Jurnal Pengurusan 26(2007) 49-66

Alignment between Strategy and Intellectual Capital Development

Noradiva Hamzah
Mohd Nazari Ismail

ABSTRACT

This study is aimed at providing both an empirical and theoretical link between strategic management and the three categories of intellectual capital (i.e. human capital, organizational capital and relational capital). This study investigates whether organization's intellectual capital development management reflects to the distinct requirements of its strategy. A case study approach was employed on a total of eight organizations of various industries. Data was collected through in-depth discussions, 'company tours' and collaborated with documents evidence shared during interviews. In analysing the data collected, this study carried out within-case analysis and cross-case analysis. The study found that the development and management of organization's intellectual capital is contingent upon the strategy employed by the organization. Thus, this study has demonstrated that there is a link between the intellectual capital management and organization's competitive strategy.

ABSTRAK

Kajian ini adalah bertujuan untuk menjelaskan secara empirikal dan teoretikal akan perhubungan yang wujud diantara pengurusan strategic dan ketiga-tiga kategori modal intelek.(modal manusia, modal organisasi dan modal perhubungan). Kajian ini mengkaji samada pengurusan modal intelek sesebuah organisasi adalah refleksi daripada keperluan strategu yang digunakan. Kajian ini menggunakan pendekatan kajian kes ke atas lapan buah organisasi daripada pelbagai industri. Data kajian diperolehi melalui perbincangan terperinci, 'lawatan syarikat' dan dokumentasi. Dua jenis analisis telah dilaksanakan: analisis dalam kes dan analisis silang kes. Hasil kajian mendapati bahawa pembentukan ketiga-tiga kategori modal intelek adalah bergantung kepada jenis strategi yang diamalkan oleh sesebuah organisasi.

INTRODUCTION

In a knowledge-based economy knowledge-based assets have become focal economic resource and are replacing financial and physical capitals (Demediuk

2002; April 2002; Usoff 2002; O'Donnell et al. 2001; Teece 2000; Dzinkwski 2000; Wiig 1999). The knowledge-based assets are knowledge that is embedded in individuals and organizations. The knowledge that is embedded in individuals (employees, suppliers and customers) and organizations has been termed as intellectual capital (Demediuk 2002; Bontis 1998; Stewart, 1997). There is a multi-faceted description of intellectual capital proposed by intellectual capital theorists. However, most of the definitions and frameworks of intellectual capital includes human, customers, suppliers and organizations as factors (e.g. Bontis et al. 2000; Roos & Roos 1997; Edvinsson 1997; Petrasg 1990). According to Wiig (1997) knowledge that is embedded in intellectual capital is the most powerful asset and is the foundation of an organization success. Thus, this intellectual capital ought to be m2anaged fruitfully in order to remain at the forefront and maintain a competitive edge.

Many earlier researchers found that an organization's effort to manage its intellectual capital will lead to a relatively higher business performance (April 2002; Harrison & Sullivan 2002; Teece 2000; Bontis et al. 2000; Zack 1999). However, there is no specific study that has attempted to integrate organization's competitive strategy and intellectual capital management. In the strategy literature, it has long recognized of the need to develop internal capabilities to support strategy. Strategy is vital to an organization because it plays an important role in determining the ultimate success or failure of the business. Furthermore, intellectual capital is a new concept (McLennon 2002) and according to Stewart (2002), the body of knowledge about intellectual capital is in its infancy stage. Therefore, this study intends to shed light on this issue. This study aims to provide empirical and theoretical link between organization's competitive strategy and intellectual capital.

This study argues that organizations apply different types of strategy in order to tap their internal capabilities and external developments. Therefore, organizations should implement the right strategy to consolidate their internal capabilities such as their corporate wide knowledge, skills, and activities. Hence, by considering the importance of intellectual capital as the organization's capabilities, this study argues that these capabilities should be managed fruitfully in order to achieve strategic competitiveness.

RESEARCH BACKGROUND AND FRAMEWORK

In the strategy literature, the discussion on intellectual capital is focused on studying the use of knowledge for value creation (Roos et al. 1997). Pena (2002), posits that effective management of intellectual capital should lead to improve business performance. Furthermore, in the strategic human resource management, it has long been recognized that each form of competitive strategy requires a distinct form of human resource management practice. According to Schuler (1989), the fit between strategy and distinct types of human resource management practice is said to lead high level of business performance. This study argues that as human capital is part of intellectual capital, the same concern for fit should be applied to the other parts of intellectual capital. Moreover, previous studies have provided evidence that there is a relationship between each of the intellectual capital dimensions and the organization's performance (Bontis et al. 2000; Engstrom et al. 2003; Kalling 2003). Hence, this study argues that the fit between strategy and distinct types of intellectual capital management practices will lead to superior organizational performance.

By applying Chandler's (1962), famous dictum of 'structure follows strategy', this study links the strategy to intellectual capital - 'intellectual capital follows strategy'. This indicates that different forms of intellectual capital will result and be associated with strategy. Different intellectual capital forms are presumed to result from and associated with a variety of internal and external forces including strategy (Roos 1998). According to Pena (2002), a theory on intellectual capital has to recognize each company's unique characteristics. Therefore, this study predicts that an organization's intellectual capital management has to follow its competitive strategy.

For the purpose of this study, the discussion on intellectual capital management will be based by comparing organizations pursuing cost leadership strategy and differentiation strategy. Porter's (1980) differentiation and cost leadership strategies are used in order to examine whether there are differences in organization's intellectual capital management. For intellectual capital, this study used the three well established dimensions of intellectual capital: human capital, organizational capital and relational capital. Human capital refers to know-how, skills, capabilities, experiences and expertise of an organization's members (Bontis 1998; Edvinsson 1997; Stewart 1997; Roos 1997; Sveiby 1997). Meanwhile relational capital refers to external capital of the organizations which includes the relationship with its customers, suppliers and other external community (McElroy 2002; Roslender & Ficham 2001; Stewart 1997). The organizational dimension refers to internal configurations and systems of an organization (Roslender & Ficham 2001; Edvinsson 1997; St Onge 1996).

THE IMPORTANCE OF INTELLECTUAL CAPITAL IN A KNOWLEDGE-BASED ECONOMY

The major challenge to an organization nowadays is to produce and to process their knowledge-based assets. According to Stewart (2002) and Lee and Yang (2000), knowledge-based assets are crucial to every organization and has become the most powerful producers of organizations wealth. Sveiby (1997) believes that knowledge-based assets could be found in three areas: the competencies of employees, an organization's internal structure and an organization's external structure. The organization's internal structure includes patents, models, computers and administrative systems. The organization's external structure on the other hand, includes brands, reputations and relationships with customers and suppliers. According to Stewart (2002), knowledge-based assets comprise of talents, skills, know-how, know-what, relationships and also include machines and network that can be used to create organization's wealth.

In short, both strategy and intellectual capital theorists discussed knowledge-based assets are knowledge that is embedded in people and in organization. As mentioned earlier, many intellectual capital theorists (e.g. Demediuk 2002; Bontis 1998) have termed these knowledge-based assets as intellectual capital.

It is said that the difference between the organization's market value on the stock exchange and its book value is depends on its intellectual capital (Bukh et al. 2001; Pepard & Rylander 2001). Studies conducted by Engtorm et al. 2003; Kalling 2002; Bontis 1997 and Bontis et al. 1998, found that an organization's efforts to manage its intellectual capital leads to relatively higher business performance. As intellectual capital is one of the most vital source of competitive advantage (Engstorm et al. 2003; Stewart 2002; Mouritsen et al. 2001 and Mouritsen & Larsen 2001), it has to be developed and managed efficiently in order to support the organization's competitive strategy. Every organization has all the three types of intellectual capital (Stewart 2002; Roos & Roos 1997), but they are not equally decisive. Some organizations emphasise one aspect more that the others. According to Finney, Campbell and Powell (2004), intellectual capital has to be managed in order to be exploited and to give value to an organization. Therefore, the ability to mange intellectual capital is a strategic issue.

It has long been recognized that different competitive strategies require different internal capabilities. According to Huselid and Beker (1998) and Dellery and Doty (1996), the fit between an organization's internal capabilities and distinct types of competitive strategy will lead to higher business performance. The same concern for fitness is reflected in the well-known dictum 'structure follows strategy' introduced by Chandler in 1962. Moreover, previous theoretical and empirical works have provided foundations for identifying the dimensions and performance in force of the strategic alignment between strategy and structure. This study applied the same argument to intellectual capital. The fitness between organization's intellectual capital and distinct types of competitive strategy will lead to high business performance. In addition to that, as argued by Finney, Campbell and Powell (2004), after recognizing a strategy, an organization should focus on building a plausible resource base to support the chosen strategy.

STRATEGY AND INTELLECTUAL CAPITAL MANAGEMENT

Strategy is important and making the right choice of strategy is critical because it plays a significant role in determining the ultimate success or failure of a business (Boxall 1996). According to Hiovacha et al. (2001) and Feurer & Chaharbaghi (1989), all strategy frameworks are aimed at maximizing business performance. There has been an escalation of studies explaining and proving the association between strategy and performance (Delery & Doty 1996; Youndt et al. 1996; Huselid 1995; Namiki 1989; Schuler & Jackson 1987).

Previous research and studies have discussed extensively the linkage between competitive strategies and human resources (Schuler & Jackson, 1987; Kerr 1985; Slocum et al. 1985). They argue that distinctive human resources practices help to create unique competencies and in turn drive competitiveness. According to Lengnick-Hall and Lengnick-Hall (1988), in order to achieve competitive advantage, human resource has to be managed from a strategic perspective. In view of the believed that intellectual capital is the most important resource and human capital is a part of intellectual capital, the same argument should be applied to it. Distinctive intellectual capital practices will shape the core competencies that determine how organizations compete.

In other words, the choice of intellectual capital to be developed by an organization has to take into consideration the question of whether it will be able to support the organization's strategy. According to Zack (1999) and Allee (2000), in order to ensure for competitive edge, intellectual capital and organization's strategy must be aligned. Therefore, there should be a 'fit' between competitive strategy and intellectual capital. An increasing proportion on the literature argues that the value of an organization is largely based on the management and utilisation of its knowledge-based assets (Ukkola et al. 1999; Wiig 1999; Chris & Emma 1999; Beveren 2002; Davenport 2003). Therefore knowledge-based assets which comprise of human capital, organizational capital and relational capital must explicitly be managed in order to remain competitive in market (Jones et al. 2003). In other words, the value of intellectual capital should be exploited in order for an organization to be competitive advantage.

The competitive advantage emerges from the way a specific knowledge is applied to the production factors (Aranda & Molina-Fernandez 2002). According to Beveren (2002) the essence of knowledge management is to provide and to get the right knowledge to the right people using the right format. Therefore, the ability to manage intellectual capital is crucial and critical. Furthermore, Mouritsen et al. (2002) claim that in order to be counted, intellectual capital has to give value to products and services. The untapped intellectual capital is an enormous loss to an organization (Hiser, 1998). Moreover, extracting intellectual capital allow the improvement and innovation of production process. Thus, organizations must determine how intellectual capital can be utilised more effectively to produce superior returns.

Literature on knowledge management reveals that many of the knowledge management theorists and experts (e.g. Fitchett 1998; Lane & Lubartkin, 1998; Botha & Van Rooyen 2000; Brickley & Carter 2000; Kaniki, Andrew & Mphahlele 2002), argue that knowledge management is a new approach to strategy and organizations that leverage knowledge. A study conducted by Barrick and Spilkes (2003), reveal that search strategy (one of several knowledge management activities) mediates the relation between knowledge-based assets and performance.

In addition to that, according to Liebowitz (2000) knowledge management is the process of creating value from an organization's intellectual capital and is the best way to leverage knowledge internally and externally. Wiig (2001) argues that it is very important to integrate intellectual capital with the knowledge management constructs in order to achieve the desired business results. In short, knowledge management is needed to tap, utilise and harness the knowledge that is embedded in the intellectual capital (du Plessis 2005; Choi & Lee 2002; Mouritsen et al. 2002; Ndlela & du Toit, 2001; Lee & Yang 2000). The knowledge embedded in intellectual capital can only generate value when it is accessible and utilised.

RESEARCH PROBLEM

The discussion above suggests that different types of strategies pursued by organizations will lead to distinct types of intellectual capital management. The purpose of this study is to explain and provides evidence on empirical and theoretical link between strategy and intellectual capital management. This study argues that proper alignment between competitive strategy and intellectual capital development is important to enable the effective execution of strategy. This study proposes a framework to show the possible relationship between competitive strategy and intellectual capital development. Figure 1 depicts the propose research framework.

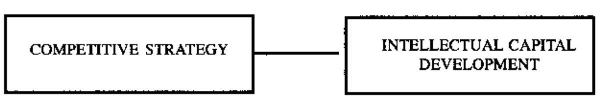

FIGURE 1. Research framework

The framework links competitive strategy to the intellectual capital development. It is presumed that different forms of intellectual capital will result and be associated with competitive strategy.

METHOD

This study employs the case study method on a total of eight organizations of various industries (Company A, B, C and D are hotel operators, Company E and F are from an automotive industry and Company G and H are food manufacturers). However, only organizations found to pursue differentiation or cost leadership strategy were included in this study to allow for comparison to be made between the two strategies. In order to identify whether the company is pursuing differentiation or cost leadership strategy, this study used the characteristics and definition given by Pitts and Lei (2002); Schuler (1989); Miller (1986) and Dess and Davis 1984) on Porter's generic strategies as references. For the hotels operators, list provided by the Ministry of Tourism and Heritage was referred. Only 5-star rating hotels (Company A and B) were chosen for differentiation strategy. Meanwhile for cost leadership strategy the hotels were chosen from the budget hotels category (Company C and D).For automotive companies, Company E were chosen for applying differentiation strategy because it produces very special, high quality, exclusive and luxurious hand crafted sport cars. Company F was chosen for using cost leadership strategy because it produces standardized models and it cars prices are among the cheapest within the similar engine capacity. For food manufactures Company G was chosen because it produced high quality breads and buns Furthermore the quality of its products is recognise by Malaysia Super Brand Council. Meanwhile Company H was determined for using cost leadership strategy because it produces a similar type of bread since it first day of operation (in 1970), and the price of it breads is the cheapest in the market.

Data was collected through in-depth discussions with the key personnel responsible for human resources practices and have complete knowledge about the companies' operations, observation, 'company tours' and documents were utilised to collaborate evidence information provide by the interviewees. The cross-case analysis was used to analyze and interpret the data collected. The analysis involves comparing and interpreting the evidence across the eight companies. This was done by using mixed-approach, which combining case-oriented and variable-oriented approaches to compare and interpret the evidence. Then, typology, context analysis and matrix techniques were used to develop patterns found in the evidence.

DISCUSSION AND FINDINGS

This research includes eight companies which are operating in three various industries. They are four hotels, two bakeries and two automotive companies. Table 1 summarizes the companies' business strategies. Based on the evidence obtained from the companies' documentations, interviews and direct observations, the companies are grouped according to the strategies that they are currently pursuing.

TABLE 1. Companies' business strategy

Company A	This company is very committed to highly personalizing its customer service. It always made the customers feel special and important. It offers special luxury accommodations and provides very high quality and distinctive services. It is a 5-star rating hotel.
Company B	This is a 5-star rating hotel and is a luxury boutique hotel. It emphasizes the quality of its services and provides the finest personal services and features to its customers.
Company C	This hotel is a member of the Malaysia Budget Hotel Association. In order to keep rates low, it concentrates totally on the main activity - providing accommodation and for basic needs. Employees do more than one task.
Company D	This hotel is a member of Malaysia Budget Hotel Association. It provides standardized amenities in every room and employees are expected to do more than one task.
Company E	This company produces very special, high quality exclusive and luxurious handcrafted sport cars. Each individual car is build to craft its unique and exclusive characteristics configuration.
Company F	This company produces standardized models of cars and the price of the cars are relatively cheaper compared to other cars within similar engine capacity. In order to keep prices low, revolutionary for a new model is undertaken only if the technology of the current model is outmoded.
Company G	This company produces high quality bread and continuously enhances the nourishment content of its products. It is reputedly as one of the Malaysia's super brand products. It always conducts market surveys in order to get information about customers' preferences and needs.
Company H	This company produces only one type of sandwich bread (the similar kind from its first day of operation), and a few types of buns. It does not customize its products to customers' needs and preferences. Emphasizes producing lower prices bread and carefully control the production process to ensure very minimal error, wastage and damage.

In order to identify the companies' business strategy, key characteristics acknowledged by Pitts and Lei (2000), Schuler (1989) and Miller (1986) are referred to. The companies are identified by either differentiation strategy or cost leadership strategy. The findings are summarized in Table 2.

TABLE 2. Companies' business strategy identified

Characteristics used	Co. A	Co. B	Co. C	Co. D	Co. E	Co. F	Co. G	Co. H
Differentiation Strategy:								
* Produce high quality products/services	√	√			√		√	
* Customers are special and important	√	√			√		√	
* Services/products are different, unique, exclusive or luxurious	√	√			√		√	
* Highly personalized services	√	√			√		√	
* High reliability of products or services	√	√			√		√	
* Continuously enhance their products/services quality	√	√			√		√	
Cost Leadership Strategy:								
* Produce standardized products /services			√	√		√		√
* Relatively cheaper			√	√		√		√
* Concentrates on main activity			√	√				
* Do not produce products/services that are customized to customer needs			√	√		√		√

From Table 2, Company A, Company B, Company E and Company G have been identified as pursuing differentiation strategy. These companies put emphasis on providing high quality products and services, highlighting the uniqueness of their products and services, on continuously enhancing the quality of their products and services and on always ensuring their products and services are different from their competitors.

Company C, Company D, Company F and Company H on the other hand have been identified as pursuing cost leadership strategy. These companies produce highly standardised products and services, their prices are amongst the lowest in the market, their products and services are not customized to customer needs and they fully focus on their main activities. The evidence obtained from the cases studied reveal that the selection process in all of the companies pursuing differentiation strategy specifically emphasise more on personality fit. For Company A and Company B, they look for talented people with a good attitude and pleasant personality. For Company H (an automotive company) puts more emphasis on technical skills in welding and also highlights on employees' interest and passion in crafting cars. This is important because the company produces handcrafted car and therefore the work involves a lot of passion and emotions. Company J, it emphasis on qualities such as ability to bring in new ideas and knowledge towards increasing the quality and nourishment content of the breads that it produced.

In term of training and development, this study found that these four companies are intensively and continuously conduct in-house training programmes for their employees. This is consistent with the argument by Schuler and Jackson (1987) that the training and development programmes in differentiation strategy companies are more systematic, have group orientation and broad application. This is to ensure that the companies are enhancing the quality of the products and services provided. These companies encourage their employees to learn new skills by paying for extensive training programme (Schuler & Jackson 1987).

With the exception of Company H, the evidence in this research indicates that all companies pursuing differentiation strategy have broad career path for their employees' career movement. Companies A and B have well structured career development plans for their employees Meanwhile Company J provides a lot of opportunity for employees career enhancement. For Company H, even though it does not have structured programme but by working with first class car manufacturer, it is a great opportunity for the employee career movement within the industry. These evidences are consistent with Schuler and Jackson's (1987) argument; firms pursuing the differentiation strategy are likely to have broad employee career paths and would reinforce the development of a broad range of skills. They also argue that broader career paths allow greater opportunity for employees to acquire skills that are relevant to many functional areas and for them to gain exposure and visibility within company.

The study also found that in Companies A, B, H and J, the employees have the ability to work in across functional team. They work together as a team and build up their own unique and consistent ways and styles in delivering services and producing products. The evidence obtained also reveals that ability to work as a team is also one of the human capital criteria developed by differentiation strategy companies. Employees are involved in discussions and everybody has the right and opportunity to voice out his or her opinion, view and idea. In addition, staff is also encouraged to put forward their new ideas and impart new knowledge to enhance the quality of products and services provided. Employees are highly involved in making decisions related to their immediate responsibilities or tasks especially in matters that involve the customers.

Companies H and J also highlight the belief that cross-functional teams are of great use in resolving problems. This study also found that all four companies always seek new knowledge, new ideas and new skills in order to ensure that they achieve their objectives. Furthermore, employees in these organizations encouraged to be creative and innovative. For training and development, all four companies conduct intensive and continuous training programmes. Each company claims that it has its own unique way of conducting its operations. Therefore, the training and development programmes are conducted in order to ensure that employees learn to work according the each company's unique ways.

The evidence from the research shows that the recruitment practices of companies pursuing cost leadership strategy vary according to the nature of business of each company. For Company C and D the interviewees agree that working experience is one of the important criteria that the companies consider when recruiting employees. However Company H does not specify any criteria for its recruitment process. According to the Production Manager, since the tasks involved are routine and machines are heavily used in production activity, the company does not need people with high skills and experience. Therefore, most of its workers are imported low-skilled workers and they work on contract basis. Whereas, for Company F, in order to ensure that the company gets good and qualified employees, it recruits people with good educational and highly qualified backgrounds.

In term of career development, all interviewees stated that their companies do not have well structured plan for their employees' career development and enhancement. Since the companies are small, such as Company C, D and H they do not have many high positions into which employees can be promoted. Meanwhile, for Company F, career development is very narrow because the positions involved are much specialised and the company heavily emphasises the basic formal qualifications that the employees have. For example, those who have only SPM qualification could not be promoted beyond the Maintenance Engineer position.

Furthermore, Companies C and D, apply flexible labour and multi-tasking policy. Employees in these companies do more than one task at a time. For example, the financial controller in Company C also does the job a human resource manager. The evidence from this study also reveals that companies pursuing cost leadership strategy fully utilize their employees especially during peak hours. In Company H, employees work long hours with no extra overtime payment. Also much of the work in Company F are specialised and this really requires them to increase their efficiency and skills in their particular tasks. But in Company H, the employees do routine work and no specific skills or knowledge is needed.

The information obtained from the interviewees also shows that companies pursuing cost leadership strategy do not provide much opportunity for the employees to acquire skills and new knowledge. In Companies E and I, only selected executives are sent for conferences, workshops or trainings organized by other bodies. Those who had attended such trainings are responsible to share the knowledge and skills that they have learnt with others in the company. The evidence obtained from the cases studied also indicates that employees in companies pursuing cost leadership strategy are not empowered to make decision. All decisions are made by the top management people. For example, for Company F, most of the decisions are made by the Managing Director.

The evidence gathered show that companies pursuing differentiation strategy emphasis more on 'live' interactions within the organizations' members, such as personal interactions, face-to-face communications and informal discussions. The companies even provide comfortable rooms for their employees in order to encourage and stimulate this activity. Informal conversations also take place in the employees' common room and recreational area.

These companies are also quite flexible when it involves matters that are related to customers' needs and desires. Documented materials such as procedures and standards are usually used only as basic guidelines. The employees are encouraged to be creative and innovative. Furthermore, group discussions and brainstorming sessions are frequently used in order to reach decisions and derive new ideas.

Moreover, the interviewees also highlight that these companies also practise open policies where employees are given opportunities to voice out their views, ideas and opinions about products or services, or on the company as a whole. For example, in Company B, its employees are given the opportunities to give their opinions, ideas, comments and feedback about the jobs and the company, even though they had only joined the company for a month! While, for Company E, the employees can even easily approach the Managing Director.

This study also found that companies pursuing differentiation strategy have their name well established. They always strive to distinguish their products and services from others. Their good names and high quality products and services are often associated with their brands. For example Company G is recognized by the Malaysia Super Brand Council for its high quality products and company F's good name is always associated with its high quality and personalized cabin crew services. Company F has received several awards and recognitions for its high quality services e.g. world best cabin staff. This study found that the development of organizational capital by companies pursuing cost leadership strategy heavily emphasises explicit knowledge. All materials such as instructions, procedures and policies are well documented, strictly followed and leave room for flexibility.

Additionally, dissemination of some classes of knowledge and information are restricted to a certain group or level of people. Even though formal face-to-face interactions are practiced in some of the companies which are pursuing cost leadership strategy (Companies C, D, G and F), those occasions are more like a medium or avenue to deliver and inform the employees about company plans and what have been achieved.

For relational capital all of the organizations mainly focused on developing good relationship with their customers. Customers are vital to their business and customer loyalty is essential. In order to fulfil customers' needs and desires, companies pursuing differentiation strategy always satisfy their customers and make them loyal through individualised and personalised service.

This research found that companies pursuing differentiation strategy also have database on their consumers. For example, Companies A and B, have a database on returning guests, general essential preferences and fight schedule information on all customers. Knowledge such as what the customers like or don't like, customers' previous difficulties, personal interests and family interests are also kept. The same goes to Company E. Data such as the buying date, dates of servicing, customer's preferences and suggestions to increase and enhance the car performance are also stored in this database. The study also found that companies pursuing differentiation strategy also organize regular meetings with their customers. For example, every evening (from Monday to Friday), Company B organises a cocktail meeting with its customers. Meanwhile, for Company A, it has a monthly cocktail function with its customers. It is a casual meeting and customers can give suggestions, ideas or expectations.

In order to be more in touch with the customers, companies pursuing differentiation strategy also organize regular programs for their frequent customers. For example, Companies A and B establish clubs for their frequent customers. Members of these clubs are given a generous array of benefits and personalized amenities. Besides developing good relationships with customers, some of the companies also build good reputations with other parties. Company G develops a close relationship with the America Institute of Baking; Company E develops a good relationship with the world's established automotive parts and accessories manufacturers.

In contrast, some of the evidence obtained reveals that the relational capital developed by companies pursuing cost leadership strategy mainly focus on increasing their process efficiency and at the same time to reduce costs. In order to achieve process efficiency and cost reduction, the companies develop good relationships with parties that are directly associated with their businesses. For example, since a franchisor plays an important role in Company C's operations, Company D has to develop good relationships with its franchisor. The company has regular meetings with its franchisor to discuss its performance, problems, suggestions or complaints from customers. Furthermore, all manuals, procedures and policies are prepared by the franchisor and all Company C's activities must abide by those documented elements.

Company D has a close relationship with the government, especially with the Ministry of Youth and Sports. The management of Company D is under the supervision of this Ministry. Therefore, it has to abide by all the procedures and policies issued by the Ministry. There is no room for flexibility. Company F develops good relationships with their vendors. This is vital to ensure that they get their requested supplies as agreed, and the vendors can supply the required parts in accordance to the companies' specifications. Normally, vendors are given specific contracts to supply parts for a specific car model.

Similarly, Company F also builds a good relationship with its dealers and branches in order to get direct information about its market demand. This is to ensure that the product it produces correspond to market demand. Branches and dealers are appointed by the company and their performances are measured annually. The relationship with branches and dealers is also based on contract and the contract can be terminated if they are not performing well.

Company H, besides having close relationship with its suppliers and appoints agents to distribute its products. Therefore, it has to develop a good relationship with all its agents. Otherwise, it cannot sell its products. This company does not have a distribution division. It relies heavily on the agents. Agents are appointed and the company sells to them at a lower price. The advantage of having agents is that, the company is not responsible for the unsold goods. In order to ensure that the company gets consistent supply and could learn and gain new technology from suppliers, Company H also develops a good relationship with its suppliers. For example, when there are changes in flour technology, suppliers will usually share this information with Company H. They even give some suggestions to the company to adjust its processes according to the latest technology evolvement. The discussion are summarised in Table 3 below.

CONCLUSIONS

The study found that the management of the three categories of intellectual capital is contingent upon the strategy employed by the organization. The findings of the study have demonstrated that there is a link between intellectual capital and organization's competitive strategy. The finding

TABLE 3. The development of intellectual capital

Intellectual capital developed by companies using differentiation strategy	Intellectual capital developed by companies using cost leadership strategy
Emphasis personality fit	Do not specify criteria
Spend more per employee on training	Spend less per employee on training
Have broad career path for employees	Have narrow career path for employees
Higher reliance on tacit knowledge	Higher reliance on explicit knowledge
Greater use of cross-functional teams	Greater use of specialised functional teams
Developing relational capital with customers	Developing relational capital with suppliers/franchisors.
Improvement in technology sourced is more internally developed	Improvement in technology sourced is more externally developed
Development of information is to monitor markets.	Development of information is not to monitor costs.

reveals that the intellectual capital management for differentiation strategy organizations focus more on developing innovative ability, seeking for newness and variations, flexibility in standards and procedures implementation and uses more tacit knowledge. For relational capital, these organizations build good relationship with their customers. On the other hand, the findings reveal that intellectual management for organizations employs cost leadership strategy focuses more on minimizing labour costs, seeking minimal variations and develop more explicit knowledge. For the relational capital, these organizations build good relationship with parties that involved with the company's upstream activities.

In general this study adds to the existing intellectual capital literature by demonstrating that there is a relationship between intellectual capital and business strategy. By taking the first step towards understanding the broad patterns in the interrelationship between the various aspects of intellectual capital and different types of strategy, this study paves the road for more focus studies examining these interrelationships The evidence gathered strongly indicated that each strategy emphasises intellectual capital differently in order to achieve its strategic objectives. Consequently, these findings could assist top managers to devise a proper plan to guide the organizations in developing their intellectual capital. Top managers could also clearly define types of knowledge needed by their organizations.

However, this research used case study method, therefore the findings are less generalizeable. Future research could confirm this finding by using larger sample in order to generalize the linkage to the population. Future research could also examine on type of relationship between each category of intellectual capital towards strategy.

REREFENCES

April, K.A. 2002. Guidelines for developing a k-strategy. *Journal of Knowledge Management* 6(5):445-56.

Aranda,A.D. and Molina-Fernandez, L.M. 2002. Determinants of innovation a knowledge-based theory lens. *Industrial Management and Data System* 102/ 5:96.

Barrick, J. and Spilkers, B.C. 2003. The relation between knowledge, search strategy and performance in unaided and aided information search. *Organizational Behaviour and Human Decision Process* 90(1):1-18.

Beveren, J.V. 2002. A model of knowledge acquisition that refocuses knowledge management. *Journal of Knowledge Management* 6(1):18-22.

Bontis, N. 1998. Intellectual capital: an exploratory that develops measures and models, *Management Decision* 36(2):63-76.

Bontis, N. 2000. Managing organizational knowledge by diagnosing intellectual capital framing and advancing the state of the field. *International Journal Technology Management* 18(5-8):433-62

Botha, M. and Van Rooyen, L. 2000. Knowledge management. Meta-info Bulletin. 9:3 (online): *http//www. aviaadne.ac.uk/knowledge-mgt.* Retrieved July, 2003.

Buckley, O.J. and Carter, M.J. 2000. Knowledge management in global technology markets: applying theory to practice. *Long Range Planning* 33:55-71.

Bukh,P.N., Larsen, H.T. and Mouritsen, J. 2001. Constructing intellectual capital. *Scandinavian Journal of Management* 17(1):87-108.

Chandler, A. 1962. Strategy and Structure. MIT Press. Cambridge.

Choi, B. and Lee, H. 2000. Knowledge management strategy and its link to knowledge creation process. *Expert System With Application* 22:173-87

Chris,G and Emma,G. 1999. Knowledge management: the way forward. *Total Quality Management* 10:4/5:554-60

Davenport, T.H. 2003. Strategy for the knowledge economy. *Strategy and Leadership, Chicago* 31(2):56-7

Delery, J.T. and Doty, D.H. 1996. Model of theorizing in strategic HRM: sense of universalistic, contingency and configurational performance prediction: *Academy of Management Journal* 39:802-35

Demediuk, P. 2002. Intellectual capital reporting: new accounting for the new economy:, *Asian Academy of Management Journal* 7(1):57-74

Du Plessis, M. 2005. Drivers of knowledge management in the corporate environment. *International Journal of Information Management* 25(3):192-205

Dzinkowski, R. 2000. The measurement and management of intellectual capital: an introduction *Management Accounting.* Feb 36-46

Engstrom, T.E.J., Westness, P. and Westness, S. 2003. Evaluating intellectual capital in the hotel industry. *Journal of Intellectual Capital* 4(3):287-303

Finney, R.Z., Campbell, N.D. and Powell, C.M. 2004. Strategies and resources: pathways to success. *Journal of Business Research* 11:1-15

Fitchet, J. 1998. Managing your organization's key asset: knowledge. The Healthcare *Forum Journal* 41(3):56-60

Harrison, S and Sullivan, H.P. 2002. Profiting from intellectual capital: learning from leading companies. *Industrial and Commercial Training* 32(4):139-48

Hiser, J.C. 1998. Understanding the value of your employees' knowledge. *The CIA Journal* 68(7):56-7

Hlavacka, S., Bacharova, L., Rusnakova, V. and Wagner, R. 2001. Performance implications of Porter's generic strategies in Slovak hospital. *Journal of Management in Medicine* 15(1):44-66

Huselid, M.A. 1995. The impact of HRM practices on turnover, productivity and corporate financial performance. *Academy of Management Journal* 38:635-70

Huselid, M.A. and Beker, B.E. 1998. Human resource strategies, complimentary and firm performance. *Available at: http//www. rel-rutgers-edu/-huselid/Humr-1*

Johne, N.B. Hershes, R.T. and Moesel, D.D. 2003. Using knowledge champions to facilitate Knowledge management. *Journal of Knowledge Management* 7(1): 49-63

Kalling, T. 2003. Knowledge management and the occasional links with performance. *Journal of Knowledge Management* 7(3):67-81

Kaniki, Andrew, M. and Mphahlele, M.E. 2002. Indigenous knowledge for benefit of all: can knowledge management principles be used effectively. South African Journal of Library and Information Séances 68(1):1-15

Kerr, J.K. 1985. Diversification strategies and managerial rewards: an empirical study. *Academy of Management Journal* 28:155-79

Lane, P.J. and Lubartkin, M. 1998. Relative absorption capacity and inter-organizational learning, *Strategic Management Journal* 19:461-77

Lee, C.C. and Yang, J. 2000. Knowledge value chain. *Journal of Management Development* 19(9):783-93

Lengnick-Hall, C.A and Lengnick-Hall, M.C. 1998. Strategic human resources management: a review of the literature and a proposal typology. *Academy of Management Review* 13(3):454-70

Liebowitz, J. 2002. Facilitating innovation through knowledge sharing: A look at the US Naval Surface Warfare Centre-carderock division. *Journal of Computer Information Systems (Special Issues)*

McLennan, P. 2000. Intellectual capital: future competitive advantage for facility management. *Facilities* 18(13/4):168-71

Mouritsen, J. Bukh, P.N. Larsen, H.T. and Johansen, M.R. 2000. Developing and managing knowledge through intellectual capital statements. *Journal of Intellectual Capital* 3(1):10-29

Mouritsen, J., Larsen, H.T. and Bukh, P.N. 2001. Intellectual Capital and the capable firm: narrating, visualizing and numbering for managing knowledge. *Accounting, Organizations and Society* 26:735-62

Mouritsen, J. and Larsen, H.T. 2001. valuing the future: Intellectual capital supplements at Skandia. *Accounting, Auditing and Accountability Journal* 14(4):399-422

Namiki, N. 1989. Miles and Snow's typology of strategy received environmental uncertainty and organizational performance. *Akran Business Economic Review* 20(2):72-88

Ndlela, L.t. and du Toit, A.S.A. 2001. Establishing a knowledge management performance for competitive advantage in an enterprise. *International Journal of innovation Management* 21(2):151-65

O'Donnell, D., O'Regen, P. and Heffernan, M. 2001. Recognition and management of intellectual resources: preliminary evidence from indigenous Irish high-technology firms. *Journal of European Industrial Training* 25(2:):109-115

Peppard, J. and Reylander,A. 2001. Using Intellectual capital perspective design and implement a growth strategy. *European Management Journal* :510-25

Roos, G. and Roos, J. 1997. Measuring your company's intellectual capital. *Long Range Planning* 30(3):413-26.

Roslender, R and Fincham, R. 2001. Thinking critically about intellectual accounting. *Accounting, Auditing and Accountability Journal* 14(4):383-98

Schuler, R.S. and Jackson, S.E. 1987. Linking capabilities strategies with human resource management practices. *Academy of Executive* 9(3):207-19

Slocum, J.W., Crown, W.L., Hansen, R.W. and Rawlings, S. 1985. Business strategy and the management of plateau employees. *Academy of Management Journal* 28:133-54

Stewart, T. 2002. *The wealth of knowledge: Intellectual capital and twenty-first century organization.* Nicholas Brealey Publishing. London.

Stewart, T. 1997. Tom Stewart on Intellectual capital. available at: *www.brint.com. Retrieved July* 2003.

Sveiby, K.E. 2001. a knowledge-based theory of the firms to guide in strategy formulation. *Journal of Intellectual Capital* 2(4):344-56

Sveiby, K.E. 1997., The intangible asset monitor. *Journal of Human Resource Costing and Accounting* 2(1):73-97

Sullivan,P.H. 1999. Profitability from intellectual capital. *Journal of Knowledge Management* 3(2):132-43

Teece, J.D. 2000. Strategies for managing intellectual capital assets: the role of firm structure and industrial context. *Long Range Planning* 33:35-54

Ukkola, Virpi and Osterholm and Jan-Erik. 1999. Making your assets work. *Managing Intellectual Property* 86:30-8

Usoff, A.C., Thibodeau, C.J. and Buenaby, P. 2002. The impact of intellectual capital and its effect on performance measurement system. *Managerial Auditing Journal* 17(1):9-15

Wiig, K.M. 1997. Integrating intellectual capital and knowledge management?. *Long Range Planning* 30(3):399-409

Wiig, K.M. 1999. What future knowledge management offers may expect. *Journal of knowledge management* 3(2):155-66

Youndt, M.A., Subramaniam, M. and Snell, S.A. 2004. Intellectual capital profiles: An examination of investments and returns. *Journal of Management Studies* 41:355-62.

Noradiva Hamzah
School of Accounting
Faculty of Economics and Business
Universiti Kebangsaan Malaysia
43600 UKM Bangi, Selangor D. E
Malaysia