

KNOWLEDGE MANAGEMENT READINESS ASSESSMENT AND PLANNING IN GAME INDUSTRY

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Abstract - Knowledge becomes a very important aspect for the company to create values and generate competitive advantage for the company in facing global competition. As a new start-up games company, the organization need knowledge management to be able to grow more rapidly to meet the demands. Moreover, currently the company recruits many new employees so it takes a faster learning process for them to adapt toward customer demand deadlines. On the other hand, the main source of the company in carrying out its business is come from the individual knowledge so that is why the company needs good knowledge management to transfer individual knowledge into company knowledge. Before implementing knowledge management, the company needs to measure the level of readiness and planning of the company to obtain the right strategy. Through questionnaire and interview, assessing knowledge management readiness were conducted based on Asian Productivity Organization Framework (APO) related to KM Leadership, Process, People, Technology, Knowledge Process, Learning and Innovation, and KM Outcomes. This research using descriptive study to describe the characteristics of the variables of interest in a situation and consists of two types of data namely primary and secondary data.

Index Terms - Asian Productivity Organization Framework, Knowledge, Knowledge Management, Knowledge Management Readiness and Planning.

I. INTRODUCTION

PT.XYZ is a game developer based in Bandung, Indonesia. As a new start-up company, the organization need knowledge management to be able to grow more rapidly to meet the demands. Moreover, with many new employees who joining PT. XYZ, they are required to adapt and learn faster. Because of that, it takes synergy of all elements of the company to utilize and share the knowledge through the implementation of knowledge management at the company. With knowledge management, the company are expected to make decisions better and faster, accelerated innovation, increasing efficiency and productivity and also build competitive advantage.

PT. XYZ was founded in April 2009 by 18 passionate founders. Although the age of the company is still relatively young, they are required to be able to produce games on demands and the deadlines. Because the company only has a knowledge based in the form of written documents that are not up to date, so it takes organized knowledge based system in the future to increase company's productivity.

As a game developer, PT. XYZ not only provides entertainment games, but also serious games which is used to train user skills in doing their job and educating them. To make this such sophisticated games, it must be required high level of skills, knowledge and also capability to produce games in a timely manner and fit with costumer expectation. The fact that there is increasing demand in gaming industry, makes PT. XYZ to adding more employees to keep up with costumer needs. On the other hand, the increasing employees resulting in adding more managers to supervise them. Moreover, the main source of the company in carrying out its business is come from the individual knowledge so that it needs good knowledge

management to transfer individual knowledge into company knowledge.

According to the interview with Chief People Officer, "Now we have 100 employees, while in 2018 we want to recruit more employees with a total number 300 employees in here" (Personal interview with Mr. Wiradeva Arif, Chief People Officer). With that many employees, it also takes more managers with good quality for leading a program. They are required not only know about the technical aspect, but also the managerial aspect too. Related to this point, Mr. Wiradeva said, "There is a problem that occurs at our managerial level, for instance senior programmers do not really understand in managerial things while doing their job, such as financial aspect, time management, leadership, and communication". Thus, it's very important to manage knowledge and skills properly so it can be maintained continuously and will generate benefits for the company itself. So far, PT. XYZ only has knowledge management in the form of documents. This makes difficult for the crew to be able to adapt and make decisions quickly and accurately. So that, implementing Knowledge Management in the company is necessary.

The objectives of this research are as following:

1. To identify level of Knowledge Management readiness of PT. XYZ
2. To propose planning of Knowledge Management of PT. XYZ

The objectives of this research is to determine the level of Knowledge Management readiness in PT. XYZ. By knowing the knowledge management readiness, so planning for Knowledge Management can be proposed. After proposed the planning, then company

knowledge based can be implemented to achieve a faster growth.

II. LITERATURE

As the knowledge era emerge, the knowledge assets become invaluable to the organizations. The knowledge that company own and used effectively provides competitive advantage to the organization's survival and success in competitive global markets. Knowledge is the belief of a group of people who are able to increase their capacity or capability to take action (work) more effectively [1]. Knowledge has become the key economic resource and the dominant and perhaps even the only source of competitive advantage [2]. It reflects that knowledge has important role as key factor for success on the 21st century as the organization concern fulfill their capital with knowledge workers.

Jones and Leonard (2009) describes knowledge management as the process of acquiring knowledge from the organization or another source and turning it into explicit information that the employees can use to transform into their own knowledge allowing them to create and increase organizational knowledge [3]. According to O'Dell & Grayson, knowledge management is a conscious strategy of getting the right knowledge to the right people at the right time and helping people share and put information into action in ways that strive to improve organizational performance [4].

Basically, knowledge management activities are lifelong activities. In adopting KM, the authors use Organization Development (OD) as the research point of view. Organization development is any process or activity, based on the behavioral sciences, that, either initially or over the long term, has the potential to develop in an organizational setting enhanced knowledge, expertise, productivity, satisfaction, income, interpersonal relationships, and other desired outcomes, whether for personal or group/team gain, or for the benefit of an organization, community, nation, region, or, ultimately, the whole of humanity [5].

Holt (2000) use the word "readiness" as a necessary pre-condition for a person or an organization to succeed in facing organizational change [6]. Readiness assessment is an important part in early planning phase of KM initiatives to know whether the organization is ready to undergo KM initiatives or there is a gap that needs to be filled in first. By doing readiness assessment, the risk of KM failure also can be minimized. That is why the assessment part is very essential to do for successful KM implementations in the future. This study use KM framework from Asian Productivity Organization (APO) that describe 7 elements that includes KM Leadership, Process, People, Technology, Knowledge Processes, Learning and Innovation, and KM Outcomes. After assessing KM readiness in an organization, then the total score of APO assessment tool is then compared against the KM

Maturity levels. There are 5 levels of KM readiness; first level is reaction (not aware of what KM is and its importance), initiation (beginning to recognize the need of KM), expansion (KM practice in some areas), refinement (continually evaluated KM), and the last level is maturity (KM is fully mainstreamed within the organization).

III. METHOD

In terms of collecting data, this research consists of two types of data: primary data and secondary data. Primary data was obtained through interviews and questionnaires. While secondary data is collected from documents from various sources such as the internet and documents from the company itself. This study used mixed methods research that consists of both quantitative and qualitative data. Questionnaires were used to obtain quantitative data using the APO Framework by assessing 7 KM readiness criteria through 30 statements. The results of the questionnaire will be analyzed using gap analysis to facilitate in generating improvements and strategies through analysis of the current condition and ideal conditions. The interview is also conducted to gain a deeper understanding as qualitative data.

IV. RESULTS

The result of the questionnaire showed that the highest score of Knowledge Management Readiness level in current condition is Leadership criteria while the lowest score is Knowledge Process. According to interview with Mr. Wiradeva, leaders are seen as role models in the company. They often share their knowledge and experience in both formal and informal meetings or conversation. They also frequently giving motivation to employees through social networking companies where the website is utilized as the most common used communication tool. Differ from Knowledge Process, this variable as the less attention in the company. They still do not have a systematic process of identifying, creating, storing, sharing, and applying knowledge.

Table I. of Knowledge Management Readiness Level

Criteria	Perception Average Score	Expectation Average Score	Gap
Leadership	3.99	4.69	0.70
Process	3.78	4.52	0.74
People	3.88	4.59	0.71
Technology	3.92	4.591	0.67
Knowledge Process	3.49	4.46	0.97
Learning & Innovation	3.84	4.52	0.68
KM Outcome	3.84	4.52	0.68
Average	3.82	4.18	0.36

Table I shows that the perception score is 3.82 which means that the current level of organization's readiness toward knowledge management is at the Refinement level. Refinement level means that KM implementation is continually evaluated and monitored. This result is good enough, but the expectation score was higher that is 4.18. This implies that employees want better conditions in the application of knowledge management in their company. Although the score shows good results, but in reality there are still many aspects that need to be improved. Table I also shows a gap between Perception and Expectation scores.

To illustrate the gap more clearly, the following radar diagrams presented for each knowledge management variable include both dimensions of perception (current condition) and expectation (ideal condition).



Fig. 1 Gap Diagram Readiness Assessment in PT.XYZ

Knowledge Process is the variable that has the lowest score. This is in line with the business issues that occur in the company, which is, they need more time and more energy to train new employees. This is due to the absence of a structured system of knowledge management. The company has never been focused on knowledge management. But this year, they introduce knowledge management as one of their strategic planning that hopefully it could address the business issues that they face before. Not just Knowledge Process, other variables also need to be improve. For example, related to business issues owned by middle managers where there is a lack of understanding in managerial aspects such as financial aspects, communication, and leadership. One way to increasing leader's insight about managerial is by holding seminars. This kind of activity can be useful for middle managers to understand what managerial aspects they should look at. For example, by doing a case study or role play, they can get a more real example to understand what actions they should take regarding managerial aspects.

The third lowest category is Process. It if refers to how knowledge is used in managing, implementing, and improving the organization's processes. The lowest score in this category is the absence of a structured system to manage crisis situations or unexpected events. This will certainly disrupt production activities. So it is good company to start to predict what

unexpected events can happen and what the solution. This is done as a preventive effort to keep production going. The lowest statement in the category of People is the absence of a process of mentoring, coaching, and tutoring formally by the company. Company should begin to consider for this because the forum can be used as a place to build a good learning habitat for the company. For Technology variable, the lowest statement for this variable is that the company has not provided IT support for searching and distributing of information or knowledge between work units. This is justified by Mr. Wiradeva. Knowledge Management currently being one of the strategic planning for this year, they just plan to design an online-based platform that which will be done with the interns.

For the Knowledge Process variable, the lowest score is the lack of activity in documenting and disseminating knowledge from completed tasks or projects. This lack of activity can indirectly hurt the company. This will result in the company's knowledge disappearing and can not be saved. This kind of loss is not felt directly. But keep in mind, that knowledge is an intangible capital of a company that can be used as a competitive advantage. In the variable of learning and innovation, the lowest score statement is the lack of companies in providing various kinds of training programs. Training programs are important to increase the knowledge and skills of employees, so it is important to be held as often as possible. Employees with a lot of knowledge and expertise will ultimately benefit the company as an asset. Last but not least is the KM Outcomes variable. In this indicator, the lowest statement is that the application of knowledge has less impact on improving the ability of individuals and teams to meet customer demands. Lack of awareness of employees of the importance of applying knowledge to everyday business activities is a major factor of this issue. Thus, it is important to increase the awareness of employees through the exposure of superiors about the real benefits of the utilization of knowledge on organizational achievement.

CONCLUSION AND RECOMMENDATION

In the era of globalization, a company should keep its intellectual capital in order to create business value to face today's business challenges. Knowledge is a company asset that can not be replicated by another company. This is where the role of knowledge management in maintaining, sorting, and increase the company's knowledge to be utilized as much as possible to achieve common goals. To adopt knowledge management, there are three aspects that must be considered, namely People, Process, and Technology. In this study, the People aspects that must be considered are fostering employee awareness as well as creating a good learning habitat such as perform seminars or forming Community of Practice (CoP). While for the aspect of the Process can be done by creating new policies such as the provision of

incentives and sanctions related knowledge management for employees. Providing infrastructure both physical and non physical is a thing that can be considered for aspects of Technology such as make some kind of platform that easy to access.

After find out and analyzing each variable, there are several things that can be done for the improvement. First, creating learning habitat for employees to be familiar with knowledge management activities, such as mentoring or coaching, forming a Community of Practice, or simply weekly meetings for sharing ideas and experiences. Secondly, increasing employees' awareness about the importance of knowledge management on productivity, effectiveness, efficiency, and organizational outcomes through a seminar or symposium. Third, provide training to leaders on managerial aspects and evaluated each month. Then, began to design and implement knowledge management systematically and well structured from capturing knowledge, knowledge sharing to applying knowledge which starts from one division. Provide incentives for active and high-level employees in the

knowledge management process and sanction those employees who are unwilling to cooperate in these activities with the aim to motivate and encourage employees. Provide infrastructure for sharing and storing knowledge, such as a website or portal that is easily accessible and user friendly.

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