Knowledge Management in Asia: An Initial Review

Serafin D. Talisayon Revised March 5, 2007

Introduction and Objective of this Paper

Knowledge management is a new field of management practice which started in Europe and North America in the 1980s. It emerged with the realization that the capacity of corporations to generate revenue comes more and more from its intangible¹ knowledge assets (Sveiby, 2000) and the common observation during the last 2-3 decades that market value of listed corporations in many stock exchanges, including in the Philippines, generally exceed their book value. In other words, the global trend is that intangible assets are contributing more than tangible assets to market values of corporations.²

Among leading knowledge management practitioners³, "knowledge" is commonly understood as capacity for effective action, which includes information useful for effective action. An action is "effective" if its result is close to what is desired, whether by an individual or an organization. For private or business organizations, the desired result is creation of market value; and for public and civil society organizations, it is creation of social value. Actions to create value are organized through business processes or work processes.

Knowledge management involves weaving technology, people and process to achieve effective action. It requires attention to behavioral and cultural factors as much as to

¹ "Intangible" in accounting discourse refers to acknowledged assets that are not entered into the accounting system for a number of reasons, such as: (a) the asset is not bought and sold in the market e.g. reputation and goodwill on the part of suppliers or customers, (b) the asset does not belong to the corporation, e.g. skills of its employees, or (c) the asset was developed in-house, e.g. a custom software. The net worth of corporations measured by accountants consists of "tangible" assets.

² For example, see: Blair, Margaret M. and Steven M. H. Wallman. (2001). <u>Unseen Wealth,</u> Report of the Brookings Task Force on Intangibles. Washington, D.C.: Brookings Press.

³ Here are definitions by some leading knowledge management practitioners:

[&]quot;Justified belief that increases an entity's capacity for effective action" (Nonaka, 1994).

[&]quot;I define knowledge as a capacity to act" (Sveiby, 1997).

[&]quot;Knowledge is information that changes something or somebody — either by becoming grounds for action, or by making an individual (or an institution) capable of different or more effective action"—(Drucker, 1989).

[&]quot;Knowledge is information in action" (O'Dell and Grayson, 1998).

⁴ "Knowledge management is a new branch of management for achieving breakthrough business performance through the synergy of people, processes, and technology." Source: http://www.kmnetwork.com/

technical factors.⁵ For this reason, it is likely that successful practice of knowledge management is affected by organizational culture, and even by national culture. The objective of this paper is to explore how differently, if any, knowledge management is practiced in Asia.

Progress of Knowledge Management in Asia

Teleos, a UK firm, in association with the KNOW Network, runs the most well-known global award in knowledge management, the Most Admired Knowledge Enterprise or MAKE award. Teleos Managing Director Rory Chase (2007) reported that between 1998 and 2006, North American best practice corporations still dominate list of global MAKE awardees but Asian corporations have caught up and surpassed their European counterparts.

Knowledge Dimension	Asia	Europe	N. America
Organizational Culture	7.96	8.00	8.45
Knowledge Leaders	8.00	7.97	8.22
Innovation	8.14	8.02	8.68
Enterprise Intellectual Capital	7.82	7.69	8.37
Collaboration	7.92	7.66	8.11
Organizational Learning	7.98	7.65	8.44
Managing Customer Knowledge	7.78	7.93	8.37
Transforming Knowledge into Wealth	7.92	8.01	8.44

From the breakdown of scores in the 2006 global MAKE awardees, Asian winners clearly surpass European winners in the categories of innovation, organizational learning and collaboration. North America clearly outpaces other regions. The lowest North American score, and the category where the gap between North American and Asia is least, is in collaboration.

The Asian regional MAKE winners are mostly from Japan and India, led by Toyota:

BHP Billiton Samsung SDS

Canon Satyam Computer Services

Honda Motor Sony

Infosys Technologies Tata Consultancy Services

LG Electronics Tata Steel
Nissan Motor Toyota

POSCO Unilever Indonesia
Samsung Advanced Institute of Technology Wipro Technologies

Knowledge management has reached widespread acceptance in Japan, India, Korea and Singapore. It has taken roots in Malaysia, Taiwan, Thailand, Indonesia and the Philippines. The progress of knowledge management in these countries seems to parallel

⁵ Karl Erik Sveiby, one of the earliest practitioners of knowledge management, says that there is an "IT-track KM" and a "people-track KM." Source: http://www.sveiby.com/Portals/0/articles/KnowledgeManagement.html

the adoption by their respective governments of formal national strategies towards a knowledge-based economy and society.

Korea. Among Korean companies, it is commonly assumed that knowledge management is essential. The question is no longer whether to implement knowledge management or not, but how and when to implement it.⁶ After laying down one of the world's best national information infrastructures and legal framework, Korea is now implementing the e-Korea Vision 2006 which adopted a "lead strategy" in key service and technology sectors, as opposed to a "catch up strategy" in previous plans (ADB, 2007a).

Singapore. Singapore is a model of how knowledge management is applied in the public sector. Its e-government vision of "Many Agencies, One Government" is a continuation of years of relentless pursuit of performance efficiency and public service deliver by government bodies. Knowledge management is a strong program of agencies such as the Singapore Police Force and the National Library Board (Menkhoff, 2006). Singaporean citizens now conduct business with the Singaporean government agencies through various on-line services.

India. Liberalization of the Indian economy starting in the 1990s forced many Indian corporations to strive for greater competitiveness and efficiency. Led by corporate leaders such as Infosys and the Tata Group, knowledge management had been adopted by many Indian companies and taught in many Indian institutes of management (IIMs). The Indian government had formed in 2005 the National Knowledge Commission to transform industry, education, science and government sectors to become more knowledge-based (Sharma, 2007).

Taiwan. The growth of small to medium-scale enterprises (SMEs) and the widespread adoption of information and communication technologies in the corporate sector are unique in Taiwan. The SME Administration of the Ministry of Economic Affairs had adopted a program for promoting KM among SMEs. Software vendors also drive the adoption of knowledge management and ICT applications. Most universities in Taiwan offer knowledge management courses (Lin, 2007).

Malaysia. Malaysia's entry into the global knowledge economy started in 1991 with its Vision 2020 which committed Malaysia to become "an economy driven by brain power, skills and diligence, in possession of a wealth of information" and the establishment of the Malaysian Super Corridor, a "knowledge-based economy within an economy" (Yasin, 2006).

Thailand, the Philippines and **Indonesia.** The spread of knowledge management in Thailand, the Philippines and Indonesia has been slower. Unlike Korea, Singapore and Indai, their governments have not adopted a formal national strategy towards a knowledge-based economy. Thailand set up in 2004 the Office of Knowledge Management and Development under the Prime Minister, which oversees the following agencies: National Institute for Brain-based Learning, National Center for the Gifted and

⁶ Personal communication from Dr. Jung Hoon Derick Sohn, Faculty of Business Administration, University of Seoul

Talented, Thailand Knowledge Park, National Discovery Museum Institute, Thailand Creative & Design Center, Thailand Center of Excellence for Life Science, National ICT Learning Center, and the Center for the Promotion of National Strength on Moral Ethics and Values (Bunyagidj, 2006). The drivers of spread of knowledge management in these countries are multi-national companies (from their headquarters), development financing organizations, some universities and individual champions in the public and private sectors (Talisayon, 2006). In Indonesia, the popularity of knowledge management was spurred by the establishment of the Indonesia MAKE award (Purnomo, 2006). Knowledge management practice is still in its initial growth stages. Early adopters of knowledge management are usually those organizations which had been practicing total quality management, productivity improvement, Malcolm Baldridge measures of performance, etc.

Some Indicative Directions for an Asian Knowledge Management

The literature on Asian versus Western practice of knowledge management is scanty. Among the few sources that deal directly with Asian knowledge management is the KM4Dev Forum 2007 sponsored by the Asian Development Bank. One of its workshops is on "Asian Knowledge Management." It was participated by nineteen⁷ practitioners or advocates of knowledge management, consisting of two Westerners, an Indonesian and 16 Filipinos. The consensus of the group is that knowledge management to be more effective must be suited to the Asian context. The group enumerated a number of East and Southeast Asian cultural characteristics that must be considered by knowledge management practitioners (ADB, 2007b):

- "Ba" the quality of human interaction/relationship (Japanese concept and practice)
- Tacit, hidden or implicitness
- Social networks, trust, quanxi, "who knows who"
- Insider vs. outsider, comfort zone, family, nuclear relationship.
- Consensus, wholistic, importance of group, importance of "behind the scenes" interactions
- "Face" or reputation
- Hierarchy conscious: Respect for elders/wise, hero/precedent vs. proactive.
 Hierarchy
- Asian "no" can mean many things, saying no "nicely", non-confrontational
- Notion of time is not linear, "right timing"
- Trust, less paperwork, no great push to formalize
- Going global, but strengthening community

⁷ The participants in the ADB workshop were: Zbigniew Mikolajuk a KM consultant from Poland, Maria Teresita Santiago of the Board of Investments, John Regala and Bernard Cruz of Banko Sentral ng Pilipinas, Tony Fernandez of ADB and EMI, Iris Tutuarima of Bank Indonesia, Tina Pimentel of RFO Center, Data Tolentino-Canlas and Donna Diez of Digital Solutions, Robert Juhkam of UNDP, Noel Juban of UP-Manila, Donato Bumacas of KAMICYDI, Ting Mijares of NEDA, Aldo Lim and Garry Montemayor of UP Los Banos, Eugene Earle, Babes Afable of CCLFI.Philippines, Jesus Tamang of the Department of Energy, and Sharlene Lu-Quintana of ADB.

Knowledge is culture-bound: Local, indigenous, experiential (more than formal)

According to the group, the value Asians place on networks and on relationships with someone who is viewed as belonging to one's "in group" (or a fellow "insider") is expected to influence how networks are organized, maintained and utilized in Asia. Ethnic networks such as those among Chinese (Rauch and Trindade, 2002) and Koreans (Bergsten and Choi, 2003) facilitate international trade.

Asians trust on those who belong to their own group can be matched by their distrust with those who don't. Many knowledge management practitioners from the West acknowledge that collaboration and knowledge sharing is problematic in a culture of individualism and "knowledge is (my) power" and that knowledge sharing behavior depends on trust. It is expected that collaboration and knowledge sharing behavior among Asians would be influenced by their inclusive-exclusive frame of mind; however, there seems to be no studies yet to confirm this expected behavior.

Asians' non-direct and implicit manner of communication fly against the common dictum in knowledge management that as much tacit knowledge among employees as possible should be documented or made explicit, so that it can be readily multiplied and shared to more employees. Non-directness and implicitness can be double-edged. While this tendency can serve as a block to team communication that depends on explicitness and precision, Nonaka and Takeuchi (1995) argued that at the early stages of knowledge creation, working with implicitness and use of metaphoric language could be an advantage:

"...a figurative language using metaphor and analogies is of particular importance for concept creation... A metaphor serves as a kind of intermediary concept, one that can be expediently used to shape thoughts and communication. Consider a [team] that intends to develop a new culinary product by watching how a sophisticated consumer bakes a cake. Perhaps the only way the [team] can conceptualize the cooking procedure is to understand this consumer as an artist, someone who blends ingredients until the result comes as close as possible to the experience of eating her grandmother's cakes on a hot summer day... a literal approach may be find for certain routines, but it cannot capture the tacit nuances of cooking or any other creative endeavor..."⁸

Asians' respect for authority can be a hindrance to learning processes. "Who says what" can take precedence over discovering "what works well." Team learning and group inquiry works best among peers who do not try to "pull rank" over one another. Protecting "face" can also hinder inquiry into "what did not work and why." Some questions are regarded as "sensitive" and politely avoided, or the "right" answers are chosen that try to protect personal reputations or evade confrontations and defensiveness. Bias for harmony or consensus (Indonesian "mufakat") over disagreements may prevent someone who has the right information to keep quiet for the sake of group harmony. Whatever dynamics is prevailing results in failure to discover the real lessons from an activity or project and to examine the reasons behind mistakes thereby risking repetition of those mistakes.

⁸ Von Krogh, Ichijo and Nonaka (2000) quoting and explaining Nonaka and Takeuchi (1995).

Calingo (2001) analyzed the degree of fit between Asian cultural values and features required on organizations that strive for various levels of quality management and organizational learning. He adopted the dimensions⁹ of cultural values used by Hampden-Turner and Trompenaars (1997) and by Hofstede (2005):

Organizational Feature	Associated Cultural Value	Degree of Cultural Fit	
Total Quality Organization			
Visionary leadership	Long-term oriented; internal locus of control	Medium	
Customer driven	Collectivist; particularist	High	
Organizational and personal learning	(not applicable)		
Valuing employees and partners	Collectivist; diffuse (integrated wholes); particularist	High	
Agility	Internal locus of control	Low	
Focus on the future	Long-term oriented	High	
Managing for innovation	Internal locus of control	Low	
Management by fact	(not applicable)		
Public responsibility and citizenship	Collectivist	High	
Focus on results and creating value	Diffuse (integrated wholes)	High	
Systems perspective	Diffuse (integrated wholes)	High	
Learning Organization			
Openness	Small power distance	Low	
Creativity	Internal locus of control	Low	
Self-efficacy	Internal locus of control	Low	
World-Class Organization			
Customer-based focus	Small power distance; collectivist	Medium	
Continuous improvement	Internal locus of control	Low	
Use of fluid, flexible, or "virtual" organization	Internal locus of control	Low	
Creative human resource management	Collectivist		
Egalitarian climate	Small power distance; collectivist	Medium	
Technological support	Small power distance	Low	

He concluded that "although Asian organizations will have less cultural difficulty in acquiring the characteristics of total quality organizations, they face more difficulty in transforming themselves into learning organizations and world-class organizations."

Of course, this conclusion was reached using the categories of cultural values developed by researchers in non-Asian contexts. If we examine the Japanese experience in knowledge management and knowledge creation in particular, we see the importance two other categories of cultural values or cultural orientation that may be useful for understanding high-performance Japanese corporations.

⁹ The cultural values prevailing in Asia according to Hamped-Turner and Trompenaars (1997) are: particularist (focus on relationships rather than rules), ascribed status (hierarchy rather than equality as the norm), collectivist, diffuse (integrated wholes rather than analyzed specifics), and external locus of control (harmony with and/or subjugation to nature). According to Hofstede, Asian cultures are collectivist, long-term oriented and have a large power distance (high tolerance for power differentials).

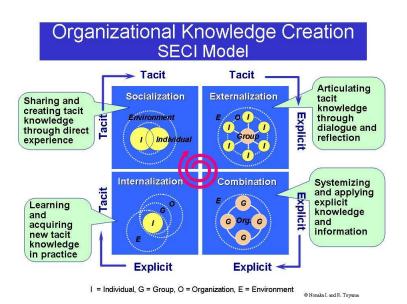
Nonaka's "Ba" and SECI Model in Japanese Corporate Experiences

Ikujiro Nonaka is perhaps the pioneer or thought leader in Asian knowledge management. His concepts, derived from successful Japanese corporate experiences, are sometimes difficult to understand by some knowledge management practitioners.

Foremost among these concepts is that of "ba" or shared interpersonal "knowledge space" ¹⁰ characterized by trust and openness that promote intimate knowledge sharing and knowledge creation. Von Krogh, Ichijo and Nonaka (2000) cites examples from European and Japanese corporate experiences that effective knowledge creation depends on an enabling context. According to them,

"...an enabling context does not necessarily mean a physical space (such as the design of an office or dispersed business operations), virtual space (e-mail, intranets, teleconferences), and mental space (shared experiences, ideas, emotions). More than anything, it is a network of interactions, determined by care and trust of participants."

Nonaka's SECI model describes knowledge creation in an organization; it traces the flow, transformation and elaboration of knowledge as it is converted from individual tacit forms to group explicit forms, and back (Nonaka, 2007):



The crucial first step in the SECI process is what Nonaka calls "socialization" where a learner creates tacit knowledge in himself through direct experience or practice guided by an expert. It is the age-old tacit-to-tacit transfer of knowledge between *iemoto* (master) and apprentice in Japanese tradition, or between guru and chela in Indian tradition. This process is facilitated by an appropriate learning context, the trusting relationship or "ba" between between mentor and learner.

¹⁰ "Space" is both physical as well as psychological space. It applies to both face-to-face and to virtual or on-line interactions.

For hundreds of years, training in various arts in Japan is via the iemoto tradition. Iemotos are traditional schools for learning these arts (such as *chanoyu* or tea ceremony, *ikebana* or flower arrangement, *noh*, calligraphy, traditional Japanese dance, martial arts, *kendo*, *shogi* and the board game *go*) from a recognized master, called *iemoto* or *o-iemoto*.¹¹ The transfer of knowledge is tacit-to-tacit (the "S" stage in SECI of Nonaka) under years of training and practice guided by the master. The values in an *iemoto* are constant striving for excellence, value of practice (e.g. *kata* in *kendo*), loyalty to the master and the school, and respect for hierarchical rank.

Despite the fact that the mentor-learner relationship is characterized by high power distance and external locus of control – using the language of Hampden-Turner and Trompenaars (1997) – effective learning does take place, or rather, did take place for centuries of Japanese *iemoto* tradition.

Conclusion

It is becoming clear that the issue of whether or not there is, or should be, an "Asian" knowledge management is an interesting but still a largely open question. Whether behavioral and cultural elements contribute to successful knowledge management practice does not seem to be the issue at hand. The question is less about "whether", but more of "how". As knowledge management becomes more widely accepted in more Asian countries, this discourse is expected to continue.

¹¹ For example, see: http://en.wikipedia.org/wiki/Iemoto

Bibliography

Asian Development Bank. (2007a). Moving Towards Knowledge-Based Economies: Asian Experiences. Manila: Asian Development Bank.

Asian Development Bank. (2007b). Proceedings of the KM4Dev Forum 2007. Source: http://www.adb.org/Documents/Events/2007/Knowledge-Management/default.asp

Bergsten, C. Fred and Choi, Inbom (Eds.). (2003). The Korean Diaspora in the World Economy. Washington, D. C.: Peterson Institute of International Economics.

Blair, Margaret M. and Wallman, Steven M. H. (2001). <u>Unseen Wealth, Report of the Brookings Task Force on Intangibles</u>. Washington, D.C.: Brookings Press.

Bunyagidj, Boondee. (2006). Survey of the Status of Knowledge Management in Thailand. Read in the Asian Productivity Organization's Coordination Meeting in Bangkok, Thailand, 14 August 2006.

Calingo, Luis Ma. R. (2001). Features of Excellent Organizations and the Organization of the Future. In: Asian Productivity Organization, <u>Learning Organization</u>. Tokyo: Asian Productivity Organization.

Chase, Rory. (2007). Innovation and Intellectual Capital Management Set the Agenda. In Proceedings of KM4Dev Forum 2007. Manila: Asian Development Bank. Source: http://www.adb.org/Documents/Events/2007/Knowledge-Management/default.asp

Drucker, Peter F. (1989). The New Realities. Boston: Butterworth-Heinemann.

Hampden-Turner, Charles and Trompenaars, Fons. (1997). Mastering the Infinite Game: How East Asian Values are Transforming Business Practices. Oxford: Capstone Publishing.

Hofstede, Geert H. (2005). Culture's Consequences, International Differences in Work-Related Values. Thousand Oaks, California: Sage Publishing.

Lev, Baruch. (2001). Intangibles: Management, Measurement, and Reporting. Washington, D. C.: Brookings Institution Press.

Lin, Fen-Hui. (2006). Survey of the Status of Knowledge Management in Taiwan. Read in the Asian Productivity Organization's Coordination Meeting in Bangkok, Thailand, 14 August 2006.

Menkhoff, Thomas. (2006). Survey of the Status of Knowledge Management in Singapore. Read in the Asian Productivity Organization's Coordination Meeting in Bangkok, Thailand, 14 August 2006.

Nonaka, Ikujiro. (1994). A dynamic theory of organizational knowledge creation. <u>Organization Science</u>, 5 (1), 14-37.

Nonaka, Ikujiro and Takeuchi, Hirotaka. (1995). The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation. New York: Oxford University Press.

Nonaka, Ikujiro. (2007). Strategy as Distributed Phronesis. Read in the International Productivity Conference 2007, "Knowledge Management – from Brain to Business", Asian Productivity Organization and Foundation for Thailand Productivity Institute, Bangkok, Thailand, 18 January 2007.

O'Dell, Carla and Grayson, C. Jackson Jr. (1998). If Only We Knew What We Know. New York: Free Press.

Purnomo, Andiral. (2006). Survey of the Status of Knowledge Management in Indonesia. Read in the Asian Productivity Organization's Coordination Meeting in Bangkok, Thailand, 14 August 2006.

Rauch, James E. and Trindade, Vitor. (2002). Ethnic Chinese Networks in International Trade. Boston: MIT Press.

Sharma, Siddharth. (2006). Survey of the Status of Knowledge Management in India. Read in the Asian Productivity Organization's Coordination Meeting in Bangkok, Thailand, 14 August 2006.

Stewart, Thomas A. (1997). Intellectual Capital: The New Wealth of Organizations. Darby, Pa.: Diane Publishing.

Sveiby, Karl Erik. (1997). <u>The New Organizational Wealth: Managing & Measuring Knowledge-Based Assets.</u> San Francisco: Berrett-Koehler Publishers.

Talisayon, Serafin. (2006). Survey of the Status of Knowledge Management in the Philippines. Read in the Asian Productivity Organization's Coordination Meeting in Bangkok, Thailand, 14 August 2006.

Von Krogh, Georg, Ichijo, Kazuo and Nonaka, Ikujiro. (2000). Enabling Knowledge Creation: How to Unlock the Mystery of Tacit Knowledge and Release the Power of Innovation. New York: Oxford University Press.

Yasin, Ida. (2006). Survey of the Status of Knowledge Management in Malaysia. Read in the Asian Productivity Organization's Coordination Meeting in Bangkok, Thailand, 14 August 2006.