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Abstract. Nowadays organizations realize that knowledge is an important asset to achieve a competitive advantage. In the favor of that, it is necessary for organizations to manage and utilize the knowledge as much as possible through knowledge management (KM). KM concept is not only used in large companies, but also has begun to be adopted by healthcare organization in an effort to improve the quality of services. Managing knowledge is not easy, a lot of factors to consider, one of which is the culture of the organization. Organizational culture is defined as a set of practices, values, and assumptions held by members of the organization and are able to influence the behavior of the organization [12, 13]. According to Kim Cameron and Robert Quinn (2006), organizational culture can be examined using 'Organizational Culture Assessment Instrument' (OCAI) which has a framework, called the competing value framework (CVF). This framework consists of four culture types i.e. clan, adhocracy, market, and hierarchy. In this research, we found that healthcare organization in Indonesia have developed a dominant culture-style. It is a mix of the market and hierarchy. In addition, we also discuss the relationship of four culture types with KM, and six dimensions of organizational culture.

Keywords: Organizational Culture, Knowledge Management, Healthcare Organization.

1 Introduction

Today, organizations are competing to be more creative, innovative, and competitive in order to survive in the competitive business world [1]. In achieving a competitive advantage, knowledge becomes the most important asset in the organization as compared to other assets [2]. Knowledge can be trusted to make the action taken and the individual organizations more effectively and efficiently so as to stimulate the emergence of innovations to improve the quality of the products and services of the organ-

ization [3]. Therefore, organizations need to manage, identify, deploy, and exploit their knowledge assets to take advantage of such knowledge as much as possible [4].

Knowledge management (KM) defines the process of doing what needs to be done to manage knowledge resources [5]. KM can also be defined as a process to manage, store, distribute, and use knowledge [3]. KM can improve availability and access to valuable knowledge, provide it at the right time and at the right people, and be able to make the organization to adapt to new market conditions rapidly [4]. Managing knowledge is not easy. This is because many factors need to be considered outside of the knowledge itself that affect the success or failure of KM, one such factor is the organizational culture. Organizational culture is considered as a foundation in KM and serves to understand how an organization behaves and gains competitive advantage [9]. However, organizational culture can act not only as an advocate but also inhibiting the activity of KM [6, 9]. Therefore, organizations need to understand the organizational culture that is embedded in the organization to be able to create an effective KM [9]. It is very important to do so, because the organizational culture can affect the way individuals in learn and share knowledge [6, 9].

Application of KM is not only used in large companies or manufacturing industry, but also has begun to be adopted in the hospital industry in an effort to improve the quality of services [3]. Hospital industry is an industry that is rich in knowledge, but unfortunately this knowledge is not utilized properly [7]. According to Gray and Densten successful organization is not caused by the amount of knowledge possessed by an organization, but rather due to the dynamic social processes that affect the application and development of knowledge within the organization [6]. According Hemmelgarn, et al. in Saame et al., in industries engaged in services such as hospitals, organizational culture affects the nature and quality of services provided, where the quality of these services is one indicator of the success of the organization [8]. Based on these two concepts, it can be concluded that the organization needs to develop a culture that encourages the sharing of knowledge. It should be triggered in order to achieve organizational success [6, 8].

Based on the above, it is known that the concept of KM cannot be separated from the culture of the organization. This is the foundation of this research. In this study, we discuss the relationship or influence of organizational culture on KM, especially in the hospital industry. The concept of organizational culture was adopted from the concept of Competing Value Framework (CVF) proposed by Cameron and Quinn (2006). This concept divides organizational culture into four types i.e. clan, adhocracy, market, and hierarchy. The purpose of this study was to identify the culture type or culture-style of healthcare organization in Indonesia. We also needed to find out the Dominant Characteristics, Organizational Leadership, Management of Employee, Organization Glue, Strategic Emphases, and Criteria of Success.

2   Knowledge Management in the Hospital Industry

Knowledge has been considered as an important asset in the organization as the primary source of gaining competitive advantage [2, 10]. KM includes the management

of knowledge from the knowledge discovered, created, codified, transferred or shared and used [5,10]. Since 1990, many organizations define and develop a knowledge management focus to align individual-individual, processes and technology, so that the organization can successfully create, capture, share, and use traditional knowledge required [11].

Hospital industry is an industry that is rich in knowledge. However, it has the lack of attention and awareness of members in the field of making maximum use of the knowledge yet [7]. In this industry, KM is defined as the alignment of individuals, processes, and technology to optimize information, collaboration, expertise, and experience necessary to drive growth and performance of the organization [11]. KM in the industry can also be defined as the formation, modeling, division, operation, and translation of knowledge in the hospital industry to improve the quality of services to patients [7]. The goal of knowledge management is to provide knowledge optimally, timely, and effective for all stakeholders in wherever and whenever they need to assist them in taking the right decision and quality [3, 7]. The application of KM principles is believed to improve performance in terms of both medical and hospital operations [11].

3　Organizational Culture

Organizational culture is defined as a set of norms, beliefs, values , and assumptions held by members of the organization and influence the behavior of the organization [12, 13]. According to Schein in Wiewiora, et al., organizational culture comprises several levels: artifacts, values and basic assumptions [9]. Artifacts are things that can be seen in his form as the physical layout, attitude or manner of a person talking to another person, and other physical objects such as archives, products, and annual reports. Values are norms, ideologies, and philosophies that exist in the organization. The basic assumption is made up of events that have occurred in the organization that determines the perceptions, thoughts, feelings, and behaviors. Of the three levels, the value is the most easily and frequently studied to understand the cultural context of the organization as it provides a deep understanding of the social norms that define the rules of social interaction [9]. In organizations, in order to act and make decisions, assessment is mostly influenced by the behavior of the members of the organization [12].

Several studies have shown that organizational culture can establish a pattern of interaction in the context of social interaction and establish a norm within the organization. Therefore, culture can affect the way people communicate and share knowledge [9]. Thus, organizational culture influences the behavior of members of the organization, learning and development, creativity and innovation, and KM [1]. According to Yun, the type of organizational culture can affect one's attitude in using or adopting KM system [4]. But in practice, it is rare to find an organization that only has a culture [6]. Hence, it is necessary to more in-depth analysis to determine the effect of each type of organizational culture on KM.

4   Relationship Organizational Culture with KM

KM provides a way to capture the existing knowledge in the organization with the advanced principle of sharing knowledge. However, the desire to share knowledge or not is in the hands of individuals. The desire of individuals to share knowledge depends on the culture in the organization, whether that culture encourages knowledge sharing or not [5]. Organizational culture plays an important role in the organization, because it can be a barrier or an advocate of knowledge generation and knowledge sharing [5, 6, 9]. Culture in the hospital industry tends to focus on the internal environment and emphasis on stability, as well as having clear rules [8]. However, this culture may be different depending on the ownership of the hospital. According Seren and Baykal in Saame et al., private hospitals more emphasize on cooperative culture, while government hospitals more emphasize on cultural hierarchy [8]. To better understand the types of organizational culture, there are many models that can be used for example Schein models, Schwartz, Hofstede, O'Reilly, and the Competing Values Framework (CVF) [13]. CVF in the hospital industry is the most commonly used model to investigate the influence of organizational culture on the performance of the hospital.

   This framework was developed by Cameron and Quinn where in the framework of organizational culture distinguished into two dimensions, namely the structure and focus [12, 13]. Dimensional structure is divided into the stability and flexibility. This dimension describes the difference between organizations that seek to maintain a consistent pattern of behavior and organizations that tries to provide the freedom for members to develop their own behavior [12]. The focus dimension is divided into internal focus and external focus. Internal focus has its emphasis on internal factors within the organization such as member satisfaction, while the external focus emphasizes the organization's ability to run well on the environment [12]. Furthermore, Cameron and Quinn states *"to the left-side describes the internally focused of organization (what is important for the organization, how do the organization wants to work) and to the right-side, the organization describes the externally focused of the organization (what is important for the outside world, the clients, the market)"* [15]. Based on these dimensions, CVF resulted in a cultural profile that includes four basic types/domains of organizational culture [12, 13, 14]. Type of organizational culture is clan, adhocracy, market, and hierarchy. The four type of culture is illustrated in Figure 1.
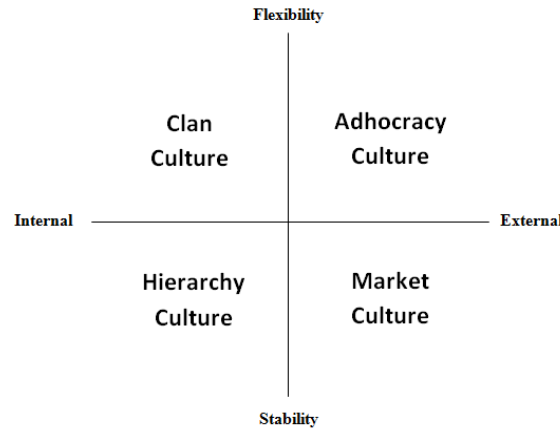
Fig. 1. Competing Value Framework [13].

Based on the four types of culture (clan, adhocracy, market, and hierarchy) and litera-ture study on the effect of organizational culture on KM, we described the relation of each of them with the concept of KM.

4.1 Clan Culture and KM

This culture emphasizes the high degree of flexibility and a focus on internal organi-zation [12, 14]. Organization is seen as a convenient place to work together and have higher family properties [1, 13]. In this culture, leaders act as mentors or facilitators for subordinates [13]. The characteristic of this culture is the emphasis on participa-tion teamwork, loyalty, cohesion and morale. The types are also often referred to as human relations or relationship-based [9, 14].

According to Lopez et al., Saeed et al. in a culture that is collaborative as clan cul-ture helps shape knowledge to improve the exchange of knowledge among members of the organization [16]. This is in line with the concept proposed by Gray and Den-sten, which states that the clan culture is related to the socialization process of knowledge sharing [6]. Clan culture has a positive relationship with knowledge crea-tion and has a considerable influence on knowledge sharing [2, 16].

The main objective of KM is to gain a competitive edge so that the organization can compete with other organizations. One of the indicators to measure the success of KM is to measure the performance of the organization. According to Safran et al. in Saame et al., this type of culture can improve the quality of hospital services and the performance of the organization as a whole [8]. Another study also showed that this culture is positively related to the satisfaction of patients and is associated with the least complaints received by the organization [8]. Moreover, in the context of the adoption of KM systems in hospitals, this culture also has a positive relation [4]. This means that organizations that have a high clan culture will more easily adapt to the new KM system.

4.2 Adhocracy Culture and KM

This culture emphasizes a high level of flexibility and focus on external environment [12, 14]. This type of organization is a dynamic workplace, innovative, and creative which provides an opportunity for individuals to develop themselves over the line with the objectives of the organization [1, 13, 15]. In this culture is the leader's role as an entrepreneur or innovator who inspired the formation of creativities in subordinates and encourages innovation, and the search for new ideas [12, 13]. The focus of this type of organization is the opportunity to get as much as possible from the external environment with emphasis on the development of new products and services, adaptability, growth, change, productivity, efficiency [1, 13].

According to the Yun Shu -Mei, an organization that has a high degree of external orientation will make it easy to spread the knowledge to the individual, group, or other organization levels [4]. Based on this it can be concluded that the adhocracy culture that focuses on the external also has a positive influence on knowledge sharing. This statement is also supported by other concepts presented by Gray and Densten. They mention that the adhocracy culture congruent with externalization process that involves the conversion of knowledge from tacit to explicit form [6]. Given the explicit knowledge in the form of access to such knowledge would be increased because it no longer depends on the individual. Therefore, the dissemination of knowledge will become easier. Moreover, culture is also positively related to the behavior of individuals that exist in the organization in the context of the adoption of KM systems in hospitals [4]. Hospitals that embrace this culture has a high degree of success in implementing KM systems, and can be easier to use and adapt the KM system [4].

4.3 Market Culture and KM

This culture emphasizes and focuses on the degree of external stability [12, 14]. This type of organization tends to be oriented on the outcome (result-oriented) [1, 15]. This culture is very concerned about the reputation and success so there is much emphasis on effectiveness in achieving goals [13, 15]. The achievement of goals is an important value in this culture, because the purposes of the control action represent a form of organizational members and direct the behavior of the external environment [12].

According to the Saame Voon, this culture is needed to produce good quality care [8]. However, in the context of KM, according to Hendriks in Nicolas and Cerdan, this culture inhibits the process of KM in the organization [17]. This statement is also supported by the KM concept in the context of the adoption of a system which states that this culture negatively correlated with the ease of an organization in implementing and using the KM system. This is due to the tendency of members of the organization who see the possibility that the implementation of KM in the organization will lose the benefit or profit of the organization [4]. Hence, they become more resistant to the implementation of the system.

4.4   Hierarchy culture and KM

This culture emphasizes and focuses on the level of internal stability [12, 14]. Organization is seen as a place to work in a structured and formal, as well as having a clear organizational structure. The rules and procedures are standardized, with strict control, moreover the responsibility are clearly defined [13, 15]. This type of culture is sometimes also referred to as internal type process due emphasis on stability and continuity [14].

Having a hierarchal culture for KM implementation in the organization has negative correlation [2]. According to Hendriks in Nicolas and Cerdan, the existence of this culture can inhibit knowledge sharing within the organization [17]. This is because the formalities of culture inhibit the formation of creativity and innovation, and KM [6]. According to Gray and Densten, culture correlates with internalization process model of knowledge creation. This process occurs in the conversion of knowledge into tacit and explicit which are formed by defining responsibilities, assessment systems, and documentation [6].

5   Research Methods

The research conducted to gauge the type of culture in healthcare organization using OCAI. It was claimed that the instrument is validate to examine organizational culture. OCAI questionnaire consists of six questions to assess the dominant characteristics, forms of leadership, management style, organization glue, strategic emphasis, and criteria of success of the organization. According to Cameron and Quinn (2006), the four alternatives of each dimension are described on detail in questionnaire (see on appendix).

The test-taker was 150 respondents includes structural management (top, medium, and low level), and medical personnel (doctors, nurses, pharmacists, radiologists, etc.) in hospital institution. From the total, respondents valid are 132, and 18 respondents are ignored because they do not fully charge. From the cumulative answers, we counted a number of choices as follow: A (clan) = 172, B (adhocracy) = 109, C (market) = 260, and D (hierarchy) = 245 for column 'Now'. Meanwhile, the preferred column are A = 345, B = 140, C = 68, and D = 132.

The cumulative answers (similarly) will be divided to 6, then the totally of culture should represent 100 points over four alternatives. The choice column is correspond to the four culture types according to the present and preferred organization. The outcome measures the mix of or extent to which one of the four culture types dominates the present and preferred organizational culture [15].

6   Result and Discussion

The diagram is depicted in Figure 2. The solid lines represent the current culture and the dash lines represent the preferred culture. From this graphic, we can deduct the dominant culture is market culture (33.08 points) which concentrates results-oriented,

production, goals and targets and competition. It is followed by hierarchy culture (31.17 points) which concentrates structure, procedures, efficiency and predictability. The third is clan culture (21.88 points) which is a very pleasant place to work where people share a lot of themselves and commitment is high. The adhocracy culture is present as well (13.87 points) which has a dynamic, entrepreneurial, and creative place to work. For more details about OCAI calculation results can be seen in Table 1. The points represent the cumulative answers (similarly) divided the 100 points into four alternatives.
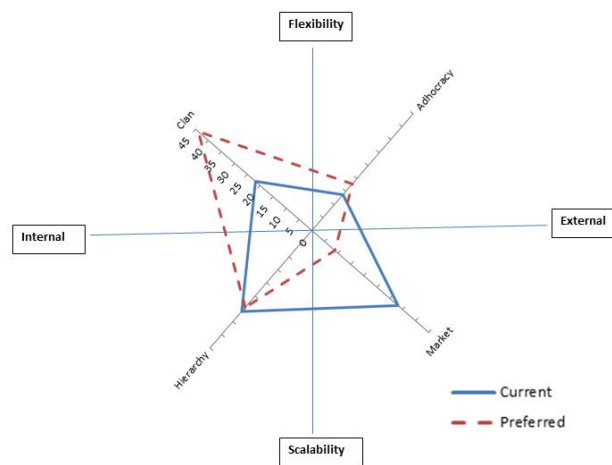

Fig. 2.   A diagram OCAI of hospitals institution at CVF

Table 1. Results of OCAI Measurement of hospitals institution

Types of Organizational Culture	Current	Preferred
Clan	21.88	43.95
Adhocracy	13.87	17.83
Market	33.08	8.66
Hierarchy	31.17	29.55
Total	100	100

The organizational culture of hospitals in Indonesia is more likely to be a market culture and hierarchy culture rather than clan culture and adhocracy culture. Based on literature, it appears that the market culture and hierarchy culture negatively correlated with KM in the organization. Even the hierarchy tends to inhibit the culture of knowledge sharing in the organization. In addition, the market culture that tends to be result-oriented KM will make it difficult to apply due to the results of KM cannot be quickly or easily visible. Therefore, hospitals need to make changes to its organizational culture in order to encourage knowledge creation or knowledge sharing. It is the basis of the existing KM in the organization. Moreover, it is also supported by the results of OCAI measurement on preferred culture indicator. The majority of re-

spondents preferred clan culture as the dominant culture (43.95 points). It was claimed that clan culture is positively related to KM. Thus, it is believed to help the formation of knowledge by enhancing the exchange of knowledge among members of the organization.

Therefore, based on the results of the analysis can be concluded that hospitals in Indonesia have not been noticed KM as a process to manage the existing knowledge within the organization. However, it is not directly that members of the organization have the awareness that knowledge is an important asset in the organization. This is evidenced by the high expectations of members of the organization. The organizational culture is more towards the clan culture with emphasize of the relationship or collaboration among members of the organization.

7   Conclusion

KM provides a way to capture the existing knowledge in the organization with the advanced principle of sharing knowledge. In this case, the organizational culture has an important role in the organization, because it can be a barrier or, in the other side, can advocate the knowledge sharing process. The influence of organizational culture on KM can be either positive or negative.

As mentioned earlier, the clan culture has positively related to KM as an encouragement for knowledge creation and knowledge sharing. Adhocracy culture also has a positive influence on knowledge sharing. While the market culture and hierarchy cultures tend to correlate negatively to KM.

The outcome of this research becomes references to conduct the next research of developing knowledge management systems (KMS) at healthcare organization. We believe that the implementation of KMS will need a comprehensive study, such the barrier from organizational culture and key success factors. We recommend for using ICT to support the business process and KMS. It should be encouraged to be empowered, which is currently limited only to transactional data.

Although the test-taker were taken from personal in charge in big five and referral hospitals, it can be claimed that the organizations have a complex business process. We assumed that they can represent as healthcare organization in Indonesia. Even the results of this study may still not represent a pattern or profile of organizational culture within the hospitals in general.

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Appendix (is noted fully from Cameron and Quinn [15]):

Dominant Characteristics:

    A. The organization is a very personal place. It is like an extended family. People seem to share a lot of personal information and features.

    B. The organization is a very dynamic entrepreneurial place. People are willing to stick out their necks and take risks.

    C. The organization is very results-oriented. A major concern is getting the job done. People are very competitive and achievement-oriented.

    D. The organization is a very controlled and structured place. Formal procedures generally govern what people do.

Organizational Leadership:

A. The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.
B. The leadership in the organization is generally considered to exemplify entrepreneurship, innovation, or risk taking.
C. The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.
D. The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.

Management of Employees:
A. The management style in the organization is characterized by teamwork, consensus, and participation.
B. The management style in the organization is characterized by individual risk taking, innovation, freedom, and uniqueness.
C. The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement.
D. The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships.

Organization Glue:
A. The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.
B. The glue that holds the organization together is commitment to innovation and development. Here is an emphasis on being on the cutting edge.
C. The glue that holds the organization together is an emphasis on achievement and goal accomplishment.
D. The glue that holds the organization together is formal rules and policies. Maintaining a smooth-running organization is important.

Strategic Emphases:
A. The organization emphasizes human development. High trust, openness, and participation persist.
B. The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.
C. The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.
D. The organization emphasizes permanence and stability. Efficiency, control and smooth operations are important.

Criteria of Success:
A. The organization defines success on the basis of development of human resources, teamwork, employee commitment, and concern for people.
B. The organization defines success on the basis of having the most unique or newest products. It is a product leader and innovator.
C. The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.
D. The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling and low-cost production are critical.