The Most Appropriate Knowledge Management Style for Thailand's Organizations?

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Abstract

Recently, many internationally famous organizations worldwide have been applying KM concepts to their organizations. However, some of these organizations have failed in their implementation of KM. As a result, the success of the KM process must depend on correct KM model selection. Therefore, developers have to consider carefully when choosing the appropriate models in order for KM to be effectively regulated. This paper compares and analyzes the prominent strengths and weaknesses of six popular KM concepts that have been applied to some of Thailand's organizations. Hence, developers must be diligent when considering the variety of models because the selected model will have a direct impact on the organization's development.

Keywords:

Knowledge Management (KM), Knowledge Sharing, Knowledge Culture, Knowledge Warehouse, Knowledge Base Society, Community of Practice (CoP), SECI Model, Ba Concept, Cyprinidae Flock Model, Learning Organization (LO)

Basically, most organization's developers believe that the use of Knowledge Management (KM) is one of the most useful development tools. Therefore, many excellent KM models have been created by several KM specialists but theses KM models are not appropriate for some organizations because of the environmental differentiation. As a result, establishment

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developers have to select the most useful KM models in order to successfully improve their organizations. However, most Thai organizations are not able to improve their institutions using KM methods because Knowledge Management concepts and models are very complicated to observe in terms of practical conductibility. This research will discuss the advantages and disadvantages of well-known Knowledge Management models which have been applied to several Thai organizations. It will pay particular attention to describing the unsuccessful use of Knowledge Management practices in Thailand

The first aspect to be discussed is a very illustrious Tuna KM model. This model originated from three famous KM principles which is the concept of building the learning organization. Senge (1993) introduced the first principle of learning organization establishment by relating with five regulations such as, system thinking, personal mastery, mental models, shared vision, and team learning. The second principle from David A. Gavin are systematic problem solving, experimentation with new approaches, learning from the experiences and best practices of others, and transferring knowledge quickly and efficiently.(Gavin. 1993 : 1 - 16). The third principle from Michael J. Marquardt introduced building the learning organization by consisting with organization transformation, knowledge management, technology application, people empowerment, and learning dynamics (Marquardt. 2002). In 2004 Prapon Phasukyud developed the Tuna Model for KM development using the Ishikawa diagram format. Prapon Phasukyud got the idea to design the Tuna Model from "The Knowledge Market Fair for increasing the capability development in HIV protection" at Chiang Mai on the eighth and ninth of July 2004 (Office of Strategic. Thaksin University. 2009 : 1 - 4). Some people know this model as the Thai-UNAIDS Model. This model was created using a metaphor of a tuna anatomy, which has three sections, the head, the torso and the tail. Knowledge Vision (KV) is the head which includes the eyes so Prapon Phasukyud designated this part as "Chief Knowledge Officer: CKO" (Prapon Phasukyud. 2006 :   1 - 12). These eyes function to consider the aims for using KM for organizational development. All organizations must answer an important question before clearly applying KM methods to their organization; "Why do we have to apply KM?" The second part of this model is Knowledge

Sharing (KS). This part is represented by the tuna torso and it seems to be the heart of this model because the role of this section is assisting, sharing and learning together. In more detail, this part Prapon Phasukyud created as the "Knowledge Practitioner". The last section is Knowledge Assets (KA). This part is like a fish caudal so this area is used for knowledge warehouse creation, knowledge network connection, and information technology applications. Prapon Phasukyud called it the "Knowledge Facilitator". The role of the fish tail is flipping for mobilizing the multitudes of power and assigning the practice of the rules. Hence, all three sections of this model must work together and it can not work without all of the parts. In addition, Prapon Phasukyud also specified two other external compositions for the Tuna Model's success which are the Chief Executive Officer (CEO) and the Network Manager (NM). Therefore, the Knowledge Management Institute (KMI) of Thailand has been developing the Cyprinidae Flock Model using the original Tuna Model (The Knowledge Management Institution. 2010b : 1 - 7). The hypothesis of this new model is the differentiation of small units within large organization so knowledge patterns from each unit must adjust to the appropriateness of their role. It follows that all Cyprinidae Flocks must focus on the same target. Nevertheless, the use of the Cyprinidae Flock Model has not been successful because the appearances of all Cyprinida are very similar and all Cyprinadae do not indicate the differentiation from KMI aims. Besides, this Tuna Model is very defective in many important factors, which includes the composition of knowledge Management Procedures. Consequently, it can be said that the Tuna Model is a superb KM Model because it is very easy to understand the concept although it is difficult to put into practice.

The second aspect to be analyzed is a very popular KM Model from Ikujiro Nonaka and Hirotaka Takeuchi (Nonaka and Takeuchi.1995a ; Nonaka and Takeuchi.1995b), which is the Knowledge Spiral Model or SECI Model. Ikujiro Nonaka and Hirotaka Takeuchi introduced this KM Model in four steps, which are socialization, internalization, combination, and externalization. These processes relate to tacit knowledge and explicit knowledge transformation, such as tacit to tacit, explicit to explicit, tacit to explicit and explicit to tacit. Socialization is the process of Tacit Knowledge creation which is the experience sharing step. Externalization is the second step for

knowledge creating and sharing existing knowledge and exposing it in written or dialogue form respectively. This step is knowledge adaptation from tacit knowledge to explicit knowledge. The third step of this theory is Combination which means knowledge based modification for new explicit knowledge creation. This new explicit knowledge is created from the past learning of explicit knowledge. The final step of this mode is Internalization which means the transformation from explicit knowledge back to tacit knowledge. This step is the use of learned knowledge in real practical and daily life. The basis of the SECI Model concept is the interest in mixing and matching between tacit knowledge and explicit knowledge where it relates to the four steps of knowledge conversion patterns. The principal of SECI knowledge creation within units and organizations is the synthesis and fusion of tacit knowledge and explicit knowledge in order to advance knowledge, a more profound knowledge, and incorporation by following the four main steps of SECI. Despite the fact that the SECI Model is very complicated and difficult to follow in real life because of KM execution, knowledge transformation problems and new knowledge creation problems, all members within the organization must continuously enlarge their own knowledge. Therefore, in 1998 Ikujiro Nonaka and Noboru Konno develpoed the new "Ba concept" which is the model of knowledge creation. The Ba concept is also "Place" and means places or areas of knowledge sharing and creating. The first person who presented the Ba concept was a Japanese sage by the name of Kitaro Nishida and it was further developed by Shimizu. After that, Ikujiro NonaKa and Noboru Konno adjusted the Ba idea to the new Ba concept. The Ba concept is divided into categories, which are Originating Ba, Interacting Ba, Cyber Ba, and Exercising Ba. "Originating Ba" is the first principle of knowledge creation for indicating the essentiality of knowledge sharing in group discussion because group meetings are very useful for emotion sharing, feeling apportionment, idea allotment, and experience distribution. Group confidence and group sympathy occurs within groups so this can improve knowledge sharing and knowledge creation in individuals. Nonaka and Konno (1998 : 40 – 54) maintained that vision development and culture learning enables business management freestyles which includes encouragement for improving customer relationships. "Interacting Ba" is the second pattern of the new Ba concept that provides for refining for the well- informed in order to

transmit explicit knowledge to tacit knowledge, while all well- informed must realize their own ideas before the discussion so this step is an important and essential part of the process. The third type of the new Ba concept is "Cyber Ba". Cyber Ba is the communication of virtual areas which replaces real times and areas and this step shows the blending of tacit knowledge and data with the original base knowledge so this enables allocation of tacit knowledge systems by using information technology tools. The fourth category of the new Ba concept is "Exercising Ba" which is the use of knowledge in the practical steps and this step can help the knowledge transition from tacit knowledge to explicit knowledge. This part emphasizes learning and thinking by practicing within real working time. Knowledge sharing places is comparable to the real physical areas, virtual areas, and notion areas. Nonaka and Konno (1998 : 40 - 54) also supported that the Ba concept helps to encourage the analogy and disparity of idea creation for describing the SECI Model because the SECI Model is an abstract. As a result of this; it is very difficult to understand. The Ba concept is the area of basic knowledge creation for the SECI Model. In addition, the Ba concept is the idea for improving office environment, developing personnel relationships within organizations and improving personnel opinion, experience, and ideas. The Ba concept allots various stratums and every stratum links together so it becomes bigger Ba which is called "Basho". Ba concept is the main basis of resource combination so it may be said that Ba is created from Knowledge Based Society. Besides, the new Ba concept is very similar to the "Community of Practice concept" (CoP) of KM development tools. However, the use of the SECI Model and Ba concept for getting the best performance results are very ambiguous from new KM developers and these two theories are also very complicated to perform in real situations because of limitations of personal abilities, organization behavior differentiation, knowledge culture, wide scope of work, and lack of supporters. It can be concluded that the SECI Model and Ba concept must be used together in order to be effectively developed but these two methods always present complicated problems for most users in terms of knowledge transformation processes, personnel omniscience, places of knowledge sharing, knowledge transition culture, personnel acknowledgement, and leadership existence.

The third aspect to be evaluated is the popular KM Model from Xerox Corporation known as the Xerox Corporation Model (Powers. 1999 : 1 - 4). The Xerox Corporation is one of the largest producers of printers and photocopiers in the world. This company is an American brand whose company headquarters are located in the state of Connecticut in the USA. The Xerox Corporation created the Xerox Corporation KM Model in 1995 in order to increase the world market ratio from eastern countries (Powers. 1999 : 1- 4). This model has been used by this organization for internal organization for KM development and has had excellent results. The Knowledge Management Institute (KMI) in Thailand readjusted this model by describing all compositions of the model in six items. The first composition of the Xerox Corporation Model is "Transition and Behavior Management". Basically, the accomplishment of KM development requires a start from knowledge sharing or exchanging within organizations (McEntrye and Associate Pyt Limited. 2002 : 1 – 25). This step should be taken slowly by emphasizing personnel behavior change in the case of continuous knowledge sharing. This part could start from the top management level and proceed to middle management level and low management level. Organizations would also establish KM planning teams for assigning organization success factors and improving organization environment. Although difficulties which follow from this are lack of budget, lack of vision from leaders, and egocentric environment. The second element of this model is "Communication". Normally, communication is essential for comprehension for internal personnel so all members must be aware with all aspects of KM development and they should agree on all issues correspondingly. This step has to consider three core factors, such as substance, target groups, and ways of communication. The third step of this model is "Processes and Tools". This step seems to be the key of KM development which encourages stimulation of knowledge sharing behavior. KM processes and tools relates to Information Technology or no Information Technology. Tacit knowledge may not be necessary to use Information Technology because the best use of tacit knowledge communication is transformation by erudite learners. The three most famous tools for tacit knowledge transformation are Community of Practice (CoP), Knowledge Forum, and Job Rotation. Nevertheless, Information Technology is very suitable to explicit knowledge in terms of

data searching, data collecting, data storing and data accessing due to Information Technology development. The fourth concept of this model is "Training and Learning". This concept is the personnel preparation process in all levels of management by arranging the principals of KM development training courses for promoting reliability and awareness. These courses must have several styles in order to be applied to environmental change. The fifth invention of this model is "Measurement". Measurement is the success indicator of all KM activities implemented by organizations. The measurement results will be reviewed in order to correct and amend any flaws but measurement does not mean control so the measurement results are used to stimulate the initiation of KM development within organizations. The final element of the Xerox Corporation Model is "Recognitions and Rewards". This technique provides for using persuasion so an organization could use laudation at the beginning of KM development. After that, remuneration is necessary for excellent KM cooperation among KM personnel. Recognition must be given to the persons who are the best at knowledge creation or knowledge sharing in terms of the prototypes. Hence, all personnel must conceive of the benefits of personal KM development. This model is a perfect KM model for Western regions because this model was created on the basis of opinion of Western people so new KM users must be careful when applying this model to different regions because of the differentiation of the KM hypothesis idea. Robert Osterhoff, a retired Vice President & Director Corporate Quality and Knowledge Sharing of Xerox Corporation also suggested that the company's development from using KM methods required a very long period of time to achieve success (Osterhoff. 2010). Successful development depends on the circuit of knowledge learning that is imperative in arranging systems and processes correctly. Consequently, it may be remarked that the Xerox Cooperation KM model enabled the conveyance of an excellent sample model but this model originated from a huge organization in the USA. Therefore, all users must apply this model to their organizations carefully because of the differentiation of knowledge culture, knowledge infrastructure and knowledge fundamentals.

The fourth aspect to be deliberated is a perfect KM Model from Michael John Earl which is the Earl KM Model (Earl. 2001 : 215 - 233). Michael John Earl is the Dean of Templeton

College and the Professor of information Management at University of Oxford, United Kingdom. Michael John Earl invented the Earl KM Model by analyzing and studying cases, interviews, seminars, and journal articles which relate to knowledge management. Michael John Earl classified the main idea of knowledge management into three bureaus, such as Technocratic Bureau, Economic Bureau, and Behavior Bureau. Firstly, "Technocratic Bureau" is the section that is expected to use the information and managing technologies for improving work performance regularly. The Technocratic Bureau idea is allotted three smaller institutes, such as system institute, cartographic institute, and engineering institute. System institute emphasizes the combining of specific knowledge for creating the "Knowledge Base" in order to facilitate easier accessing. The critical success factor does not come from the knowledge transformation of normal educational ways only, but it is also gotten from personal practical experience so persuasion and rewards are very necessary for knowledge creation and knowledge competition. Cartographic Institute relates to the assemblage and arrangement of an organization's information by recording. The organizations also need to reveal the dexterous fields of organizational experts for creating the directories for accessing. These directories are useful for advising, consulting, and exchanging knowledge. Engineering Institute expects an increase of knowledge using procedures so the successfulness of the process depends on the skillfulness of the organization's personnel and executives must allocate the right man for the right job. The creation of an organization's management procedures also takes into account a higher knowledge level than the creation of jobs performance processes. Secondly, "Economic Bureau" only emphasizes the concrete objectives of an organization in terms of knowledge sharing and the added value of intellectual property. Finally, "Behavior Bureau" is divided into three small parts - organization part, spatial part, and strategy part. The organization department stresses the description of an organization's structure and knowledge sharing network which is called the knowledge society so the essence of this part is the designing of knowledge exchange and sharing in terms of internal and external participation. The spatial department is knowledge sharing in places or social departments so this part relates to the encouragement of social capital use and this part also focuses on the stimulation of knowledge

sharing. The main function of the strategy department is the creation of organizational strategies for gaining an advantage over competitors so organizations must use their knowledge for production of high quality products and services. Hence, Knowledge Management using Michael John Earl's idea of excellence may apply to other KM models so the functions of all institutes are extremely similar to the previous KM models in terms of details, patterns, and subject matter but this model is split up into many KM modes for appointing roles of each organization's units. Therefore, it may be summarized that the function of this model in the main institutional context resembles the idea of early KM experts but it distinguishes many parts of functions in order to be easier to apply. It may also be said that this model is clearer than previous models because of the combination of the conception and performance roles.

The fifth aspect to be debated is a very modern KM model from Maryam Alavi and Dorothy E. Leidner which is the Alavi and Leidner Model (Alavi and Leidner.1999:1-37). Maryam Alavi holds a Ph.D. in Management Information Systems and she also served in an administrative position as the chairperson of the Information Systems Department at the Robert H Smith School of Business at the University of Maryland, USA, from 1993-1998. Dorothy E. Leidner is the Professor of Information Systems at the Hankamer School of Business at Baylor University, Texas, USA. These professors researched by collecting the specific opinion data from various organizations' executives. These experts found that ways of knowledge management can be divided into three paths, such as Information- based, Technology- based, and Culture-based. The Information- based aims to emphasize the information that leads to the conductibility, data classification, information filterability, organization directory, idea & content freedom, information memorandum documents, and information accessing ability, while the Technology- based accentuates information technology techniques, such as Data Mining, Data Warehouse, and Executive Information Systems. Data Mining is the information exploration processes or the creation of main data base connections for use in tendency and conductibility predictions. Data Warehouse is a combination of several main data bases that come from numerous data sources so data must be easy to access and use for decision making. The Executive Information Systems are several network types and this part also

relates to artificial intelligence, intranet, search engine, and multimedia. The Culture- based puts interest on learning combinations, learning continuity, intellectual property incubation, and learning organization. Hence, this model is useful for assessing the potential of KM means and the practical model to understand the correct direction of knowledge management. This also analyzes personnel ability in knowledge management within organizations. In addition, this shows the efficiency of an organization's management. Therefore, it can be judged that the concept of this model is clearer than previous models because of direct designation. Obviously, organizations that need to apply KM concepts are able to use this model as a KM compass in order to select the appropriate portions.

The final aspect to be reflected on is an ultramodern KM model from Jacky Swan, Maxine Robertson and Sue Newell which is the Swan, Maxine and Sue KM Model (Swan, Robertson and Newell. 2003 : 179 - 197). Jacky Swan is Professor of organizational Behavior and Director of the Innovation, Knowledge and Organization Networks (IKON) research center, Warwick Business School, The University of Warwick, United Kingdom. Maxine Robertson is a Professor of innovation and Organization of School of business and management, Queen Mary University of London UK. Susan M. Newell is a Professor of Information Systems of Warwick Business School, Warwick University UK. Jacky Swan team introduced two ways of knowledge management, such as "Knowledge Management as Technology" and "Knowledge Management as People Camp". Firstly, "Knowledge Management as Technology" originated from several maxims. Knowledge Management enables assigning codes, maintaining, and propagating. Knowledge Management is the management or the combining of dissipated intellectual capital. Knowledge is formed like objects of the senses so it is able to collect and it also has its own particular attributes. The aims of knowledge management are increasing knowledge from tacit to explicit knowledge exchange and explicit to tacit knowledge exchange. Knowledge enables compiling and transferring by using information technology. Knowledge management outcome is able to be reused. Finally, "Knowledge Management as People Camp" or as it is also called "Community or Cultivation Perspectives", is a concept that contemplates that knowledge management is greater than the use of technologies because technologies are limited to codes assigning in knowledge organizations.

Hence, this concept is conceived on many precepts. Knowledge development intimately relates to the community relationship, social network and communities of practices. Knowledge sharing is very necessary for the organization's development but the valued knowledge is always tacit knowledge so tacit knowledge is limited on codes assigning. General knowledge is in human brains so the main purpose of knowledge management is tacit knowledge sharing because tacit knowledge is very complicated to use. Knowledge flows through social networks and communities. As a result, it seems to connect people together so the constancy of relations is the most important thing in tacit knowledge sharing. The final result of knowledge management is the use of knowledge and knowledge creation. Therefore, it can be remarked that this concept is divided into two important parts, such as KM as Technology and KM as People Camp. Clearly, the failure of KM is the wrong selection between Technology and Human. Moreover, the path to successful KM is the combination of these two parts consistently. Tippawan Lorsuwannarat (2005 : 1 – 24) also proposed that these two ways between Technology and Human can not be separated decisively because the technology part is very important for combination and externalization but the human part is also necessary for socialization and internalization.

In conclusion, summit KM models such as the Tuna Model, Spiral and SECI Model, Xerox Corporation Model, Earl Model, Alavi and Leidner Model, and Swan team Model have recently been applied to many famous organizations in Thailand. However, there are also many concepts of KM procedures that come from academic experts' ideas and these concepts may also be used by other organizations. It can not be denied that most people in Thailand know KM in the form of the Tuna KM Model only because this model was introduced by The Knowledge Management Institute (KMI) of Thailand in 2003 (The Knowledge Management Institution. 2010b :1-6), despite the fact that two favorite KM Models, such as the Tuna Model and Xerox Corporation Model have been applied most basically to Thai organizations. The Tuna model puts emphasis on tacit knowledge but the Xerox Corporation Model underlines explicit knowledge. These two popular KM Models have very similar concepts on goals of knowledge management although the Tuna Model provides the fish model. The Tuna Model designates wide aims of knowledge

management in knowledge sharing but the Xerox Corporation Model relies on six compositions of knowledge network, such as transition and behavior management, communication, process and tools, training and learning, measurement, and recognition rewards. These six compositions do not refer to warehouse of knowledge collection, while the Tuna Model assigns the fish tail as data warehouse. However, the six compositions of knowledge management network from the Xerox Corporation Model are clearer than the three main parts of the Tuna Model in terms of functions assignment. Therefore, these two models are able to be mixed together for application to Thai organizations in order to be clearer and easier to perform. The SECI Model describes knowledge sharing and exchanging procedures in tacit knowledge and explicit knowledge so that the four regulations of knowledge creation are useful to get the idea of knowledge origination within the community by using self development processes or Ba concept. Nevertheless, the SECI Model stresses the knowledge creation part only but knowledge creation is only one of the knowledge management procedures. The weakest point of SECI is the psychology theory of acknowledgement and the SECI Model neglects the differentiation between tendency of knowledge and situation assigning. The Spiral Model concept began with the dynamic interaction between tacit and explicit knowledge, which is characterized in four parts. Then, Nissen and Levitt (2002:1-2) adapted Nonaka's spiral model to a dynamic model of knowledge flow because of its deficiency. This new dynamic model is much better than the previous one because this model highlights the ways of knowledge flow dynamics by taking into account the computational organization theory so the model has perfect fidelity and insight into knowledge flow dynamics (Nissen and Levitt. 2002 : 1 - 30). Michael John Earl also introduced his Earl Knowledge Management Model but this model highlights three main offices, such as Technocratic, Economic, and Behavior, but these offices only relate to knowledge storing, experts allocation, intellectual property protection, social knowledge, and knowledge strategy. This model does not refer to knowledge creation processes or tools within organizations and this model does not mention measurement so organizations may not be aware of the use of KM development results. Thence, the chief characteristic of this model is classifying all units within organizations to achieve KM responsibilities. In a different vein, Maryam Alavi and

Dorothy E. Leidner developed a new KM pattern by focusing on three ways of KM development, such as Information, Technology, and Culture but Information-based and Technology-based patterns are very ambiguous when applied to real situations. Basically, the success of information management with this KM style must depend on high technologies, such as computer technology and communication technology. Another, Jacky Swan team, proposed a new KM style by dividing in two ways KM as Technology and KM as People Camp or Community or Cultivation Perspective. But this KM development style puts emphasis on the socialization and KM processes because KM development is more important than technology so technology is limited with reference to code assigning with organization knowledge. Therefore, these six KM models are alternative concepts but the strongest points of the six KM models outweigh the weakest ones. Therefore, all organizations must choose these KM models carefully. In the case of the use of KM within Thailand's illustrious organizations, most famous organizations have been choosing the appropriate KM models on their own. Hence, some organizations have been failing in their KM application while other organizations have had success in KM utilization, such as Thailand Productivity Institute, Spansion Inc. Thailand, Siriraj Hospital, True Corporation, and TOT Public Company Limited, Ramkhamhaeng University, among others. However, the use of KM utilization within educational organizations is only focusing on information technology for connecting to exterior places. Most academic experts only pay attention to developing prefabricated information tools, such as e-learning for their institutions so Thai academic institutions spend a large amount of money for this development. As a result, most instructors understand that the heart of KM development within academic institutions is e-learning only, so the best measurement of KM development is the greatest e-learning system. As a result, Thai academic organizations must compete excessively to develop their e-learning. Many Thai academic institutions may take the wrong road to KM utilization. Consequently, organizations which need to apply KM methodologies for their institutions must select the appropriate KM concepts cautiously in order for them to be effectively incorporated. Naturally, nothing is perfect.

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