

Web-Based Village Information System Design (Study At One of The Villages in West Java)

Dyas Faturahman¹, Ikbal Jamaludin², Adi Suwarno³, Susanto⁴
STMIK Mardira Indonesia^{1,2,3,4}

Email: faturahmandyas@gmail.com¹, ikbal@stmik-mi.ac.id², adi@stmik-mi.ac.id³, susanto@stmik-mi.ac.id⁴

Abstract

The findings of this study indicate that the combination of intrinsic motivation and compensation has a notable impact on the performance of employees in a fashion firm located in Bandung. Consequently, these two elements can enhance employee performance concurrently. However, more factors impact employee performance that should have been investigated in this study. Additional elements may encompass work discipline, leadership, job stress, competency, and organizational culture.

Our research underscores the pivotal role of intrinsic motivation in boosting employee performance, surpassing the influence of compensation. Employees with a strong sense of intrinsic motivation, including job satisfaction, commitment to the organization, and a drive to succeed, consistently demonstrate superior performance.

However, compensation continues to be a significant issue that affects employee performance. Employees who see the company's income, benefits, and incentives as equitable and commensurate with their workload are more likely to be motivated to perform at a higher level. The importance of equitable and competitive remuneration cannot be overstated, as it enhances employee well-being, potentially boosting productivity and job excellence.

Ultimately, both internal motivation and financial rewards significantly impact employee performance. However, it's crucial for management to take the lead in prioritizing strategies that enhance employee intrinsic motivation. This can be achieved through proactive implementation of programs and policies that boost job satisfaction, foster devotion to the organization, and cultivate a strong drive to achieve. Regular evaluation and modification of compensation schemes to ensure equity and competitiveness are also essential. By focusing on these two factors, firms can achieve maximum staff performance, leading to enhanced overall productivity and success.

Keywords : Website, Village, Information System, Descriptive, OOSE, PHP, MySQL

INTRODUCTION

The advancement of science and technology is intricately connected to the changing requirements of humanity. (Wahyudin & Rahayu, 2020) Human thinking is motivated by a range of demands, leading to the development of technology that aims to enhance convenience in all areas of life. Information technology systems is a sector that is experiencing tremendous growth. One of the instruments we can employ is communication media, such as the Internet, which is now readily available from any location. (Abdillah, 2021; Saputera & Yunita, 2019) This enables data input to be performed remotely and managed centrally. The evolution

of the Internet has been remarkable and markedly distinct from its initial stages. A practical approach to utilizing the capabilities of the Internet for information management is to develop a system. Creating a web-based information system focused on a particular thing can effectively introduce and promote that object to a broader audience. (Dewi et al., 2021; Li et al., 2018)

A village is a governmental subdivision found in several countries, especially those with a governing system based on villages. Typically, a village is a smaller rural settlement than a town or city. Villages typically have a more modest population size in contrast to urban areas.

Villages are conventional settlements located in rural regions, each possessing distinct attributes. Information and communication technology advancement has revolutionized the process of gathering, storing, organizing, and distributing information in villages. The progress of communication infrastructure, including cellular networks and other wireless technologies, has enhanced the availability of village information. Various governments and non-profit organizations prioritize the advancement of technology in order to improve the standard of living in rural regions.

Systems and Information

Asmara et al., (2021) defines a system as a set of interrelated components that receive inputs and generate outputs through a processing mechanism. The concept of a system can be categorized into two approaches: the procedural approach, which focuses on procedures, and the component approach, which stresses elements or components. (Disnasari & Rasyid Ridha, 2022)

Information refers to process data that is organized and utilized to provide more excellent value to the recipients, aiding them in making informed decisions. (Nusri et al., 2022)

Website

Terminologically, a website is a compilation of web pages commonly organized under a domain or subdomain within the Internet's Internet's World Wide Web (WWW). The World Wide Web (WWW) encompasses all web pages that can be accessed by a Uniform Resource Locator (URL), which acts as the "root" or starting point, commonly referred to as the homepage (sometimes translated as "brand" or "halaman muka"). This URL employs a hierarchical structure to organize web pages. In contrast, the hyperlinks within the pages serve to

direct readers and provide them with an understanding of the general arrangement and progression of content. (Ramdhan & Nufriana, 2019; Rozana & Musfikar, 2020)

The Village Office in a village in West Java serves as a vital public service infrastructure, delivering essential information and civil services to the community. Nevertheless, the progress of technology and information media has facilitated the emergence of web-based information platforms, enabling the community to access information at any time and location conveniently. However, lacking information facilities has led to unexplored opportunities in Putrapinggan Village that require development.

Therefore, there is a clear need for a system that can present supplementary information to unlock the untapped potential in Putrapinggan Village. The author is fully committed to developing a Web-Based Village Information System for a village in West Java, as described above.

METHOD

Research methods

The chosen research methodology for this study is Descriptive Research, which seeks to provide a comprehensive description of the variables involved in the scenario and conditions and characterize the correlations among these factors. The method is comprised of two distinct techniques: data collecting and system development.

The research uses the following strategy for collecting data and information:

Observation

This data gathering method entails directly observing the subject of investigation and capturing pertinent information about the subject.

Interview

The Job Interview data collection strategy is an interactive process that allows for in-depth discussions and the collection of nuanced data by posing direct questions to pertinent individuals.

Literature Review

This data collection method entails conducting a thorough examination of literature relevant to the research problem and subject of investigation.

System Development Methods

The chosen methodology for system development is the Object-Oriented Software Engineering (OOSE) methodology. OOSE is a development methodology that places particular emphasis on the use case. This approach's primary benefit is its simplicity of notation, which facilitates easy comprehension while simultaneously encompassing all phases of software engineering. The sequence of phases in the system is as follows:

Requirement Model: This phase entails identifying system requirements by following these steps: An observational research entails a firsthand examination of the acquired processes and analysis to ascertain the system needs and identify the essential objects.

Design Model: This phase commences by creating the system's structure, procedures, interface, and user interaction.

Implementation Model: The design outcomes are translated into executable software codes.

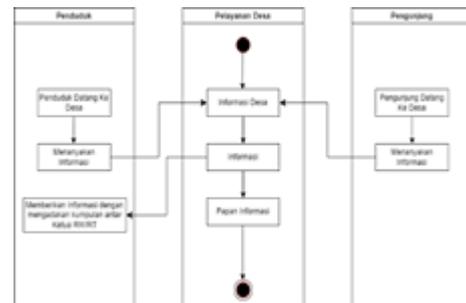
Model Testing: After completing the implementation, a set of tests is carried out to verify the system's appropriate functioning.

RESULT AND DISCUSSION

SYSTEM ANALYSIS AND DESIGN

a) **Business Process Analysis**

The current business process flow in Putrapinggan Village is as follows.



b) **SWOT analysis**

The SWOT analysis, which stands for Strengths, shortcomings, Opportunities, and Threats, is a method commonly employed to identify the shortcomings of an existing system.

The subsequent text presents a SWOT analysis conducted at the Putrapinggan Village Office.

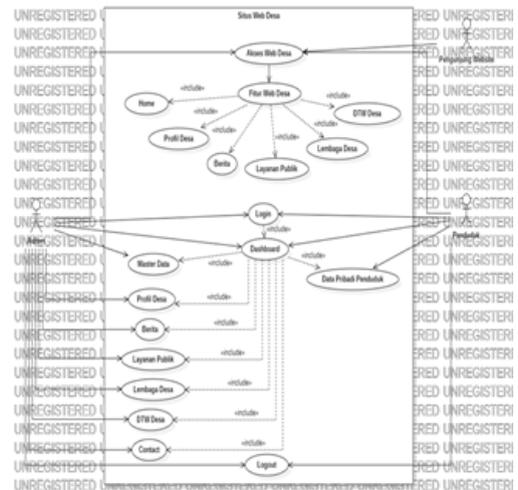
N o	Types of Analysis	Running System	Proposed System
1.	Strength	Officers collect data and information manually .	Storing data and information into the system so that it is better computerized.

2.	Weakness	Officers still collect data and provide information manually	Implementing a new system in the form of a web information system
3.	Opportunities	With the existence of a web-based village information system, it will be easier for residents and outside communities to obtain information.	Because there is no information system yet, a web-based village information system will be built which will make it easier for officers to receive and provide information data.
4.	Threats	Possible loss of source data	The system presents information data so that there is no confusion when

			searching for information data
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c) Proposed New System

i. Use case diagrams



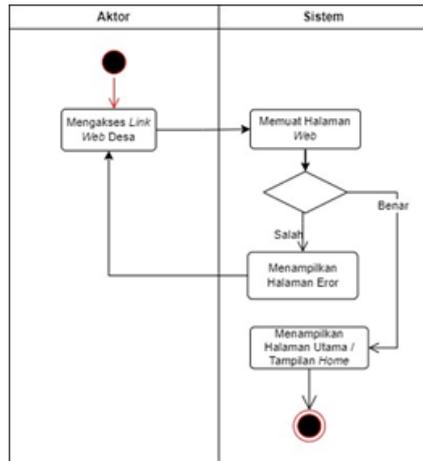
ii. ScenarioTable

Usecase		Access the Village Web	
Actor		Admin, Residents, Visitors	
Precondition		Access the village web	
Postcondition		The system displays the main web page, village profile, news, public service information.,	
Main Flow Of Event			
Action		System Response	
1	Open the village web link.	2	Loads the village website page.
3	Village web link that was successfully accessed.	4	The system will display the main page of the village website, village profile, news, public service information, institutions, village dtw and login.

5	The village web link is wrong/failed to be accessed.	6 The system fails/will not display the village website page.
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iii. Activity diagram



d) System planning

i. Database Design

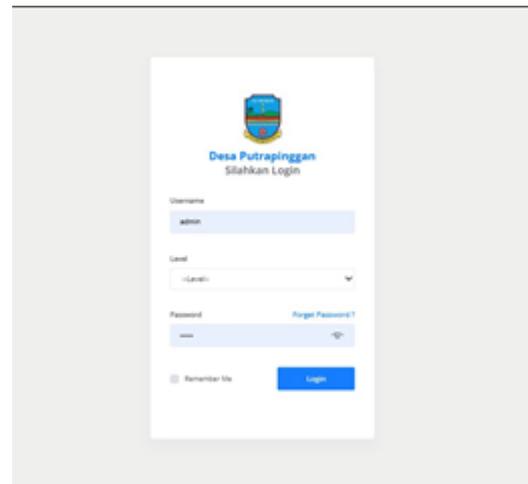


No	Field	Type	Size	Keterangan
1	id_user	int	4	Primary Key
2	name_user	varchar	40	
3	username	varchar	255	
4	password	mediumtext		
5	level	varchar	100	
6	picture	int		

SYSTEM IMPLEMENTATION

The system implementation stage involves defining an application system in a manner that prepares it for operation..

Login Page Display

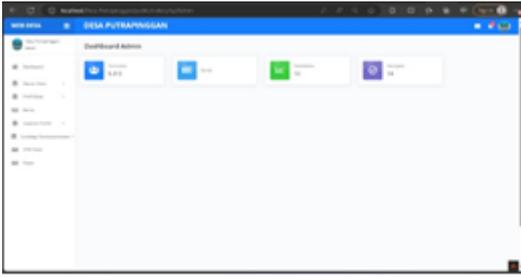


Home Page



Dashboard Page View

ii. Interface Design



CONCLUSION

To summarize, this research emphasizes several significant discoveries. To begin with, creating a website is a very efficient means of accelerating the distribution of information inside Putrapinggan Village. This website is a platform to facilitate prompt and effective communication with the community. Furthermore, developing a website that is easy for users to navigate dramatically improves the precision of village-related information, thereby simplifying the process for people to get and locate pertinent data. Finally, deploying this website significantly enhances the Putrapinggan Village Government's information management, making it more effective and efficient. Additionally, it facilitates public access to essential data and information.

In the future, researchers need to take into account some excellent suggestions. First and foremost, it is imperative to prioritize data protection and consistently create backups of information to reduce the risks linked to system failures. Moreover, the website generated from this research can be further improved by incorporating supplementary functionalities that specifically address the distinct requirements of the community. Moreover, it is imperative to prioritize the advancement of security procedures in order to safeguard critical information. Finally, it is advisable to consider the potential

for extending the village information system to a mobile-oriented platform, thereby enhancing accessibility for inhabitants.

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