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of the
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on Intellectual Capital

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Edited by

Geoff Turner and Clemente Minnone

Papers have been double-blind peer reviewed before final submission to the conference. Initially, paper abstracts were read and selected by the conference panel for submission as possible papers for the conference.

Many thanks to the reviewers who helped ensure the quality of the full papers.

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Preface

These proceedings represent the work of presenters at the 3rd European Conference on Intellectual Capital (ECIC 2011).

The Conference is hosted this year by the University of Nicosia in Cyprus. The Conference Chair is Geoff Turner from the University of Nicosia and the Programme Chair is Clemente Minonne from the School of Management and Law, Zurich University of Applied Sciences, Winterthur, Switzerland.

The opening keynote address is given by John Girard from Minot State University in the USA. John will address the question Social Knowledge: Are we ready for the future? The second day of the conference will be opened by Ludo Pyis from AREOPA in Belgium who will consider Intellectual Capital Accounting: how to measure the unmeasurable. We also look forward to a Knowledge Cafe on the topic of What intellectual capital ideas and developments do you expect to live and see? facilitated by Helen Paige from The Paige Group, South Australia.

A primary aim of this conference is to contribute to the further advancement of intellectual capital theory and practice. The conference provides a platform for presenting findings and ideas for the intellectual capital community and associated fields. The range of people, issues, and the mix of approaches followed will ensure an interesting two days.

144 abstracts were received for this conference. After the double blind, peer review process there are 53 academic papers, 7 PhD papers, 7 work-in-progress papers and 3 non-academic contributions published in these Conference Proceedings. These papers represent truly global research from some 28 different countries, including Australia, Barbados, Belgium, Canada, Cyprus, Czech Republic, Finland, Germany, Greece, Hungary, Iran, Indonesia, Ireland, Italy, Latvia, Malaysia, Poland, Portugal, Romania, Russia, South Africa, Spain, Sweden, The Netherlands, United Arab Emirates, United Kingdom, USA and Zimbabwe.

We hope that you have an enjoyable conference.

Geoff Turner, Univeristy of Nicosia, Cyprus
Conference Chair

and

Clemente Minonne, Zurich University of Applied Sciences, Winterthur, Switzerland
Programme Chair

April 2011

Biographies of Conference Chairs, Programme Chairs and Keynote Speakers

Conference Chair

Dr Geoff Turner lives in Cyprus and is the Executive Director of the European Centre of Knowledge Management Research, which is hosted by the University of Nicosia. He is an Associate Professor at that University and for more than 20 years has been researching, teaching, practicing and advising internationally in the fields of accounting, financial management and performance measurement. His doctoral thesis examined the need for accounting for human resources in the context of intellectual capital management.

Programme Chair

Dr Clemente Minonne lives in Switzerland and is a Research Associate at the European Centre of Knowledge Management Research, which is hosted by the University of Nicosia. He is a researcher, teacher and management advisor in the fields of information, innovation, knowledge and strategic management. For the last 19 years he has served in senior business and project management positions for various multinational companies and is presently a member of faculty at the Zurich University of Applied Sciences. Knowledge Management was the topic of his doctoral dissertation.

Keynote Speakers
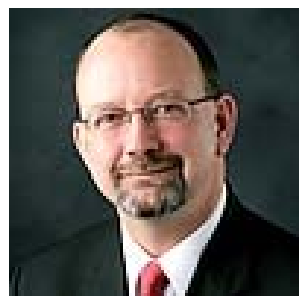
Dr John Girard is Professor of Management at Minot State University where he is actively engaged in academic research. He has written more than thirty articles and chapters for peer-reviewed or trade journals and books. John's first book was an edited volume entitled *Building Organizational Memories: Will you know what you knew?* Published by IGI Global in 2009. He is the coauthor of A Leader's Guide to Knowledge Management: Drawing on the past to Enhance Future Performance, published by Business Expert Press in 2009. John speaks regularly on the subjects of knowledge management, transformation and innovation at events such as KM World, APQC's Knowledge Management Conference, the World Congress on Intellectual Capital, KM Australia, KM Asia, and InfoVision (India).

Ludo Pyis is the founder of AREOPA, a management consulting group specialising in change management, intellectual capital accounting, and learning and knowledge management. He speaks regularly on these topics, especially intellectual capital accounting. Ludo was a member of the European Commission Expert Group on the Valuation of Intangible Assets, which produced the Ricadis Report in 2006 and is a visiting Professor at several international universities.
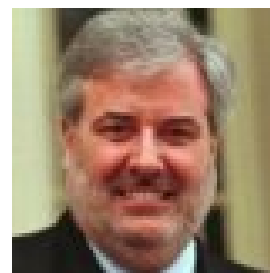
Knowledge Cafe Leader
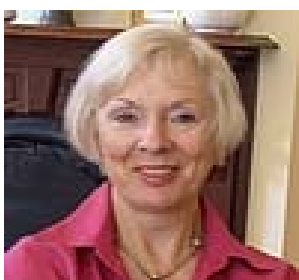
Dr Helen Paige is the Founder and Director of The Paige Group, Adelaide, Australia. She holds an EdD from the Flinders University in South Australia. She was the Academic Director of the Master of Entrepreneurship at the University of Adelaide, and has lectured at the three South Australian universities in a variety of topics including Leadership, HRM and Management. With more than 20 years in corporate education, Helen has her own consultancy business, Advance Knowledge Networks, and consults in applied knowledge management, facilitation of World Knowledge Cafes, strategic business management, change management, and independent chairing and facilitation. She is also the Founder of a creative business – Fun.Food.Focus – which combines learning, training and

The Tobing Knowledge Management Architecture

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Abstract: This article proposes design of knowledge management architecture as a framework for the development and implementation of KM initiatives and as an aid for management in realizing the benefit of KM for organization. The article identifies the main elements of KM architecture and details the nature each element's role and inter elements relationship conceptually and practically. The architecture was developed using the Integrated Business Architecture (Accenture), literature research and some personal experiences. Through this article, we found that the KM strategy shall has a feasible value proposition extracted from corporate strategy and shall define the process, technology and structure needed to deliver the value proposition to all KM stakeholders. This architecture provides guidance in placing KM, corporate strategy and enterprise systems at a more appropriate and integrated position. This architecture also has potential in moderating and combining various extreme poles of the KM strategy.

Keywords: knowledge management (KM), architecture, knowledge and strategy

1. Introduction

The importance of the KM role to leverage the corporate competitiveness nowadays is increasing, but still many organizations are implementing KM as a separated initiative from other initiatives, especially the company's business strategy itself. So the gap between KM programs with other programs of the organization remains a major issue (Fonseca, 2003). Zack (1999) stated that critical issues in implementing KM are how to build links between strategy and knowledge. Failure to build a knowledge-strategy link can reduce the effectiveness of KM implementation in maximizing the company's competitive advantage.

So effective KM implementation requires an appropriate KM business architecture (for the rest of this paper, we call "KM business architecture" as "KM architecture"). KM architecture is required to enable an organization to commercialize or to convert knowledge into business value. As a consequence, it is necessary to build a KM architecture that ensures that the implementation of KM is fully integrated with the strategic elements of the organization such as the external environment, business strategy, leadership, people, process, technology, organization and culture.

KM architecture should assist organization in understanding the characteristics and dynamics of knowledge possessed and required by the organization, for, the dynamics of knowledge greatly depends on the KM stakeholders such as users, leaders, contributors and knowledge manager. In addition, understanding the dynamics of the internal and external of organization, represented by the business strategy will assist managers in determining the KM value proposition. KM value proposition explains the role and position of KM in the organization and what benefits must be produced and how the benefits are delivered to KM stakeholders.

This article proposes a KM Architecture that is a crystallization of our retrospect and learning process as practitioners who are involved daily in the KM implementation.

2. Approach

The purpose of KM Architecture conception is to provide a framework and a foundation for the development and operation of KM initiatives. KM Architecture is defined as a description of components and capabilities as well as their synergic interrelationship in realizing the strategic advantages and benefits of KM for the company.

The approach used in the development of KM architecture is based on the Integrated Business Architecture that was used by Accenture Global Management Consulting in its report to management of PT. Telekomunikasi Indonesia (for the rest of this paper we call as Telkom) in 2004.

The Integrated Business Architecture from Accenture (shown at Figure 1) consists of several components:

Vision/Strategic Intent that determines the direction of a company and becomes the primary basis for determining corporate strategy. Achieving the vision is the focus of the entire company and is the main reason for the existence of a company.

Value Proposition describes the benefits/value added that can be offered to customer compared with other products/services in the market. Thus, the value proposition is also the basis for determining how a company's strategy differentiates itself with other competitors.
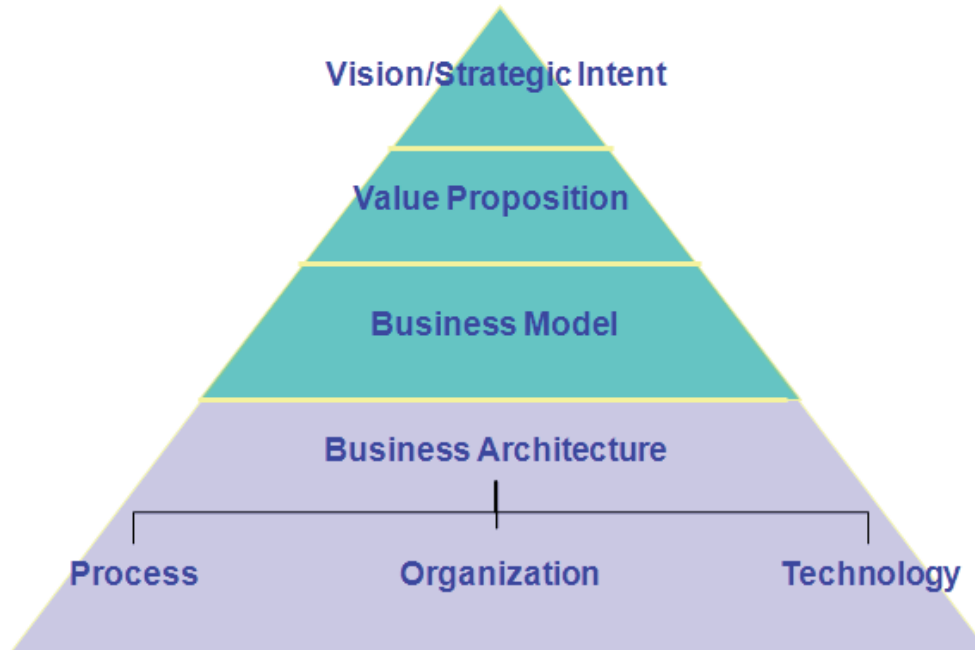

Figure 1: IBA: Integrated Business Architecture (source: Accenture, 2004)

Business Model describes the products/services offering, to whom the offer, how the distribution channel, and which revenue base model used. Business model also outlines the main capabilities required and how to build or obtain these capabilities.

Business Architecture describes the required organizational capabilities in terms of process capabilities (business processes, policies, procedures, etc.), organizations (performance management, competency, etc.), and technology (infrastructure, operational support systems, etc.). These capabilities need to be arranged so that they become the main framework of a company in running the day-to-day operational activities.

By adopting and modifying the Accenture's Integrated Business Architecture, we define the elements of KM Architecture as follows: KM strategies, role and value proposition, operation model, and operation architecture ((see Figure 2).

KM strategies are in the forms of vision, mission and strategic objectives of KM that must be aligned with the company's vision, mission and strategic objectives. Management shall ensure that the existence of KM must support the company in attaining its strategic objective.

The next element of KM Architecture is **KM role and value proposition**. In order to point out its contribution, management must declare the role and value offered by KM to the company. This is important, especially to convince the management and organizational members about the imperative of KM implementation in the company. The clarity of the position and role of KM is important to reduce the confusion in its implementation.

The **operation model** is a component that describes how a company realizes its vision, mission and strategic objectives, as well as how the company can communicate the KM role and value proposition to organizational members and management. In the operation model, it is established a KM target

user, knowledge to be managed, as well as methodology and technology used for conveying benefits and services of KM to the users.

The final element is **operation architecture** that consists of three sub-elements: process, organization, and technology. The operation architecture defines the processes, unit and qualification of the people who execute the processes and by what technology the processes to be executed in order to realize the operation model.
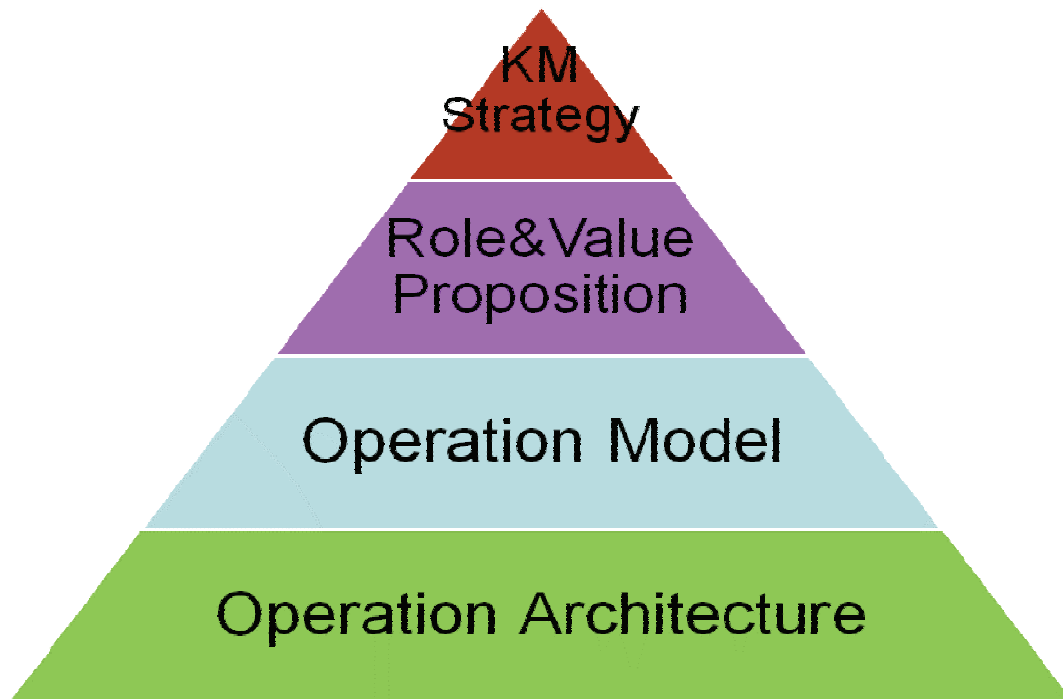

Figure 2: Four basic elements of knowledge management architecture (adapted from IBA, Accenture, 2004)

3. KM architecture analyzes

3.1 KM strategy

KM strategy is an elaboration of the company's business strategy. In the KM strategy, the vision, mission and strategic objectives of knowledge management are formulated to support the company's vision, mission and objectives. And then in the next stage, it is carried out an identification of what steps must be done from the side of KM in supporting the implementation of business strategy and in achieving the company's strategic objectives. The alignment of KM strategy with the company's business strategy is conducted through a chart shown in Figure 3.

The process of KM implementation is a long journey that requires vision, clear direction and high level of commitment and discipline that is expressed in the KM strategy. As a consequence, the KM implementation requires a visionary leader who not only has short-term achievement, but also can reflect how the future of company in the five or ten years.

Vision should be the result of collaboration of all elements in the company. The involvement of all stakeholders in the vision formulation will not only generate a qualified vision, but also will gain a commitment from all elements in the organization for its achievements.

Strategic objective is the translation of KM vision and mission to the various performance targets. The targets can be in the forms of indicators that describe the intensity of the knowledge use, service quality indicators, or competency improvement indicators. The indicators can be divided based on the principles of balance score card, so that there is a balance between short-term and long-term or strategic indicators.
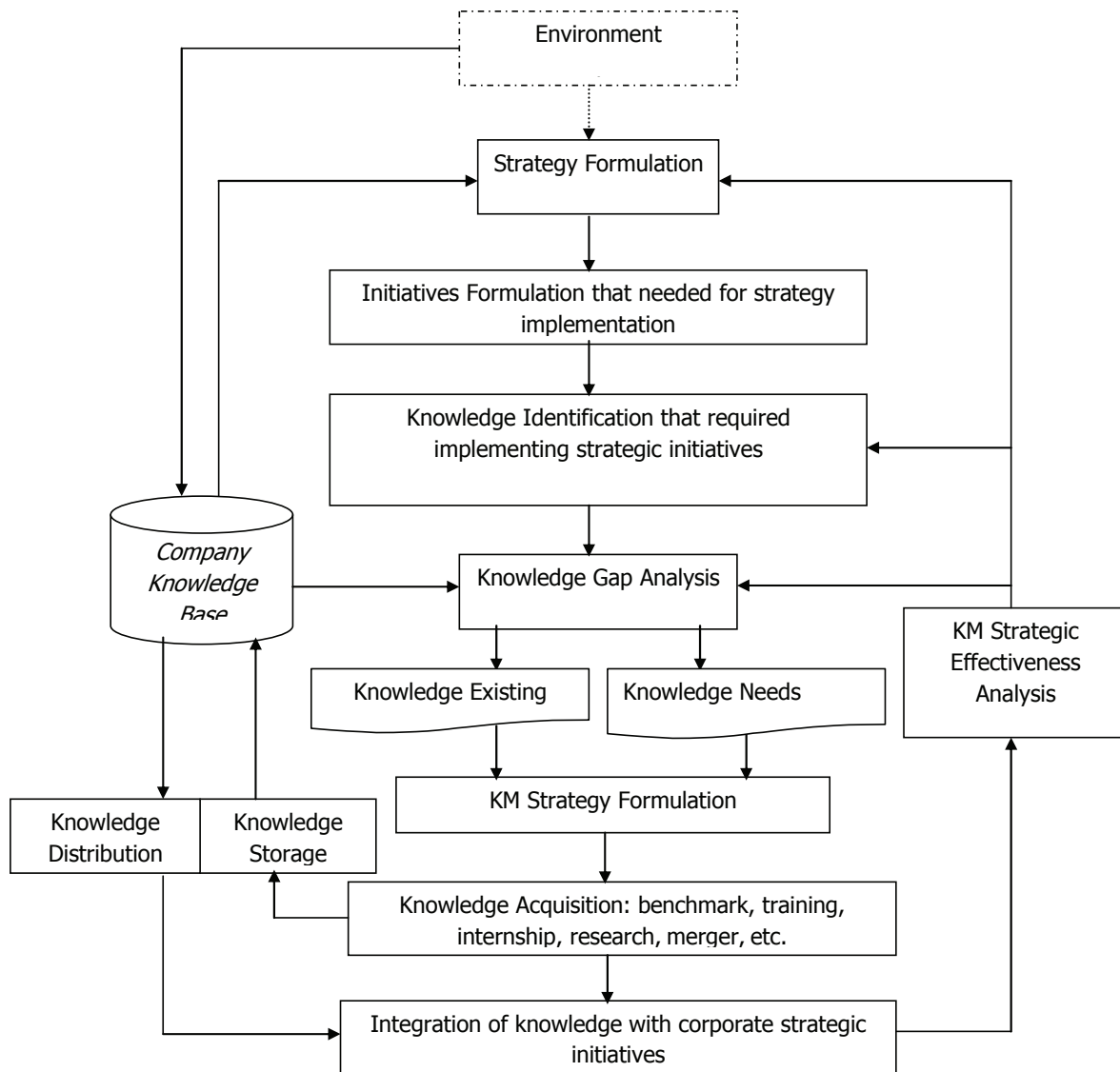
Figure 3: Process of alignment and integration of company strategy with KM strategy

3.2 KM role and value proposition

In the early implementation of KM, employees and management frequently have a highly varied understanding of KM. This varied understanding also leads to a different expectation of employees and management, and it likely ends up to the confusion and excessive load for the KM, especially if KM is required to fulfil the desire of all parties.

To control the expectations that arise and also to focus the stages of KM implementation, management must decide the KM role and value proposition for a certain period, which is in the next period can be evaluated and extended.

3.2.1 KM role

There are three role options that can emerge in KM. First option, KM is directed to manage the knowledge as a product. It means that the knowledge management concentrates itself in doing knowledge codification and to store it in knowledge repository that can be accessed by employees. This approach is based on cognitivism perspective (Varela, 1992 in Dalkir, 2005)

Second option, KM is directed to connect people who have knowledge to the people who need the knowledge. The consequence of this option is the knowledge manager must be able to identify people who have certain knowledge and to connect them to other people who need it. In order to facilitate the

people connectivity, the KM is demanded to create various media and to moderate meetings creatively. This approach is based on connectionist perspective (Dalkir, 2005)

The third option is to play the two roles above simultaneously, which we call as balanced approach, because of the balance of emphasis between the cognitivism and the connectionist. The third choice that combines the first and second options, needs a larger resource, if the resource is not enough, then the KM may become stagnant and not focus.

The choice of the role must be conducted with respect to the availability of resources allocated to knowledge management. Compared with the first option, second option clearly requires more active participation and higher commitment from many parties, namely people who act as experts, audiences, and the facilitators.

But the advantage of the second option is richer than first option especially from the aspect of personal interaction and will be easier to build a trust, which is the foundation for the establishment of both strong sharing cultures as the core of KM and knowledge communities.

3.2.2 KM value proposition

In KM publications, we found that advantages and benefits of KM are very diverse and quite a lot. But from many advantages offered by KM, Anantatmula (2005) concluded that the results or benefits which are most preferred by the profit organizations are:

- Improving collaboration.
- Improving employees' skills.
- Improving the quality of product and service.

In selecting the KM benefits, management needs to identify crucial problems being faced by company currently and in the future. Then, from the various KM benefits, the management selects which benefits that can be realistically achieved, and uses them as a solution for the problems both being faced currently and likely faced by company in the future. How the benefits of KM are realized to overcome the problems faced by company will be formulated in the operation model.

3.3 KM operation model

By taking the analogy with business terminology, KM must have services and products that must be delivered to users.The users must be also established based on the classification available at the company. In the value proposition it has been formulated a solution promised by KM, then in the operation model it is formulated who provides the solution, and how the mechanisms of production and delivery of the solution to the target users.

In the operation model design, the knowledge manager must conduct an analysis on the condition of the availability of company's knowledge to determine the company's knowledge needs. The output of the analysis is the identified knowledge gap in the form of the list of knowledge needs but not fully owned and managed by the company, the list of units and personnel who need the knowledge, and the list of personnel, expert, or the external organization/expert that can provide the knowledge.

Next, the unit KM must formulate a delivery method that is used to supply knowledge in order to meet the knowledge gap. Organizations can provide knowledge in many ways, among them, with:

- Perform knowledge codification, and store it in knowledge base and give workers authority to access the knowledge.
- Send selected personnel to attend training to acquire the knowledge needed.
- Invite expert to share his/her knowledge.
- Hire an expert to work in the company during a certain period
- Perform merger and acquisition.
- Encourage employees to develop certain knowledge independently.

3.4 Operation architecture

The operation architecture consists of three sub-components: process, organization, and technology.

- Process: determine the main processes needed to realize the operation model.
- Organization: define the functions and characteristics of the organization to execute the KM processes.
- Technology: sets requirement of technology to accelerate the execution of KM processes

The main processes in the KM are very diverse, both in terms of the terminology and understanding of the process itself. As an example, Telkom as a Telco operator uses eTOM (enhanced Telecom Operations Map). eTOM is a reference framework in the classification of elements of the business processes for telecommunication services and information company.

The organizational sub component concerns with the functions that is necessarily provided for supporting the activities and process of KM. These functions directly handle KM, or support the implementation of KM itself. Organization needs to provide a special unit to handle KM not only from the side of content management but also related to the socialization and promotion of KM culture.

The companies also need to harmonize policies and systems so that they integrated with KM. Things that need to be prioritized are human resources policies, such as: competence development, career development, remuneration and reward. The next alignment, is to improve the architecture of knowledge, by doing so, there is a better flow of knowledge to all elements of the process in each unit.

The organization sub-component also concerns with corporate culture. To be more conducive for KM implementation, organizations needs to develop learning organization, by growing the organizational skills in the activities of systematic problem solving, new approaches experimentation, learning from past experience, learning best practice from other parties, and transfer knowledge quickly and efficiently to the entire organization. (Garvin, 1998)

The final sub component in the operation architecture is technology. Information technology is an enabler that makes the execution of KM processes more effective and efficient. Giraldo (2005), called four main roles of technology for global companies that is also believed relevant for national-scaled companies, those are:

- Maintain and keep track of the operational transaction data.
- Analyzing business environment
- Providing support in the decision making process.
- Improve the collaboration and group decision-making

The technology selection is adapted to the business process, knowledge flow and knowledge distribution system, as well as organizational functions that have been developed. Some capabilities or applications of the technology have been probably owned by the company, so it is necessarily to evaluate and leverage the capability of existing information technology infrastructures.

4. The Tobing KM architecture as a synthesis of KM architecture components

In systems philosophy, the whole is greater than the sum of its parts. In sections 3 previously it has been carried out a component development and analysis of KM architecture. So in this part, all those components are recombined into KM architecture but with the more detailed and comprehensive components (sub components). Or in other words, after doing system analysis, then the next step is to do system synthesis. Dentailed explanation of each component / sub component is done through a case study in section 5.

Two elements are added namely Strategic Environmental Factors that serves as an interface between the organization to its external, and business strategy that formulates the organization response to its environment. The Strategic Environmental Factors concern with the situation of competitive intensity, macroeconomic condition, regulation, social situation and technological trend. The external factors

influence the company's business strategy, and the company's business strategy will become a main reference for all components in the KM architecture.

In designing architecture, system synthesis is done to guarantee that the components in the architecture have been integrated in solid and synergic ways so it can be viewed as systems, as showed in Figure 4 and we called it as **The Tobing KM Architecture**. This architecture is a more-detailed and more complete description of KM architecture than showed in Figure 2.

Figure 4: The Tobing KM architecture

In Figure 4 the component of KM strategy in Figure 2 has been detailed into the elements of leadership and strategy. The elements of leadership and strategy by considering the organizational business strategy will determine the KM role and value proposition.

The operation model has been detailed into target user, those are consumers and contributors of knowledge, the type of knowledge managed and distributed (tacit/explicit), as well as distribution system and storage (online or offline). And the last element is the operation architecture that consists of the process, technology and organization.

5. Implementation of the Tobing KM architecture in Telkom

PT.Telekomunikasi Indonesia, Tbk (Telkom) is the largest network and service provider in Indonesia. As of December 31, 2009, Telkom common share is owned by the Indonesian Government (52.4%) and the rest is owned by public shareholders. This company has been 154 years old. Telkom realized that its business was already in the maturity level, and driven by the high intensity of competition with 10 local competitors, then on 16 October 2009 Telkom transformed its business by changing its business portfolio from TMM (Telecommunications, Mobile and Multimedia) to TIME (Telecommunications, Information, Media and Edutaintment / Education and Entertainment).

Actually, this architecture has been implemented in Telkom. Telkom's business strategy is formulated in a document called the CSS (Corporate Strategic Scenario). Changes in the business portfolio as outlined in the CSS from TMM to TIME have knowledge implications, because Telkom has been very rich in T (telecommunication) competence, but has a serious knowledge gap related to IME (Information, Media and Edutaintment) competence.

Based on this CSS, knowledge strategy is formulated in the form of KM vision, mission, and directory competency. Knowledge strategy also determines ways and methods to acquire knowledge / competencies needed to the success of CSS and sets a KM role (what the duties and responsibilities of each business unit in implementing KM) and KM value proposition. The benefits offered by the KM in Telkom is to prioritize the development of content knowledge related to IME competence and to provide access to employees who want to do the "competence migration" from old competence to IME competence.

Based on these formulations, the vision of KM is to become a knowledge company that acts as a lever of competitiveness in order to achieve the vision of the company as a Leading TIME (Telecommunications, Information, Media and Edutaintment) Player in the Region.

The purpose of KM Telkom is to support the implementation of the company's business strategy through:

- a. Provision of knowledge that the company needs
- b. Maintain, transfer and store the competence, skills and experience of employees and organizational innovation in the form of corporate knowledge
- c. Support the establishment of knowledge-based corporate culture

Operation Model is designed to create a mechanism to meet the knowledge needs of employees day-to- day. The provision of explicit knowledge is done by developing IME content that can be accessed by employee, in particular employee who will work on IME product line. Included in the operation model, Telkom build competitive intelligence application called CIA (Competitive Intelligence Analysis) that provides knowledge resulting from the data warehousing and analytic processing systems and EXIS (Executive Information System) that serves as a dashboard for BOD in controlling the business day-to-day. While tacit knowledge is provided by hiring people who are competent in the field of IME for a specific period, thus they will be able to transfer their tacit knowledge through their daily work. In the corporate level, Telkom meets knowledge needs by acquiring companies that have IME competence.

Online storage and distribution system are provided through the provision of KM technology called the Kampiun, while offline media is done through the establishment of community of practice and various forums that discuss specific issues. Last element of the operation model is the target user, the target users of KM is the employees who will be assigned to the IME sector that is required to master another competence.

The next component that is necessarily designed is the operation architecture. The sub-elements of operation architecture are process, organization and technology. From the side of process, it has been conducted an identification and inventory of the processes required to implement the operation model. Telkom as a Telco operator uses eTOM (enhanced Telecom Operations Map). Example of the KM main process derived from the process of Knowledge Management in eTOM, as shown in Figure 5.

Processes always have a technology, knowledge, and organizational characteristics. Technology characteristic is related to how to identify technology needs for executing the process. With regard to technology, Telkom has built a KM system and e-learning accessible to all workers. Knowledge characteristic is related to the knowledge that must be owned to execute the process. In connection with this knowledge, Telkom provides a Directory of Competency and DJM (Distinct Job Manual) that contains the knowledge requirements of each position. Directory of competency and DJM are always tailored to the business strategy
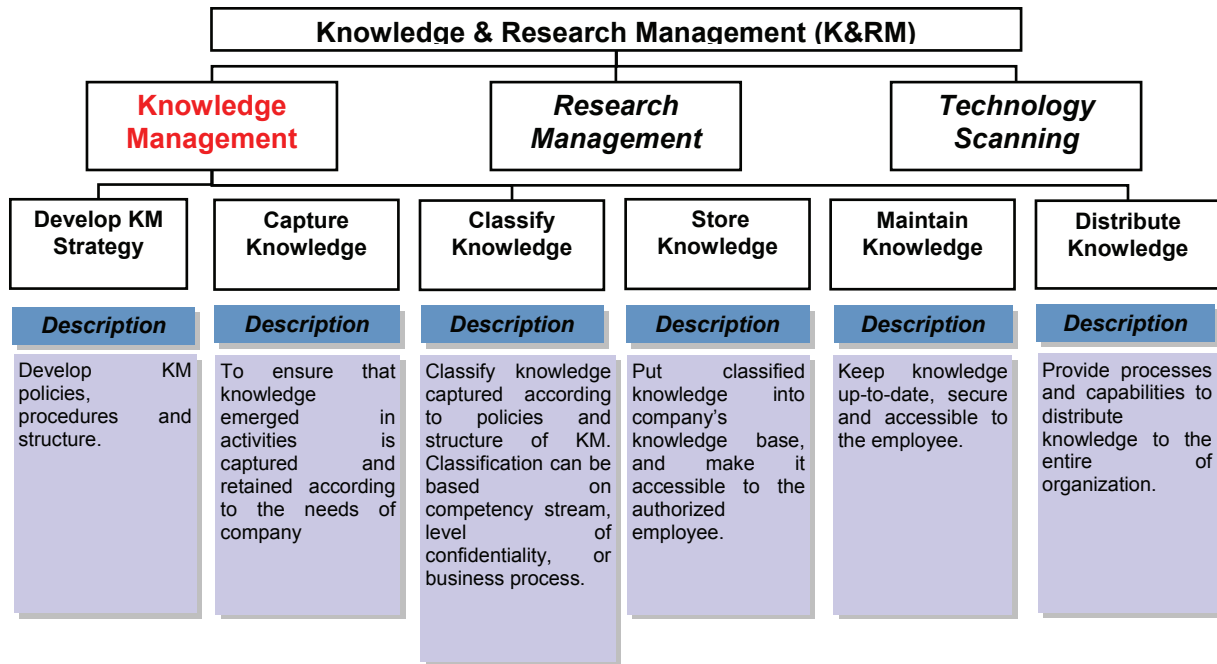
Figure 5: The main process of KM described from eTOM

All elements above are supported by organizational elements. The organization provides the functions and structures needed in executing the process and directing the use of technology. The company's commitment can be seen through the allocation of function, structure, personnel, and other resources of organization. Related organizations, Telkom has established some units dedicated to the implementation of KM. For innovation (knowledge creation), Telkom has R & D Centre. Telkom has Learning Centre and Management Consulting Centre for IME content development and unit SICP (Strategic Investment and Corporate Planning) for performing Merger & Acquisition.

Organization also concerns with the culture. Related to culture, Telkom has a knowledge culture called 5Cs, are: **C**ommitment to Long Term, **C**ustomer first, **C**aring meritocracy, **C**o-creation of win-win partnership, and **C**ollaborative innovation.

Figure 6 shows the mapping of the implementation of KM Telkom to the Tobing KM Architecture.

6. Discussion

In this section, not all elements of the architecture are discussed, but only a few elements whose influences are significant. Discussions associated with its application in Telkom or associated with the relevant reference.

Our main motivation in developing this architecture here is the growing realizations that KM is a critical factor for building firm's competitive advantage. In the resource-based view (Barney, 1986 and Peteraf, 1993 in Mahoney and Pandian, 1992), knowledge is seen as a strategic asset with the potential to be a source of sustainable competitive advantage of an organization. In order to be a source of competitive advantage, the knowledge should be managed in an integrated way with other corporate initiatives.

The first implication of this architecture is emphasized again that business strategy is a key element that directs the implementation of KM (Zack, 1999 and McDonough III, et al 2008). In addition to product / market and innovation, another key component of an effective strategy is knowledge (McDonough III, Zack, Lin and Berdrow, 2008). The question is how to build links between knowledge with the strategy? At Telkom, any change in strategy always implies the knowledge needs, which are formulated in the form of changes in directory of competency, change in directory of competency followed by change in Distinct Job Manual (DJM) and training needs and subsequently changes in the knowledge content.
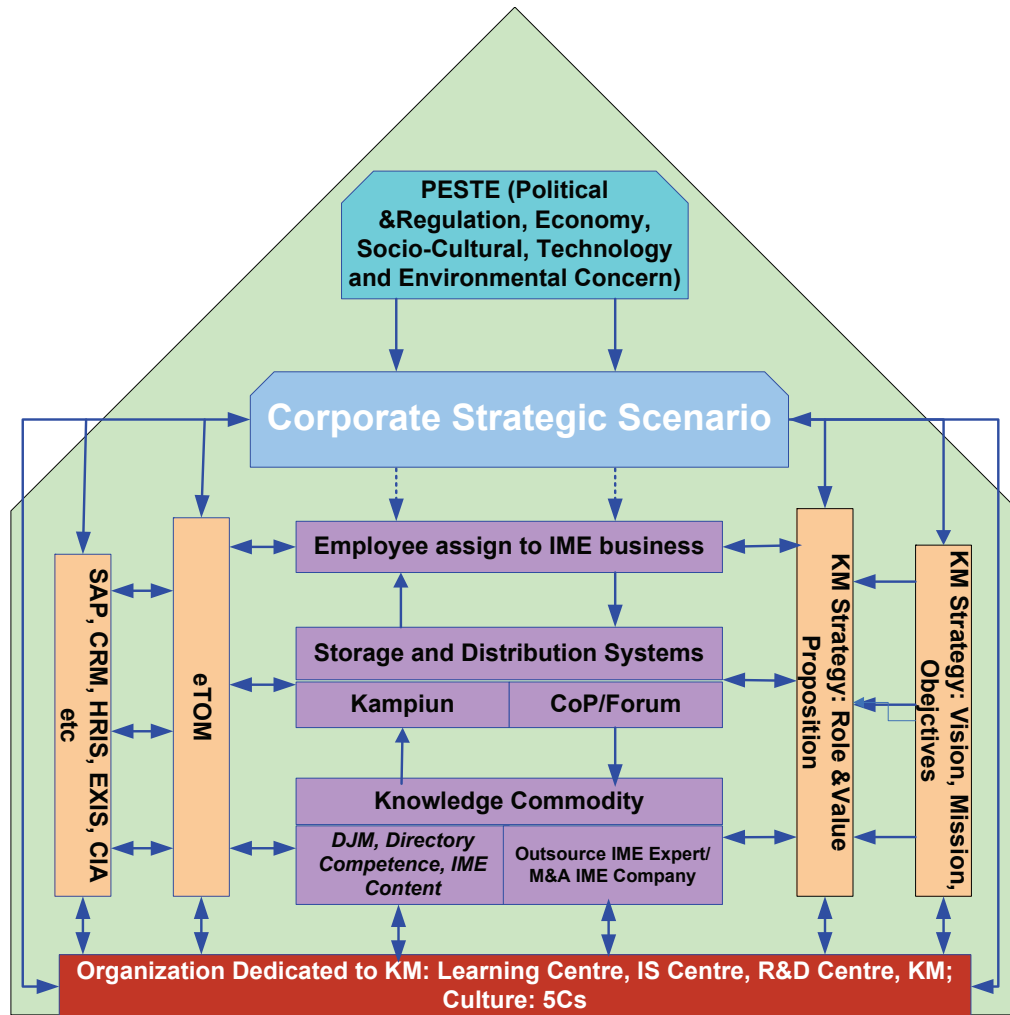
Figure 6: The Tobing KM architecture: Implementation in Telkom

In a higher level, in addition to strengthening the business portfolio, M & A is also intended to acquire IME competence, which is very rare in the parent company. For example, Telkom has acquired Sigma (competent in Information) and in the future may acquire TV stations (competent in media and entertainment).

In addition to the strategic level, KM also should serve the workers in meeting their day-to-day knowledge needs. Consequently, the operation model is designed by describing and defining the mechanism and system used in realizing the value-added offered that supports the users and capability required to realize the benefits KM. In the operation model, it also establishes the main target users (knowledge users and contributors), and they become the focus of knowledge management.

The next implication of this architecture makes the debate whether the enterprise system with the KM needs to put together or not, is irrelevant. Various literatures have explored different view about how collaboration between KM and the enterprise systems, such as ERP, DSS and CRM (Chan, 2009).So with the existence of this architecture, the KM, corporate strategy and enterprise systems can be positioned more appropriately and can be seen in an integrated way.

Another important implication is related to corporate culture. Well formulated corporate strategy and it derivatives in KM strategy, does not guarantee that the implementation of strategy will be successful. Cultural factors potentially inhibit or accelerate KM strategy execution (Davenport et al., 1998). 5Cs new culture of Telkom, although this is very knowledge-centric culture, but not yet have a significant influence in encouraging the implementation of KM. Many KM implementations particularly on the operational level are still artificial, for example, not many people share their best knowledge.

In the academic and practical discourses, often appears the polar extremes of the KM strategy, such as tacit versus explicit orientation (Jordan & Jones, Choi and Lee, 2003), personalization versus codification (Hansen et al. in Choi and Lee, 2003), aggressive versus conservative styles (Zack, 1999), cognitive vs. community styles (Swan et al. in Choi and Lee, 2003), which is similar to cognitivism versus connectionist (Dalkir, 2005) and exploitation versus exploration. This architecture has the potential to moderate and to combine the various extreme of KM strategies. And organizations that are able to place the various poles of strategy dynamically, will be more successful in improving corporate performance (Choi and Lee, 2003),

7. Conclusion

The architecture is emphasized again that business strategy is a key element that directs the implementation of KM. The ability to build strong links between knowledge and strategy is the key success factor of KM implementation, especially in supporting the implementation of business strategy.

KM should serve the workers in meeting their daily knowledge needs. Consequently, the operation model is designed by describing and defining the mechanism and system used in realizing the KM value-added.

This architecture can arrange KM, corporate strategy and enterprise systems with more appropriate and in an integrated framework.

This architecture has the potential to moderate and to combine the various extreme of KM strategies. And organizations that are able to place the various poles of strategy dynamically will be more successful in improving corporate performance.

Cultural factors potentially inhibit or accelerate KM strategy execution. As a foundation of all elements, it is found that the organization shall build a specific and supportive knowledge culture.

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