Identification of Needs for Tutorial-based Electronic Modules (E-Modules) for Village Operators

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Abstract
Digitization in an information delivery system is a sign that the development of digital technology is getting faster and entering all aspects of life. There-fore, this study aims to identify various needs in the framework of develop-ing a tutorial-based electronic module (e-module) for Village operators to operate the SIAP Desa application. This research is a descriptive- quantitative research using a survey method, the research subjects consisted of 61 village operators with a non-test data collection technique accompanied by an in-strument, namely a questionnaire. The data analysis technique used is de-scriptive analysis technique with percentages. The research results show that village operators have a low level of understanding on how to operate the SIAP Desa application, even though most of them have attended training ac-tivities. They needed material that they could study in the form of text or video tutorials. Most of them then agreed that e-modules or electronic mod-ules were one of the efforts that could be made so that they could learn the material for operating the SIAP Desa application independently.
Keywords: *Digitalization, E-Module, SIAP Desa, Village Operator*

INTRODUCTION

Globalization is a process in which all aspects of human life will experience development, either directly or indirectly (Wibowo, 2022). One of the most visible impacts of these developments is in the field of education. In the world of educa-tion, globalization will bring about very rapid progress, namely the emergence of various sources of learning and the spread of mass media. There is a lot of infor-mation that can be used as a reference - a reference in carrying out something, this information can be accessed via the internet through the technology devices that are owned (Septiani Rosana, 2010).

Indonesia prepares and implements a policy to regulate information disclosure, public information disclosure rules made by the government in addition to regu-lating freedom to obtain information also provide all kinds of information about government so that the public can find out what the government's actions are in administering the country, so that transparency and accountability government to the public realized well (Nababan, 2020),(Mindarti et al., 2022). It should be known together that public information disclosure is the foundation in building good governance, which is transparent, open and participates in all state process-es, including the entire process of managing public resources from the process of decision making, implementation and evaluation (Nurdiansyah, 2016).

Therefore, management of information for implementing teams or operators in government is an important matter to be mastered and studied in stages. One of the field facts obtained from several villages in the Bojonegoro Region, shows that in the implementation of their governance they have an information system application called SIAP Desa. SIAP Desa (Village Government Administrative Information System) is a web-based application that is integrated with Siskeudes made by the Bojonegoro PMD Service which is expected to become a means of Disclosure of Village Public Information. Communities can find out how far the realization of your village budget is, what is budgeted by the village government, is there any alignment of the village budget for poor communities, what programs are planned and carried out by the village, how much Village Original Income is, and other information. Besides that, residents and visitors to this website can see what legal products have been made by your village government in the applica-tion, and to what extent these legal products have been made to advance your village. The data in the SIAP Desa application will be accessible to the public. you can access it at https://baikdesa.bojonegorokab.go.id/. Pungpungan Village is one of the 7 (seven) villages selected to be the Village SIAP Application Imple-mentation Pilot Project, it seems that several other areas have implemented in-formation digitization through digital devices so that information can be accessed anytime and anywhere (Nirmala & Paramitha, 2020),(Cahyono et al., 2021).

The development of technology and information systems must of course be ac-companied by the readiness of competent managers or operators so that the man-agement of information systems becomes more optimal. Unfortunately, this is not reflected in the readiness of the HR. Most of the operators do not have sufficient understanding to be able to solve problems and operate the SIAP Desa infor-mation system. Given the importance of studying information, acquiring skills on how to use the SIAP Desa application for operators, it is necessary to have a me-dia as a source of information and a source of learning materials for operators that are effective and enjoyable so that the aim is to increase the independence and skills of operators in operating the SIAP Desa application. can be achieved. One of the media or sources of learning materials is an electronic module or e-module.

Some learning media solutions other than e-modules that can be used are learning Videos: Learning videos can be used to present learning materials in an attractive visual form. Learning Podcasts and Audio: Learning audio and podcasts use au-dio formats as learning media. The advantage is flexibility, where students can

listen to material while they are moving or in situations where reading is not pos-sible. Additionally, podcasts and learning audio allow users to re-listen to mate-rial at their own pace. The main advantages of these various learning media solu-tions are increased interactivity, student engagement, and better understanding of concepts. They make use of visual, audio and interactive elements to enrich the learning experience and make it more interesting and relevant to students. In ad-dition, this learning media solution allows the use of a variety of learning meth-ods that suit students' needs and preferences.

The novelty of these various learning media solutions lies in the use of the latest technology and innovative approaches in presenting and combining information. They offer adaptive learning experiences, support independent learning, and encourage active student engagement. With the continuous development of tech-nology and new approaches in learning design, these learning media solutions continue to evolve to provide more effective and interesting learning experiences for students in the digital era. Along with the development of increasingly sophis-ticated technology, not a few modules are made in electronic form, or commonly known as e-modules. The difference between a module and an e-module lies in how to read it. E-modules can be read using electronic devices or the internet (Risma Wiwiwta & Revi Hanadayani, 2022),(Hadianto & Festiyed, 2020). The advantages of e-modules for learning are that they can increase the effectiveness and flexibility of learning (Murod et al., 2021), not related to space and time, can make the learning process more interesting and not get bored quickly because the e-module is equipped with various pictures, videos, and various interesting fea-tures that can increase student motivation (Pratiwi et al., 2021),(Syahrial et al., 2021),(Wulandari et al., 2021).

Electronic module or e-module means that it has an electronic format that runs on a computer (Sofyan et al., 2019). In line with that, e-modules also become learn-ing media using computers that display text, images, graphics, audio, animation and video in learning, besides that e-modules also become non-printed learning media which are arranged systematically which are used by students. for inde-pendent study that can be used anywhere and anytime (Saputra & Usmeldi, 2021). The process of delivering material using e-modules makes students more enthusiastic and less bored (Isnaeni & Agustina, 2018). Currently it is not diffi-cult to develop e-modules, bearing in mind that there are many applications that can be used to create them, including using a flipbook maker. Flipbook makers are able to add videos, images, audio, and hyperlinks so as to make teaching ma-terials more interesting and can increase learner interest and independence (Aprillia et al., 2021),(Perdana et al., 2021).

METHODS

The research method used is quantitative with survey methods (Sugiyono, 2018). The data collection technique is a non-test technique, with the instrument being a questionnaire (I Gunawan, 2013), The questionnaires were then distributed to Village office operators in several villages in the Bojonegoro Regency area. The questionnaire adopted in this study referred to several studies that had previous-ly been conducted in order to explore needs such as those carried out by Laila Raudatul Fauziah (Laila Raudatul Fauziah, 2020), Hasanah et al. (Hasanah et al., 2021), Roemintoyo & Budiarto (Roemintoyo & Budiarto, 2021) which contains several aspects, such as the use of media to convey information, the availability of facilities, and their understanding of the management of village information systems. The data analysis technique used in this research is descriptive qualita-tive data analysis technique, to describe the results of data collection (Sugiyono, 2016).

RESULTS AND DISCUSSIONS

In this section, some information will be presented regarding the responses of research subjects, namely village operators as a first step to identify their needs so that they are facilitated by what village operators really need. Table 1. The following will contain the responses from the distributed questionnaires.

Table 1. Village Operator Response

Questions / Statements	Answer Options	Percentage (%)
How do you understand the program or application ready for village?	Understand	38%
	Enough Understanding	16%
	Do not understand	46%
Can you operate the SIAP Desa application if there is no training/socialization/workshop?	Can	28%
	Can Not	72%
Have you ever participated in a training/workshop on using the SIAP Desa application?	Ever	86%
	Never	14%
Media information conveyed when participating in training / workshops?	Slide PPT	58%
	Poster	23%
	Video	19%
What type of media do you think you need to be able to operate the SIAP Desa application?	Printed book	16%
	Electronic Module	65%
	Poster	19%
Do you need a video tutorial on how to operate the SIAP Desa application?	Yes	93%
	No	7%

Based on the data in Table 1, it can be seen that the majority of village operators find it difficult and do not really have sufficient understanding of how to operate the SIAP Desa application. This was identified from the questionnaire responses which showed that 46% of Village operators still did not understand how to operate the program. Even though most of the Village operators stated through the results of the questionnaire, that they had attended workshops or training on how to use the SIAP Desa application (86% attended training), they still did not really understand after practicing independently. Of course, these results are supported by their statements that without training activities on how to use the SIAP Desa application, they will not understand and understand how to use the program.

Referring to the next question/statement, that village operators need a media so they can study the material independently, as well as their hopes that later in the material there will be a video tutorial on how to use and function each menu in the Village SIAP application, according to the response of the research subjects who said they wanted it, namely 93%.

Therefore, media in the format of electronic modules can be an option to be developed, considering that most of them also want the presence of these media products. It is undeniable that the e-module can be used to maximize understanding of village operators' material to practice independently operating the SIAP Desa application through video tutorials, and the material contained therein. In line with that, it is known that as a material for learning, e-modules are very suitable to be studied independently by students, this is in line with the characteristics inherent in them (Hadianto & Festiyed, 2020),(Laili et al., 2019). In addition, entering the digital era in the 21st century, which is known as technological development, requires that everything utilizes technology and students, in this case village operators, also tend to

be familiar with the presence of technology (Ghosh et al., 2021),(Arsić & Milovanović, 2016). the use of e-modules can also improve the skills of Village operators in operating the SIAP Desa application. E-modules can be arranged with clear and structured steps to use the SIAP Desa application, starting from an introduction to its features, procedures for use, to tips and tricks to maximize the use of the application. Thus, Village operators can improve their understanding and skills in operating the SIAP Desa application effectively and efficiently. In addition to increased learning motivation and increased skills, the use of e-modules can also provide other benefits such as flexibility in access to learning, ease of revision or updating of materials, as well as the ability to measure and track Village operators' learning progress. With the e-module, Village operators can learn according to their needs and time availability, while getting instant feedback through evaluation and assessment features integrated in the e-module. Overall, the use of e-modules as a solution to address the problems of Village operators who have difficulty operating the SIAP Desa application can provide significant benefits, including increased learning motivation, increased skills, flexibility in learning, and the ability to measure learning progress. The e-module is an effective tool in supporting Village operators' learning and understanding of the use of the SIAP Desa application to increase the efficiency and effectiveness of their tasks in managing data and information at the Village level. Besides that, the benefits that village operators will get if they use e-modules are that their learning motivation increases, and they are able to improve their skills (McKnight et al., 2016). Therefore, it is hoped that the e-module can be one of the solutions to fix problems for Village operators who have difficulty operating the SIAP Desa application.

CONCLUSION

Based on the results of the previous research and discussion, it can be concluded that so far Village operators still have a fairly low understanding of the Village SIAP application, which makes it quite difficult for them to operate independently without the help of one person who is quite skilled. One way to overcome these problems and their low skills in operating the SIAP Desa application is to create material for them to learn through the e-module format, in which, in addi-tion to containing text material, material is also provided in a video tutorial for-mat for using the SIAP Desa application. It is hoped that they will be able to bet-ter understand how the SIAP Desa system works and operate it for daily service activities when carrying out tasks.

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