Developing Community Information Group Website to Improve Digital Literacy

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Abstract. Community Information Group is a public service institution as a community information center at Biting Ponorogo. Dissemination of information to the public is often an obstacle due to limited communication media. Then, word of mouth is often inaccurate, causing miscommunication. This research aims to develop a website as a community information center. As well as being a communication and information medium, this website development also aims to improve community digital literacy. This research used the System Development Life Cycle method. This study succeeded in developing a website for the Biting Community Information Group. The feedback from Biting Community Information Group peoples expected that these websites could be developed as a medium of communication and information for the community. This website can be accessed via a search engine (https://kimbiting.com/). The next research can measure the effectiveness of the Biting Community Information Group website as the communication media. Besides, future research also can develop another communication medium based on information and communication technology.

1. Introduction
Biting Community Information Group is a public service institution owned by the village of Biting Ponorogo. Biting is a village located on the border of the province of East Java and Central Java Indonesia. Biting once had a Community Information Group which was founded in 2011 and only survived for less than a year. The Community Information Group functions as a group formed by, from, for the community independently and creatively whose activities carry out information management and community empowerment in order to increase added value of the community. The establishment of KIM Desa Biting is based on a Ministerial Regulation Communications and Informatics of the Republic of Indonesia No. 08 / PER / M.KOMINFO / 6/2010 Regarding the Guidelines Development and Empowerment of Social Communication Institutions [1]. The establishment of the Biting Community Information Group was facilitated by the Department of Communication, Informatics and Statistics Ponorogo. The facilities and funding for the Community Information Group program are carried out independently by the community because it is a group formed by, from, and for the community. The low level of education and types of livelihoods of the people of Biting village causing minimal facilities and participation in the Community Information Group program. Based on the documents profile of Biting Village, it is known that 78% of the people make a living as farmers cultivators and the level of community education 98.2%, are primary school graduates [2]. This condition also greatly affects the
lack of knowledge about digital literacy and awareness of the importance of Community Information Group existence as a public service institution. The continuity of the Community Information Group as a public service institution is required to be capable of providing various information for the community. This is because one of the Community Information Group functions is to increase public literacy in the field of information and mass media as well Information and Communication Technology among Community Information Group members and the public [3]. Through information obtained from various media, especially digital media, the public can obtain information on business opportunities, market demand for various products and services, then the Community Information Group can do business transactions, which in the end it will increase economic added value. Lack of digital literacy knowledge and skills Community Information Group management becomes an obstacle in carrying out their main duties and functions well. Several steps have been taken by Biting Village functionaries to maintain Community Information Group’s continuity. Those are through communication and coordination with the district government to provide assistance and special training in website development. Like Community Information Groups in other villages, the website is the main medium for publishing the local potential of the village. By doing assistance to Biting Community Information Group is expected to increase its role and function as a service institution public. However, in its implementation there are many obstacles. Low awareness society and ineffective understanding of digital literacy has an impact on weak Community Information Group knowledge and skills in website development. So that Biting Community Information Group is not only left behind in terms of website development but also unable to carry out its function properly as an agent of community literacy marked by the absence of activities carried out since the end of 2011. The question in this study is how the strategy for developing the website of the Biting Community Information Group?. This study aims to develop the Biting Community Information Group website. The website is expected to be a medium of communication and public information. This website is expected to become a center for community information too, especially for raising village potentials. In addition, with the Community Information Group website, it is hoped that could improve people's digital literacy skills.

2. Methods
The development of this Community Information Group using the System Development Life Cycle (SDLC) method. System Development Life Cycle (SDLC) consists of five stages, those are planning, analysis, design, development and evaluation [4]. The Waterfall model phases shown in Fig. 1.
Website development methods adopt Software Life Cycle, or waterfall. The software life cycle goes through five stages and can continuously form a software design life cycle.

2.1. Planning
The first phase of the System Development Life Cycle is planning. At this stage, identification of the desired system and procedure is created, by specifying the expected results of the desired system and procedure developed. System identification and Community Information Group website floating procedures are carried out by looking at the readiness of both hardware and software. The existing conditions, this development was motivated because the availability of the equipment did not exist at all. The development of the Biting Community Information Group website is based on the need for providing information to the public. The results of the interviews indicated that the need for information for the community was very urgent, while the existing communication media were still personal so that the dissemination of information could not spread quickly.

2.2. Analysis
Analysis is carried out on systems and procedures that are usually carried out and determining the functions of providing public information. In digging up the data it is necessary synergy between management of Community Information Groups. The functions that will be carried out through the media website are the provision of information quickly and accurately to the public in the form of straight news, the website as a media for publication of the potentials of Biting Village, as well as a medium for delivering government policies and public complaints.

2.3. Design
At this stage, system and procedure development is carried out by designing a workflow and clear information on these systems and procedures. To design the Biting Community Information Groups website requires several steps, those are finding the right and reliable web hosting, choosing a platform to create a website, installing the tools needed to run the website, making mockups for website design, making design prototypes, and checking whether the design looks good on mobile devices.

2.4. Development
The development stage is carried out by implementing the design that has been designed. The result has appeared in Fig. 2. is the main page that consists of six menus. It is a home, Community Information Groups profile, village potential, activities and gallery. The actual information will appear at the display main page.

Fig. 2. Biting Communication Information Group website interface view
In the corner of the home page of the website, appear the social media icon owned by Biting Communication Information Group. The website that developed will be able to connect directly with Biting Communication Information Group social media.

2.5. Evaluation
The last step is testing the systems and procedures that have been completed. This piloting process is necessary to ensure that the system meets the expectations of the Biting Community Information Group management. In this step, all data about Biting Community Information Group, village potential, and social media pages have shown directly. Furthermore, the Biting Community Information Group could try and see directly the valid data displayed.

3. Result and Discussion
The website of the Biting Community Information Group that has been developed is divided into two main menus, it is menus and navigation. On the menu there is our contact and privacy policy. While on navigation the user will be directed to home, Community Information Group profile, village potential, village profile, activities and gallery. The appearance of the website on a PC and smartphone could be seen in Fig. 3

![Website display on PC (a), website display on smartphone (b)](image_url)

The development of the community information group website aims to provide a means of disseminating information to the public quickly and accurately. In addition, the existence of a community information group website also aims to improve people's digital literacy. Digital literacy is defined as the ability to understand and use information in various forms from a very wide variety of sources accessed through a computer device [6].

Increasing digital literacy skills can be seen from the ability of Biting Community Information Group management to manage the website as the main media in disseminating information to the public. This is in line with UNESCO's definition of digital literacy as a skill (life skills) which not only involves the ability to use technology, information and communication tools, but also the ability to socialize, the ability to learn, and have attitudes, think critically, creatively, and inspire as digital competences.
According to UNESCO, digital literacy is closely related to ICT skills, civic skills, learning to learn skills, participation of adults in lifelong learning [7].

With a website as the main medium for disseminating information, Community Information Groups also play a role in improving people's digital literacy skills. With the website, people will begin to learn to use digital media in the form of websites to access information. The existence of Community Information Groups in Ponorogo has a function to increase community literacy which includes information literacy, mass media literacy, and information and communication technology literacy. The function is to increase literacy in the field of information, namely to build a paradigm that the effort to obtain information is a necessity of life and build a habit of seeking information from various sources. Its function as mass media literacy is the ability to use mass media intelligently and healthily, as well as being able to utilize it in people's lives. The function of Information and Communication Technology (ICT) literacy is the ability of the community to access and utilize information and communication technology, such as computers and the internet for the benefit of accessing information or to use it as information and communication technology services and products.

4. Conclusion
This study succeeded in developing a website for Biting Community Information Groups well. The website can be searched through a search engine https://kimbiting.com/. This website is expected to help Biting Community Information Groups become a center for public information and communication. In addition, this website is expected to be a means to improve people's digital literacy skills. The next step, researchers can try to develop similar websites to Community Information Groups elsewhere. Further research also could be carried out to measure the effectiveness of increasing digital literacy through website development.

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