiden Republik Indonesia, 2008) Stages started with identify need information that must be opened to public in accordance mandate Constitution Number 14 of 2008. After system designed and built, carried out testing use method *Black Box Testing* and *User Acceptance Test (UAT)* for ensure system walk with good and accepted by users.

Approach This rated appropriate Because produce system adaptive information to need local village as well as push transparency and participation society. With R&D method and waterfall approach, the resulting system No only functional but also relevant in a way social and regulatory, so that can become example Smart Village implementation that supports openness information public.

(Fatta, 2007; Jeffery, Bentley, & Dittman, 2004) Approach *waterfall* is a method model systematic and sequential research that can used for do study This Because give information very relevant step by step with scenarios in the field. Although draft method This Already out of date, its creator believe that method This is very practical. Steps for the development process technique *Waterfall* listed below this.

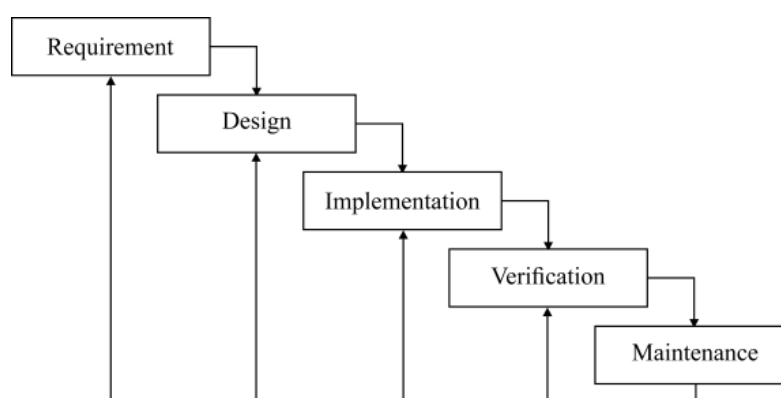


Figure 1. *Waterfall* Method

a. **Requirements (needs analysis)**

System requirements analysis is the next step. To design an application or program that can perform the functions required by users, researchers will collect as much data as possible from consumers.

b. **Design (Plan)**

Before implementation, design process will translate condition become design device software that can predicted. Focus from approach This is in procedural details (flowchart).

c. Implementation (Application)

actual phase from development system is at the stage this. In the sense stage This will utilise computer with the best. Complete design changed become program code at the time that. Final program code still made in form module, which is then will combined become One unity system for ensure all criteria device soft has fulfilled.

d. Verification (Testing)

Development process phases system This can considered as the last one. especially the verification process user. User will inspect for see whether application created in accordance with preference they. Stage This is the last one in programming, but No in the process of creating a program.

e. Maintenance

In accordance with need user or in accordance with contract work, activities installation and maintenance system entered in stage final development system in the Waterfall model.

RESULTS AND DISCUSSION

3.1. Design

In this design process, the researcher will create a Web Mobile-based information system for Sendang Agung Village to improve village services and potential. It will be drawn in the form of a diagram as follows:

a. Use Case Diagram

According one of the from various UML (*Unified Modeling Language*) diagram form that can used For explain How system interact with actor is a use case diagram. Use cases can used For to characterize characteristic interaction between user system and system (Prasetya, Sintia, & Putri, 2022).

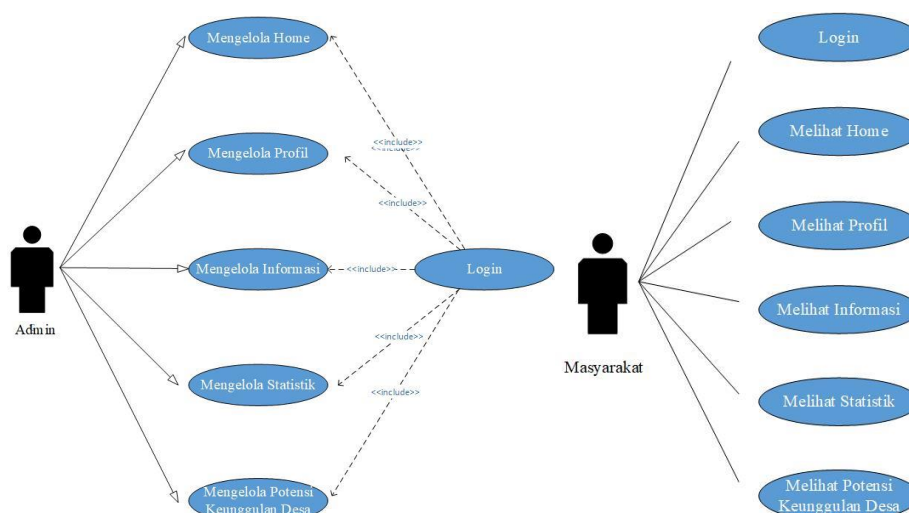


Figure 2. Use Case Diagram

This Use Case Diagram is to describe the clarification of the running of the Website framework that has been created. Starting with the admin who manages and provides some information what is needed. After that the officer shows the information page and explains to the public, then continues by searching for the information data that they want to see.

3.2. Interface Implementation

Profile View This page is the interface when first accessing the Mobile web-based information system in Sendang Agung Village. The following is a design view of the Profile page .



Figure 3 . Profile Page

This display is a display for logging in to public services that will be needed on the Sendang Agung village website:

Aparatur Desa

Layanan Mandiri

Silakan datang atau hubungi operator desa untuk mendapatkan kode PIN anda.

Masukan NIK dan PIN

1234567890

.....

Masuk

Kesempatan mencoba 2 kali lagi.
Login Gagal. Username atau Password yang Anda masukkan salah!

Figure 4. Service Login Page

This display shows information regarding the disbursement stage as well as the village budget plan and finances coming in from the center from year to year.

Sistem Informasi Desa Sendang Agung

Tampilkan 10 entri

Cari:

No	Judul Informasi	Tahun	Kategori	Tanggal Upload
1	SK TIM Penyusun RPJMDes Tahun 2017	2017	Informasi Setiap Saat	2018-05-28 06:49:28
2	SK Pengangkatan RT dan Pemberhentian RT Baru	2017	Informasi Setiap Saat	2018-05-28 06:51:53
3	Perdes SPJ Tentang Keuang Desa Tahun 2016	2016	Informasi Setiap Saat	2018-05-28 06:57:37
4	RPJMDes Miau Merah Tahun 2016 s/d 2022	2017	Informasi Setiap Saat	2018-05-28 07:09:56
5	Formulir Pengajuan Keberatan Informasi	2019	Informasi Berkala	2019-10-31 22:20:48

Menampilkan 1 sampai 5 dari 5 entri

« 1 »

Figure 5. Information Page

In this display, there is information about officials in the government agencies of Sendang Agung Village.

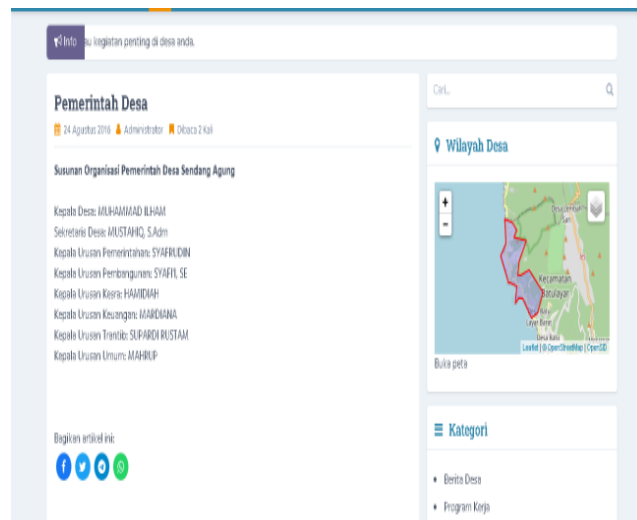


Figure 6. Government Page

This view shows several areas with a large number of both male and female residents.



Figure 7. Region View

This display shows how many people are still actively continuing their education and how many have stopped continuing their education.

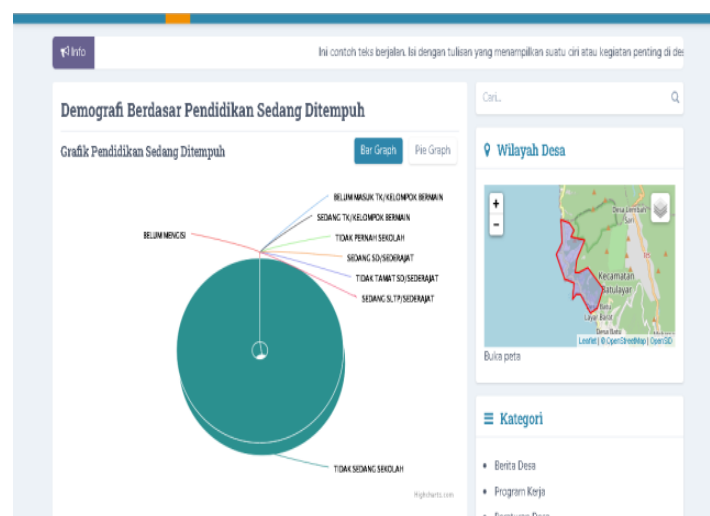


Figure 8. Education View

This display shows how many people are still working actively, both in the gardens and elsewhere.

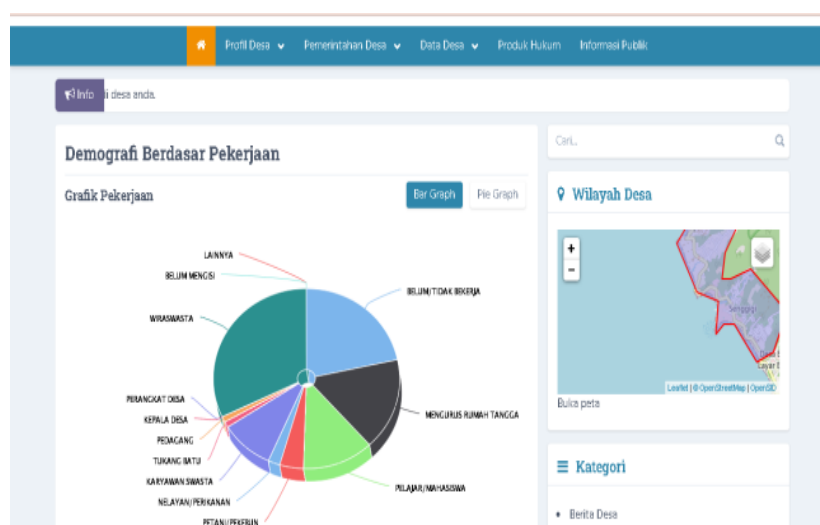


Figure 9. Job View

3.3. Analysis of Research Results

Questionnaire test done of 30 respondents consisting of from device village and community user system information village mobile web based. Questionnaire consists of of 10 statements use Likert scale 1–5 (1 = very much disagree) agree, 5 = strongly agree) which includes five aspects: ease usage, speed access, completeness information, display interface, and impact to openness information. Recapitulation results show that aspect convenience use obtained an average score of 4.3; speed access 4.2; completeness information 4.4; display interface 4.1; and impact to openness information public 4.5. Overall average rating be in numbers **4.3** which is classified as in category **"Very good"**.

In general quantitatively, as many as 87% of respondents state agree or strongly agree that system This make it easier they in access information village. As many as 90% of respondents feel information presented Already complete and relevant, while 83% rated it interface application Enough interesting and easy understood. This data show that system succeed fulfil expectation user in support openness information public. Quantitative results This strengthen conclusion that implementation system web -based mobile in Sendang Agung Village is worthy For developed in a way more wide in other villages.

Research result show that system information village web -based mobile development capable fulfil need openness information in Sendang Agung Village. Features main like information activity village, report finance, aid data social, and services online administration has accessible to the public with easy through mobile devices. This is prove that digital platforms can bridge gap information between government village and community in a way effective and efficient.

Testing system through method *Black Box Testing* show that all over feature walk in accordance with its function without found fatal error. In addition, the results *User Acceptance Test* (UAT) carried out to device village and some representative public show level high satisfaction. They feel system This make it easier access to previous information difficult obtained, as well as increase participation public in the process of taking decision village.

Implementation system this also has an impact positive to culture transparency and accountability in the environment government village. Device village become more open in convey information, while public more active in access and monitor the way government village. With Thus, the system This No only succeed in a way technically, but also in social and

regulatory, in line with Spirit Constitution Number 14 of 2008 concerning Openness Public Information.

CONCLUSION

Based on results research and implementation system information village web- based mobile in Sendang Agung Village, can concluded that implementation draft *Smart Village* through proven digital technology effective in support openness information public as mandated by law Number 14 of 2008. The system that was built capable provide information village in a way fast, accurate and easy accessible to the public through mobile devices. Test results technical and evaluation questionnaire show that system This functioning with good and get response positive from users. The majority public feel more-easy to obtain information village, feel more involved in the governance process, as well as evaluate system This increase transparency and accountability government village. The implementation of Smart Village in Sendang Agung Village can made into as a pilot model implementation technology information in governance transparent and participatory village development. more carry on It is recommended that the features and coverage information the more-wide as well as can replicated to other villages.

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