COMPARISON OF FACTORS CONTRIBUTE TO KNOWLEDGE SHARE BETWEEN EMPLOYEES IN NATIONAL AND MULTINATIONAL COMPANY IN JABABEKA AREA – INDONESIA

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Abstract

The central purpose of this research was to explore the factors contribute to knowledge share, and then compare it, between Indonesian national company (in this case in the sector of industry) and multinational company in Jababeka area Indonesia. A survey method was implemented, and involved 140 respondents. Data was collected through the distribution of questionnaires, and the reliability of this was determined 0.911. Multivariate analysis, in this case Factor Analysis was used, and resulted that -in general- well guided employee, discuss in reguler based, and have good connection to the internet are factors that contribute to knowledge share, but if we compare between national and multinational company, it showed that national company has a propensity to the people, whereas the multinational company has a propensity to ICT (information and communication technology). This dissimilarity may cause diminish the level of competitiveness of national company to multinational company.

Keywords: knowledge sharing, people based, technology based

Introduction

Knowledge has been recognized as a foremost focus area in many aspects within organization, include knowledge management. In the paper of DR. Jessica Keyes (2008), Nonaka explained that Knowledge was described as a justified belief that increases an entity's capacity for effective action. In the same paper, Davenport and Prusak defined knowledge management as the processes which support knowledge collection, sharing and dissemination. Knowledge management strives to achieve a better organizational value and through its input to induces decision making processes and commit to strengthen the quality of outpout.

In the dissertation of Adrian Mihai (2009), Malhotra expressed that knowledge management is created where the knowledge applies and created, sized that knowledge management is more about the pragmatic and thoughtful application of any concept or definition, as it is not in the definition but in real world execution where opportunities and challenges lie. Pohs said that in relation to knowledge management within organization, this process can be explained as an effort to advance the creation of knowledge, including how this should be delivered and used.

On the other hand, knowledge in context of organizations is widely proliferate. This knowledge can be identified in various structures, level and concentration of each business despite the consequences of the size. Knowledge is also identified as a core asset within each organization, in which this will take part in improving the organization's ability to act, solve the problem, create new ideas and develop. Despite of the definition and or the essence of knowledge, how to manage knowledge within organization is another critical important issue.

One of the component of the effort in managing knowledge is to encourage knowledge sharing among personnel in the organization. This endeavor is hard to ensure since this is generated and stored in the minds of the staff in an organization. Dave and Koskela, in the paper of Rad, Gh. Pezeshki, et.al (2011) said that knowledge sharing involves a set of behaviors that help the better exchange of acquired information among pesonnel with their organizations also being able to really reduce the time spent on problem solving, while increasing the quality of work among personnel. At the same paper, Collins and Clark stated that knowledge sharing can influence and shape skills, attitudes and activities of personnel in achieving organizational goals.

However, eventhough there are many theories in relation to the benefit of knowledge share, and also there are many theories concerning how to share the knowledge, but still there are many problems, obstacles and or barriers in implementing knowledge share within organization.

Obstacles to share the knowledge

There are several research results in relation to the obstacle or barrier to share the knowledge within organization. One of them is proposed by Ardichvili, which is discussed in the paper of J.H. Erik Andriessen (2006). Ardichvili said that there are 2 (two) types of reason for not sharing knowledge. Firstly, there is an insecurity about the value of the knowledge. People fear for criticism and not being sure that contributions are important, accurate and qualified. Particularly (but not only) newcomers may have some of these fears. This fear may partly be a matter of personality, but partly also a consequence of the overcritical reactions of colleagues. Secondly, there are external factors that act as barriers for the motivation.

Another scholar, Hendriks, in the same Andriessen paper above, suggests 4 (four) main barriers for knowledge sharing: lack of time, geographical distance, lacking abilities and cognitive distance. All those factors altogether imply that people may be hindered to share knowledge, because they do not have sufficient time, are not face to face with each other, are lack of necessary skills or do not understand each other.

Stimulating knowledge sharing in organizations

In order to face the potential problem that has been described at the previous part, several organizations motivate and stimulate their employees to share knowledge. Andriessen (2006) in his paper ilustrate the examples as follows:

ShareNet initiative is developed in Siemens ICN. This is the network for sales force in sharing knowledge and global collaboration. The contributions of the contributors, such as documents to ShareNet will be rewarded with ShareNet shares. The quality and reusability of the contributions are assessed by peer ratings. Rewards are given not only to the person, but also the reusers of ShareNet content. The ShareNet shares can be exchanged for a real Siemens products. Moreover, top ShareNet contributors are rewarded with an invitation to the ShareNet global knowledge sharing conference.

'Knowledge Masters Awards' is known in Hewlett-Packard Consulting, given for those who contribute significantly to the success of the company. Reward winners will be awarded company recognition and cash or a paid trip. Scott Paper provides financial incentives, whereas IBM provides bonus which is separated between the knowledge originator and knowledge user.

Chevron tries to develop knowledge management into the daily work process. Metrics around sharing and reuse of knowledge are part of the annual performance evaluation and are used in relation to promotion, career ladders, and job posting processes. Sclumberger argues that since the advantages of knowledge sharing are clear for all the members, they are motivated to share knowledge with each other.

Whereas McKinsey has no special rewards, because knowledge sharing is seen as a matter of lesson among colleagues. A so called Rapid Response Team emerged to connect anyone facing a problem with others who might have useful related knowledge.

Purpose of Research

Indonesia, as one of the developing countries, will pay a good attention in developing in many sectors. In the effort of the Indonesia's government to industrialize the country, agro-industries were used to start the industrialization process. The country, conversely, is open to other kinds of industry basing in Indonesia to utilize the potential work force coming from around 220 millions of population and the other available natural resources.

The development of industries happened in a high growth (about 6 % - 7.5 % annually), which has boosted the country's export volume and value especially in the last 20 years, and also the development of industrial estate.

This activity, which is potentially producing added value, will automatically be prioritized, and one of this sector is of course industry. As per being discussed at the previous parts, knowledge sharing is already part of day-to-day activity within organizations in many big prominent business organization, include in industry sector. The question that can be raised in this case is how indonesian's industry organization prepare themselves, equip themselves –in the field of knowledge sharing mechanism- and face global competition. So that, the purpose of this study is to identify factors that contribute to knowledge share in Indonesia national industry organization and its comparison to multinational industry organization in Indonesia.

Problem Statement

In sequence with the purpose of this study, problem statements that will be used in this particular research are:

- What are the specific factors to be considered in contributing a knowledge share in Industry organization in Indonesia?

- What are the specific factors to be considered in contributing a knowledge share in Indonesia National Industry Organization?

- What are the specific factors to be considered in contributing a knowledge share in Multi-National Industry Organization in Indonesia?

Theoretical Background and Research Framework

At the paper of Gh. Pezeshki Rad, et.al.(2011), it can be known that many scholars have argued that knowledge sharing plays a crucial role in knowledge management. This has been said by Bock and Kim (2002), Markus (2001), Wasko and Faraj (2005) and Yu et.al. (2009). In this particular instance, knowledge share was defined as the process by which an individual convey his or her expertise, insight or understanding to another individual, so that the recipient may potentially acquire and use the knowledge in supporting their better performance. Davenport and Prusak (1998), still at Rad's paper, considered knowledge sharing as a process that includes the attempt to transfer knowledge by a sender, the completion of the transfer, and the successful absorption of this knowledge by a recipient.

To be specific for this research, the terminology of knowledge share is taken from Gh. Pezeshki Rad, et.al. opinion which accomodate knowledge sharing is the extent to which an individual shares the knowledge he or she has acquired or created with the people who are working in the same organization where the individual works.

As Yu et.al. stated, and this also can be found in Rad's paper, knowledge sharing behavior can not be forced but can only be encouraged and facilitated. Nevertheless, there are various factors that should be identified to foster sharing knowledge.

This particular research will adopt Rad's perspective in related to the variables to be taken into consideration, based on Yang and Chen (2007) categorization, such as organizational culture, organizational structure, organizational technology, trust and social capital. The variables mentioned above will be operationalized for this particular research, and be converted into variables as follows.

Table 1 Research Variables

Variable	Description
Knowledge Sharing (KS)	Create knowledge, knowledge transfer and acquired information among colleagues in organization
Organizational Culture (OC)	Beliefs and attitude of personnel toward knowledge sharing in organization
Organizational Structure (OS)	Ability and flexibility of decision making in organization
ICT Infrastructure (ICT)	Access to and application of ICT in organization
Social Trust (SC)	Trust in colleagues'expertise and cooperation
Relational Social Capital (RSC)	Interaction among personnel
Individual Attitude toward Knowledge Sharing (IA)	The degree of one's favorable or positive feeling about knowledge

Source: Rad, Gh. Pezeshki et.al.

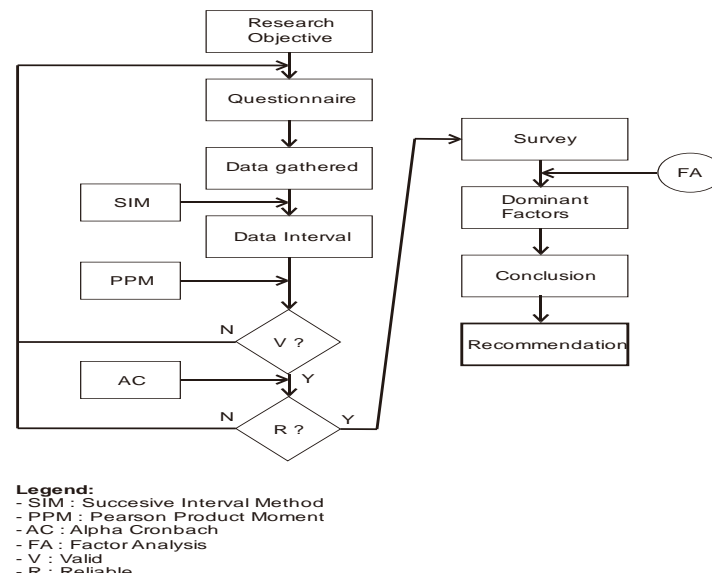And the the research framework for this particular study can be seen at the figure 1 below.

Figure 1 Research Framework

Realization of the Research

The population of this research is employees in Jababeka Industrial Estate, Cikarang, Bekasi, Indonesia, who still study in one of the private university in Kota Jababeka majoring Industrial Engineering. Assumption that being used in considering this population is these employees are still familiar with theories, concepts and knowledge as they earned from the university, and at the same time they have to do their work in their company, so that the possibility of sharing the knowledge getting bigger and also might be part of daily activity. There are 182 Industrial Engineering students enrolled in batch 2010 and 2011.

A pilot test to check the proposed questionnaire was conducted with the participation of 20 students. The questions adopted from the questionnaire from Rad et.al., and modified as its purpose, and since all the respondents are Indonesians, in order to maintain the accuracy of the content, questionnaire was constructed in Bahasa Indonesia.

After the calculation using Pearson Product Moment, 28 questions were considered valid, and the alpha cronbach value is 0.911.

The questionnaire applies 5 scale likert, from strongly disagree to strongly agree. The minimum number of sample was calculated by Slovin formula, and we have 116 respondents to be involved. In fact, from 162 questionnairres were distributed, 140 questionnairres returned and eligible to be involved in the further process.

This particular research applied Factor Analysis as part of Multivariate Statistic, with N=140. Since we used Multivariate Analysis, and considering some scholar's opinion that Likert scale still in ordinal scale, we used Succesive Interval Method to convert data from ordinal scale into interval.

Hypotheses for significance are:

- H_0 = sample is not adequate to be further processed
- H_1 = sample is adequate to be further processed,

And, the criterias:

- Sig. > 0.05 then accept H_0
- Sig. < 0.05 then reject H_0

The table of KMO MSA and Bartlett's test shows that sig. value equal to 0.000 and KMO MSA equal to 0.52. From this, we may decide that we can reject H_0, and since the KMO MSA value bigger than 0.5, we may conclude that the variables still can be predicted and can be further processed.

From the Rotated Component Matrix Table, with the Principal Component Analysis extraction method, and Varimax with Kaiser Normalization rotation method, and use 1 eigen value, we will have 10 factors extracted, and if we use 2 eigen value we will just have 3 factors extracted, which are: variable 12, 'atasan saya selalu memandu dan membimbing saya dalam melaksanakan tugas', as the first important factor based on the respondent, then come variable 3, 'saya berbagi pengetahuan dengan rekan kerja saya secara reguler', and then variable 15, organisasi ini memiliki kapasitas yang cukup untuk berkoneksi ke jaringan internet'.

From those findings, we may have a general picture that we have '**well guided employee, discuss in reguler based, and have good connection to the internet**'.

In line with the purpose of this study, for exploring the difference between National (NI) and Multinational Industry (MNI) Organization in Indonesia, we used 1.5 eigen value for the extraction process for NI, and 2 eigen value for MNI. Fortuitously, we have exactly the same number of respondent, 70 for NI employee, and another 70 for MNI employee.

For NI, we have KMO MSA of 0.517 and sig. value of 0.000. There are 2 factors, factor 1, consist of variable 5, 'manajemen perusahaan mendorong karyawan untuk menghasilkan gagasan baru', variable 22, 'saya merasa sudah menjadi bagian dari organisasi ini', and variable 23, 'saya merasa memiliki rekan kerja yang tangguh dan solid', whereas factor 2, consist of variable 1, 'Bila ada rekan kerja saya yang memiliki ketrampilan khusus, saya akan meminta rekan tsb untuk mengajari saya', variable 7, 'gagasan baru sangat dihargai di organisasi ini', variable 8, 'ada penghargaan khusus bagi karyawan yang menghasilkan gagasan atau insiatif bagus' and variable 11, 'saya selalu dapat bertanya kepada atasan saya saat saya menghadapai kesulitan dalam melaksanakan tugas'.

For MNI, we have KMO MSA of 0.645, and sig. value of 0.000. There are 3 factors, factor 1, consist of variable 8, 'ada penghargaan khusus bagi karyawan yang menghasilkan gagasan atau insiatif bagus', variable 13, 'karyawan diakomodasi untuk dapat menggunakan e–mail dan internet', variable 14, 'saya selalu mendapatkan akses untuk mendapatkan informasi, sesuai kapasitas saya', and variable 16, 'organisasi ini memiliki teknologi informasi dan infrastrukturnya yang mutakhir'. Factor 2, consist of variable 2, 'bila saya ingin mempelajari hal baru, saya akan bertanya pada rekan kerja saya', variable 4, 'saya belajar banyak melalui komunikasi dengan rekan kerja saya', and variable 15, 'organisasi ini memiliki kapasitas yang cukup untuk berkoneksi dengan jaringan internet'. Factor 3, consist of variable 11, 'saya selalu dapat bertanya kepada atasan saya saat saya menghadapai kesulitan dalam melaksanakan tugas'.

Conclusion and recommendation

As per being discussed at previuos part, in general, this research found that 'well guided employee, discuss in reguler based, and have good connection to the internet', are the factors

that contribute to the practice of knowledge share. As has been stated earlier, fortuitously there were 70 respondents from the National Industry (NI) and another 70 respondents from Multinational Industry (MNI). Both NI and MNI vary in terms of number of employee, establishment period, value of capital, etc. Therefore, we may have an illustration that the more well guided the employee, the more the chance of the effort of knowledge share. The more frequent the discussion, the more the chance of the effort of knowledge share, and the more access to internet the more the chance of the effort of knowledge share. Furthermore, if we have to compare between NI and MNI, it seems that MNI tends to have more establish in systems, so that they will have more chance to have well guided employee,and at the same time the employee will be having a support of information technology, include good internet connections. This is also considering MNI have had a capable support of many resources when they decide to compete internationally, by way of having business outside their own country.

Likewise, if we take a look a bit deeper in the result on NI and MNI, we can see, again in general, that NI still has a propensity to the person (people centered) Though this fact can be considered as a good thing, but people has limited capacity to remember and store information, so that if the knowledge still in the mind of the employee, the knowledge share will never or at least rarely happen. Whereas MNI has a propensity to the latest technology and infrastructure (technology based), so that, storing and exchange information and knowledge no longer become problem. Though this findings need to be explored further, this indicates that NI has to do a lot of things, to go after the advancement of the MNI, especially technology based ornament. This gap in technology advancement may cause a wider gap between NI and MNI, and of course MNI will take the lead in this particular case. This also align with the paper of Paul Hendriks (1999) which stated that ICT (Information and Communication Technology) can make a difference for knowledge sharing.

References

Abrams, Lisa C., (2003) *Nurturing interpersonal trust in knowledge-sharing networks,* Academy of Management Executive, vol. 17, No. 4

Andriessen, Erik, J.H., (2006), *To share or not to share, that is the question. Conditions for the willingness to share knowledge*, Delft, Delft Innovation System Papers

Chiu, Chao-Min., et.al., (2006), *Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories*, Science Direct

Davis, Joseph G., (1999), Knowledge Sharing and Management in Large, Multi-national Corporations, Carnegie Bosch Institute

Gagne, Marylene, (2009), *A Model of Knowledge-sharing Motivation, Human Resources Management*, vol. 48, No. 4, p. 571-589

Hendrix, Linda., et.al., *Eagerness and Willingness to Share: The Relevance of Different Attitudes towards Knowledge Sharing*, Amsterdam School of Communication Research

Keyes, Jessica., (2008), *Identifying the Barriers to Knowledge Sharing in Knowledge Intensive Organizations*, New art technologies, inc

Levin, Daniel Z., (2002), *Trust and knowledge sharing: A critical combination*, IBM Institute for Knowledge-Based Organizations

Mihai, Adrian, (2009), *Improving Knowledge Sharing in an Open Informal Network: Knowledge Management in Open Coffee*, Dissertation, Dublin Institute of Technology

Noorderhaven, Niels, (2008), *Knowledge Sharing and Social Interaction within MNCS*, Journal of Internaional Business Studies

Rad, Gh. Pezeshki, et.al., (2011), *Factors Influencing Knowledge Sharing among Personnel of Agricultural Extension and Education Organization in Iranian Ministry of Jihad-e agriculture*, J.Agr.Sci.Tech, vol. 13:491-501