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Disclosure of Intellectual Capital Information of the Airline Companies in Malaysia

Pendedahan Maklumat Modal Intelek oleh Syarikat Penerbangan Di Malaysia

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ABSTRACT

Despite the lack of structured reporting guideline for Intellectual Capital (IC) information, the information continues to be the stakeholders' most preferred voluntary information. This article reports on an exploratory study that identifies important components of IC information included in corporate annual reports of two major airline companies in Malaysia. The level of disclosure is measured based on content analysis of their 2005 and 2006 annual reports. Findings reveal that both companies disclose all the three categories of the IC comprising the organisational, human and relational capital. Whilst both companies show increased level of disclosure when compared between 2005 and 2006, the level of disclosure for certain components differs between the two companies suggesting a need to regulate to get a more uniform disclosure. The finding also suggests that brand, intellectual property, personnel and partnerships are items of IC information prominently disclosed in the annual report of airline companies.

ABSTRAK

Maklumat modal intelek merupakan maklumat yang diutamakan oleh pihak berkepentingan walaupun masih kurang garis panduan daripada segi pelaporan modal intelek dalam pelaporan kewangan di Malaysia. Artikel ini melaporkan satu kajian eksplotari bagi mengenal pasti komponen-komponen maklumat modal intelek yang didedahkan dalam laporan tahunan korporat bagi dua buah syarikat penerbangan utama di Malaysia. Tahap pendedahan ini diukur berdasarkan analisis dokumen laporan tahunan bagi kedua-dua syarikat penerbangan untuk tahun 2005 dan 2006. Hasil kajian mendapati, daripada aspek pendedahan modal intelek, kedua-dua buah syarikat telah mendedahkan ketiga-tiga kategori modal intelek yang terdiri daripada modal organisasi, modal insan dan modal perhubungan. Hasil kajian juga mendapati bahawa kedua-dua syarikat telah menunjukkan peningkatan tahap pendedahan modal intelek apabila perbandingan dilakukan di antara tahun 2005 dan 2006. Namun begitu tahap pendedahan bagi ketiga-tiga kategori modal intelek ini adalah berbeza antara kedua-dua syarikat. Oleh itu daripada hasil penemuan kajian adalah dicadangkan bahawa keseragaman daripada sudut pendedahan modal intelek adalah amat diperlukan. Hasil kajian ini juga mendapati bahawa jenama, harta intelek, kakitangan, dan perkongsian adalah merupakan item utama maklumat modal intelek yang didedahkan dalam laporan tahunan oleh syarikat-syarikat penerbangan.

INTRODUCTION

The role of intellectual capital (IC) has become more prominent in today's knowledge-based economy or k-economy. Its importance, as a source of predictor for future benefits surpasses the traditional measures such as physical and financial capitals. According to Beattrie and Thompson (2007) IC reflects best the difference between market and book value of a company. It is also argued that IC represents the competitive advantage element of the company and evidence suggests that business success can be partly explained by its IC position. Nevertheless, this does not negate the importance of conventional capitals including physical and financial assets. In light of IC growing importance as an information source, this article argues for the inclusion of IC in financial reports.

In the era of k-economy, stakeholders need more innovative information to measure company performance. Innovative information comprises financial, non-financial information and other information on the external environment. Companies need to continually disclose new information about them in order to keep stakeholders abreast with their development. Investors are now requiring a more diverse set of information in order to make investment decision (Bukh & Johanson 2003). Companies must change the level of disclosure and align their operations and values with the values of society (Gray, Owen & Marders 1988). However, to date, there are no specific guidelines on social and environmental reporting especially in relation to IC reporting in Malaysia unlike in Scandinavian countries, where companies are suppose to publish what is known as an Intellectual Capital Statement as a mechanism to disclose their IC value. As a result, companies in Malaysia often use their own judgment in reporting their IC position as part of the voluntary information. According to Verrechia (1983), companies disclose certain information in order to exploit their economic advantages and enhance their values, which may not be in the interest of the stakeholders. Huang, ZainalAbidin and Jusoff (2008) found that firm's intellectual capital has a positive impact on its market value and financial performance that suggests that intellectual capital may be an indicator for future financial performance.

Prior research posits IC to be an important disclosure to both the internal and external stakeholders. Previous studies have shown that there is a cause and effect relationship between IC management and performance (Hamzah & Mohd Ismail 2008; Huang, Zainal Abidin & Jusoff 2008; Mouritsen, Larsen & Bukh 2001). Hence, in order for companies to achieve competitive advantage, they have to focus on managing their IC (Stewart 1997; Low 2000; Hamzah & Mohd Ismail 2009). In addition, Wyatt's (2001) study on human capital index, representing a component of IC, showed that superior human capital practices are correlated with improved financial returns and increased shareholder value. A more recent study by Branco and Rodrigues (2006), reveals intangible assets as a source of competitive advantage because the assets can differentiatite a company from its competitors. The study cites valuable reputation as an element of IC that could be generated by maintaining good relations with stakeholders.

Whilst good IC position correlates with good performance, poor IC position might signal the need to acquire new financing capital by firm's stakeholders, inhibit future investment from investors or divert cash flows from current investment to debt repayment (Williams 2001). According to Petty and Guthrie (2000), annual report users have different content requirements of IC reporting. IC reports for internal users such as for management are usually presented as part of the balanced scorecard (Kaplan and Norton 1992), intangible assets monitoring (Sveiby 1998) or the intangible assets assessment (Petrash 1996). Meanwhile, IC reporting for external users is either included in the annual report or as a separate supplementary statement (e.g. Intellectual Capital Statement). Currently in Malaysia, IC is reported in the annual report as part of voluntary disclosure. According to Mathew (1997), companies should provide further information, even when the accounting profession does not show interest in making it a mandatory requirement. This is because IC reporting represents part of the social contract between companies and society. IC reporting can also be used to legitimize organisation's position and impressed the capital market. Based on this argument, IC needs to be reported even without the mandatory requirement.

Traditionally, IC was not included in the financial report due to the fact it is not measurable economically. Failure to measure IC that resulted in it not being represented in the annual report, is not just a theoretical problem, it is also a cost to investors. The current accounting model depends primarily on measurable tangible assets to generate value of companies. Taylor and Associates (1998) finds disclosures of IC information ranked as the top ten information needs of users. The value of an organisation is not equal to the value of measurable items in the balance sheet alone. It should also include items that are not measurable such as the value human and relational capital which have been proven to contribute to companies' success.

To date, research on IC disclosures are only done in selected nations. Abeysekera & Guthrie (2003) study intellectual reporting in developing nations, April, Bosma and Deglon (2003) on IC measurement and reporting in South Africa whilst Bontis (2003) studied IC disclosures in Canada (Other studies include Guthrie & Petty 2000; Brennan 2000; Williams 2001; Olsson 2001; Bozzolan *et al*. 2003; Goh & Lim 2004; Abdolmohammadi 2005; Goh 2005; Garcia-Meca and Martinez, 2007; Huang, Zainal Abidin & Jusoff, 2008). One common finding in all of these studies is low level of IC disclosure in the annual reports of companies in many countries. In addition, most of the countries studied do not have specific guidelines and regulation on IC reporting and thus lead to low quality reporting of IC.

Despite the low level of disclosure, there is a substantial growth in awareness of IC by companies' stakeholders. Lev (2001) points to two reasons for the growth, first the intensified competition and second, the advent of information technologies'.

The issue of IC is none the less more prevalent in technological based and services industries such as the airline industry. From its knowledge embedded assets or IC, the airline industry now faced with new opportunities and threats. Tangible assets such as terminals, aircrafts and equipments always create value in the industry, but an even greater part of the value in the airline industry for which customers are willing to pay now comes from IC such as its crews, flight services and flight route.

DEFINING IC

IC researchers have proposed numerous definitions of IC. Stewart (1997) defines IC as intellectual material that includes knowledge information, intellectual property and organisational experiences that can be used to create wealth. Roos (1998), on the other hand, classifies IC into human and structural capital which he terms as 'thinking' and 'non-thinking' assets while Lynn (1998) defines IC as the wealth of ideas and the ability to innovate, both being factors that determine the future of the organisation. Edvinsson (1997) explains IC as applied experience, organisational technology, customer relationships and professional skills that provide a firm with a competitive advantage in the market. Edvinsson's definition is further expanded by Miller (1999) to include the sum and synergy of a company's knowledge, process discoveries, innovations, market presence and community influence. Pulic (2001) included all employees, the organisation and the ability to create value-added activities which can be evaluated by market as IC. In short, most definitions proposed by IC theorists is summarised to include human, customers, suppliers and the structure within the organisation, (Roos & Roos 1997; St Onge 1996).

For the purpose of this study, three dimensions of IC that are human capital, relational capital and organisational capital will be used. As purported in Abdolmohammadi (2005), human capital refers to the know-how, skills, capabilities, experiences and expertise of an organisation's members. Human capital is used to accomplish tasks at hand and ultimately achieve organisational goals and missions (Youndt, Subramaniam and Snell 2004). Human capital can be present in an organisation even though the capital is not owned by the organisation. The human resource of an organisation can leave the organisation unless there is a binding contractual agreement.

The organisational capital refers to the internal configurations and systems of an organisation. It consists of two components: innovations that include intellectual property and intangible assets, and process capital that includes organisational structure and operating procedure (Roslender and Ficham 2001). The organisation has perfect ownership over its organisational capital (Roslender & Ficham 2001; Sveiby 2001).

The term relational capital refers to external links of the organisation: the relationship between the organisation and external parties that goes beyond its relationship with its customers. It includes the relationship with the organisation's suppliers and other members of its external community.

INTELLECTUAL CAPITAL DISCLOSURE

IC is still a new concept to accounting and discussion of the theoretical framework underlying IC disclosure is growing. Legitimacy theory, stakeholder theory and signaling theory are amongst the theories used to explain why companies disclose their IC (Bozzolan *et al.* 2003; Gutherie, Petty, Yongvanichl and Ricceri 2004).

Legitimacy theory purports that companies are considered as operating in a constantly changing external environment and they seek to ensure that they operate within the bounds and norms of their respective communities. These bounds and norms are not fixed across time, thereby requiring the company to be responsive all the time. In the k-economy, knowledge embedded in people, organisation and external relations (which have been termed as IC) are the most vital resources for a company. Therefore, companies should disclose their IC position to the stakeholders of the company. The disclosure of IC information is a way for companies to legitimise their presence in society. Thus, it could be said that from the legitimacy theory perspectives, companies would voluntarily report on their IC activities if they perceived that those activities are expected by communities in which they operate.

Stakeholder theory stipulates that a company's management will engage in and report on activities that are expected by the company's stakeholders (Guthrie *et al*. 2000). Furthermore, stakeholders have the right to be provided with information about how the company's activities could affect them (Deegan 2000). Stakeholder theory argues that companies' accountability extends beyond their economic and financial preferences. Thus, in this k-economy it is believed that stakeholders require information about company's important assets which encompass its IC. IC disclosures enable stakeholders to better assess the company's future wealth creation capabilities, allow a more precise valuation of the company and decrease the perception of risks. This is evidenced by Abdolmohammadi (2005) and Chen, Cheng and Hwang (2005) which suggest IC disclosures can significantly affect market capitalisation.

Signaling theory, on the other hand, purports that management will signal positive information to investors through the annual reporting mechanism in an effort to persuade investors to invest in the company. Signaling is a reaction to information asymmetry in markets. Companies have more information than investors. This asymmetry can be mitigated when the party with more information (management) signals to the other parties(investors). Managers of higher quality companies are willing to distinguish themselves by means of voluntary disclosures of their IC position. This signaling motive is particularly useful in growing companies in either the technological based or service industry to communicate their strengths to outsiders. With the advent of new technologies that serves as medium of communication, companies can now communicate their IC in their web based annual reports. The information that they release, particularly on their IC position, would allow investors to make timely and more precise valuation of the companies.

IC reporting provides companies with the opportunity to take advantage of increased publicity to knowledge based information. Previous research on IC information disclosure has consistently described the level of disclosure as 'low' (Goh & Lim 2004; Guthrie & Petty 2000; William 2000). Interestingly, Garcia-Meca *et al.* (2005) argue that differences exist in disclosure levels by categories of IC information. They find that larger companies usually disclose more IC information than smaller companies. Guthrie and Petty (2000), on the other hand suggest that low disclosure of IC information is attributed to the lack of an established IC reporting framework and the general lack of a proactive stance by companies to measure and externally report IC information.

MALAYSIAN CORPORATE FINANCIAL REPORTING SCENE

There are two important bodies responsible for the development, review and approval of accounting standards in Malaysia; the Malaysian Accounting Standards Board (MASB) and the Financial Reporting Foundation (FRF). The MASB is an independent authority to develop and issue accounting and financial report standards in Malaysia. The FRF is a trustee body and has responsibility for the oversight of the MASB's performance, financial and funding arrangement. It is also an initial source of views for the MASB on proposed standards before pronouncement.

Companies in Malaysia are required under the Company's Act, 1965 to prepare and publish audited financial statement every year. The format and contents of the financial statement must comply with requirements as set out in the Ninth schedule of Companies Act and the Approved Accounting Standards. In addition, public companies listed on Bursa Malaysia, including the two airline companies included in this study, must also comply with listing requirements as sets out by Bursa Malaysia. The listing requirements include the disclosure on directors' responsibility to the financial statement, directors' statement on corporate governance and directors' statement on internal control and disclosure of IC. In 1997 a new financial reporting framework was established in Malaysia – the Financial Reporting Act 1997. This act sets out the first formal reporting framework for Malaysia. However, there is no particular section within the Act that discusses IC reporting and disclosure requirement. The extent of mandatory IC reporting in Malaysia is clearly stipulated in the new Financial Reporting Standards (FRS138) on intangible assets which forms part of the Generally Accepted Accounting Principles. The items included as assets in the balance sheet are limited to the items that are objectively measurable. The standard precludes the reporting of other elements of IC including the human, organisational and relational capital.

Today's annual report users prefer high-quality financial reports. Users usually want to look beyond their shares for investment and capital. Therefore, companies cannot consider minimum compliance with politically compromised Generally Accepted Accounting Principles (GAAP) as sufficient. Therefore, to exceed the requirements of GAAP, companies must respond to the powerful drive for greater wealth by expanding the scope of reported information to ensure that users are adequately informed. Dzinkowski (2000) highlights the importance of IC in creating company's value in achieving competitive advantage. The amount of

IC is not captured in the balance sheet. In Malaysia, the disclosure of IC is voluntary. Therefore, the decision to reveal companies' IC is at the discretion of companies' management.

This study aims to quantify the extent and types of IC disclosure in two Malaysian companies operating in the airline industry. The existing financial accounting standards only prescribe the accounting and disclosure for a very general dimension of IC such as purchased goodwill, intangible assets and intellectual property. This study will explore the different forms of IC disclosed including those required by accounting standards encompassing patents, licenses, trademarks, franchises, brand names, rights and concessions also known as organisational capital or structural capital dimension of IC.

METHODOLOGY

This study uses content analysis on companies' annual report over the two-year period of 2005-2006. The main premise of content analysis is that contents of documents are analysed to find patterns that can be interpreted by the researchers (Srnka & Koeszegy 2007). Documents are dissected into smaller units that are identified as unit of analysis. This smaller unit can be a term, a sentence, or a paragraph within the document. Each unit will be tagged by the related IC components. The frequency of appearance of each unit within the document indicates importance of the related IC components. This study used the ten IC categories and 58 IC components used by Abdolmohammadi (2005). The ten IC categories and 58 IC components is shown in Table 1.

As the list above shows, all the categories are further defined by the IC components. For example the competence category has 11 IC components such as intelligence, knowledge and brain power. These IC components relate to qualities that employees posses and put to work for the benefit of the company. This category can be clearly differentiated from the personnel category which relates to the company's policies and actions that help retain qualified employees.

This study examines annual report of two airlines companies' (Airline A and Airline B) over the years of 2005-2006. When analysing the annual reports of the companies, this study focuses on the 58 IC components listed above (refer to Appendix 1). The items used for each category was analysed by word count. It is worth noting that companies may chose not to disclose some of the IC listed above in their annual reports. Some companies prefer to disclose their IC positions in the Web sites that are generally updated more frequently. This is due to the fact by doing so, they can attract more audience. However, the scope of this paper is limited only to disclosure of IC information in company's annual report with the assumption that companies disclose all their important information to attract to potential investors in their annual report.

TABLE 1. IC categories and IC components

IC Category	IC Component
Brand	Brand, recognition, development, goodwill, and trademark
Competence	Intelligence, knowledge, know-how, education, competence, motivation, expertise, intangible skills, brainpower ,specialist and training
Corporate culture	Corporate culture, management philosophy, leadership and communication
Customer based	Customer satisfaction, customer recognition, customer loyalty, customer based, customer retention, customer service, customer support, customer value and market share
Information technology	Information technology, network, computer software, operating systems, EDI, telecommunication and infrastructure
Intellectual property	Patents, copyright, soft asset, intangible asset, licensing agreement and franchising agreement
Partnership	Partnership and joint venture
Personnel	Human resource, employee satisfaction, personnel, employee retention, flex time, telecommuting, empowerment and people
Proprietory process	Innovation, innovative trade secret and methodologies value added
R & D	R&D

Source: Abdolmohammadi (2005)

BACKGROUND OF COMPANY A AND COMPANY B

Airline A and Airline B are currently the two major airline carrier operating in Malaysia. Airline A is a full service airline and emphasizes providing high quality services and enhancing its services continuously. This airline highlights its slogan on "Going beyond Expectations". Meanwhile, Airline B is a no-frill airline and it is the first budget carrier in the South East Asia Region. With its "Now everyone can fly" motto, this airline focuses on providing lower fares where passengers pay just for the air fare. This study only examine over the year of 2005-2006 annual report because, Airline B was only listed under the Bursa Malaysia in year 2005. Airline A is a full service carrier and it has nearly 100 aircrafts to serve more than 120 destinations around the world. It is the airline's vision to become uniquely renowned for its personal touch, warmth and efficiency. This airline emphasizes the provision of high quality services, continuous enhancement of its in-flight services, reliable ground support and excellent infrastructure.

Airline B is the first airline in the South East Asia region with the low cost concept, and is becoming a market leader in that particular sector. It began its operations on January 15, 2002. This airline believes that flying should be affordable to everyone. To support its low fare structure, this airline practices low-cost reservation and ticketing methods, and ticketless travel. This airline also focuses on zero overnight destinations and a quick time-around. The airline vision is "to continue to be the lowest cost short haul airline in every market it serves in Asia, delivering strong organic growth through offering the lowest airfares at a profit'.

FINDINGS AND DISCUSSION

Table 2 and Table 3 present empirical evidence on the nature and extent of disclosure of intellectual categories and components for the years 2006 and 2005. The study reveals that both companies disclose more about its organisational capital (intellectual property represents part of the organisation's soft assets and intangible assets, which cannot be touched and seen of their existing physically - its licensing agreement and franchising agreement), followed by human capital and relational capital components. For both companies, the disclosure of organisational capital has increased in 2006 compared to year 2005. Interestingly, Company A reduces its disclosure of human capital namely the personnel component while Company B increases to match Company A at a new level of disclosure. Another point worth noting is that both companies disclose the relational capital in 2006, which is not reported in 2005.

Intellectual property has the highest frequency of disclosure in the annual reports for both companies. The intellectual property components comprise patent, copyright, soft assets, intangible assets and agreement with third parties. This finding is justified by the fact that disclosure on intellectual property is required by current accounting standards in Malaysia. Both airline companies focus more on the required disclosure. Disclosure of intellectual property can actually signal out company's ability to create new knowledge, involvement in developing of combinative ability of the organisation, knowledge sharing across functional boundaries and emphasize combining different knowledge from different sources to enhance variety.

TABLE 2. IC Disclosure in Year 2006

IC Category	IC Component	Company A	Company B
Organisational Capital	• Brand	9%	25%
	• Corporate culture	5%	18%
	• Customer based	2%	7%
	• Information technology	15%	0
	• Intellectual property	51%	10%
	• Proprietary process	1%	0
Human capital	• Competence	7%	3%
	• Personnel	8%	28%
Relational capital	• Partnership	2%	7%
Total		100%	100%

TABLE 3. IC disclosure in Year 2005

IC Category	IC Component	Company A	Company B
Organisational Capital	• Brand	5%	38%
	• Corporate culture	6%	25%
	• Customer based	2%	8%
	• Information technology	8%	0
	• Intellectual property	46%	0
	• Proprietary process	1%	0
Human capital	• Competence	6%	4%
	• Personnel	26%	25%
Relational capital	• Partnership	0	0
Total		100	100

For Company A and Company B, the disclosure of competence and personnel as its human capital component is equally high. This shows that employees are an important element in the airline industry. Airline industry, being a service industry needs people to manage and deliver its services. The success of airline companies rest on the ability of their staffs to provide the right kind of services to its customers.

Both companies emphasize more on the personnel information rather than on the competence of their personnel. While Company A increases its disclosure of competence, Company B seems to be hesitant in disclosing it. Company A, being a more established organisation, is seen to be serious about telling external users of the competencies of its staffs. This observation is not apparent for a growing company such as Company B. Interestingly, in 2006, Company A reduces its disclosure on personnel while Company B increases its disclosure. One interpretation that could be derived from the observation above is that without external regulations, companies depend on their competitor's disclosure to measure the adequacy of their disclosure. Company reduces its disclosure on competencies to reduce its risk while company B tries to match up with company A's disclosure on competencies.

Meanwhile for the relational capital category, the finding reveals that both Company A and Company B disclose partnership, as an element in this category in its 2006 annual report. This disclosure is not included in 2005 annual report suggesting both companies began projecting its strength in having strong relationship with industry players globally.

Even though, category wise, both companies have similar elements of IC disclosure, differences are noted if we compare elements for each category. For example, Company B seems to neglect reporting about their information technology capabilities and proprietary process in both 2005 and 2006 annual reports. Even in the human capital category, that is the competence element, Company B appears to lag behind in the number of disclosure. There are many possible explanations including the fact that Company B is a new and growing company as opposed to Company A being a more established company. The disclosure of company's IC in its annual report indicates the internal capital being developed by the company with established companies having more internal capital developed. But, company with high disclosure of its IC might face a possible threat to a company's competitive advantage For example, management may feel hesitant to disclose information related to a new product or service it has developed, fearing to release of such information may attract unwanted reputational or contracting attention (Williams, 2001). Williams (2001) also suggests that companies reduce IC disclosures when performance reaches a threshold level for fear of competitors' reactions. According to Karpoff and Lott (1993) a driving force behind potential costs of (e.g. reputational and political costs) IC disclosure may stem from external parties undertaking actions detrimental to the company's future cash flows.

CONCLUSION

This study presents analysis on the disclosure of IC information in two airline companies based in

Malaysia. The descriptive data on the frequency of disclosure of IC components and categories provide initial evidence of disclosure of IC by airlines companies. This study shows that even though both companies have all the three types of IC categories disclosed, but they are not equally emphasized. Whilst Company A emphasizes more on intellectual property, competence and personnel information, Company B places more focus on brand and personnel. From the findings, there is clear evidence that brand, personnel and partnership are the types of IC being disclosed by airline companies in Malaysia. However, it is not clear whether these dimensions are peculiar only to the airline industry. Furthermore, it is also not clear whether disclosing these ICs provides higher quality of financial reports or whether disclosure is significant in maintaining market confidence and integrity. It is however, very clear from the data that both the companies increase their disclosure of the various components of IC in their annual report. Apart from that, both companies appear to include the relational capital component to project their linkages globally. Even though reporting of IC is not mandatory in Malaysia, two major airline companies in Malaysia provide such disclosure to their stakeholders, perhaps to signal to the public their strengths in IC. The question is whether the stakeholders perceive these voluntary disclosure as value added information to the respective function. This gives rise to the need for future research that look at the value of IC disclosures to the various stakeholders. High quality financial reports should provide the necessary information required for users to make informed decisions. More studies should be carried out to ensure companies report relevant IC information so that stakeholders can make better decisions. While this study relies on information disclosed in companies' annual report, it should be reminded that annual reports are not the only medium of communication that companies used. So the extent of IC disclosure using other mediums is beyond the scope of this paper.

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APPENDIX 1

IC Categories	Items	Co A/05	Co B/05	Co A/06	Co B/06
Brand	brand	1	0	3	0
	recognition	1	0	8	0
	development	0	18	0	0
	goodwill	20	0	0	17
	trademark	0	0	0	0
	Total	22	18	11	17
Competence	intelligence	0	2	0	0
	knowledge	2	0	3	2
	know-how	0	0	0	0
	education	1	0	3	0
	competence	0	0	0	0
	motivation	0	0	0	0
	expertise	2	0	2	0
	intangible skills	0	0	0	0
	brain power	0	0	0	0
	specialist	0	0	0	0
	training	7	0	9	0
	Total	12	2	17	2
Corporate culture	corporate culture	0	0	0	0
	mgt philosophy	0	0	0	0
	leadership	3	0	2	0
	communication	9	0	10	0
	Total	12	0	12	0
Customer based	customer satisfaction	0	0	0	0
	customer recognition	0	0	0	0
	customer loyalty	0	0	1	0
	customer based	0	0	0	0
	customer retention	0	0	0	0
	customer service	0	0	2	0
	customer support	0	0	0	0
	customer value	4	0	2	0
	market share	0	0	0	0
	Total	4	0	5	0
Information technology	information technology	0	0	0	0
	network	11	0	32	0

APPENDIX 1 *cont.*

	computer software	0	0	0	0
	operating systems	0	0	0	0
	EDI	0	0	0	0
	telecommunication	0	0	0	0
	infrastructure	3	0	3	0
	Total	14	0	35	0
Intellectual property	patents	0	0	0	0
	copyright	0	0	0	0
	soft asset	0	0	0	0
	intangible asset	0	0	9	0
	licencing agreement	86	0	113	7
	franchising agreement		0		
	total	86	0	122	7
Partnership	partnership	0	2	4	2
	joint venture	0	3	1	3
	Total	0	5	5	5
Personnel	human resource	5	0	9	0
	employee satisfaction	0	0	3	0
	personnel	1	0	0	0
	employee	31	12	0	19
	employee retention	0	0	0	0
	flex time	0	0	0	0
	telecommuting	0	0	0	0
	empowerment	0	0	0	0
	people	9	0	7	0
	Total	46	12	19	19
Proprietory process	innovation	0	0	1	0
	innovative	0	0	0	0
	proprietory process	0	0	0	0
	trade secret	0	0	1	0
	methodologies	0	0	1	0
	value added	1	0	0	0
	Total	1	0	3	0
	R&D	0	0	0	0