

GLOBAL JOURNAL OF ENGINEERING SCIENCE AND RESEARCHES QUALITY OF INFORMATION SERVICES IN COMMUNICATION SYSTEM AGRICULTURAL EXTENSION BASED ON CYBER EXTENSION WEBSITE IN KOLAKA DISTRICT

Zaitun*¹, Weka Widayati², La Rianda³, Najib Husain⁴, Ilma Sarimustaqiyma Rianse⁵ & Awaluddin⁶

^{*1}Student of Doctorate Program at Halu Oleo University, Kendari Indonesia.

²Lecturer in Graduate Program, Halu Oleo University, Kendari, Indonesia.

⁴Lecturer in Graduate Program, Halu Oleo University, Kendari, Indonesia.

⁵Lecturer in Graduate Program, Halu Oleo University, Kendari, Indonesia.

⁶Lecturer in Plant Protection Program, Halu Oleo University, Kendari, Indonesia

ABSTRACT

Cyber extension is agricultural extension information system through internet media that is built to support the provision of counseling material in facilitating the learning process of the main actors and business actors to be competitive. The purpose of this research was to identify the the quality of information services in a communication system agricultural extension based cyber extension website- in Kolaka Regency. This study uses qualitative methods. We found that a communication system based website-cyber extension in Kolaka Regency, does not provide quality information services.

Keywords: services, information, communication systems, cyber extension.

I. INTRODUCTION

The ability of information technology that can spread to each individual, in the world, from different times, days and years directly narrows the distance, space and time. The development of information technology systems is often referred to as the "cyber" world, where the virtual world has been created by itself because of the human need for technology and information contained in it. The up to date information service speed is also a basic need of farmers, to be able to develop understanding and become a bridge between the outside world. Information services that are right on target for farmers will facilitate the marketing of agricultural products, farmers will be able to directly make transactions without going through intermediaries (middlemen) who always do not benefit farmers. On the other hand, information service technology also makes it easy for extension agents to provide assistance to farmers. Wahyuni, (2010) argues that the application of Good Agricultural Practices (GAP) for domestic agriculture is an absolute requirement that must be fulfilled. Therefore the current approach is that farmers not only produce heavily but must comply with GAP standards. Information that must be quickly obtained without limitations of space and time, both technical implementers in the region, extension agents, and farmers, because with appropriate agricultural practices, Indonesian agricultural products will be increasingly competitive and easy to penetrate into international markets. Kolaka Regency, which is one of the Regencies in Southeast Sulawesi Province, has many development programs for the community. Starting in 2012 cyber extensions began to enter and be developed in Kolaka District, but the program was active in 2013, which was introduced in 12 scattered sub-districts, with their respective management carried out by local field extension staff. Each extension worker in the sub-district is given the trust to manage and develop all information related to agriculture, so that it can be directly accessed by farmers. How a communication system agricultural extension based website cyber extension provides quality services for farmers needs to be further investigated, to find out the impact and benefits.

II. MATERIALS AND METHODS

This research was conducted in Kolaka District, which implemented information services through the cyber extension website. The population of this research is users who have accessed information through the cyber extension website in three districts, namely Tanggetada, Baula and Samaturu. Determination of informants based on activeness in accessing information on the cyber extension website. Qualitative research methods, used to analyze the quality of information services received by users (farmers).

III. RESULTS AND DISCUSSION

Research on cyber extension-based agricultural development communication was carried out in three sub-districts in Kolaka District, namely Tanggetada Sub-District, Baula District and Samaturu District. Based on the results of research, the three regions have good telecommunications networks. The network needs to be known to provide an initial description of information services through the cyber extension website, the following data are presented regarding the state of the cellular / stationary telephone network according to the District in Kolaka Regency 2017

Table Of Telecommunications State Networks in Kolaka Regency

No	Sub-District	Number of Stasionary	Information
1	Watubangga	3	Strong signal
2	Toari	3	Strong signal
3	Tanggetada	4	Strong signal
4	Polinggona	0	Strong signal
5	Pomalaa	7	Strong signal
6	Wundulako	6	Strong signal
7	Baula	3	Strong signal
8	Kolaka	9	Strong signal
9	Latambaga	6	Strong signal
10	Samaturu	5	Strong signal
11	Wolo	7	Strong signal
12	Iwoimendaa	4	Strong signal

Source: Kolaka District Office of Transportation, Communication and Information 2017

The results of the study show that regions with more stationary networks must be accompanied by the power of internet networks to disseminate agricultural information. In general, the three research areas from the description of the table above are interpreted as having adequate internet network availability, in utilizing communication systems agricultural extension through the cyber extension website. The development of information and communication technology (ICT), especially the internet, can be used to bridge the spread of information and knowledge among those who dominate information and undominate it.

Access to digital communication helps increase access to educational opportunities, increases transparency and efficiency of government services, increases participation directly from the role of communities who are unable to argue in the democratic process, increases trade and marketing opportunities, enlarges community empowerment by voting for groups that were not voicing (women) and vulnerable groups, creating networks and income opportunities for women, access to treatment information for isolated communities and increasing employment opportunities (Servaes, 2007).

In accordance with the opinion of Servaes (2007) and the results of this study is the application of a communication system based cyber extension whose data and information disseminated through the website is a government effort to bridge extension activities to extension agents to disseminate information, and farmers who receive innovation. Cyber extension-based communication systems in Kolaka Regency should be able to be accessed by the website, anytime and anywhere. Access through managed websites is expected to be able to open up a wider information space for farmers. Extension agents and farmers as well as agencies related to the success of agricultural

development have the same vision and mission in an integrated media namely cyber extension. The results of the study revealed several facts related to the quality of information services for Kolaka Regency. Measures of the quality of information services in agricultural extension systems based on cyber extension websites, based on predetermined criteria, indicate that:

A. Information Suitability

The measure of the quality of information services in a communication system based cyber extension through the website is carried out by knowing the extent to which information is suitable. The point is how the manager of a cyber extension-based communication system is able to provide services in accordance with the promised, trusted, accurate and consistent way to farmers and extension agents. Communication systems agricultural extension based cyber extension reduce excessive budgeting, and create transparency of information from the government to farmers. Extension activities that were initially conducted through field schools and other conventional techniques, with access through the cyber extension website, all programs and promises from the government can be known at the same time throughout Indonesia.

Data and information inconsistencies not only become knowledge in the realm of government and extension agents, but can be accessed by anyone. Therefore, knowing whether information services through the cyber extension website site managed at can provide information that is appropriate for users in Kolaka Regency. In this regard, the following is the result of an interview with information service user informants on 11 January 2017:

"There is indeed a new policy on the planting pattern, it just doesn't have an impact too, because rice production is the same as the previous program."

The results of the study revealed the fact that the contents of the message displayed on the website did not match with the users. Especially in the application by the user himself. This has a negative impact on the sustainability of agriculture in Kolaka Regency. Users who access information through cyber extensions do not feel an increase in agricultural production in their farming activities. This means that the content of messages on the cyber extension website does not provide innovation changes for users. Though in accordance with the opinion of Rogers and Shoemaker (1971), In a communication perspective, there are three main components that need to be considered related to the process of delivering information on agricultural technology. The three components are: (1) source of information, namely researchers-extension agents who are actively involved in research and assessment activities); (2) message / information submitted to the candidate; and (3) media / channels used in conveying information.

The results of the study of researchers with the conditions that occur in the field, namely the incompatibility of the message content on the cyber extension website with the reality faced by users, after adopting innovation through media provided by the government caused the disseminated message elements to not have a change. This means that information services provided through agricultural development communication systems are not qualified, due to the needs of users for an innovation is not supported and motivated to adopt a technology, because the content of messages disseminated through cyber extension websites is not in accordance with the facts of expected agricultural production.

B. Data and Information Accuracy

Users in this case extension agents and farmers, must obtain accurate data and information. Because information services through the agricultural development communication system are disseminated through the website, the accuracy of data and information is one of the priority things. The following are excerpts from interviews with informant users of information services through the cyber extension website, on how to manage information accuracy, on the quality of information services in Kolaka Regency. Interview on January 18, 2017:

"It's difficult if you want to see the accuracy of the information, because generally the information is diverse, a lot, but it's all about farming, we looking for information on cyber extensions unless there is a new program."

The interview results from the informants above indicate that there is a sense of confusion from users when accessing cyber extension websites, because the overall information is generally diverse and usually concerning information from other districts. The diversity is actually good, but for Kolaka Regency users still feel that the information is not in accordance with the wishes and problems that faced by users. The above facts are supported by the manager's statement. The following are the results of interviews with communicator informants managing information services through the cyber extension website in Kolaka Regency, September 28, 2016:

"For the accuracy of the data, so that he is not bias or contains political elements, that is not my policy, all the responsibilities of the leadership, I just manage it."

The above expression is interpreted as ignorance of the manager in supervising data and information relating to extension activities and uploaded through a cyber extension-based communication system through the website. This happens, because the assumption about the accuracy of the data in keeping there is no misleading data, especially containing other elements such as politics is not the responsibility of the manager, but the leader of the communicator. The results of the study revealed that it was related to the accuracy of the data confusing users, and helped managers feel that they were not responsible for the data and information disseminated through the cyber extension website, because the center for managing information sources through this communication system based cyber extension was centralized. As a result, a lot of data and information are not understood and the accuracy is not known by the manager, and the cyber extension website users in the Kolaka Regency.

C. Clarity and Certainty

Data and information displayed on the cyber extension website must use good and correct Indonesian language, while the data and information displayed on the website contain consistent messages. That is, keeping the data and information delivered is always changing. Others displayed on other websites are also applied to users, especially extension workers and farmers. Regarding the clarity and certainty of data and information through communication services through cyber extensions displayed on the website. Following are the results of interviews with user informants, January 18, 2017:

"The words or language on the website are generally easy to read, only the image seems to have to be improved again so it is more interesting to see the information. If it is good, if you want to access the extension data, the sentence is easily understood by the general public. But If is possible don't use English words. "

In accordance with the statement of the informant above, reveals that for the clarity and accuracy of the data and information displayed on the cyber extension website, it contains language that can be understood by informants user of communication system based cyber extension. The phrase about language with words that easy-to-read and sentences indicates that the management of information services in terms of clarity and certainty of data and information is included in the quality category. Despite the presumption of users that words, sentences and languages are easily understood by users, they still hope that foreign languages, namely English, are quite difficult for them. This also means that at the same time, users feel unclear in the foreign language by the cyber extension website used. Users feel that when accessing information through website pages, words, sentences in foreign languages are quite difficult, because it causes confusion when trying to access information to other parts of the website.

Especially for information service users in a communication system based cyber extension, language is a unification of goals. This means that the message delivered using language that can be understood and understood will facilitate the flow of communication, so that data and information can be conveyed easily. Agricultural extension as the main goal is able to be understood by users quickly and precisely, in a fast period of time. This means facilitating the flow of information from the center to the regions. The way to communicate using language and accent from the local area that is usually used by users, inhibits the delivery of meaning displayed through the cyber extension website. As a result of understanding the meaning of data and information displayed by using other languages outside of the Indonesian context, making users feel confused. This also affects the language aspect, which means that the clarity

and certainty of data and information available in communication systems based cyber extension agricultural extension are not of high quality.

D. Discipline

The realm of discipline is how the user informants respond to the manager on the responsiveness of the cyber extension-based communication system staff handling and serving users in finding or answering existing problems. In the communication system through the website, the manager usually provides a special commentary space, this becomes a special reference for the writer to find out if the cyber extension information service user, uses the comment column or sends a special complaint, whether directly gets a response or gets a solution to the problem at hand with a quick and precise solution.

This indicates that the cyber extension-based agricultural development communication system that provides the website as a means of communication should have a special section on the website page for comments for users. The informant's response regarding this matter is as follows, as for the results of the interview on 11 January 2017:

"How do we want comments through the website, there is no control of information to cyber extensions from the ministry, only we fellow communicators communicate with each other through the website."

The expression from the informant above indicates that the special commentary space provided on the website is not carried out by users of the cyber communication system, because there is an initial assumption that the data and information they send and display to the district communicators do not get attention from the center. That is, the government of the Ministry of Agriculture itself until when communication systems agricultural extension based cyber extension are implemented in Kolaka Regency, there has never been a program evaluation to find out how far the extension system through the website answers the needs of extension agents and farmers in the field.

In the special rubric for commenting, it should be a place to communicate from farmers to extension agents spread in other regions. However, for this realm, the cyber extension system developed by the Ministry of Agriculture does not function, due to a unilaterally constructed communication system. Evidence of the alignment of the information system for the flow of communication is management that is only centralized, even though the management of the special rubric on the website is also the responsibility of the managing communicator in the Regency.

From the reviews above, the quality of information services for the management discipline category is not of high quality. The lack of quality of communication system based cyber extension agricultural in terms of discipline is caused by the communication system factors applied not directly managed by extension agents in Kolaka Regency. However, the management of the communication system is still in the management of the central government communication system, namely the ministry of agriculture.

E. Access

Quality management of communication systems based cyber extension to the quality of information services to users seen from the criteria of access to communication systems. In this study, access covers the speed of information services provided, meaning that the information contained on the cyber extension website is not complicated and easily accessible to users. Results of interviews with informants regarding access to information to the cyber extension website. The following are excerpts of interviews from informants on January 18, 2017:

"Other extension agents and farmers will have difficulty accessing cyber extensions. Not to mention the information you want to upload is difficult to access. "

Furthermore, the results of the informant interview on 11 January 2017:

"If access to cyber extensions we go directly to the farmer accompanied. The essence of extension is the welfare of farmers, the essence of extension through cyber extension is that farmers should provide success, if the farmers do not prosper, what is the point of extension."

Some expressions from the informants above, indicate that information services through the cyber extension website are quite convoluted, an expression that says that unless the extension workers is given the trust to send data and information and manage services that are able to access information. Then the informant revealed that when accessing the cyber extension website, there was a need for special assistance, this meant that users had difficulty accessing information if there was no assistance from extension agents.

The results of the research about the access of information through the cyber extension website have non quality information in Kolaka Regency cause cyber extension website are not in accordance with the initial concept of the implementation of this system. Ministry of Agriculture (2009) revealed, the development of a cyber extension is one of the system for developing a programmatically mechanisms that work and effective in share an agricultural innovation through communication network. The results of the study revealed that, developing a cyber communication system based on cyber extension is one of the government's efforts to be able to provide and integrate all components of agricultural development in one information container. The cyber extension website communication system that should be integrated is able to combine various stakeholders such as the central government, provinces, research institutions, agricultural companies, markets, extension agents and farmers.

This means that cyber extension as an information media for education, must be a means of communication for users, which gives access to information from the contents of messages that are appropriate for users. Access to this information contains all information relating to farming activities of Kolaka Regency users starting from stakeholders (central, provincial, regional, research institutions), agricultural company, markets, extension agents and farmers.

IV. CONCLUSION

The quality of information services in the communication system agricultural extension based cyber extension in Kolaka Regency is not of high quality. The built-in communication system is not implemented intact and strong. factors that cause this are because the message presented is not in accordance with, access to information that is difficult with different information access portals makes them confused, educational background, discrepancy in the social conditions of the community, namely culture, adat and local languages.

REFERENCES

1. *Ministry of Agriculture (2009). Development of a Cyber Extension Website Work system. Accessed at www.pertanian.go.id on January 20, 2017*
2. *Permentan, 2013., Guidelines for Agricultural Extension Performance Evaluation. Accessed at [http.depan.go.id](http://depan.go.id). October 29, 2015.*
3. *Center for Information Communication and Telecommunications Data, 2004. E-Government Development Policy in the Ministry of Home Affairs and Regional Government. Jakarta.*
4. *Zaitun., 2012. Evaluation of Service Quality and E-Government Information User Satisfaction (Website) in the Kolaka District Management Information System (SIMDA). 2012.*