DECISION MAKING MODELS AND KNOWLEDGE MANAGEMENT PREFERENCES:

Taiwanese Expatriates in China

Hsin Kao
Department of International Business,
China University of Science and Technology, Taiwan
hsinkao@mail2000.com.tw

Sean Peng-Hsiang Kao (corresponding author)
Department of Food & Beverage Management,
China University of Science and Technology, Taiwan
seankao@mail2000.com.tw

Shih-Chih Chen
Department of Information Management,
Tatung University, Taiwan
scchendr@gmail.com

Kevin Kuan-Shun Chiu
Graduate School of Business and Management,
Lunghwa University of Science and Technology, Taiwan
kevinchiu@msn.com

ABSTRACT

The purpose of the study was to investigate the possible relationship between Decision-Making models and Knowledge Management practices of selected executives in Taiwanese companies at the Changjiang Delta in Mainland China. Using survey data from 138 out of 200 randomly selected Taiwanese, this research was a descriptive and a correlation study. The significant positive relationship was found between rational DM model and total KM processes. However, the significant negative relationships were found between total KM processes and avoidant and dependent DM models. Additionally, intuitive and spontaneous DM models do not have significant relationships with total KM processes. The Rational Decision-Making could be the predominant DM model of Taiwanese executives practicing KM in China.

Keywords: *Decision Making Models, Knowledge Management, Taiwanese Expatriates*

1. INTRODUCTION

Universal competition is increasingly drastic, and internationalization has become one of the necessary strategies for a company to retain its long-term superiority. Foss (1999) said "in fact, during the last decade, accumulating frustration in the strategy field with the modern economics of organization has resulted in the gradual crystallization of a knowledge-based view of competitive advantage and economic organization" (p. 725). This view is seen by many of its proponents as being rival to the modern economics of organization (Kogut and Zander, 1992). With the growing awareness of a knowledge-based economy, enterprises are eager to create value through the better use of knowledge. Knowledge management (KM) is an up-and-coming discipline that promises to capitalize on organizations' intellectual capital. This practice supports not only the know-how of a company, but also the know-where, know-who, know-what, know-when, and know-why. The widely held belief that today's organizations' richest resource is the knowledge residing individually and jointly among their employees reflects the importance of processes for promoting the creation, sharing, and leveraging of knowledge (Drucker, 1993; Earl and Scott, 1999).

In the structure of most organizations, executives occupy the topmost position. For the organization to operate; executives must not only control the business direction and procedures, they must also make decisions for their employees. Moreover, executives have a role as gatekeepers to society (Wei, 2003) because they control the

product quality, service, and consumer behavior in the business. Executives' decision-making (DM) therefore influences their own business and affects society's cultural situation. The executive is the person who has a full view and can integrate knowledge and DM talent to influence the entire organization. Therefore, the executive's DM ability and KM practices impact on the company's development and future.

2. LITERATURE REVIEW

Decision-Making Process
Decision-making is the process of selecting an alternative from among those available. A leader must select the best decision within certain limits of a legitimate range. Jahnke (1998) indicated that the classical view of making a decision requires the individual to consider the costs and benefits of each alternative. Every decision is the result of a strong process that is influenced by huge forces (Gibson, Donnelly and Invancevich, 1997). It is a sequential process involving a series of steps that enable people to examine each element in a normal progression that leads to a decision.

DM has been the subject of long-standing conceptual concern by the researchers, such as Driver, Brousseau and Humsaker (1990) and Rowe and Mason (1987). However, there has been little consideration of the impact of individual differences between decision maker's approaches to or styles of decision making. Different interpretations of the same decision issue can be attributed to individual differences in processing capacity combined with factors such as personality and perception. Because of these decision styles are potentially related to underlying cognitive styles; the "characteristic self- consistencies in information processing that develop on congenial ways around underlying personality trend" (Messick, 1984, p.61).

The processes of DM can be separated into normative and descriptive methods (Bell, Raiffa and Tversky, 1988). The normative method uses a mathematics model, making the different departments in an organization accomplish the best alternative. The descriptive method focuses on merging the ability of leaders and computerized mathematics models to solve problems. It enables leaders to control the problem-solving procedure through the integration of people and machines. The descriptive process enhances decision quality, and creativity plays a major role in both normative and descriptive DM. Other factors that affect DM and decision quality include determination, intuition, and experience.

The Decision-making Model
Scott and Bruce (1995) defined *decision-making style* as the learned, habitual response pattern exhibited by an individual when confronted with a decision situation. They proposed five DM models:

1. Rational: The thorough search for and logical evaluation of alternatives.
2. Intuitive: The reliance on hunches and feelings.
3. Dependent: The reliance on research for advice and direction from others.
4. Avoidant: The attempt to avoid DM.
5. Spontaneous: A sense of immediacy and a desire to get through the DM process as soon as possible.

Knowledge Management and Knowledge Spiral
KM is a set of professional practices to improve organizational effectiveness and enhance employees' willingness to share knowledge in the organization. KM represents a logical progression beyond information management. Information technologies have demonstrated a notable impact on organizational intelligence products, which will increasingly enable KM, in contrast to information management, and, as such, will have a far bigger impact on organizational performance (Sveiby, 1997). The impact of effective KM on business performance is well recognized; enterprises benefit much from successfully practicing KM (Alavi and Leidner, 1999; Conner and Prahlad, 1996; Zack, 1999). KM includes managing the knowledge that already exists in the organization, as well as enhancing the ability to create new knowledge. It is providing the right information to the right people at the right time. Knowledge is very complex and comes in many forms and types. The most common distinction is that between explicit and tacit knowledge (Nonaka and Takeuchi, 1995). Although codified knowledge and its capture is commonplace, tacit knowledge has, up until recent years, proved elusive in its inclusion within an organization's knowledge base.

Tacit knowledge is that which is used by all people but not necessarily easily articulated (Polanyi, 1967). Polanyi also stated that tacit knowledge is a subtle conception rooted in cognitive schemata referred to as "mental models." According to Nonaka and Takeuchi, "tacit knowledge is highly personal and hard to formalize, making it difficult to communicate or to share with others. Subjective insights, intuitions, and hunches fall into this category of knowledge" (p. 8). To sum up, tacit knowledge is subjective and experience-based knowledge that cannot be expressed in words, sentences, numbers, or formulas, often because it is context specific. It includes beliefs, images, and technical skills such as craft and know-how.

Explicit knowledge is objective and rational knowledge that can be expressed in words, sentences, numbers, or formulas (context free). It includes theoretical approaches, problem solving, manuals, and databases. In contrast to individual knowledge, organizational knowledge is a more complex and murky dynamic, involving socio-political factors of knowledge buying, selling, brokering, pricing, reciprocity, altruism, reputation, and trust. Recognition of organizational knowledge creation as a corporate resource has generated considerable interest in recent years. The evolution toward a "knowledge society" underscores the salience of the knowledge creation process within organizations (Bell, 1973; Drucker, 1968; Toffler, 1990). Nonaka (1994) stated that individual commitment is generated through intention, autonomy, and environmental fluctuation. This suggests that knowledge creation may be activated when organizational members have freedom and sufficient purpose to pursue new knowledge, such as when confronted by change in the external environment.

Nonaka and Takeuchi (1995) identified four kinds of knowledge creation in organizations: socialization, externalization, internalization and combination. *Socialization*, which is the exchange of experiences whereby personal knowledge is created in the form of mental models. According to Bandura (1982), individuals may learn and gain a sense of competence by observing behavior modeled by others. For example, mentoring and apprenticeships instruct tacitly through observation, imitation, and practice. *Externalization* is personal knowledge that is made explicit in the form of metaphors, analogies, hypotheses, and models. Because the conversion of tacit knowledge into explicit knowledge involves the reification of an esoteric, cognitive abstraction into a concrete concept, metaphors are recommended as a way to facilitate this translation (Nonaka, 1994). *Internalization* is a process in which explicit knowledge becomes part of tacit knowledge. Where externalization utilizes metaphors to facilitate knowledge conversion, internalization represents an active process of learning. Nonaka (1994) described this as "participants … sharing explicit knowledge that is gradually translated, through interaction and a process of trial-and-error, into different aspects of tacit knowledge. …Tacit knowledge is thus mobilized through a dynamic entangling of the different modes of knowledge conversion" (p. 20). Finally, *combination* is how notions are synthesized into a knowledge system. Explicit knowledge may be exchanged during meetings or conferences in which a diversity of knowledge sources combines to shape a new and enhanced conception.

In view of the above, it could be concluded that the whole perspective of KM becomes a central productive and strategic asset where the success of the organization increasingly depends on its ability to gather, produce, maintain, and disseminate knowledge.

The Situation in Taiwan and Mainland China
As the East Asia market has grown, its influence on the world economy has become more significant (Yi, 1998). There are two important economic powers in this market: China and Taiwan. In terms of the ratio of Gross Domestic Product (GDP), there is no country in the world that is investing in China at a higher rate than Taiwan. According to a survey by *Fortune China Monthly*, Taiwan's accumulated amount of investment in China in 2001 totaled U.S. $140 billion, which exceeded 50% of Taiwan's GDP (Marsh, 2004).

Currently, there is an increase in business activities on both sides of the Taiwan Strait. This began after the Taiwanese government's ban on visiting Mainland China was lifted in 1987. However, because the Taiwanese are all Han people who migrated in several waves from Mainland China, the Taiwanese and the Chinese have the same ethnicity, blood, and language. The similarity in cultures has facilitated the movement of Taiwanese business to Mainland China. In addition, recently, the business environment in Taiwan has undergone enormous changes, such as the awakening of labor force issues, the rising cost of labor, the variation in the exchange rate, the competition for property, and the market saturation of products. These factors have caused many small and middle-sized enterprises to lose their cost-benefit competitive advantage (Lee, 1999).

Even though Taiwan and China are the two largest Chinese societies in the world, there are substantial political, economic, and social variations between them. For example, China's government and the Communist party are still inextricably linked in a system of state socialism (Child, 1996). Moreover, Taiwan and China have different regional development histories, hold diverse social customs and systems, and are influenced to various extents by foreign cultures and powers, although they are both collectivist societies with Confucian traditional roots (Lu, Cooper, Kao and Zhou, 2003).

Taiwan's accession to the World Trade Organization (WTO) holds great challenges, and this move needs to be seen as an opportunity to change rather than an economic disaster or an economic miracle. The WTO has indicated rising profitability in the service industry sector due to worldwide competition (Price, Pollock and Shaoul, 1999). Many changes have already happened in Taiwan since deregulation. Deregulation has been a wake-up call for the Taiwanese government, businesses, and industry; they have had to rise to the challenges of competing in an international market by changing regulations and outdated business practices. Taiwan has transformed its autocratic one-party political system into a multi-party democracy (Chu, 2001). Its political parties are independent of social and economic institutions. Conversely, the politics in China influence economic activities.

Because of over-investment in some industries, China is now suffering an energy shortage; rigorous quotas for electricity usage have been imposed everywhere, especially in areas where Taiwanese companies are concentrated. Although China has already reformed, the society is short all three foundations for a free economy: a sincere and honest society, a free market, and property rights protected by the government. Government officials retain the right to examine and approve every aspect of a business and to interfere at any time (Chang, 2004). Additionally, the Chinese government's recent tightening of policies toward foreign-funded firms seems to suggest that China's long-term aim is to establish internationally competitive indigenous industries under Chinese control. Under these conditions, Taiwanese firms investing in China would encounter an unfamiliar operation environment. However, economic progress with political and social stability has been the guiding principle for both governments.

3. THE PURPOSE OF THE STUDY

The purpose of the study was to investigate the possible relationship between DM models and KM practices of selected executives in Taiwanese companies in the Changjiang Delta of Mainland China. The DM models of these executives were investigated using the General Decision-making Styles Scale. Their practices of KM were measured using the State of Knowledge Management: An Assessment Questionnaire. This research assessed the correlation between these two variables. The research question for this study was: What is the predominant DM model of Taiwanese executives practicing KM in China? Further we seek to understand the relationship between KM+ DM. The null hypothesis was: Executives' DM model and their practice of KM processes are not significantly correlated.

4. RESEARCH METHODOLOGY

Quantitative research seeks explanatory laws, based on testing a theory, measuring it with numbers, and analyzing it using statistical techniques. It is well suited to establishing a cause and effect relationship, it requires a hypothesis before research can begin, and it explains the causes of change primarily through objective measurement and quantitative analysis. Using a deductive approach, quantitative research seeks to establish facts, make predictions, and test stated hypotheses. Descriptive research is characterized as the study of the current or past status of something, such as behaviors, attitudes, and other characteristics of participants (McMillan and Schumacher, 2001). The DM models of these executives were investigated using the General Decision-making Styles Scale. Their practices of KM were measured using the State of Knowledge Management: An Assessment Questionnaire. Both instruments take the form of a self-report questionnaire. This research assessed the correlation between these two variables. Correlation research studies the relationship between two variables (Howell, 1999). Therefore, this research was a descriptive and a correlation study.

The population of this research was made up of the executives of Taiwanese investment companies doing business in Mainland China. This research focused on the Shanghai area because Shanghai is the center of the southern economic power in Mainland China and the population is 150 million people. According to the *Taiwanese Handbook of Companies in Mainland China* (Straits Exchange Foundation,2004), there were 1,500 Taiwanese companies in the Shanghai area. The researcher narrowed the target population to traditional business

industries that deal in food, textiles, rubbers and plastics, electronics, and metal manufacturing. It was considered more likely that these companies would have headquarters in Taiwan and employ more than 500 workers. Using stratified random sampling; the researcher selected a sample of 200 companies and received approval to collect data from the organization and direct access to the companies' executives. Therefore, a high level of cooperation was assured.

After collecting responses, the researcher scored the instruments and organized the data. Pearson correlation coefficient was used to measure the relationship between the DM models and KM practices. The Pearson correlation coefficient was used to "measure the degree and the direction of the linear relationship between two variables" (Gravetter and Wallnau, 2001, p. 388). Gay and Airasian (1999) identified the use of the Pearson correlation coefficient:

> The Pearson *r* correlation coefficient is the most appropriate measure when the variables to be correlated are either interval or ratio. Like the mean and the standard deviation, the Pearson r takes into account each and every score in both distributions. It is also the most stable measure of correlation. (p. 452)

According to Gravetter and Walluau (2001), "when there is a perfect linear relationship, every change in the *X* variable is accompanied by a corresponding change in the *Y* variable" (p. 388). This results in a perfect linear relationship, based on how *X* and *Y* vary together.

5. RESULTS WITH TABLES

Of the 138 respondents, 118 were men and 20 were women. The large number of men participating in the survey reflected the relatively high number of male executives. The descriptive statistics related to gender are presented in Table 1.

Table 1

Respondents' Gender

	Frequency	%	Valid%	Cumulative%
Male	118	85.5	85.5	85.5
Female	20	14.5	14.5	100.0
Total	138	100.0	100.0	

Note. *N* = 138

The primary hypothesis required the examination of the relationship between executives' DM model including rational, intuitive, dependent, avoidant and spontaneous and their practices of KM including externalization, combination, socialization and internalization. The hypotheses were first tested using the Pearson product-moment correlation coefficient to determine whether two factors had a significant positive or negative relationship. When the *p* value is significant, it is less than .05 (*p* < .05).

Table 2 shows the Pearson correlation coefficient between executives' DM models and their practices of KM processes. The correlation coefficients between the variables range from −.452 to .379, and some *p* values were less than.05. Statistically positive relationships were found between rational DM model and several other variables: satisfaction with knowledge available (*r* = .334), total KM processes (*r* = .212), socialization (*r* = .245), and internalization (*r* = .379). There were statistically negative relationships between externalization KM process and dependent DM model (*r* = -.172); combinational KM process and total DM model(*r* = -.221), dependent (*r* = -.255) and avoidant (*r* = -.237) DM models; socialization and internalization KM processes and all DM models besides socialization KM process and intuitive DM model.

Furthermore, statistically significant negative relationships were found between satisfaction with knowledge available and avoidant DM models (*r* = -.244); total KM processes and dependent(*r* = -.206), avoidant(*r* = -.296) DM models and total DM model (*r* = -.250). Therefore, the primary hypothesis was rejected.

Table 2

Pearson Correlation between Decision Making Model and Practices of Knowledge Management

KM / DM	Externali-zation	Combination	Sociali-zation	Internali-zation	Total KM Processes	Satisfaction with KA
Total decision making model	NS	-.221*	-.254*	-.352*	-.250**	NS
Rational	NS	NS	.245*	.379*	.212*	.334**
Intuitive	NS	NS	NS	-.239*	NS	NS
Dependent	-.172*	-.255*	-.252*	-.372*	-.206**	NS
Avoidant	NS	-.237*	-.391*	-.452*	-.296**	-.244**
Spontaneous	NS	NS	-.138	-.212*	NS	NS

Note. KM = Knowledge Management, KA= Knowledge Available. $N = 138$. $*p<.05$, $**p< .01$.

Figure 1. Scatter Map of Decision Making Model and Knowledge Management

A regression analysis was performed and the model was found to be significant at the .05 level of significance. The model is given as DM= 103.14 +-.29 KM with the individual coefficients testing significant at the .05 level of significance.

Frequency of Primary Decision-Making Styles

Decision-Making Style	Frequency	Percent
Rational	94	68.12
Intuitive	7	5.07
Dependent	4	2.90
Avoidant	2	1.45
Spontaneous	3	2.17
Rational/ Intuitive	8	5.80
Rational/ Dependent	5	3.62
Other Combinations	15	10.87

A respondent does not have a tendency for a particular DM style indicates a strong tendency for a particular style. Scott and Bruce (1995) contend, "Individuals select particular environments on the basis of congruence between personal style and perceptions" (p. 822). Although five DM styles exist, the Taiwanese executives overwhelmingly practice just one of these styles. Collectively, fewer than 80% of the executives had a rational or intuitive primary DM style. A small minority (6.52%) of the executives identified their primary DM style as being either dependent, avoidant, or spontaneous. Another number of the executives (14.49%) identified their primary DM style as being equally other combinations of the five DM styles. Taiwanese executives tend to be rational and intuitive decision makers when it comes to important DM situations. Neither of which represents the exact way of making a decision; there are alternative ways of approaching a problem. In fact, individuals should ideally balance rational and intuitive DM.

6.   FINDING

Statistically, significant negative relationships were found between total KM processes and total DM models. However, a significant positive relationship was found between rational DM model and total KM processes. Therefore, rational DM could be the predominant DM model of Taiwanese executives practicing KM in China. This concept along with the previous studies such as Michailova and Husted (2004).mentioned that the need for the decision is defined as an information need; Russ, McNeilly and Comer (1996) stated that the rational style is deliberate, involved with countless information and knowledge, analytical and logical; Spicer and Sadler-Smith (2005) noted that a rational style might reasonably include strong information search characteristics.

Certainly, a rational approach incorporates search for data and information to support DM. As rational decision makers, they have a deep idea regarding to the issue and try to divide a problem in different portions or components. They believe that they can solve the problem in solving each component. Through this phase component knowledge is mainly involved (Nicolas, 2004). The more rational the manager perceives his/her DM to be, the higher performance s/he is rated (Russ et al., 1996). In addition, in order to assemble valuable knowledge or information when managers are making rational decisions, KM would be generally practiced in organizations. Therefore, a significant positive relationship was also found between rational DM model and the satisfaction of knowledge available in the organization.

Compare to rational DM model, dependent and avoidant DM models had significant negative relationships with total KM processes. A dependent style can be defined as that DM is described by the use of advice and support from others in making decisions. It may produce favorable reactions from subordinates and superiors if this behavior is viewed as participative (Russ et al., 1996). On the contrary, it may produce a negative reaction if this behavior is seen as leaning on others. Scott and Bruce's (1995) see dependent decision making negatively, with individuals being unable to act without others confirmation of their conclusions. It might be able to be explained that dependent personalities look to others to provide guidance and direction and are ready-made followers. As such, they may be dedicated employees, as long as independent DM is kept to a minimum (Miller, 2003). If decision makers keen to involve or rely on others' opinions in their DM, they would no longer need to collect knowledge or information on their own.

The avoidant approach style is more overtly negative because this model can be seen as delay and denial. The avoidance of DM may be used by some people to decrease the anxieties of making decisions (Janis and Mann, 1977). Consistent avoidant DM is highly likely to create difficulties. It might be a method to keep away from the risk of making a wrong decision. Managers who consistently postpone making decisions seem likely to generate discontent from both supervisors and subordinates (Russ et al., 1996). Avoidant DM could be seen as putting off decisions as long as possible which not only produces lower performance but also the need of practicing KM. It would be harmful for KM practicing in the organization if managers evade making decisions. Therefore, a significant negative relationship was found between avoidant DM model and the satisfaction of knowledge available in the organization.

Additionally, intuitive and spontaneous DM models do not have significant relationships with total KM processes; however, both models had significant relationships with internalization KM processes. Intuition allows us to operate quickly and in uncertainty, but could result in decisions that cannot be explained to others (Spicer and Sadler-Smith, 2005). Decisions made engaging the intuitive style are feeling-oriented and based on an internal ordering of the information leading to "hunches". Intuitive decisions are made relatively quickly and often changed if the intuition was in error. The spontaneous DM model can be described as a strong sense of immediacy and an interest in getting through the decision making process as quickly as possible. Spontaneous decision makers report that they make decisions on the spur of the moment, without a lot of reflection (Russ et al., 1996).

Internalization is the conversion of explicit-knowledge into tacit-knowledge (Nonaka, Toyama and Konno, 2000). This is a difficult process individuals must understand and internalize explicit-knowledge for it to become their own tacit-knowledge. Emotion is one of the key tacit knowledge in making intuitive decisions (Spender, 2003). Intuitive DM model is driven by the existing internal tacit knowledge along with beliefs and aims to develop sense making (Weick, 1995) but exclude internalize explicit-knowledge. Furthermore, spontaneous DM model uses directly and momentarily without thinking. Therefore, both intuitive and spontaneous models are the results of the tacit knowledge and experiences sharing through many processes and in no way to apply internalizing process.

Moreover, cultural or environment factors seem to be other discussable issues of influencing managers' DM and KM practicing. For example, a study conducted by Michailova and Husted (2004) found that traditional Russian companies serve as powerful illustrations of organizations hostile to knowledge sharing. Because these companies usually have a highly centralized DM structure (Czinkota 1997; Puffer and McCarthy 1993), which increases the need for bottom-up information and knowledge flows. These structures caused from the idea that noted by Puffer, McCarthy and Naumov (1997), "the Russian concept of strong leadership reinforces a more authoritarian belief system for those in senior ranks, and less disposition for them to share managerial decision making with workers" (p.267- 268).

The idea is similar to Chinese culture that the ideal manager in Chinese cultures was more controlling and directive and that Chinese workers seem to prefer a more directive, authoritarian approach from their leaders.

> "... subordinates in Chinese groups prefer a leadership style in which the leader maintains a harmonious, considerate relationship with the followers and defines clear-cut tasks for each member of the group"(Bond and Hwang, 1993, p. 135).

In addition, a leader has vast, unquestioned authority in collectivist systems. The effective model is the loving father, leading to a leadership style labeled *paternalism* by Redding (1990). It seems that Chinese prefer an authoritarian leadership style in which a benevolent and respected leader is not only considerate of his followers but also able to take skilled and decisive action.

Michailova and Husted (2004) also mentioned that hierarchical differences are barriers to knowledge sharing. For instance, Russian managers treat information as a source of power, status and authority rather than as a basis for making decisions. They typically have difficulties delegating authority and consider discussions irrelevant. Furthermore, Russians' unwillingness to provide information is a tradition of secrecy still influences people's attitudes, and standard company information is scarcely available. With lack of available information and knowledge, Russian managers base their decisions on intuition (Holden, Cooper and Carr, 1998). Therefore, Environments hostile to knowledge sharing create a weak foundation for judgment.

Redding (1990) suggested that political ideology may not have taken roots in people's minds and been handed on to the succeeding generation as part of the Chinese culture. The socialist ideology is an aspect of the foregone political economy rather than an indigenous part of the culture. Although the economic scene changes almost daily in China, some features of the underlying economic structure and systems can be noted, which have important implications for observable organizational behaviors (Lu et al., 2003).

In Michailova and Husted (2004) study, they mentioned that Russian managers have a tendency to make decisions based on intuition. Chinese and Russian shared similar concepts of authority, social construct and information controlling. It might can be audacious assumed that the primary DM model using by Chinese managers is intuitive. However, collectively, 68% of the Taiwanese executives had a rational primary DM style in the study. Indeed, the idea of Confucianism guided Chinese for almost several thousands years. In addition, Chinese people in both Taiwan and China share the same traditional value of respect for age, authority, and hierarchy, but the cultural characteristics and hierarchical centralized command structure of China's economy under socialism mutually reinforce each other.

Taiwan is a new democracy continuing its rapid industrialization; it is economically more Americanized. A recent study using Hofstede's value scheme found greater power distance in China than in Taiwan (Cheng and Chow, 1995). Furthermore, In Taiwan, the close trade links between various businesses and the West has meant a cross-cultural exchange and has been a means for the spreading and acceptance of Western values in Taiwanese society. Therefore, Taiwan and China have different starting points, different political ideologies, and different managing styles.

7. CONCLUSION

Essentially, many previous studies stated that KM seems to be able to provide decision makers enhanced quality of support in the direction of real-time adaptive active decision support, especially in collective environment (Metaxiotis, Ergazakis, Samouilidis and Psarras, 2003). Bolloju, Khalifa and Turban (2002), for example, defined decision makers as "individuals responsible for solving problems for the purpose of attaining a goal or goals" (p.169). This concept could be combined with different types of knowledge available in various forms in

the organization to select from a set of options and the alternatives that are acceptable. Key practices that were found to be common to leading-edge firms in all regions include: a propensity for experimentation, collective sharing of knowledge, and collective DM (Dana, Korot and Tovstiga, 2005). This KM system is mainly involved in the phase of conception through the DM process and so on (Nicolas, 2004). Even though statistically significant negative relationships were found between total KM processes and total DM models, these statements along with the result that a significant positive relationship was found between rational DM model and total KM processes.

It is not surprisingly there exists a positive correlation between rational DM model and KM; negative correlation associate with avoidant and dependent upon DM models and KM. Scott and Bruce (1995) found that the negative correlation between rational and avoidant DM models. Phillips, Pazienza and Ferrin (1984) found that dependent decision makers were more likely to avoid DM than were rational or intuitive decision makers. However, rational decision makers tend to approach, rather than avoid problems. This outcome supports Harren's (1979) notion that dependent decision makers are relatively passive and seek to avoid decision making. Organizations can be seen as networks of decisions and decision makers (Choo 1998; O'Reilly, Chatman and Anderson, 1987), and management can be viewed as DM (Monahan 2000). The decision making process it results in improved understanding if the problem and the process, and generates new knowledge (Saad, Rosenthal-Sabroux and Lamsade, 2005). Explicit and tacit knowledge are involved through the DM process in all the phase but with different intensity (Nicolas, 2004). First, explicit knowledge is the most important one, organizations with competitive intelligence process collects and gathers information or explicit knowledge in order to analyze its actual situation. It is believed people need to express their explicit knowledge in order to share efficiently what they think and believe. But, before explicating this knowledge, individuals are influenced by their feelings and emotions, subsequently learn the knowledge and transform them into tacit knowledge that makes the process a knowledge spiral. Noh, Lee, Kim and Kim (2000) stated that the tacit knowledge is quite beneficial to a faster DM process.

The notion of KM support DM models is not mutually exclusive, and individuals do not rely on a single DM model. Managers use a combination of DM model in making important decisions (Driver, Brousseau and Humsaker, 1990). Moreover, if a firm tries to emphasize on one of these specific points of the DM process, it can choose to employ the KM system (Nicolas, 2004). The important intention in this article is to stimulate awareness in firm when practicing DM styles and KM practices. Once aware of their preferences and the strengths and weaknesses of their approaches, managers can then seek to develop those areas where they are weaker and/or work with others who exhibit styles that are complementary to their own (Spicer and Sadler-Smith, 2005).

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