READINESS OF KNOWLEDGE MANAGEMENT IMPLEMENTATION: A COMPARATIVE STUDY BASED ON EMPLOYEES CHARACTERISTICS

Balianty Putri
Magister of Management
Telkom University Bandung
Email: baliantypk@gmail.com

Ade Irma Susanti
Magister of Business Administration
Telkom University Bandung
Email: adeirma@telkomuniversity.ac.id

ABSTRACT

This research intended to measure how high the level of readiness of the organization in applying Knowledge Management, focused in Knowledge Management Infrastructure (that composed of: Organizational Culture, Structure, IT Infrastructure, Common Knowledge, and Physical Environment) and finding significant differences regarding the readiness of employees in implementing Knowledge Management based on employee profile. It was considered an important thing, to support the company in the success of Knowledge Management implementation so as to realize the vision and mission of the company in facing the era of competition.

The research is conducted in A Sertification Institution in Bandung, that focused in training and certification business, The research method used in this research is descriptive method. Approach conducted by researcher in this research using quantitative method. In this study the data were collected using questionnaires distributed to respondents. The measurement scale used in this research is ordinal scale (ordinal scale). The analysis used in this research is descriptive analysis. The participant in this research is 38 respondents.

Based on the data processing and discussion that has been listed previously, the researchers can draw the following conclusions. Organizational readiness in applying Knowledge Management. There is a significant difference regarding the readiness of employees in the implementation of Knowledge Management based on employee profile. Based on the crosstabulation test, the researcher found that demographic characteristics, ie gender, age, duration of work and education level can give rise to different levels of readiness in Organizational Culture

Key Words: *Knowledge Management Infrastructure, Organizational Culture, Organizational Structure, IT Infrastructure, Common Knowledge, Physical Environment, A Sertification Institution*

JEL Classifications: *D83, C12, C83*

1. INTRODUCTION

Business competition in the era of globalization and the development of information technology cannot be avoided, including competition in the business of certification and training. The certification and training businessmen include MarkPlus, Inixindo, Comm Serve, Multimatics, Sidola, Brainmatic, Informit and others. Consideration of customer in choosing certification and training institution, among others, include price aspect, expert or expert, facility, service, location and type of certification offered.

Reliable Human Resources are required to support the certification and training business. Every employee at A Sertification Institution is demanded to always be friendly to customer, give fast delivery to customer, able to become Training Officer (TO), able to become expert in training, able to explain certification product, able to make report of responsibility from each training and able to prepare to others to be properly certified. Reliable Human Resources is an intangible asset for the company and must be maintained properly.

By 2015 the employee turnover rate at A Sertification Institution is quite high. Here are employee turnover data in 2015 and 2016 at A Sertification Institution:

Tabel.1 Employees Turnover 2015

Description	Out	Number of Exiting employee	Exiting Employee Ratio
Resigned	9	69	13,6%
Failing test	15		22,7%
Rotated to another position	4		6,1%

Source: A Sertification Institution (2016)

Tabel 1.2 Employees Turnover 2016

Description	Out	Number of Exiting employee	Exiting Employee Ratio
Resigned	2	41	4,9%
Rotated to another position	2		4,9%

Source: A Sertification Institution (2016)

Total turnover of employees in 2015 by 42.4% and in 2016 amounted to 9.8%. The turnover is quite high in 2015 in example on employees who failed the test by 22.7%. This happens because of the reduction of employees in order to perform cost efficiency in the company. Employees who fail the test have not done the process of knowledge sharing and knowledge storage optimally, thus causing some data is difficult to find with the exit of the employee. (Interview with *A Sertification Institution* HR Staff, on July 17, 2017).

Employee turnover occurs due to employee resign, employee failed test in 2015 and mutations caused by Foundation policy. The mutation has not been accompanied by sharing knowledge, so there is no substitute employee who meets the requirements of knowledge or experience to fill vacant positions left behind. The vacant position is a crucial position, including Assistant Manager Marketing, Assistant Manager Finance, Expert Group Manager, Senior Manager Marketing and Senior Manager Solution. (Interview with a The Certification Institution Human Resource Staff, on July 17, 2017).

Good knowledge management process consists of knowledge sharing, knowledge creation, knowledge utilization and knowledge storage. Knowledge sharing in an enterprise environment is a process whereby the explicit or tacit knowledge of an employee is communicated or transferred to another employee. While knowledge utilization is the process of using knowledge possessed by employees (Becerra-Fernandez & Sabherwal (2010:56). Knowledge creation is the process of knowledge creation by employees arising from interaction through the process of knowledge conversion. Then the knowledge that has been communicated or knowledge that has been created is stored (knowledge storage) to be used or used by the employee (Kucza, 2001).

The knowledge sharing process at A Certification Institution is conducted routinely in the monthly meeting of the leaders, monthly budget committee meetings and sales meetings. Knowledge sharing process can be done incidentally, among others, if there is new knowledge for example obtained from newly published book, it will be sharing knowledge by the HR department to the related employees. The process of knowledge sharing that has not been effective in A Certification Institution among others has not been done sharing if there are employees who completed the training.

Sharing knowledge between units within the Certification Institution has not been carried out routinely as has been done by the leaders, it happens because each unit has a lot of busy in doing the job. Sharing knowledge in the Certification Institution can also be done top down and bottom up. Sharing top down is done by the Director or the leaders to his subordinates respectively. Sharing bottom-up is the occasional subordinate or suddenly sharing knowledge to his boss, especially when there are problems related to the customer or prospective customers.

A Certification Institution employees strive continuously to create new products or services and different from the products or services of competitors. Structurally there is a special unit that handles knowledge creation, namely unit solution (research and development). Each unit is expected to have new ideas in creating new products or services (innovation) so as to outperform its competitors in the field of certification and training business.

Knowledge storage in the Certification Institution uses a local server because the data storage volume is still limited and not large. Storage of data without adequate back up, in case of loss of data then knowledge will be difficult to recover. Well-kept data is a company asset, so that when more employees come out, their knowledge data can be utilized by their replacement employees.

Knowledge utilization within A Certification Institution has not been maximally utilized and become less effective. Employees are still less aware to use data history resulting in difficulty in retrieving data (inefficient in time and effort). Likewise with the knowledge storage in A Certification Institution felt not effective because there is no data center that can be accessed by all Employees

Furthermore, A Certification Institution Director asserts that Knowledge Management needs to be implemented in A Certification Institution environment, so that the process of knowledge management activities from sharing, creation, storage to utilization or utilization can be done well. Therefore, it is necessary to immediately apply Knowledge Management and be included in A Certification Institution's

annual program. Implementation of programmed Knowledge Management in each unit is expected to help improve company performance. (Interview with Director of A Certification Institution, on May 27, 2017).

Some studies say that the failure rate of implementation of knowledge management is quite high. Research on the failure of knowledge management, one of which was conducted by Braganza et al., Who conducted research on Pharma Corp. Braganza et al. in Liliana (2010) states that the failure of Pharma Corp in applying knowledge management in the company occurred due to several things, such as generalization of knowledge management programs in all departments / processes, the preparation of isolated knowledge management plans, too focused on explicit knowledge so that the tacit knowledge lack of attention, cultural changes that are not received by staff, the use of external consultants and there is no process of monitoring the process of adding knowledge management.

Some studies say that the failure rate of Knowledge Management implementation is quite high. The risk of failure to implement Knowledge Management can be reduced if the organization is prepared to implement Knowledge Management (Widiastuti and Budi, 2016). Therefore, prior to the application of Knowledge Management, careful preparation is required by conducting a Readiness analysis first. Based on the background that has been described above, the authors are interested in choosing the title **"**Readiness Of Knowledge Management Implementation: A Comparative Study Based On Employees Characteristics**"**

Research Questions

The main problem formulation in this research is the high turnover of employees in A Certification Institution, but Knowledge Management in in A Certification Institution has not been effective, so it needs Implementation of Knowledge Management and will become the program in in A Certification Institution. Based on the above problem formulation, question (s) addressed in this research will be:

1. How high the level of readiness of the organization in applying Knowledge Management. More specifically the research question is as follows:
    a. How high is the readiness of Organization Culture in measuring the application of Knowledge Management
    b. How high the readiness of Organization Structure in measuring the application of Knowledge Management
    c. How high is the readiness of Information Technology Infrastructure in measuring the application of Knowledge Management
    d. How common is the knowledge of common knowledge in measuring the application of Knowledge Management
    e. How high is the Physical Environment preparedness in measuring the application of Knowledge Management
2. Are there any significant differences regarding the readiness of employees in implementing Knowledge Management based on employee profile? (More specifically the research question is as follows:)
    a. Are there any significant differences regarding employee readiness in Knowledge Management implementation based on gender?
    b. Is there a significant difference in the readiness of employees in the implementation of Knowledge Management by age?

The purpose of this study is to do a comparative study based on employee characteristics of in A Certification Institution to support the company in the success of Knowledge Management implementation so as to realize the vision and mission of the company in facing the era of competition.

2. LITERATURE REVIEW

Knowledge is information that changes something or someone, it happens when the information becomes the basis for action, or when the information enables a person or institution to take different actions or actions more effectively than the previous action. (Drucker in Tobing, 2007)

Knowledge is information with decision making and actions that lead to usability and purpose (Becerra-Fernandez & Sabherwal, 2010)

Becerra-Fernandez & Sabherwal (2010) classifies knowledge into six types:

1. Procedural knowledge

   Procedural knowledge focuses on the procedure or sequence of steps to achieve the desired goal.

2. Declarative knowledge

   Declarative knowledge focuses on facts; or focusing on beliefs about relationships between variables.

3. Tacit knowledge

   Tacit knowledge is the knowledge attached to each individual. Tacit knowledge is insight, intuition and hunch.

4. Explicit knowledge

   Explicit knowledge is knowledge that has been expressed in terms of words and numbers. Such knowledge may be communicated in the form of data, specifications, manuals, documents, images, audio and video tapes, computer programs, patents and the like.

5. General Knowledge

   General knowledge is knowledge shared by most individuals and can be transferred easily between individuals.

6. Specific Knowledge

   General knowledge is shared by some individuals and is expensive to transfer this knowledge.

Knowledge management is systemic approaches that help to arise and flow information and knowledge to the right people at the right time to create value. Is the definition of American Productivity and Quality Center. (Tobing, 2007).

Knowledge management is seen as an increasingly important discipline that encourages the creation of creation, sharing, and leveraging of corporate knowledge. (Becerra-Fernandez & Sabherwal, 2010:4).

Knowledge management is the practice of creating, capturing, transferring and accessing the right knowledge and information when needed to make good decisions and actions to support business strategy (Horwitch and Armacost in Huang and Lai, 2014).

According to Becerra-Fernandez & Sabherwal (2010), the knowledge management process consists of four types:

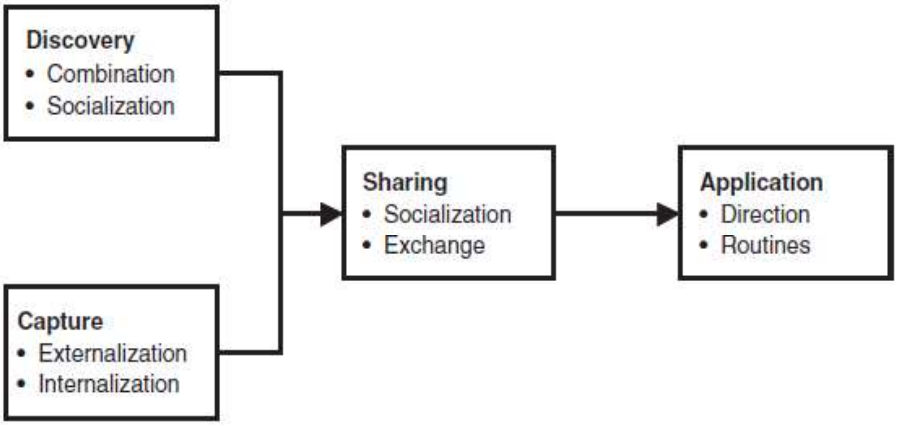

Figure2.1
Knowledge Management Processes

1. Knowledge Discovery

   Knowledge discovery is defined as the development of tacit or explicit new knowledge of data and information or from a combination of prior knowledge. Consists of :

   a. Combination: Explicit knowledge changes from one form to another.

   b. Socialization: The interaction of knowledge between individuals is usually through shared activities, for example by sharing ideas.

2. Knowledge Capture

   Knowledge capture is a process of taking knowledge, either explicit knowledge or tacit knowledge residing within people, artifacts, or entities of the organization. Consists of :

   a. Externalization: Changes in tacit knowledge become explicit like word, concept, visual or figurative language.

   b. Internalization: The change of explicit knowledge becomes tacit like word, concept, visual or figurative language. An example is a consultant reading a book about innovation and capturing knowledge from the book.

3. Knowledge Sharing

   Knowledge sharing is the process by which explicit or tacit knowledge is communicated to other individuals.

   a. Socialization: Sharing knowledge face-to-face.

   b. Exchange: Focuses on sharing explicit knowledge.

4. Knowledge Application

Knowledge application is the process of using the knowledge that some individuals have with other individuals without actually obtaining or learning the knowledge.

a. Direction: Directs the actions of other individuals without transferring to the individual.

b. Routines: Involves the use of embedded sinking in procedures, regulations and norms.

Knowledge management technologies and mechanisms rely on knowledge management infrastructure, reflecting the long-term foundation for knowledge management. In organizational discussion, knowledge management infrastructure consists of 5 major components: Organization Culture, Organization Structure, Information Technology Infrastructure, Common Knowledge, and Physical Environment. Becerra-Fernandez & Sabherwal (2010) grouped the components in 5 sections.

1. Organization Culture
   Becerra-Fernandez & Sabherwal (2010) defines organization culture as a set of norms and values that influence and guide very individual of the organization in their behavior
2. Organization Structure
   Becerra-Fernandez & Sabherwal (2010) defines that knowledge management is highly influenced by *organization structure* of the company.
3. Information Technology Infrastructure
   Knowledge management is also supported by information technology infrastructure of a company. Although information technology and information systems are developed directly to achieve knowledge management, a company's overall information technology infrastructure is developed to support the needs of information systems, while facilitating knowledge management. (Becerra-Fernandez & Sabherwal, 2010).
4. Common Knowledge
   Common knowledge (defined in Becerra-Fernandez & Sabherwal, 2010: 48) is another important component of Infrastructure that enables knowledge management. Referring to the company's experience in mastering the categories of knowledge and activities and also in managing the principles of communication and coordination support (Becerra-Fernandez & Sabherwal, 2010).
5. Physical Environment
   Physical environment in an organization is often underestimated, but it is an important foundation in which knowledge management resides. The core aspects of the physical environment include the design of the buildings and their separators, location, size, and type of office; type, number and type of meeting room, etc. (Becerra-Fernandez & Sabherwal, 2010: 48).

This research is focused on readiness level. Readiness is a necessary prerequisite for a person or organization to succeed in the face of organizational change. (Shirazi et al., 2011). Knowledge management readiness is the ability of organizations, departments or working groups to successfully adopt, use and utilize knowledge management. Thus, it is important for companies that want to adopt knowledge management to analyze their business to ensure that their performance is productive and rewarding. But knowledge management strategies are not easy to implement an organization because they require significant structural and cultural change at all levels of the organization that inevitably lead to resistance to change. In other words, the readiness of knowledge management largely depends on the readiness for change. (Shirazi et al., 2011).

Organizational readiness for KM means readiness to identify, collect, organize, store, distribute, and share knowledge, and ability to adopt and use profits (Shahidi et al., 2015) Implementation of knowledge management covers a wide domain and different aspects. Therefore, without the appropriate infrastructure and organizational preparation, successful implementation of knowledge management is not possible. In addition, organizational readiness for knowledge management implementation includes the organization's ability to adopt and use its advantages. (Shahidi et al., 2015). Readiness Knowledge Management is divided into five levels according to Rao (2005), namely:

1. Not ready
2. Preliminary (exploring knowledge management)
3. Ready (accepted)
4. Receptive (advocating and measuring)
5. Optimal (institutionalized knowledge management)

3. METHODOLOGY

3.1 RESEARCH METHODOLOGY

according to Sugiyono (2017: 147), that descriptive statistics are statistics used to analyze data by describing or delineating collected data as they are without intending to make general conclusions or generalizations. Type of research in this research is census research. The census study is a study that takes one population group as a whole and uses a structured questionnaire as a primary data collection tool to obtain specific information (Usman & Akbar, 2008). The analysis used in this research is descriptive analysis. Measurements were made using a questionnaire and each respondent was given five possible answers. The purpose of doing research using descriptive method is to gain an understanding of the underlying problems and factors.

3.2. PURPOSE OF THE RESEARCH

The purpose of this research is to know the level of readiness of Knowledge Management implementation in A Sertification Institution. So the research method used in this research is descriptive method. In this study the data were collected using questionnaires distributed to respondents. The distribution of questionnaires aims to obtain descriptive data so that it can be used in testing the research hypothesis. The calculation scale used is the Likert scale, which consists of a scale of 1-5 with a strongly agree statement (5), agree (4), hesitate (3), disagree (2) and strongly disagree (1).

3.3. DATA

Type of research in this research is census research. In this research, the focus point is the factors that can measure the level of readiness of Knowledge Management implementation in in A Certification Institution. Variables, sub-variables and indicators are taken from Becerra-Fernandez & Sabherwal book (2010), an indicator adapted to the condition of the research object that is A Sertification Institution. The measurement scale used in this research is ordinal scale (ordinal scale). Ordinal scale (ordinal scale) is a measurement scale that states something more than (things) to another. Measurement scale inside research instrument using Likert scale. The questionnaire in this study used Ordinal scale with Likert scale type with five points scale:

a. Strongly Agree (SS) = 5
b. Agree (S) = 4

c. Hesitant (R) = 3
d. Disagree (TS) = 2
e. Strongly Disagree (STS) = 1

The population in this study is all employees of A Sertification Institution in Bandung. A Certification Institution employees that consisted of 38 people in 2017. The sampling technique used in this method is by the census or saturated sampling technique, where all employees are used as respondents in the research that will fill out the questionnaires distributed by the researcher. In this research used saturated sampling method so that the research results can be close to the real value and can minimize the occurrence of irregularities. The sample used is all employees of the Sertification Institution which amounted to 38 people.

3.4. VALIDITY AND RELIABILITY OF THE MEASUREMENT

A valid and reliable measurement is a perquisite of an good instrument. From this research, it was found that the instrument that was used was valid and reliable enough. The validity was using the Person Product moment, using *Software Statistical Program of Social Science* (SPSS), using the r-table method. Based from this result, the item(s) that was used was considered valid enough to be used as a measurement. The result of validity analysis shows that the item(s) used was valid enough, as the Pearson's correlation was over 0.300. From the reliability analysis, the researcher was using the Alpha Cronbach, that results in every item was considered reliable enough, as the measure of Alpha Cronbach value was over 0,700, that has been the stated as a prerequisite.

3.5. NORMALITY TESTING

Before conducting a comparative test, the researchers need to test the normality. In this study, the Normality test will be calculated using the Shapiro-Wilk Test. The Shapiro Wilk test is used because the measured data has a total of less than 50 data. Based on data processing, it was found that the calculation significance value for Shapiro Wilk normality calculation for the five variables, when compared with demographic data, showed a tendency of normal distribution in almost all sub variables, with values above 0.05. Thus, the comparative test data processing for gender will use parametric data calculation that is by using ANOVA method.

4. RESULT AND DISCUSSION

Based on the above research framework, the hypothesis in this study are as follows:

1. The degree of readiness of the organization is in the category of at least ready for the application of Knowledge Management. Measurement of readiness in Knowledge Management in this study using Knowledge Management Infrastructure theory based on Becerra-Fernandez & Sabherwal's theory (2010). Knowledge Management Infrastructure consists of Organization Culture, Organization Structure, Information Technology Infrastructure, Common Knowledge and Physical Environment.

   More specifically the research hypothesis is as follows:

   a. Organization Culture is in the category of at least ready for the application of Knowledge Management

   b. Organization Structure is in the category of at least ready for the implementation of Knowledge Management

c. Information Technology Infrastructure is in the minimum ready category for the implementation of Knowledge Management

d. Common Knowledge is in the category of at least ready for the implementation of Knowledge Management

e. Physical Environment is in the category of at least ready for the implementation of Knowledge Management

2. There is a significant difference regarding the readiness of employees in the implementation of Knowledge Management Infrastructure based on employee profile. More specifically the research question is as follows:

   a. There is a significant difference regarding the readiness of employees in the implementation of Knowledge Management Infrastructure by sex

   b. There is a significant difference in employee readiness in the implementation of Knowledge Management Infrastructure by age

   c. There is a significant difference regarding the readiness of employees in the implementation of Knowledge Management Infrastructure working period

   d. There is a significant difference regarding the readiness of employees in the implementation of Knowledge Management Infrastructure based on education level

Table 4.1
Implementation Levels of Knowledge Management

Organizational Culture Infrastructure	Actual Score	Ideal Score	Percentage	Readiness Level
Organization Culture	1930	2470	78,14%	*receptive*
Organization Structure	1058	1520	70,01%	*receptive*
Information Technology Infrastructure	2045	2470	82,79%	*receptive*
Common Knowledge	468	760	61,58%	*ready*
Physical Environment	932	1330	70,08%	*receptive*

Source: Hypotheses testing with IBM SPSS 20.0

The actual score for the sub-variable organization culture is 1930 and the ideal score of 2470 with the percentage value obtained is 78.14%, including in the receptive category is in the interval range 68.00% - 84.00%. Thus, the level of readiness of the organization culture is within the level of receptive readiness.

The actual score for the sub-variable organization structure is 1058 and the ideal score of 1520 with the percentage value obtained is 70.01%, included in the receptive category which is in the interval range 68.00% - 84.00%. Thus, it can be concluded that the readiness of the organization structure in measuring the application of knowledge management including the receptive level.

The actual score for sub variable of information technology infrastructure equal to 2045 and ideal score equal to 2470 with percentage value obtained equal to 82,79%, included in category receptive is in interval range 68,00% - 84,00%. Thus, it can be concluded that the readiness of information technology infrastructure in measuring the application of knowledge management including receptive level.

The actual score for common knowledge sub variable equal to 468 and ideal score equal to 760 with percentage value obtained equal to 61,58%, including in ready category is in interval range 68,00% - 84,00%. So, it can be concluded that the readiness of Common Knowledge in measuring the application of knowledge management including ready level.

The actual score for the sub-variable physical infrastructure is 932 and the ideal score of 1330 with the percentage value obtained is 70.08%, included in the receptive category is in the interval range 68.00% - 84.00%. Thus, it can be concluded that the readiness of physical infrastructure in measuring the application of knowledge management including receptive level.

Table 4.2

Differential Tests between Gender on Dimensions of Knowledge Management

Dimension	F-value	F-table	Fvalue	p-value	Result
Organization Culture	1.394	2.035	.172	.050	Null hypotheses supported
Organization Structure	1.529	2.030	.135	.050	Null hypotheses supported
Information Technology	1.544	2.032	.132	.050	Null hypotheses supported
Common Knowledge	1.640	2.030	.110	.050	Null hypotheses supported
Physical Infrastructure	3.066	2.030	.004	.050	Null hypotheses rejected

Source: Hypotheses testing with IBM SPSS 20.0

Based on the above values, researchers found that for Physical Infrastructure variables, obtained t count value of 3,066 is greater than the value of t table of 2.030 and the significance value of 0.004 is smaller than the requirement value of 0.050. Thus, Ho is rejected, which means that the difference between male and female concerning implementation of Knowledge management in physical infrastructure is significant

Tabel 4.3

Differential testing between Age groups in the dimensions of Knowledge Management

Dimension	F-value	F-table	Fvalue	p-value	Result
Organization Culture	1.849	2.485	.131	.050	null hypotheses supported
Organization Structure	.440	2.485	.817	.050	null hypotheses supported
Information Technology	.566	2.485	.725	.050	null hypotheses supported
Common Knowledge	.957	2.485	.459	.050	null hypotheses supported
Physical Environment	1.177	2.485	.342	.050	null hypotheses supported

Source: Hypotheses testing with IBM SPSS 20.0

Based on the above values, researchers found that there is no discernible variation among the dimension of KM Infrastructure, Thus, the null hypotheses is accepted, which means that the age does not correspondents to higher degree of preparedness in any of the of KM Infrastructure readiness.

Table 4.4

Differential testing between Education in the dimensions of Knowledge Management

Dimension	F-value	F-table	Fvalue	p-value	Result
Organization Culture	2.423	2.485	0.047	.050	null hypotheses supported
Organization Structure	-2.928	2.485	0.025	.050	null hypotheses rejected
InformationTechnology	.513	2.485	.764	.050	null hypotheses supported
Common Knowledge	.569	2.485	.723	.050	null hypotheses supported
Physical Infrastructure	0.948	2.485	.464	.050	null hypotheses supported

Source: Hypotheses testing with IBM SPSS 20.0

Based on the above values, researchers found that for Organization Structure variable, obtained F-count value of -2.928 is greater than F-table value of 2.485 and 0.025 significance value smaller than the value of 0.050. Thus, Ho is rejected, which means there is a significant difference between the mean scores for the educational group studied in the Organization Structure readiness level. The F value has a negative value, whereas respondents with higher levels of education actually have lower levels of Organization Structure readiness.

Table 4.5

Differential Test between the Length of Work on the Dimensions of Knowledge Management

dimension	F-value	F-table	p-value	p-value	Result
Organization Culture	2.523	2.485	.049	.050	null hypotheses rejected
Organization Structure	-2.328	2.485	.054	.050	null hypotheses supported
Information Technology Reach	.513	2.485	.764	.050	null hypotheses supported
Common Knowledge	.569	2.485	.723	.050	null hypotheses supported
Physical Infrastructure	0.948	2.485	.464	.050	null hypotheses supported

Source: Hypotheses testing with IBM SPSS 20.0

Based on the above values, researchers found that for Organization Culture variable, the value of F-counted 2,523 is smaller than the F-table value of 2,485 and the significance value of 0.049 is smaller than the requirement value of 0.050. Thus, Ho is rejected, which means there is a significant difference between the mean scores for the long working group studied in the Culture Organization dimension.

5. CONCLUSION AND RECCOMENDATION

Based on the data processing and discussion that has been listed previously, the researchers can draw the following conclusions:

1. Organizational readiness in applying Knowledge Management, specifically as follows:
   a. Readiness Organization Culture in measuring the application of Knowledge Management including receptive category.
   b. Organization Structure Readiness in measuring the application of Knowledge Management including receptive category.
   c. Readiness Information Technology Infrastructure in measuring the application of Knowledge Management including receptive category.
   d. Readiness of Common Knowledge in measuring the application of Knowledge Management including ready category
   e. Readiness Physical Infrastructure in measuring the application of Knowledge Management including receptive category.
2. There is a significant difference regarding the readiness of employees in the implementation of Knowledge Management based on employee profile. More specifically is as follows:
   a. There is a significant difference between gender in Physical Infrastructure, where male sex has readiness in the larger Physical Infrastructure dimension more than female respondents.
   b. There were no significant differences between age groups in the level of readiness of Knowledge Management application. Thus the difference in age level does not give different levels of readiness to the respondents.
   c. There is a significant difference between the level of education in the level of readiness of Knowledge Management implementation, where higher education level has higher degree of Organization Culture readiness, and the younger / lower education level has higher organizational preparedness level.
   d. There is a significant difference between the length of work in the level of readiness of the implementation of Knowledge Management, where respondents who work longer will have higher levels of Organization Culture readiness.
3. Based on the crostabulation test, the researchers found that various demographic characteristics, ie gender, age, duration of work and education level can lead to different levels of readiness. In Organizational Culture the higher the level of education the level of employee readiness becomes higher on the respondents Telyber employees PCC. Meanwhile, for the Organizational Structure, an increase in the level of education can lead to the level of preparedness within the Organzational Structure becomes lower.

Based on the results of research and research process undertaken, researchers can provide suggestions as follows:

1. To other researchers who want to conduct similar research, researchers suggest to be able to select populations and samples with business activities and work activities vary, so the application of Knowledge Management in various businesses can be seen with more in-depth application.
2. Researchers suggest to the next researcher to be able to conduct research on companies with larger population / sample size, so that research results have better generalization capability.
3. Researchers suggest to the next researcher to be able to conduct research in the form of causal explanatory (test of influence / regression), so that application of KM Infrastructure can be

seen its influence to other variables, such as motivation, employee performance, or work effectiveness of company.

Based on the analysis conducted by researchers, the researchers can make suggestions as follows:

1. For the A Sertification Institution company, the researcher found that the employee respondents have a level of readiness tend to be positive (Receptive) for the four dimensions of KM Infrastructure, namely Organizational Culture, Organizational Structure, IT Infrastructure and Physical Infrastructure. Therefore, the company can maintain the KM Infrastructure dimension, while continuing to practice the dimensions of Organizational Culture, Organizational Structure, IT Infrastructure and Physical Infrastructure that already exist in the company environment in order to achieve optimum level of readiness. To achieve optimal readiness, the company can actively undertake activities aimed at supporting the movement of information, improving the analytical ability of information, and storing and utilizing important information owned by the company to improve the quality of decision making. Companies regularly conduct activities to engage employees to exchange ideas, share information that can help implement work activities to increase creativity and problem-solving skills, and their implementation to help improve the efficiency and effectiveness of decision-making in organizations.
2. Researchers advise the company to improve the readiness of Physical Infrastructure for Women respondents, by providing physical facilities that can support better implementation of Knowledge Management, such as meeting room, air conditioning, and office conditions so as to be more conducive for women respondents.
3. Researchers found that demographic characteristics of education turned out to differentiate the degree of readiness in Organization Culture. In Organization Culture the respondents with higher levels of education will have a higher degree of readiness. Conversely, respondents with lower levels of education will have a lower degree of readiness tendency. Some of the things that can be done by A Certification Institution to improve the higher readiness of respondents with low education can be done by providing training and improving skills that can help employees with higher levels of education to be able to view the situation of the company, especially in terms of Organization Structure becomes more objective. Thus, employees not only criticize the situation, but also improve the interaction quality of different social strata within the organization.
4. Researchers found that long demographic characteristics of work turned out to differentiate the degree of readiness in Organization Culture. Respondents with longer tenure will have higher levels of readiness. Conversely, respondents with shorter working periods will have lower levels of readiness. Some of the things that can be done by A Certification Institution to improve the higher readiness of the respondents with the recent working period such as conducting orientation and on-the job training activities accompanied by the employer
5. Researchers advise companies to be able to encourage higher levels of readiness, especially for the Common Knowledge dimension (where there are more individuals who have preliminary readiness levels on the outcome of cross tabulation). To that end, A Certification Institution needs to hold sharing units and inter units regularly so that Common Knowledge can be owned by each employee in A Certification Institution . With the sharing of these units, it is expected to dilute the boundaries between units and sections, and train employees to be able to communicate effectively, which in turn can increase employee insecurity to apply Knowledge Management in work activities and daily decision making in Company environment. With the opportunity for employees to exchange useful information for

Knowledge Management implementation, so the dimension of Common Knowledge owned by employees can increase, marked by the information known by all employees.

References

Becerra-Fernandez, I., & Sabherwal, R. 2010. *Knowledge Management Systems and Processes*. New York: M.E. Sharpe, Inc.

Huang, Li-Su., & Lai, Cheng-Po. 2014. Critical Success Factors For Knowledge Management Implementation In Life Insurance Enterprise. *International Journal of Management and Marketing Research,* Vol. 7 pp.79-89.

Kucza, T. 2001. *Knowledge Management Process Model.* Finland: Julkaisija-Utgivare.

Liliana. 2010. Knowledge Management Dan Kegagalannya. *Konferensi Nasional Sistem dan Informatika (KNS&I10-046)*, pp. 278-284.

Rao, M. 2005. *Knowledge Managemnt Tools and Techniques*. Elsevier Butterworth-Heinemann: Elsevier, Inc.

Shahidi, S., Abdolvand, N., & Harandi, S.R.2015. Assessing The Organizational Readiness For Implementing Knowledge Management In Organizations, *Journal of Health Organization and Management, International Journal of Information Technology Convergence and Service (IJITCS).* Vol.5 pp 11-23.

Shirazi, S., Mortazavi, S., & Azad, N.P .2011. Factors Affecting Employees' Readiness for Knowledge Management. *European Journal of Economics, Finance and Administrative Sciences*, Vol. 33 pp. 168-176.

Tobing, P.L. 2007. *Knowledge Management Konsep, Arsitektur dan Impelentasi.* Yogyakarta: Graha Ilmu.

Widiastuti, S., & Budi, I. 2016. Analisis Pengukuran Tingkat Kesiapan Knowledge Management: Studi Kasus Pusat Pengolahan Data dan Informasi Badan Koordinasi Penanaman Modal. *Seminar Nasional Aplikasi Teknologi Informasi (SNATi) 2016.* ISSN: 1907 – 5022 pp F22-F29.