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The Role of an Organizational Culture and Individual Towards Knowledge Management Practice in Cement Industry

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Abstract - In the growing competition of company, nowadays, the company not only oriented towards products, but also oriented in the utilization of knowledge and technology. Therefore, an appropriate knowledge management was required so that the organization could compete with other competitors. This study aimed to identify and analyze how individual and organizational culture runs a role in the implementation of knowledge management in organizations. Data processing method used was grounded theory method which consisted of three stages, namely open coding, axial coding and selective coding. The results showed that the culture of collaboration and the skill of individual were main categories that played a role in the implementation of knowledge management in cement Industry. However, in its application, a culture of collaboration and the skill of individual have been linked to a learning culture, a culture of trust and centralization.

Keywords: **Organizational Culture, Individuals, Knowledge, Knowledge Management.**

I. INTRODUCTION

In the growing competition, the company was not only oriented towards products, but also oriented in the utilization of knowledge and technology. It required companies to be able to adapt to changes and developments in knowledge and technology that the company continues to be in a state of superior and competitive. Kawalek (2004) stated that nowadays was the "knowledge era", where the only organizations capable of optimally managing knowledge were able to survive in a competitive environment [1].

Knowledge was one of the assets that were instrumental in the competition faced by an organization. Knowledge was one form of intangible assets which was no less valuable than the other intangible assets even an element of the most valuable intangible assets [2]. Intangible asset was any value and something that was owned by an organization that was intangible and was expected to provide benefits to the organization. Figure 1 shows the classification of the assets owned by the organization.
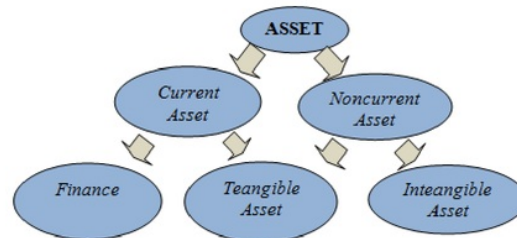

Fig. 1   Classification Asset Management

Knowledge management was one of the applications that could be used to manage the existing knowledge within the company. Knowledge management had become one of the main agenda in an organization because it was considered as a competitive strategy, which might provide some benefits for the company [3]. Knowledge management could provide a variety of benefits to the company including the increasing distribution of knowledge which could result in increased job satisfaction for employees, increasing the effectiveness and efficiency of the process, adding value to the product and increasing companies' profit [4].

Most of Cement Industry in Indonesia implemented knowledge management. Based on an interview with Mr. Guspadrianto as Knowledge Management Supervisor conducted on July 6, 2015, it was known that in practice the implementation of knowledge management, Cement Industry following the guidelines of knowledge management used by Dunamis Organization Services, which was a global organization providing services training and consultancy located in 147 countries. Dunamis Organization Service provided 9 competencies that could be done in the implementation of knowledge management in the companies.

Fig. 2 The Competences of Knowledge Management

Ninth competences of knowledge management were that competence in having networks (expert locator), establishing a culture of knowledge sharing through discussion (communities of interest), learning before acting to mitigate risk (peer assist), sharing knowledge as the basis for success (shared learning), reviewing the process of becoming the next learning (project Retrospect), a collaboration strategy (communities of practices), the use of technology (technology), utilizing the behaviors and habits of the organization to be the driving culture of knowledge-based (change management) and aligning the knowledge strategy with business strategy (strategy).

Successful implementation of knowledge management was inexorable from the role of human resources that existed within the organization itself. Knowledge management started from the knowledge possessed by each individual (personal knowledge) within the organization which would be transferred to other individuals in an organization. The successful application of knowledge was demonstrated by employees who were not only showing knowledge but also their curiosity and willingness to make new innovations. According to Laal (2011) successful implementation of knowledge management depended on the ability of individuals in the knowledge, organizational structure, the desire to continue learning and other positive things [5]

In addition to human resources, the organization itself also had an important role in the implementation of knowledge management, in this case was the organizational custom. Cultural organizations could determine the value of knowledge and provide a competitive advantage for an organization. Understanding of the culture that existed in the organization was needed in the application of effective knowledge management, defining an organizational custom in organizational context for social interaction and creating norms in the organization. Therefore, the organizational culture could influence how people communicate and share knowledge. In other words, overall some organizational custom values encouraged the application of knowledge management in an organization [6]. Culture was also one very important consideration in the implementation of knowledge management, and should serve as the main factor not the element of factors [3].

In this study, the authors chose to observe and examine how the role of the individual and organizational custom in knowledge management implementation in Cement Industry. This study aimed to identify and analyze how individual and organizational culture played a role in the practice of knowledge management in Cement Industry. According to Chase (1998), Holsapple and Joshi (2001) and Ndlela and Toit (2001) in Choi (2002) people or the individual was at the heart of the knowledge management activities. In particular, the individual was seen as an important enabler when trying to implement a knowledge management program in an organization. Zack (1999) in Choi (2002) stated that knowledge management technology of 10% and 90%

were people or individuals. Therefore, managing individuals who could and were willing to create and share knowledge was necessary. Meanwhile, a survey conducted by Chase (1998) in Choi (2002) showed that 80% of those who participated in the survey stated that culture was the most important factor for creating a knowledge-based organization. Organizations should establish a proper culture to encourage its members to create and share knowledge within the organization [7]. This study was conducted from July 1st 2015 to November 25th 2015.

II. METHODOLOGY

The data collected was obtained from interviews conducted with the expert of knowledge management in cement Industry. The method used in the processing of the data was grounded theory method. The grounded theory method was chosen due to the fact that this theory was in line with the study objective. This study aimed to find out and analyze how an individual and organizational culture had a critical role towards knowledge management practice in a cement industry which was based on the phenomenon existing in the research setting. The result of this study was a theory which was created relating to the implementation of knowledge management in a cement industry. The grounded theory was a qualitative research method used to create or develop a new theory based on the phenomenon existing in the study area or setting.

Data processing of the interview using grounded theory method consisted of three stages, namely [8]:

1. Open coding
   Open coding was the coding starting from an unclear understanding of the form lists a number of the relevant category (open codes). Open Coding was the stage of data analysis by identifying, naming, categorization, and the depiction of the issues found in the interview.

2. Axial coding
   Axial Coding was the stage to identify the causes and consequences of the data that has been categorized in the previous stage (open coding).

3. Selective coding
   Selective Coding was the stage of determining the core aspects and its relation to other aspects. At this stage it would be known indicators that were most responsible.

III. RESULTS

A. Data Collection

The data collected in this study was primary data. Primary data obtained by conducting interviews. Interviews were conducted using interview guide that served to alert researchers to a list of questions you wanted to ask the speaker of the study. Informant research used an expert in the field of knowledge management in

cement Industry. These informants were employees from one of cement Industries in Indonesia, which had an important role in the implementation of knowledge management and had a better knowledge related to knowledge management than other employees.

The data collected in this study was the information related to individuals namely the employees from the cement industry divided into two sub indicators that were the centralization and capability and information data dealing with organizational custom existing in the cement industry. The organizational custom was comprised of three sub-indicators; they were collaboration custom, learning custom, and trust custom. Resource persons who have been in this study, namely:

1. Mr. Arpin (the Head of Knowledge Management)
2. Mr Guspadrianto (the Knowledge Management Supervisor)
3. Mr. Basyiruddin (the Knowledge Management Supervisor)
4. Mr. Mulyanto Mukhtar (the Staff of Knowledge Management)

B. Data Processing

Data processing performed in this study was conducted on the results of interviews with the experts of research to determine the influence of organizational culture and the individual against the implementation of knowledge management in Cement Industry. Processing data using grounded theory method which consisted of three stages, namely open coding, axial coding, and selective coding.
1. Open Coding
   Open coding was the coding starting from an unclear understanding of the form list a number of the relevant category (open codes). Open Coding was the stage of data analysis by identifying, naming, categorization, and the depiction of the issues found in the interview. At this stage, the interview data have been obtained previously categorized as cultural organizations variables and individuals that affected the application of knowledge management in Cement Industry. The categorization of the results can be seen in Table 1 and 2.

TABLE I. CATEGORIZING OF RESULTS INTERVIEW

No	Category	Information
1	Culture of Collaboration	Collaboration that took place between employees in general were good enough in the implementation of knowledge management despite some hiccups
		Collaboration in the implementation of knowledge management in Cement Industry performed in work units and between work units
		The employees support the collaboration in the implementation of knowledge management
		Departments in Cement Industry showed willingness and participation in the implementation of knowledge management
		Collaboration is done through activities such as discussions, seminars, learn and share, leader café etc.
		In general, employees are quite satisfied with the level of collaboration that exist in Cement Industry in the implementation of knowledge management
		Obstacles encountered in the conduct of collaboration in the implementation of knowledge management is still a lack of knowledge of employees in the management of knowledge
2	Culture of Trust	In general, employees of Cement Industry trustworthy in implementing knowledge management
		The employees has the ability and good knowledge in certain fields and proven by certification which is owned and training held
		Among employees has confidence in the ability of each
		The employees sure that employees are working to realize the vision of company
3	Culture Of Learning	Cement Industry provides a variety of training programs such as benchmarking, OJT, study abroad, training related to knowledge management
		Each department has a training coordinator that aims to propose training required by department
		Each knowledge management program schedule set by the bureau Training Center and cooperate with the work unit
		In general, knowledge management activities are conducted in Cement Industry has been quite good and beneficial for the company and employees
		Each knowledge management activities facilitated by the management of PT Semen Padang
		Employees who have achievements in knowledge management given rewards
		There are communities made with the aim of implementing knowledge management such as cycling clubs, the big bike, golf, photographers etc.
		Expert role in the records of employees who have the ability and knowledge more
		The employees easy enough to ask and discussion with expert

TABLE II
CATEGORIZING OF RESULTS INTERVIEW (CONTINUE)

No	Category	Information
4	Centralization	Their limitations in taking action on knowledge management for employees
		Employees are given the freedom to conduct informal knowledge management course
		Cement Industry not encourage employees to make decisions related to knowledge management
		Every employee activities and actions related to the management of knowledge must be filed prior to the bureau Pusdiklat
5	Skill	In general, employees only understand their own work
		All employees works based on predefined SOP
		The employees can provide input and suggestions for other employees to do the job
		Good communication between employees in the work unit and between departments is good enough and smoothly
		Cement Industry need loyal employees, high integrity, willing to learn and do not be shy to share knowledge in implementing knowledge management
		Employees as individuals have a very important role in the implementation of knowledge management

TABLE III
RELATIONSHIP OF EACH CATEGORY

Category	Causal Condition	Consecuention	Strategy
Culture of Collaboration	The level of collaboration in general is good enough	It's enough employee satisfaction with the level of collaboration	Increase meetings and discussions between work units to discuss and provide inputs to each unit
	Given the difficulties in doing collaborations	Satisfaction level of collaboration is not maximized	Intensifying dissemination of knowledge management to the employees with the intention that employees understand the importance of knowledge management and easily perform collaboration
Culture of Trust	The employees trustworthy	Cement Industry applying the employees trust the management of knowledge and confidence among the employees of the ability of a good employee	Improving the ability of employees to undertake training and other training with the aim to generate confidence among employees in implementing knowledge management
Culture of Learning	The facilities and study time in implementing knowledge management has been given	Employees can learn and share knowledge to implement knowledge management	Facilitating employee in learning, creating knowledge and sharing knowledge
			Improving the standard of knowledge management point for employees so that employees have responsibilities in implementing knowledge management
Centralization	Limits for employees in the process of knowledge management	The limited role of employees in the process of knowledge	Involve employees in making and taking action in implementing knowledge management
		Employee creativity unfulfilled	
Skill	The limited ability of employees	Employees have not been able to provide input and do the work of other employees	Improving learn and share activities between employees within each unit of work
	creativity minimal		Improving communication between employees either in the work unit or between units

2. Axial Coding

Axial Coding was the second phase in grounded theory. This phase was done to identify the causes and consequences of the data that has been considered at the stage of open coding. At this stage, it would be known relationships between aspects emerge that cultural organizations variables and individuals that affected the application of knowledge management. The elements of the information would be identified in a category, causal conditions, actions taken, and the consequences.

Relationships and linkages between each category with the causes, consequences and strategies undertaken can be seen in Table 3.

3. Selective Coding

This phase was undergone to determine the main categories that played a role in the implementation of knowledge management and determined the relationships or linkages to other categories.

Based on the stage of open coding and axial coding, it identified the causes and consequences of each of these categories. It also identified strategies to achieve those categories in order to find out the relationship between the existing categories. For variable category that most organizational custom played a role in the implementation of knowledge management in Cement Industry was a collaboration custom, while for the individual variables that were most responsible category management implementation was the skill. It was determined by the relationship between each category.

C. Validation Results

Based on the data processing stage of selective coding that has been done, the research results obtained in the application of knowledge management in cement Industry, the collaborative culture and the individual's skill were a category that had a more dominant role than the other categories. However, in its application, a culture of collaboration and the ability of individuals have been linked with a learning culture, a culture of trust and centralization. Therefore, it can be said to be the fifth category which were dependent and integrated with each other in the process of knowledge management implementation in Cement Industry.

The results of this study then validated by using triangulation. Validation of the results of research carried out by cross-checking the results with those who had good competence regarding to the implementation of knowledge management in cement Industry. This validation was commenced by Puspha Sari as the Head of Bindiklat. A validation was intended to determine whether the results obtained were consistent with the circumstances that occurred in Cement Industry. Based on the validation has been carried out, the results obtained were in accordance with the circumstances that occurred in Cement Industry.

IV. DISCUSSION

The stage of open coding and axial coding identified the causes and consequences of each of these categories. It also identified strategies to achieve those categories in order to find out the relationship between the existing categories. For variable category that most organizational culture played a role in the implementation of knowledge management in Cement Industry was a culture of collaboration, while for the individual variables that were most responsible category management implementation

was the ability (skill). It was determined by the relationship between each category.

Category learning culture had relevance to the category of cultural collaboration. Learning culture carried out in work units and between work units. Each learning activity (learning) related to knowledge management was commenced by doing a good collaboration between individuals in a work unit or collaboration among work units. Examples of collaboration in the work unit could be seen in the activities of learning and sharing. Learning and knowledge sharing was done through discussion among employees in the work unit. This activity would not happen without the support of collaboration that took place between employees in the work unit. While examples of collaboration between units could be seen through large-scale activities, namely leader cafe conducted once a month. Activity leader cafe was attended by every department. In this activity, it would be carried out through discussions on either issues or things that were considered important for cement Industry. Collaboration on the activities of the leader of this cafe could be seen from the willingness and participation of every department to attend and hold discussions with other departments.

In addition to the collaboration related to culture, learning culture also had relevance to an individual's ability. Individuals who were at the heart of knowledge management were the factors that would determine the success of a learning culture in Cement Industry. Learning culture would be realized best when individuals had the ability to create, develop and distribute knowledge to other individuals.

Category culture of trust (trust) had been linked with a culture of learning. Learning activities such as discussions, and sharing of knowledge could be done after the creation a sense of trust among employees. Trust of employees against the capabilities of other employees would create a culture of learning running smoothly. The confidence against other employees was also based on some things like certification possessed by each employee to specific areas and any training which has been joined by each employee.

Apart from pertaining to a learning culture, a culture of trust also has been linked to a culture of collaboration. Collaborative activity that occurred among both employees in the work unit or between units could be established if a sense of trust between the employees in the work unit and between work units. Cultural collaboration indicated the degree to which employees within an organization supporting and cooperating in achieving organizational goals. In achieving the vision and mission related to the implementation of knowledge management was required confidence of each employee to collaborate in learning and sharing knowledge.

Category centralization has associated with the category of individual ability. Cement Industry on decision-making authority related to knowledge management conducted by the Bureau of the Training

Center of Cement Industry. Therefore, any employee who intended to apply knowledge management activities must go through the stages of the evaluation conducted by the Bureau of Education and Training Center. This resulted in the restrictions that were owned by employees related to the implementation of knowledge management. The individual's ability in designing a good knowledge management activities would be determining whether to accept the proposal given by the employees to the knowledge management activities that would be executed.

The ability possessed by employees would determine the success of the implementation of knowledge management. Employees had an important role in process management implementation as knowledge management activities performed by employees themselves. Obviously, the ability possessed by employees in implementing knowledge management such as the ability of communication, collaboration, learning and sharing knowledge was supported for implementing knowledge management in Cement Industry. To improve the quality and capability of our employees, Cement Industry has carried out several programs such as training, seminars and other activities.

Based on the stage of selective coding, it was known that in the process of knowledge management implementation in Cement Industry, a culture of collaboration and the ability of individuals were a category that had an important role. However, in the application process, a culture of collaboration and the ability of individuals with regard to other categories such as learning culture, a culture of trust and centralization. Hence, it can be said that the implementation of knowledge management in Cement Industry, category collaborative culture, learning culture, a culture of trust, the ability of individuals, and centralization was a category that was bound (dependent) and related to each other.

The stage of selective coding showed that the category of a culture of collaboration and the ability of the individual was the main category that played a role in the implementation of knowledge management in cement Industry. The results obtained under the category of most relevance to other categories.

V. CONCLUSION

The conclusion of this study, namely:
1. The results showed that the culture of collaboration and the individual's ability were main categories that played a role in the implementation of knowledge management in Cement Industry. However, in its application, a culture of collaboration and the ability of individuals have been linked with a learning culture, a culture of trust and centralization. Hence, it can be said to be the fifth category are dependent and integrated with each other in the process of knowledge management implementation in cement

Industry.
2. The subsequent study required a research dealing with the evaluation of individual role and organizational custom in the knowledge management towards organization performance.
3. In dealing with problems related to a culture of collaboration and individuals in implementing knowledge management in Cement Industry can be given several strategies, among others:
   a. Improving socialization activities related to knowledge management in each unit.
   b. Improving the schedule of meetings and discussions in work units and between work units.
   c. Providing training (training) on a regular basis to employees.
   d. Elevating the standard of knowledge management points that must be achieved by employees.
   e. Giving awards (reward) for performing employees
   f. Involving employees in making and taking action in implementing knowledge management
   g. Improving communication between employees

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