

# The Development of a Village Information System (SID) in Realizing a Developed and Independent Village Based on Information Technology and Communication (ICT) in Pemalang Regency

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**Abstract.** Since the emergence of Village Law No. 6 of 2014 concerning Villages, the village is seen as a government structure that plays an important role in realizing the prosperity and welfare of its people. Internet-based rural development paradigm is important to do in the middle of the development of information and communication technology. However, it is not easy to carry out the development of information and communication technology. Research have tried to describe how the Local government Pemalang district along the village government to develop and implement the development of System information village. The study also tried to describe the obstacles faced, strategic efforts that have been made and explain the perceived benefits of the village government since the development of information system for the village of governance early and public service for the village community. This study uses qualitative research methods to approach phenomenology locus of research in Pemalang district. The procedure is done through assessment theory and collecting dat a good primary as well as secondary data. Data primary derived from in-depth interviews with the head and staff Bapermasdes and the Head and staff of the Department of Communications and Informatics as well as some of the village chief in the district of pemalang, while secondary data obtained from the regulations, reports, or from the Internet. The results of the study indicate that the development of a village information system in Pemalang Regency has not fully been able to reach all villages in Pemalang Regency. In addition to requiring a fairly high budget, limited human resources are an inhibiting factor for the development of ICT in villages in Pemalang Regency. Organizational culture and the mindset of the community and village apparatus also become one of the obstacles in the development of information systems in Pemalang Regency.

**Keywords:** Village Information System, Pemalang

## 1 Introduction

Since the emergence of the Village Law No. 6 of 2014 concerning Villages, the village is seen as a "government structure" that has an important role in realizing the prosperity and welfare of its people. With the emergence of "regulations that discuss more deeply about village regulations, it is hoped that the "welfare" of rural communities and the quality of human life and poverty alleviation will be created through "fulfillment of basic needs,

development of village facilities and infrastructure, development of local economic potential, and sustainable use of natural resources and the environment [1]. The paradigm of internet-based rural development is important in the midst of the development of information and communication technology. There are several stages of internet-based rural development that can be done including: Developing internet-based rural information networks by building websites villages with desa.id domain; Encouraging technology-independent villages by migrating to open source technology; Improving public services with the village partner application; Managing resources based on village profiles with surveys of resources and geospatial data; Building a village with interconnection of systems and regulations that support the village to take development initiatives [2].

SID is a village information system that has a legal basis, namely Article 86 of Law No. 6 of 2014 concerning Villages concerning Village Rights, Obligations and Authorities. It states that the obligation of the village government is to provide transparent and valid data to the community. In the Village Law Article 86 concerning the Village Development Information System and Rural Area Development which consists of 6 paragraphs as follows: Villages have the right to get access to information through the Village information system which is developed by the Regency/City Government. The Government and Regional Governments are required to develop a village information system and rural area development; The Village information system includes hardware and software facilities, networks, and human resources; The Village information system includes Village data, data of Village Development, Rural Areas, as well as other information related to Village Development and Rural Area development; The Village information system is managed by the Village Government and can be accessed by the Village community and all stakeholders; District/City Local Governments provide information on development planning for Kabupaten/City for Villages. The development of an Integrated Village Information System has been implemented by the Provincial Government of Central Java with the issuance of Governor Regulation no. 47 of 2016 concerning Guidelines for Development of Systems Village Information. The Governor's Regulation was issued on the basis that village data is an important aspect in planning, policy formulation, programs, and measurement of village development performance achievements as well as acceleration of poverty reduction in the regions. The Rural Information System is also expected to be able to synergize village data. In Article 4 of the Governor's Regulation No. 47 of 2016 it is explained that the policy and strategy for managing village data is one Village Data and Information System, in the form of integrated data from various data sources, through the Regional Apparatus in charge of Community Empowerment, Village, Population Administration and Civil Registration. The Pemalang Regency Government has issued a policy in the form of Pemalang Regent Regulation No. 89 of 2017 concerning the Implementation of a Village Information System and the Development of "Sidekem" Rural Areas in Pemalang Regency.

This paper tries to describe how the Pemalang Regency Government and the Village Government develop and implement the Village Information System development. This research also tries to describe the strategic efforts that have been carried out, identify the obstacles faced and explain the benefits felt by the village government since the development of the village information system for government governance and services for the village community.

## **2 Method**

Qualitative research approach with a phenomenological approach. Informants were selected purposively, people who have experience and knowledge about the object of study, using the snowball technique. Techniques data collection using documentation study through document search and online media news, as well as interview method with four informants. Data analysis followed Creswell's steps [3].

## **3 Result and Discussion**

### **3.1 The Important Role of Village Websites for Villagers**

The availability of a website for villages can encourage rural communities to continue to innovate in various fields, so that later it will have an impact both from the economic side or from the community empowerment side. In a website for the village, various local information related to the village can be entered, so that residents can reach and find out the information at any time. At least there are four important roles for the village website for villagers, including the following: in a website for the village, various local information related to the village can be entered, so that citizens can reach out and find out information it at any time; Websites for villages can also "play a role as a medium for coordinating village security, especially when there are more and more fake news or hoaxes" which are developing very rapidly. Hoaxes can have fatal consequences in a community, that's where the website for the village can show its role as the most accurate and reliable source of information; Websites for villages can also act as a medium of friendship carried out by village officials with citizens; The availability of a website for the village should indeed be used to better connect the village apparatus with the residents in the village.

The role of the website for other villages is as a tool to improve village human resources. In this case, the meaning is that with the existence of a village website, it can also be used to provide features that are in accordance with the characteristics of the villagers. The availability of a website for the village will be able to help the village community to be "more motivated" to be more enthusiastic about learning IT and the internet in the right way according to their limitations. Such a method is indirectly expected to develop more advanced and prosperous [4].

In addition to having four important roles for villagers, a village website also has benefits which have a very influence on villagers. These benefits include the following; Media Promotion and Village Development Not only that, with the village website, the village government can more easily increase the potential attractiveness of the village to people from outside the area [ 5 ]. Another benefit of a website for villages is that villagers can 'know' various development progress that is being and has been successfully carried out by the village government. In addition, villagers also need to know about the various activities that will be, are being and have been carried out by village officials who act as village government. A village website can also help improve village government services. This is because the village government will be clearer in providing a variety of information related to services carried out by village officials. Not only that, because with a website for villages, the village government can also open community services. by online. Things like that will definitely make it easier for villagers to get the best service from the village government.

As is known, public service is one of the functions that must be carried out by "a state government", including village governments. There are various kinds of public services

that can be provided on the website for villages, including: Administrative services which include managing data and documents related to population administration [6][7] Community complaints services, which include columns online forms, complaint services via SMS [8] and community media; Information management services; The community outreach service, a website for villages, is designed and created with the aim of serving the public and is managed by a team from the local village apparatus. The availability of websites for villages is expected to make public services to villagers can be carried out more easily and quickly [9]. With the village website, it is hoped that it will be easier to accommodate the aspirations and complaints of local villagers. Websites for villages can be used as a 'two-way communication tool that is increasingly able to bring the government closer to its citizens. The village data is needed for various needs of local residents. Availability of a website for villages will certainly make it easier for residents if they need the village data at any time if needed. related to the village [10].

### **3.2 Village Website Development in Pemalang Regency**

Departing from ICT volunteers and PUSPINDes Pemalang Regency. As an organization in the field of informatics under the auspices of DINPERMASDES trying to introduce village information systems to government ranks in villages throughout Pemalang Regency. including Twitter as a social media reliable in terms of delivering various village information. Through various types of training, the IT KPMD, which has now turned into a Village Admin, has begun to innovate in terms of village information system management.

Since 2016, PUSPINDES has been assisting villages in Pemalang. Through the Village Law Number 6 of 2016 Article 86 paragraphs 1 to 6, PUSPINDES tries to make various breakthroughs with a focus on the Village Information System. From 211 villages, we have received an email with the address @desakupemalang.id the village website with the domain desakupemalang.id and twitter. Minister of Communication and Informatics Regulation number 5 of 2015 concerning Domain Name Registration of State Organizing Agencies. Referring to the regulation, it is hoped that villages will use the desa.id. desa cage.desa.id, gintung.desa.id, lowa.desa.id, ambokulon.desa.id and "there are many others." In principle, to register a desa.id domain, we must first register it. through the service.kominfo.go.id site, on the website we will get registration instructions. Some villages experience difficulties when registering the desa.id domain. Therefore, Puspindes tried to bridge to register the domain for Free.

### **3.3 The Success of SID Development in Pemalang Regency**

Pasir Village, Bodeh Sub-district, Pemalang Regency, which was originally labeled as a remote village and left behind in terms of 'technological progress', is slowly starting to rise. Around 2015, the Village Website and Desa's Twitter account were active. Various village activities are packaged into news information that can be accessed through twitter and the website. The community can easily find information about village activities just by visiting the village website and village Twitter. Not only that, the public can also take advantage of their android phones by downloading the village website application on the playstore for free. Until 2017, for the second time, the Desa Pasir website has successfully entered the final stage again. Through relentless struggle, the 3rd place winner was brought home. Of course, the village information system is not only limited to the website and twitter. Other social media also take part. Until 2018, the youtube account of Desa Pasir was officially launched. Armed with the experience gained at the Puspindes, the Village Admin tried to document various

activities in the village in the form of videos. Youtube as a forum is expected to make it easier for people to find developments in the village.

But unfortunately, the limitations of the Village Admin in managing the website have an impact on the less than optimal use of the website. One of them is that the address of Pasir.desakupemalang has not changed to Pasir.desa.id. However, in the future, the Village Administration together with the village government will immediately 'change the 'domain'. All kinds of village activities are updated through twitter and the website. People can easily access it. And the form of service "like this is a form of openness to the public, especially the people of Pasir Village.

## 4 Conclusion

The development of the Village Information System has provided benefits to the village government. The availability of a website for villages can encourage rural communities to continue to innovate in various fields, so that later it will have an impact both in terms of economy and in terms of community empowerment. Even though the village website has been implemented in 211 villages in the Village District, however, the development of many village websites is not updated and the application on the village website has not been optimally utilized.

The development of a village information system in Pemalang Regency has not been able to fully reach all villages in Pemalang Regency. In addition to requiring a fairly high budget, limited human resources become an inhibiting factor for the development of ICT in villages in Pemalang Regency. Organizational culture and the mindset of the community and village apparatus also become one of the obstacles in the development of the information system in Pemalang Regency.

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