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Analysis of the Organizational Culture Puskesmas in the Implementation and Development of Information Systems in Tasikmalaya Regency, Indonesia

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ABSTRACT

The existence of information technology for an organization is very important and has a positive impact on various activities if it is planned and used correctly and appropriately. Application often encounters obstacles, which can come from internal or external. In the health sector, the information system in Puskesmas has been widely developed in Indonesia, including in the Tasikmalaya district with a very wide area and variety of conditions, both easy to reach and difficult so that risk factors can hinder the implementation. The purpose of this research analyzes the description of organizational culture in the implementation of the information technology system of Puskesmas in the Tasikmalaya district. This type of quantitative with the Organizational Culture Assessment Instrument (OCAI) model, carried out in the Tasikmalaya District Health Officer consisting of 30 puskesmas. The subject is the information technology manager or the head of the puskesmas from 30 places, totaling 30 people. The sampling technique is purposive, using a structured questionnaire instrument. Data based on quantitative research were processed and analyzed using OCAI with the results of scores categorized. The results showed that the type of organizational culture of puskesmas personnel towards the implementation and development of information systems was an official and structured type of organizational culture (2,84). This means that so far the puskesmas in implementing the information system are more on aspects and controls. Expectations are changes that are oriented to customer satisfaction and provide boundaries for the cultural system in the organization.

Keywords: Organization Culture, Information System, OCAI, Puskesmas

BACKGROUND

The current era of globalization is how organizations are able to create quality products and services in a sustainable manner. In addition, the organization is expected to be able to provide products and services supported by excellent services/services to customers. Organizations are expected not to be oriented to product results only, but also to be oriented to how the process produces products and markets products. This is known as a processoriented organization that must be designed in such a way that it can improve the main processes (core processes) and supporting activities in such a way that the organization can increase excellence through monitoring and evaluating the processes that occur in it.

Organizations can apply various things to be able to design and run a process-oriented organization. Various things can be done, among others, by implementing a clear organizational structure, adequate and competent human resources and applying information

technology to enable services in running the organization's business. The development of information technology is currently so fast. Information technology can be defined as a technique or activity to receive, process, produce and convey information to be used for international and external purposes of the organization.

The existence of information technology for an organization is very important and has a positive impact on various organizational activities if its implementation is planned and used correctly and appropriately. In addition, the role of information technology can penetrate organizational boundaries to be more flexible and not limited by space and time.

In its application, technology often encounters obstacles, the obstacles encountered can come from internal or external to the organization. Constraints from outside the organization will be easier to identify and resolve. However, internal organizational constraints require a more comprehensive process and involve stakeholders/organizational stakeholders. This is because the organization is a collection of various system units that work to achieve a common goal (Megawati, 2015).

One of the obstacles that arise is how the culture of employees in responding to various policies and technological developments that must be implemented in the organization. The culture of information technology includes the technology itself (software and hardware) and human resources. In relation to human resources in the organization, it cannot be separated from the individual work culture which will have an impact on organizational culture. In organizations, it is often the cause and very influential on organizational behavior. Culture is an integrated pattern of human behavior, which consists of thoughts, language, actions and cultural results (Irham, F., 2014).

Information culture as a conducive system that supports the behavior of exchanging information between individuals and groups in the organization. The role of technology/information systems is widely used by organizations. The role of technology/information systems is widely used by organizations both profit-oriented and nonprofit. In addition, it has been widely applied in all fields, including the health sector. Information technology in the health sector is widely used to provide public services and in its arrangement. One of the developments in information technology in the health sector includes e-health and the puskesmas information system which has been widely developed in health centers in Indonesia. Until now, the service at the puskesmas is still very much needed by the community in meeting the needs in the health sector, this is happening geographically, the Indonesian people are still spread out to remote villages (Sunyoto, D., 2015).

The Community Health Center, which is better known as the Puskesmas, is the Service Technical Implementation Unit, which is an organizational unit within the District/City Health Office that carries out operational technical tasks and is responsible for organizing health development in the sub-district area. Community Health Center is an institution whose main function is to provide the best possible service in a promotive, preventive, curative, and rehabilitation manner. So the puskesmas is the deepest service strategy in an effort to improve the health status of the Indonesian people.

In addition, puskesmas and their networks are also directly responsible for increasing community independence to live healthy in a healthy environment through the approach to the principle of regional accountability, the principle of community participation, the principle of integration across programs and across sectors and the principle of referral to puskesmas as a public service institution. ensure the existence of an information system that is accurate and reliable, as well as adequate to improve puskesmas services to users (patients) and the related environment. With such a wide scope of services, of course, there are many complex problems that occur in the service process at the puskesmas. The number of variables in the puskesmas also determines the speed of information flow needed by users and the puskesmas environment. So far, many puskesmas are still managing patient visit data, drug flow data, and also making reports using manual methods. In addition to taking a long time, the accuracy of data management is also not acceptable, because the possibility of error is very large. Some puskesmas may already use computers as a tool to manage data, but until now there have not been many computer programs specifically designed for data management in puskesmas. The information system at the puskesmas requires easy access as well as as much as possible, where the information system is a series or component of data collection which then becomes an information service that is useful in decision making. In fact, there are many obstacles in the field of things that support the implementation of information systems, ranging from human resources, facilities and infrastructure, knowledge to the applications used.

Geographically, Tasikmalaya Regency has a very wide area with various kinds of conditions, both easy to reach and difficult, so that risk factors will hinder implementing the reporting system. Based on the foregoing, the purpose of this study is to analyze the picture of organizational culture in the implementation of the information system of puskesmas in the Tasikmalaya district.

RESEARCH METHODS

This type of research is quantitative with the Organizational Culture Assessment Instrument (OCAI) model, which is an instrument for assessing current and future organizational culture. According to Rangkuti, F (2015), there is a measurement model and diagnosis of organizational culture based on the model which is divided into 4 (four) types of culture. The research was carried out at the health center area of the Tasikmalaya District Health Office consisting of 30 Puskesmas, namely: Cineam, Karangjaya, Gunung Tanjung, Sariwangi, Salawu, Cisaruni, Tinawati, Sukahening, Cisayong, Leuwisari, Mangunreja, Rajapolah, Bojong Asih, Bojong Gambir, Manonjaya, Tanjungjaya, Sukaresik, Sukaraja, Pagerageung, Sukareme, Sodonghilir, Jamanis, Karangnunggal, Salopa, Singaparna, Cipatujah, Culamega, Cikatomas, Karangjaya, Sukaratu. The research implementation time is about 7 months, from April to November 2017. The research subjects are IT managers or heads of puskesmas from 30 places. The sampling technique used was purposive sampling. The research instrument used a structured questionnaire about organizational culture. Data based on quantitative research is processed and analyzed using OCAI analysis with the results of scores categorized as types of organizational culture.

RESULTS AND DISCUSSION

- 1. Types of Organizational Culture of Health Center Personnel on the Implementation and Development of Health Information Systems in Tasikmalaya Regency. The content of the data obtained is information on the organizational culture of puskesmas employees in the application of information systems using the Organizational Culture Assessment Instrument (OCAI) method, to determine the type of organizational culture, namely:
 - a. Clan culture;
 - b. Adhocracy culture;
 - c. Market culture;
 - d. Cultural hierarchy.

Each type is measured by looking at 6 indicators that are measured, namely: dominant characteristics of the organization, organizational leadership, management of personnel/employees, organizational adhesive, strategy emphasis, and success criteria based on current scores and expectations scores with a value of 1-4. The following results were obtained:

Table 1. The average value of the organizational culture of puskesmas personnel on the implementation and development of information systems based on the dominant character.

Numbe	Dominant Character	Currently	Expectations
r			
1	The organization is a private place in the		
	development of information systems.	2,64	3,10
2	Organizations are dynamic and		
	intrapreneurial places to implement	2,54	2,81
	information systems.		
3	Organizational results-oriented and get the job		
	done in the service of information systems.	2,54	2,85
4	The organization is a controlled place in	2,85	0.75
	implementing information systems.		2,75

Source: Primary data (2017)

Based on table 1, it can be seen that the organizational culture of puskesmas personnel on the implementation and development of information systems based on the dominant character of the organization in Tasikmalaya district, shows that an organizational item is a personal place in the development of information systems has the highest average value, the current value (mean 2.64), and the expected value (3.10).

Table 2. The average value of the organizational culture of puskesmas personnel onthe implementation and development of information systems based on theorganizational leadership character.

Numbe	Organizational leadership	Currently	Expectations
r			
1	Acts as a mentor and facilitator in providing information system services.	2,87	3,16
2	Innovative and willing to take risks to develop information systems.	2,70	2,76
3	Aggressive and focused on information system results.	2,784	2,78
4	Acting as coordinator, organizing in running the information system.	2,90	3,19

Source: Primary data (2017)

Table 2 shows that the organizational culture of puskesmas personnel towards the implementation and development of information systems based on the character of organizational leadership in Tasikmalaya Regency, the leader as coordinator, organizing in running the information system is the highest, namely, the current mean (2.90), while the mean expectation (3.19).

Table 3. The average value of the organizational culture of puskesmas personnel on the implementation and development of information systems based on the character of personal management.

Numbe	Personal Management	Currentl Expectat	
r		У	S
1	Characterized by teamwork, agreement, and participatory in implementing information systems.	2,92	3,12
2	Dare to take risks, be innovative, provide freedom in the implementation of information systems.	2,91	3,13
3	Characterized to be competitive to face the results in developing information systems.	2,78	3,12
4	Characterized by a sense of security, uniformity in the application of information systems	2,84	3,30

Source: Primary data (2017)

The organizational culture of the puskesmas staff towards the implementation and development of information systems is based on the character of personal management. Meanwhile, the expectation value is characterized by a sense of security, uniformity, and the application of information systems with an average value (3.30).

Table 4. The average value of the organizational culture of puskesmas personnel on the implementation and development of information systems based on organizational organizational ties.

Numbe	Organizational adhesive	Currentl	Expectation	
r		У	S	
1	Loyalty and mutual trust in supporting information systems	2,67	3,24	
2	Always focus on the most up-to-date things related to information systems.	2,70	2,94	
3	Aggressiveness and victory are the main things.	2,54	2,73	
4	Formal regulations and policies in maintaining information systems	2,80	3,19	

Source: Primary data (2017)

The average value of the organizational culture of puskesmas personnel on the implementation and development of information systems based on organizational ties in Tasikmalaya Regency shows that the average value, for now, is that the items always focus on the most up-to-date things related to information systems, namely (2.70), while the expected value is loyalty and mutual trust in supporting information systems (3.24).

Table 5. The average value of the organizational culture of puskesmas personnel on the implementation and development of information systems is based on the character of organizational strategy.

Numbe	Organizational leadership	Currently	Expectations
r			

1	Emphasis on human resource development to support information systems.	2,76	3,05
2	Discovery of new human resources and create new challenges in developing information systems.	2,73	2,73
3	Emphasis on competition and achievement in terms of information systems.	2,57	2,89
4	More towards resilience and accuracy, efficiency, and control when implementing information systems	2,89	3,05
Source:	Primary data (2017)		

Source: Primary data (2017)

Table 5 on the implementation and development of information systems based on the character of the strategy in Tasikmalaya Regency, it is obtained illustrates that based on the current organization is the development of human resources to support site information (2.76), for expectations (3.05)

2. The average value of the organizational culture of puskesmas personnel for implementing and developing information systems based on organizational success criteria in Tasikmala Regency

Table 6. The average value of the organizational culture of puskesmas personnel on the implementation and development of information systems based on organizational success criteria.

Numbe	Organizational leadership	Currentl	Expectation
r		У	S
1	Declare success on the basis of human resource development in the field of health information.	2,57	3,54
2	Declaration of success based on the formation of the latest product in the field of information systems.	2,67	3,35
3	Declare success based on winning in the competition.	2,54	3,22
4	Declaration of success based on efficiency in the field of information systems.	2,80	3,35
Source: I	Primary data (2017)		

The average value of the organizational culture of puskesmas personnel for implementing and developing information systems based on organizational success criteria in Tasikmala Regency, the highest item for the current response is stating success based on efficiency in information systems, namely (2.70), while for the highest expectation high is to declare success on the basis of human resource development (3.50).

From the data above, it can be seen that the organizational culture of puskesmas personnel towards the implementation and development of information systems based on current responses is as follows:

Numbe	Type of Organizational Culture in Application Information Systems			
r –	Clan	Adhocracy	Market	Hierarchy
1	2,87	2,54	2,64	2,85
2	2,80	2,70	2,78	2,90
3	2,67	2,91	2,78	2,84
4	2,65	2,70	2,54	2,80
5	2,57	2,73	2,57	2,89
6	2,50	2,67	2,54	2,80
Average	2,67	2,70	2,64	2,84

Table 7. Description of the Current Response Types of Organizational Culture of Health Center Personnel to the Implementation and Development of Information Systems.

Source: Primary data (2017)

Table 7 shows that the organizational culture of puskesmas personnel on the implementation and development of information systems in Tasikmalaya Regency obtained the highest average value, namely, the type of organizational culture (2.84), meaning that the type of organizational culture is official and structured.

	Ту	. 0		e in Application
No	Clan	Adhocrac	<u>rmation Syste</u> Marke	Hierarchy
		у	t	-
1	3,10	2,81	3,10	2,75
2	3,16	2,76	2,78	3,19
3	3,12	3,13	3,12	3,30
4	3,24	2,94	2,73	3,19
5	3.05	2,73	2,89	3,05
6	3,54	3,35	3,27	3,35
Averag e	3,77	2,95	2,98	3,14

Table 8. Description of the expectations of the type of organizational culture of puskesmas personnel on the implementation and development of information systems.

From table 8 regarding the expectations of the type of organizational culture of puskesmas personnel on the implementation and development of information systems in Tasikmalaya Regency, it can be seen that the highest average value is the type of clan culture, meaning that the culture leads to familial characters (3.77).

Organizational culture is the glue of social values that exist in the organization, contains habits, beliefs that characterize the characteristics of the organization and all members of the organization. Organizational culture can be strong or weak, depending on various influencing factors such as policies, value conventions, and individual commitment to common goals. A strong culture is not a good thing, because the existence of a central cultural value is more important than its strength. A culture that is strong but resistant to change can be a bad thing from a competitive and profitable point of view, compared to a weak but innovative culture. Puskesmas is one of the leading service places in Indonesia to improve the health status of the community, as well as improving the quality of the

community towards health services, it must be directly proportional to the efforts made to improve services that are wrong. quality is to implement an information system so that health services can be carried out effectively and efficiently.

Phenomena that occur in the field of implementing information systems are often faced with problems that exist, there is still limited health information system management personnel, supporting facilities that have not been fully equipped, lack of understanding of officers in operating information systems, and organizational culture that is still very weak. low on the application of information systems in Puskesmas.

Organizational culture in the application of information systems in puskesmas needs to be known early on, to avoid problems and obstacles that will arise when officers provide services to the community or officers must immediately submit reports to the relevant institutions. Organizational culture can be identified in various ways, one of which is the method or instrument of organizational culture analysis. According to Cameroon and Quinn (2011), it is stated that the analysis of organizational culture can be done by looking at the elements of clan culture, adhocracy, hierarchy, and market.

Organizational culture in the implementation of information systems in puskesmas will influence and influence IT management officers or P-care as users. Based on the results of research that has been carried out on IT or P-Care management officers at the Tasikmalaya district health centers, it shows that the organizational culture that occurs is more likely to be a hierarchical type of culture (2.84) where this type is more market-oriented, meaning that the puskesmas In implementing information systems more than aspects of control and control, it is necessary to have a balance in meeting the need for an information system. The balance in question is a balance in the provision of human resources managing information systems, a balance in meeting the market for information services.

Dominant character, which is felt by employees where the puskesmas in implementing everything in implementing information systems in a controlled manner. Structured, and goal-oriented, while in the leadership of the coordinator, efficient arrangements and arrangements, in the implementation of operational activities, organizational control, and formal policies which must be managed properly.

Rangkuti, F (2015) states that the type of hierarchical organizational culture is able to produce goods / provide system services efficiently. The organizational culture expected by the officers is clan (3.77), namely the family image, the family image must be seen in the officer's condition when implementing the information system, starting from planning to evaluating activities.

The officer's expectation in organizational culture in implementing this information system is a change in organizational culture that is oriented to customer satisfaction, including giving to reduce the work system in the organization. The consequences of this organizational culture change will result in a system of competence, and work performance. Expectations The organizational culture of this puskesmas officer is:

- 1. The puskesmas gives freedom to develop information systems so that they can make improvements and even innovations in their work.
- 2. Changes in the puskesmas to become more dynamic and willing to take risks.
- 3. Teamwork and participation lead to an externally oriented organizational culture and customer satisfaction.

Based on the analysis using the OCAI method, a significant difference in the results of the average current value compared to the average expected value, the average puskesmas officers in implementing information systems today is a hierarchical organizational culture, while the expectation is a high organizational culture (more familiar).

CONCLUSION AND RECOMMENDATION

Based on the results and discussion, it can be said that:

- 1. The type of organizational culture of puskesmas personnel towards the implementation and development of information systems in Tasikmalaya Regency is the type of organizational culture (2.84), meaning that the type of organizational culture is formal and structured. This means that so far the puskesmas in implementing the information system is more on aspects and controls.
- 2. Problems or constraints that are felt by all puskesmas are problems with IT facilities and infrastructure, human resources who have the ability in the IT field, still lacking and lack of dual work with their functional duties as nurses, midwives or public health workers, lack of awareness or awareness of IT management as a shared responsibility.

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