# INTELLECTUAL CAPITAL REPORTING AMONG LARGE MALAYSIAN COMPANIES AND THEIR DETERMINANTS

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**BY**
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# ABSTRACT

In this new economy, intellectual capital (IC) plays an important role compared to the physical assets in achieving a company's value and success. This study examines the IC disclosure practices in the 2006 annual reports of the 70 largest Malaysian companies listed on Bursa Malaysia. IC disclosures were captured using content analysis, and an 'Operational Definition of IC' was used to measure the extent of IC reporting. The results indicated that the sampled companies provided a generous quantity of IC information. However, the inconsistency in the application of content analysis, as well as an absence of specific guidelines on IC, had led to substantive difference in IC reporting practices. This study also examines the possible determinants of IC disclosure practices from three perspectives: IC value in a company, corporate governance structure and company characteristics. The results of the regression analyses based on the four measures of IC disclosure, i.e. total IC, total human capital, total structural capital, and total relational capital, indicated significant associations with certain variables under these three perspectives. These findings offer support for the proposition that Malaysian companies disclose their IC information to legitimise their activities and performance, since management considers these information as part of their value creation process and is considered as value relevant information to their stakeholders. This research also provides evidence that there is a need to have a guideline (IC disclosure index), which can be used as a basis for IC reporting framework. A set of guidelines for companies in measuring and reporting of IC would be advantageous to both preparers and users of financial information. Such practices would enhance the consistency of IC disclosure.

**Keywords:** intellectual capital, value added intellectual coefficient (VAIC), IC reporting, IC reporting framework, content analysis

# ABSTRAK

Ekonomi hari ini menunjukkan modal intelek (IC) lebih berperanan berbanding aset fizikal dalam meningkatkan nilai dan kejayaan sesebuah syarikat. Kajian ini menyelidik tentang amalan pendedahan maklumat IC bagi laporan tahunan 2006 ke atas 70 buah syarikat awam terbesar yang dipilih daripada Bursa Malaysia. Ukuran pendedahan IC dilaksanakan dengan menggunakan kaedah analisis kandungan, dan 'Definisi Operasi IC' telah diguna pakai untuk mengukur tahap amalan pelaporan IC. Keputusan menunjukkan bahawa syarikat yang dipilih sebagai sampel telah melaporkan kuantiti maklumat IC yang tinggi. Walau bagaimanapun, penggunaan kaedah analisis kandungan yang tidak konsisten dan tiada garis panduan yang khusus tentang IC telah membawa kepada perbezaan yang substantif dalam amalan pelaporan IC. Kajian ini juga menyelidik pemangkin yang mungkin menjadi penentu kepada amalan pendedahan tersebut dari tiga perspektif: nilai IC dalam syarikat, struktur tadbir urus korporat dan ciri-ciri syarikat. Keputusan analisis regrasi di bawah empat kumpulan pendedahan IC, iaitu jumlah IC, jumlah modal insan, jumlah modal struktur, dan jumlah modal hubungan, telah menunjukkan perkaitan yang signifikan antara beberapa pemboleh ubah yang berdasarkan kepada tiga perspektif tersebut. Penemuan ini memberikan sokongan bahawa syarikat-syarikat di Malaysia mendedahkan maklumat IC untuk menzahirkan aktiviti dan prestasi mereka. Hal ini kerana pengurusan menganggap bahawa maklumat ini penting kepada proses meningkatkan nilai organisasi serta bernilai kepada pihak berkepentingan. Kajian ini juga membuktikan bahawa satu garis panduan (indeks pendedahan IC) sangat diperlukan yang boleh digunakan sebagai asas bagi rangka kerja pelaporan IC. Satu set garis panduan untuk syarikat dalam mengukur dan melaporkan IC dapat memberi manfaat kepada kedua-dua pihak, penyedia dan pengguna maklumat kewangan. Amalan seperti ini akan meningkatkan ketekalan pendedahan IC.

**Kata kunci:** modal intelek, nilai tambah kemampuan intellectual (VAIC), pelaporan IC, rangka kerja pelaporan IC, analisis kandungan

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| | |
|---|---|
| ANOVA | Analysis of Variance |
| BOD | Board of Directors |
| CEE | Capital Employed Efficiency |
| CSR | Corporate Social Responsibility |
| EPU | Economic Planning Unit |
| EU | European Union |
| FASB | Financial Accounting Standards Board |
| FRS | Financial Reporting Standards |
| GLCs | Government-linked Companies |
| HCD | Human Capital Disclosure |
| HCE | Human Capital Efficiency |
| IAS | International Accounting Standards |
| IASB | International Accounting Standards Board |
| IC | Intellectual Capital |
| ICE | Intellectual capital efficiency |
| IFAC | International Federation of Accountants |
| IFRS | International Financial Reporting Standards |
| IP | Intellectual Property |
| IT | Information Technology |
| K-based | Knowledge-based |
| KBE | Knowledge-based Economy |
| MASB | Malaysian Accounting Standards Board |

| | |
|---|---|
| MERITUM | Measuring Intangibles to Understand and Improve Innovation Management |
| MSC | Multimedia Super Corridor |
| NEM | New Economic Model |
| OECD | Organisation for Economic Co-operation and Development |
| OPP3 | Third Outline Perspective Plan |
| R&D | Research and Development |
| RCD | Relational Capital Disclosure |
| S&T | Science and Technology |
| SC | Malaysian Securities Commission |
| SCD | Structural Capital Disclosure |
| SCE | Structural Capital Efficiency |
| SER | Social and Environmental Reporting |
| SMAC | Society of Management Accountants of Canada |
| SRIs | Strategic Reform Initiatives |
| STs | Strategic Thrusts |
| UK | United Kingdom |
| US | United States |
| VAIC | Value Added Intellectual Coefficient |

# CHAPTER ONE

# INTRODUCTION

## 1.1 Overview

This study aims to examine intellectual capital (IC) disclosure practices in annual reports of Malaysian companies by reflecting on content analysis methodology. In addition, this study will attend to the issue of refining the application of content analysis methodology when applied to IC disclosure study, i.e. in terms of improving its application by highlighting on issues related to operational procedure and methodological problems. At the same time, this study attempts to examine the possible determinants for the patterns of such a disclosure from the three perspectives, i.e. value of IC in a company, corporate governance structure and certain companies' characteristics. It is appealed that even though IC is of significant and growing importance, it has not been identified and measured properly by companies (Guthrie et al., 1999; Mohd-Saleh et al., 2009; Abhayawansa, 2014). They stated that the reason is because information on IC is perceived in different ways, and that there are no specific disclosure standards and guidelines to follow. The absence of standards and guidelines contribute to the results in companies failing to recognise IC information in the financial statements. Lev & Zarowin (1999) claimed that the failure to incorporate IC information in financial statements has reduced the usefulness of the accounting information, or the accounting information is said to have lost its relevance. Some have voiced their concern that this financial reporting does not reflect all the value drivers that govern modern businesses (Sveiby, The contents of the thesis is for internal user only

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**Appendix A**

**OPERATIONAL DEFINATION OF IC AND IC FRAMEWORK**

**DEFINITION OF IC**

IC is part of intangible assets but not all intangible assets are IC. It comprises any invisible and valuable investments that can be leveraged and used to create new value and wealth to the company that gives a competitive advantage to the company in the marketplace. IC in this study is classified under three components which are (1) human capital (human resources/employee competence/individual competence) (2) structural capital (internal capital/internal structure/organizational resources/process capital/infrastructure capital/organizational capital) and (3) relational capital (external capital/external structure/customer capital/relational resources); a version derived from main literature and coming from the ground-breaking works of people like Annie Brooking (Brooking, 1996), Karl-Erik Sveiby (Sveiby, 1997), Leif Edvinsson (Edvinsson & Malone, 1997), Thomas Stewart (Stewart, 1997), Roos, Roos, Edvinsson and Dragonetti (Roos et. al, 1998), and Patrick Sullivan (Sullivan, 1999). It is noted that the same categorisation has been used in most IC reporting research (for example, Guthrie et al., 1999; Guthrie & Petty, 2000; MERITUM, 2001; Bontis, 2003; Abeysekera & Guthrie, 2005; Guthrie, Petty, & Ricceri, 2006; Oliveira et al., 2006; Beattie & Thomson, 2007; Abeysekera, 2008c). It is also identified that the majority of IC reporting studies in the literature have used IC reporting frameworks either by Guthrie et al. (1999), Guthrie and Petty (2000) or Guthrie et al. (2003 & 2004) as a basis for their studies. The application has been either through a direct adoption (for example, Brennan, 2001; April et al., 2003; Bozzolan, et al., 2003; Goh & Lim, 2004), or with modification (for example, Abdolmohammadi, 2005; Wong & Gardner, 2005; Vandemale et al., 2005; Firer & Williams, 2005; Steenkamp, 2007; Campbell & Abdul

Rahman, 2010). Guthrie's framework originated from several professional pronouncements on IC such as those from the International Federation of Accountants (IFAC) (1998) and the Society of Management Accountants of Canada (SMAC) (1998). The IC categories and IC items applied in Guthrie‘s research follows the contemporary scheme for intangibles involving pioneer IC researchers (i.e. Sveiby, 1997). The present study will refer to these IC components under the names human capital, structural capital and relational capital to represent the three categories of IC.

## DEFINITIONS OF THREE IC CATEGORIES

**Human Capital (Human Resources/Employee Competence/Individual Competence)**

Human capital refers to an individual's education, innovation capacity, creativity, knowledge, skills competence, know-how, formal training and education, learning capacity, values, previous experiences, teamwork capacity, tolerance for ambiguity, motivation, loyalty and ability of people in the organization. It represents the value and benefits that can be obtained by utilizing these knowledge, experience and skills of people within the organization. Human capital grows when a corporation uses more of employees' knowledge or when more employees gain more useful knowledge (Brinker, 2000). Human capital is important because it is the source of innovation and improvement.

MERITUM Project, Guidelines for Managing and Reporting on Intangibles (2001), defined human capital as the knowledge, skills and experience that employees take with them when they leave the firm. Human capital is considered as the soul of the company (Roos et al., 1998). Stewart (1997) viewed human capital as the capabilities of the individuals required to provide solutions to customers. Brooking (1996) defined human capital as assets comprising of the collective expertise, creative and problem solving capability, leadership, entrepreneurial and managerial skills embodied by the employees of the organization. However, human capital cannot be owned by a company, it can only be rented. All employees work in one organization on their own free will, meaning that employees are not under companies' direct control. Employees may quit, be fired, or take leaves (Edvinsson, 1997, Sveiby, 1997). The company, therefore, must do their best to retain their good employees. Companies should be able to utilize the skill, ability or knowledge of their employees, so that they may have more opportunities to leverage them into profit, but at the same time it should be balanced by way of compensation. Bontis (1998) defined human capital as the individual tacit knowledge that exists in an organization. Tacit knowledge is extremely difficult to describe, it is knowledge that people often do not even realize they have (Brinker, 2000). Opportunities should be created to make this private knowledge become public and the tacit knowledge become explicit. Companies have to make tacit knowledge explicit, thus turning the knowledge into an asset with added value to the organization. Whenever human capital commits their knowledge, know-how, or learning onto paper, intellectual assets are created; they now belong to the company and become company's property (structural capital). Hence, human capital has an important role on the development and exploitation of the structural capital and relational capital. The characteristics of human resources are critical in determining the knowledge creation capacity of the organization as well as the quality and length of the relationships with external stakeholders. From a value-based perspective, they should be measured and placed within the balance sheet (Guthrie & Petty, 2000) but, as in the case of external capital, human capital cannot be "owned" by the organization even if it is in their "possession" for the period in which the individual is working for the company. Brooking (1996) considered human capital as the knowledge of the people within the organization. It includes skills and expertise, problem-solving abilities, leadership styles, creativity, entrepreneurial and everything that is embodied by the employees. Edvinsson (1997) defined human capital as the capabilities of the individuals to provide solutions to customers and gave examples such as knowledge, skills, competencies and expertise of the employees. He also stressed that human capital cannot be owned by the organization, it can only be rented. Roos et al. (1998) added elements such as i.e. attitude and intellectual agility, and reflected human capital as having thinking capabilities of IC. Sveiby (1997) refers to this category of IC under competence of employees and it includes education and training, experience, skill and expertise of the employees He mentioned that individual competence cannot be owned by the organization, it is owned only by the person who possesses it. Sullivan (1999) used the term human resource to refer to human capital and it is the firm's employee intellect. This asset includes the collective experiences, skills, and general know-how of company's employees.

**Structural Capital (Internal Capital/Internal Structure/Organizational Resources/ Process Capital/Infrastructure Capital/Organizational Capital)**

Structural capital is defined by Stewart (1997) as the knowledge that stays within the firm at the end of the working day, or knowledge that does not go home at night. It is the elements which make up the way the organization works. If human capital is the source of innovation for the company, structural capital makes this human capital works to create value. Structural capital is everything else of organizational capability that supports those employees' productivity. Its value depends on how well it is able to use and leverage the human capital at their full potential. It comprises the organizational routines, procedures, systems, information systems, market intelligence, cultures, databases, etc. which turn human capital or individual know-how into company's property. According to Bontis (1998), structural capital contains the mechanisms and structures of the organization that assist employees to contribute to the firm's profit. It includes infrastructure assets which relate to technologies, methodologies, and processes that enable the organization to function. Structural capital belongs to the organization as a whole. Also included in structural capital are the elements of human capital which have been converted into proprietary capital (IP). This includes items such as patents, concepts, models, research and development, organizational flexibility, a documentation service, the existence of a knowledge centre, the general use of information technologies, organizational learning capacity, computer and administrative systems, etc. These assets can be reproduced and shared, and a company can sell and sue anybody who takes them without permission. This is because some of them may be legally protected and become Intellectual Property Right, legally owned by the firm under separate title (MERITUM Project, Guidelines for Managing and Reporting on Intangibles, 2001). These are usually created by the employees or are brought in. Structural capital is a company's capability to use company's resources to contribute to profitability. According to Stewart (1997), there are two purposes that structural capital should serve. The first is to connect people to data, experts, and expertise, including bodies of knowledge on a just-in-time basis. The second purpose of structural capital is to codify bodies of knowledge that can be transferred, to preserve the recipes that might be lost.

Guthrie & Petty (2000) considered structural capital to comprise of two main elements of intellectual property and infrastructure assets. Intellectual property (IP) includes properties derived from the mind that has been captured during the development of companies' products and ideas, and is now protected under the law. Brooking (1996) considered it under corporate assets which are derived from the mind, can be expressed in financial terms, and are protected by legal mechanism. Elements of this category can be developed internally or acquired. Examples are trade secrets, copyright, patent, know-how and any intangible which can be protected by copyright. Sullivan (1999) considered IP as part of intellectual assets which can be legally protected. Examples of intellectual property are patents and copyrights. The latter consists of infrastructure assets owned/used by the organization. It can be a system and a process used in the organization's day to day activities. It also includes values that guide the behavior of individuals and of the entire organization. These assets include all the technologies, processes and methodologies which enable the organization to function. Infrastructure assets are important because they provide strength and cohesion between its people and its process, and also bring quality to the organization (Brooking, 1996). It remains within the organization at the end of the working day. Edvinsson (1997) referred to this category of IC under structural capital and defined it as the organizational capabilities of the organization to meet market requirements or those "left behind when the staff has gone home." Hence, he stressed that structural capital can be owned and traded by corporations. He provides examples of structural capital as the values, culture and philosophy of the organization. According to him, organizational culture and spirit are also considered part of the internal structure. Roos et al. (1998) has broken down structural capital into relationship capital, organizational capital, and the renewal and development value. Sveiby (1997) includes organizational structure, patents, concepts, models, manual system, R&D, and software under internal structure, which is owned by the organization. Sullivan (1999) used the term intellectual asset, and it comprises the tangible or physical being of specific knowledge of a company to which the company can assert right of ownership on. This intellectual asset is created when the human capital put their knowledge on paper and once written intellectual assets represent the source of innovations, which companies can commercialise. Examples of intellectual assets are plans, procedures, computer programmes, blueprints, drawings and designs.

**Relational Capital (External Capital/External Structure/Customer Capital/Relational Resources)**

Stewart (1997) defined relational capital as the value of an organization's relationships with the people whom it does business with. It consists of relationships with stakeholders of the firm – customers, suppliers, R & D partners, investors, creditors, etc., plus the perceptions they hold about the company. It also includes brand recognition and goodwill. Of the three broad categories of IC, i.e. human, structural, and relational capital, Stewart (1997) designates relational capital as the most valuable asset. This is because they pay the bills; they are where the money comes from. Relational capital is just like human capital, which cannot be owned by a company. Examples of items for this category of capital are image, customer loyalty, customers' satisfaction, link with suppliers, commercial power, negotiating capacity with financial entities, environmental activities, brand names, trademarks and reputation. MERITUM Project, Guidelines for Managing and Reporting on Intangibles (MERITUM, 2001), defined relational capital as all resources linked to the external relationships of the firm, with customers, suppliers or R&D partners. Bontis (1998) said that customer capital consists of the knowledge embedded in the relationships external to the firm. It also includes the availability of marketing channels and the relationship with external stakeholders such as local communities, industry associates, and shareholders. The information age has created smarter products, and also smarter and more demanding customers. Technology has made customer more aware about companies' products, and what were offered by other competitors. Therefore today's companies should be able to equate their competitive advantage with their ability to deliver complete customer satisfaction (Brinker, 2000). The better the relationship, the more firm can learn and share knowledge with and from its customers and suppliers in order to create sustainable competitive advantages. All these relationships, however, do not show up in the current reporting system.

In their book, Roos et al. (1998) stated that customer satisfaction, i.e. relationship value with customers, can increase the life expectancy of the relationship, reduce price elasticity, reduce the efficiency of the competitors, lower the cost of attracting new customers and enhance the reputation of the company. Brooking (1996) refers customer capital as market assets which include brands, customers and their loyalty, repeat business, backlog, distribution channels, and various contracts and agreement.

Relational capital indicates the relationship an organization has with different external stakeholders (customers, partners and retailers, suppliers, and so forth). It consists of several elements including customers, distribution channels, business collaboration and franchising agreements. Brooking (1996) includes all market related intangibles, including brands, customers, customers' loyalty, various contracts, distribution channels, licensing agreements, franchise contract and backlog under this category and term them as market assets or customer assets. The management of the relationships with different stakeholders is considered as a critical factor in building a favorable environment in which to exploit the value creating potential of the organization as they give the company a competitive advantage in the market place. Sveiby (1997) refers this category of IC under external structure and lists the examples as relationship with customers and suppliers, brand names, trademarks, and the organization's image.

## OPERATIONAL DEFINITIONS OF IC

The framework used in this study is based on Huang et al. (2007). The framework consists of three broad IC categories and comprises of forty-five IC attributes/items. The operational definitions for the 45 IC items were derived from previous literature such as by Brooking (1996), Steward (1997), Sveiby (1997), Roos et al. (1998), Guthrie & Petty (2000), Abeysekera (2003), Guthrie et al. (2003), Abdolmohammadi (2005), Firer & Williams (2005), Steenkamp (2007), and Campbell & Abdul Rahman (2010).

| IC ITEM | OPERATIONAL DEFINITION |
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| **HUMAN CAPITAL** | |
| **Employee Capabilities** | |
| 1. Employee work-related knowledge | Work-related knowledge refers to the body of knowledge individuals possess about a particular topic (Brooking, 1996, p. 41). Work related knowledge frequently comes as a function of understanding and doing a job in a particular field. It comprises three types of knowledge: tacit, explicit and implicit. Tacit knowledge is a special knowledge possessed by individuals but is extremely difficult to explain or document. It is important for organizations to know who has tacit knowledge and ensure that they are treated as a valuable asset to the organisation. Explicit knowledge is well organised in the mind of the individual and may easily be documented as manuals or procedures. Implicit knowledge is knowledge which is hidden in the operating procedures, methods and culture of the company. Identifying and transferring this type of knowledge from one person to another can be very difficult as the individual is often unable to explain why they know that a certain process works (Brooking, 1996, pp. 51-52). It is a source for new ideas and the best chance for furthering the growth and development of a vital social institution (Byrne & Powell in Steenkamp, 2007, p. 269); i.e. *employee knowledge* and *work-related knowledge.* |
| 2. Employee work-related competence | Work-related competencies are a merged set of skills, creative profiles, personality attributes and vocational qualifications. Examples of work related competencies include: the ability to design a marketing strategy, the ability to manage a project and the ability to sell a particular product. It requires vocational qualification, work related knowledge and personality profiles to come together and are used within the organization. (Brooking, 1996, pp. 55-56). Vocational qualifications are designed to provide specific work related skills to an individual for a particular job. Competence can be transferred from person to person through information such as lecture or through tradition, or through doing (Sveiby, 1997, p. 40); i.e. *employee competence* and *work-related competence.* |
| 3. Employee know-how/ expertise | With more skills, employees move from competence to expertise. The mark of a true expert is not just applying the rules but having the confidence to break and replace them with better rules by using both intellectual and physical human endeavour. It is practically impossible to transfer expertise from one |

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| | person to another (Sveiby, 1997, pp. 37-38). It refers to the amount of knowledge an employee possesses about a particular topic, industry or organization (i.e. individual knowledge). It could be a straightforward activity (for example raising an invoice) or a complex activity (for example designing airplane wings) (Brooking, 1996, p. 41); i.e. *employee know-how, entrepreneural spirit, employee expertise/experience/seniority, professional, collective expertise*, *expert teams, specialist service,* and *entrepreneural skill.* |
| 4.<br>Employee creativity/ innovativeness | Innovation is the ability to apply knowledge, as well as the ability to innovate and transform ideas into products or it could be the ability to build on previous knowledge and generate new knowledge (Roos et al., 1998, pp. 39-40). Innovation is described as putting new ideas into practice to achieve commercial success (Molyneux in Guthrie et al., 2003, p. 30). There is a direct relationship between how innovative a firm is and its increase in intellectual capital which has developed through the companies' knowledgeable employees (Brooking, 1996, p.154). A firm's employees' abilities are assets that can add luster to its reputation if properly exploited, such as people who can solve problems more creatively than customers expect (Sveiby, 1997, pp. 71-72); i.e. *employee innovation, solutions to customers, problem solving capability/abilities*, *reactive abilities, proactive* and *employee creativity.* |
| **Employee Development and Retention** | |
| 5.<br>Employee training | Training refers to programmes designed to foster worker participation in decision making and changes in average years of education of workforce incorporating achievement associated with training programmes (GRI, 2000 in Guthrie et al., 2003, p. 30). Solutions to learning needs that take the form of teaching or showing a way of doing things and are essentially skills-oriented (Mayo & Lank in Steenkamp, 2007, p. 271). Indicators measuring this include training costs as a percentage of turnover or the number of days devoted to education per professional (Sveiby, 1997, p. 169); Generally this refers to the process taken by a company, directly or indirectly, to impart skills to employees (Campbell & Abdul Rahman, 2010, p. 68); i.e. *training, effectiveness of training programmes, return on training investment, number of employees participating in training programmes, induction programmes, in-house training, staff developments, training costs as a percentage of turnover, number of days devoted to education per professional* and *training hours.* |
| 6.<br>Key employee turnover | Lost expertise is a huge problem companies try to solve (Brooking, 1996, p. 8). Companies can use the turnover rate measure as a management tool to sustain a sufficient level of dynamics. The turnover rate is usually calculated as the number of leavers during a year divided by the number of people employed at the beginning of the year. Staff turnover could be an indicator for employee motivation. Staff turnover also is generally regarded as an indicator of stability (Sveiby, 1997, p.169); i.e. *movement of key people, low level of staff turnover, turnover rate,* and *employee turnover.* |
| 7.<br>Employee recruitment costs | Recruiting new employees is a company's most important investment decision and perhaps its most important strategic tool. Organization has to compete for the pool of talent and it requires strategy to make the company as attractive as possible to the people it needs (Sveiby, 1997, p. 66); i.e. *employee recruitment, growth (decline)/recruitment of employee,* and *recruitment policy.* |

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| 8. Incentive/ reward/ compensation scheme | Professionals and experts are best motivated by intangible rewards; such as peer recognition, learning opportunities and opportunities for more independence (Sveiby, 1997, p.68). Employee thanked; express gratitude to an employee publicly for his or her contribution to the firm (The Concise Oxford Dictionary in Steenkamp, 2007, p. 269). Employee featured; make special display or attraction of, or give special prominence to employees of the firm (The Concise Oxford Dictionary in Steenkamp, 2007, p. 269). Executive and employee compensation plan; recompense executive staff and employees for their effort towards the firm in addition to their statutory entitlements (The Concise Oxford Dictionary in Steenkamp, 2007, p. 270). Companies are willing to give compensation to those who retire or are laid off such as *severance pay, umbrella agreement (including "golden parachutes")* and *pensions* to acknowledge their employees (Sveiby, 1997, p. 10); i.e. *employee thanked, employee recognition, rewards, incentive, compensation scheme, post-employment benefit, continuing education offered to employees, severance pay, umbrella agreement (including "golden parachutes"), pensions* and *career development.* |
| 9. Employee profitability e.g. revenue per employee, etc. | It is the quantum of wealth generated by the activities of the group executives and employees in their disciplines (Hayleys in Steenkamp, 2007, p. 269). This also includes the calculation of the leverage effect of the professionals. This is to identify the amount of earning power that is attributable to a firm's own professionals/employees (Sveiby, 1997, pp.170-171). Valuable human assets are those which can support the organization and are able to generate new strategies, product, services and technologies which are able to push the market (Brooking, 1996, p. 46). It can also be calculated based on the knowledge they contribute, the revenues they generate, and the customer they bring to the organization. It thus makes sense to see an employee as a generator of revenue (Sveiby, 1997, p. 67). Employee involvement in the community; an opportunity for face-to-face contact with an often concealed but significant part of the firm's stakeholders. People can create revenues with their competence in various ways; as mentor, teacher, salesperson, ambassador (Sveiby, 1997, p. 71); i.e. *value-added employee and duties, employee productivity, knowledge they contribute, the revenues they generate, the customer they bring to the organization*, e*mployee involvement in the community* and *responsibilities of employee.* |
| 10. Employee previous job experience | *Professional experience;* average number of years that executives worked in their profession (Sveiby 1997, p.79). *Number of years in the profession*; years of employment of executives with the firm (Sveiby, 1997, p.168). *Senior executive performance and results;* results achieved by senior executives over a given time period (Guthrie & Petty, 2000); i.e. *years of service, professional experience, senior executive performance and results,* and *employee experience.* |
| 11. Employees' level of education/ vocational qualification | Education refers to the education received from a formal establishment between the ages of four and eighteen. This refers to the general education a person has received and could be primary or secondary education (Brooking, 1996, pp. 47-48). It is also the exposure to new knowledge, concepts and ideas in a structured way to increase knowledge or modify attitudes and beliefs (Mayo & Lank in Guthrie et al., 2003). Education does not prepare the individual for any job in particular but includes such things as mathematics, history, geography, artistic and creative pursuits (Brooking, 1996, pp. 47-48). Vocational qualifications can be gained in a wide variety of fields including engineering, accounting, management, computing and hospitality (Brooking, 1996, p.48). Formal education is a valid indicator of the level of education (Sveiby, 1997, p.169); i.e. *primary, secondary, tertiary, CPAs, vocational qualification, degree, master,* and *PhD.* |

| Employee Behaviour | |
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| 12. Employee motivation | Companies need employees who are capable and willing to use their skills and abilities to the advantage of the company and have the ability to reach strategic goals, enthusiastic to create a dynamic environment, and demonstrated that in such environments everybody seems to be more productive (Roos et al., 1998, pp 37-38). Employment safety; freedom from danger or risks when employees are at work (The Concise Oxford Dictionary in Steenkamp, 2007, p. 270). Industrial relation/Union activity; a continuous association of wage earners for the purpose of maintaining or improving the conditions of their working lives (Cresswell, Murphy, & Kerchner in Steenkamp, 2007, p. 269). It is the job of a good manager to ensure that each human asset has access and opportunity to mechanisms which enable the employee to achieve their full potential within the organization (Brooking, 1996, p.15). People generally want to feel that they are building up their skills, and want to gain experience by working on challenging projects with other skilled professionals. These provide them with all the motivation they need. A rapid gain in experience provides motivation in itself (Sveiby, 1997, p. 71); *i.e. employee motivation, union/club activities, safety policy, employee safely, quality of safety standards* and *healthy working environment.* |
| 13. Employee job satisfaction | *Equity issues* – making sure that workplace is free from all forms of unlawful discrimination and harassment, and firm provides programmes to assist people and disabled groups (ODEOPE in Steenkamp, 2007, p. 270). Employee equality provides information about the firm's employee policies and practices on equal opportunities with some of them providing externally verified information. Employee job satisfaction relates to a question what actually makes them stay on in a company? Some firms discussed, for instance, their relationships with trade unions, activities that enable employee work and family balance, working environment, and health and safety issues. Employees should be balanced by way of compensation – monetary, professional, personal development and opportunity (Brooking, 1996, p. 15). The work-force is participatory, understanding the goal of company and receiving satisfaction from knowing the part they play in achieving them. In the third millennium company the emphasis is on sharing, encouraging involvement and empowerment, and showing an appreciation for individuals' contribution in the organization (Brooking, 1996, p. 44); i.e. *employees showing their attitudes such as being happy, cheerful, welcoming, hard working or concentrated, equal opportunities, employee equity,* and *employee welfare.* |
| 14. Employee loyalty | Closely related to employee satisfaction is employee loyalty. The employees are not owned by the organization and every time a company loses an employee, it loses a chunk of its corporate memory (Brooking, 1996, p. 9). Humans are also expensive to hire, train and sustain. People tend to be loyal if they are treated fairly and feel a sense of shared responsibility. To be loyal, employees should have the opportunity to create a career plan with the company (Brooking, 1996, p. 17); i.e. *employee loyalty*. |
| 15. Leadership qualities of managers | A leader must have a genuine desire to lead, inspired by a vision of where the organization is heading, able to unite people in the effort to realize the vision, and totally committed (Sveiby, 1997, p. 61). They need to be big picture thinkers, know where the organization aims to go and how it is going to go there (Brooking, 1996, p. 94). Leadership should have the ability to chart a clear direction for the whole group, and then motivate his employees to reach the goals (Roos et al., 1998, p. 37). Many companies now grade their |

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| | executives, but it is unusual to grade other employees. A five-point or a three-point scale may be used. After grades are given, they can be analyzed with statistical methods (Sveiby, 1997, p. 169). These items also basically look at the *leadership background of studies, their standard in community, status, their relationship, behaviour, attitude, commitment, desire and anything that can create value to their company*. Disclosure of leadership quality can be decision-useful, which demonstrates the quality of the management team. Disclosures commonly identified were *directors' current positions held outside the firm*, *managerial skills, management quality, leadership*, *professional recognition and qualifications,* and *awards.* |
| 16. Internal communication system | Information and networking systems in both manual and technology based systems in place to maintain management, share and disseminate information, as well as to network people, in order to gain access to information. Employees do not have as many face-to-face meeting as before, communicating electronically instead, as they communicate with colleagues and managers via computers and networks (Brooking, 1996, p. 10). Information systems provide a context for the employees of the organization to work and communicate with each other and as a means to implement many management processes (Brooking, 1996, p. 75). IT managers are certainly key figures as it is their role to plan and grow IT infrastructure (Brooking, 1996, p. 166); i.e *employee meeting* and *internal communication.* |
| **STRUCTURAL/INTERNAL CAPITAL** | |
| **Development of Products/Ideas** | |
| 17. Implementation of new ideas/ products/ services | Implementation completes the innovation process, i.e. getting things done and turning plan and ideas into action (Brooking, 1996, pp. 161-162). It generates value through a mix of creativity and business sense, the mark of the true entrepreneur and innovation capital represents the enablers to innovate products and processes or what creates the success of tomorrow (Roos et al., 1998, p. 41). It could be companies' new ideas/products/services attached to them or IP such as a patent; copyright; trademark; various design rights; and inovative projects that have been undertaken. Patents are valuable as they give the owner a monopoly on the patented invention for a period of time as it protects them from others who may want to copy the invention. It is an exclusive right granted by the government that confers upon the creator of an invention the sole right to make, use, and sell that invention during the period of protection (Brooking, 1996, p. 36-37). Copyright protects the written words such as books, music and computer software (Brooking, 1996, p.14). It is a protection of creative or artistic works such as literature, drama, music, art, layout, and recording (Campbell & Abdul Rahman, 2010, p. 67). The work can be sold, distributed, or licensed to generate wealth (Brooking, 1996, p. 38). Trademark is a distinctive characteristic by which a person or thing becomes known (Campbell & Abdul Rahman, 2010, p. 67). A trademark TM is non-registered trademark and R is a registered trademark. In the case of the non-registered trademark, owner believes he or she is the only one using it. Since it is not registered the owner may or may not have the legal right to stop others from using it (Choy in Guthrie et al., 2003, p. 28); i.e. *IP investments/purchases, patents, copyrights, trademarks, trade secret, models, designs, adding new product line,* and *new products/technology.*<br><br>This also includes items that are *related to launching new method such as a system to monitor existing services and new features of products*. |

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| 18. Length of time for product design/ development | Steward (1997, p. 238) used the term time-to-market to indicate how long does it takes to develop and introduce new products or services to the market and also includes information about the cost and length of time taken for the approval of certificates for product quality. This involved time taken to complete the cycle of four phases of innovation process, i.e. generating, conceptualizing, optimizing and implementing the new ideas/products/services (Brooking, 1996, pp. 154-162); i.e. *product development time, waiting time for processes,* and *number of development days on IP.* |
| 19. Development of new ideas/ products/ services | The detailed of innovation process involves generating ideas, followed by conceptualizing the ideas. The process then moves into optimizing which progresses further into idea evaluation and action planning. The item were typically about development of patents, trademarks, trade secrets, design rights, copyright, licenses and marketing exclusivity, and the ones in application process. It includes problem definition and idea finding and the process of turning them into reality (Brooking, 1996, pp. 154-162); i.e. *development of new products, costs per unit of IP development expenditure, error rates in processing, research projects,* and *R&D activities.* |
| 20. Exploitation and management of patents/ copyrights and trademarks | IP management is related to filing, maintaining and protecting IP. It is related to ownership and identity of new product and services. It also means exploiting them in the market and leveraging them into profit; i.e. *increases in value per IP item* and *reputation of IP developed* (Firer and Williams, 2005). |
| 21. Life-cycles of products | It is a life-cycle of products. Companies which fail to plan their product life cycle could be faced with under-utilized distribution mechanism (Brooking, 1996, p. 30); i.e. *life-cycles of products* and *IP renewed.* |
| 22. Opportunities for licensing/ franchising agreement | Licensing agreement refers to a wide ranging agreement that gives a party the right to sell products, services or technology to other parties as per conditions set out in the agreement (Brooking, 1996, p. 33). Franchising agreement is a contractual license granted by one person (the franchisor) to another (the franchisee) which entitles the franchisee to carry out a particular business using a specific name belonging to the franchisor. The agreement obliges the franchisor to provide the franchisee with assistance in carrying out the business and requires the franchisee to periodically pay the franchisor consideration for the franchise (Brooking, 1996, p. 32); i.e. *licensing agreement* and *franchising agreement*. Abdolmohammadi (2005) considers these items under IP. Others such as Brooking (1996) and Guthrie and Petty (2000) consider them under relational capital. |
| 23. Effectiveness of expenditure on R&D | This refers to future oriented activities and many organizations undertake R&D as a means to developing new technology which they believe will give them a competitive advantage. The final goal of R&D is to file a patent, which is a very valuable protection for inventors or may be to develop know-how through the process of performing R&D (Brooking, 1996, p. 3), or to generate new products and services for the future (Brooking, 1996, p. 84). The relationship between R&D and corporate strategy should be examined to ensure that the development of IP includes know-how, and contributes towards corporate goals (Brooking, 1996, p. 169). The indicator could be to evaluate companies' ROI on R&D (Brooking, 1996, p. 17). Such information refers to *R&D policies, programmes, planning, progress,* and *budgets on R&D*. There were also disclosures about such things as *output and success rate, project to date, to evaluate companies' ROI on R&D* and *value added by R&D activities.* |

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| 24.<br>Favourable contracts obtained due to company's unique position | It is a contract obtained because of the unique market position held by the firm (Brooking, 1996, pp. 33-34); i.e. *favourable contracts*. |
| **Organization Infrastructure** | |
| 25.<br>Data systems providing access to information | Data systems are information systems that have the ability to network with other systems in order to gain access to customers and suppliers and information from other databases (Brooking, 1996, p. 77). Companies with systems for information retrieval and distribution have a powerful structure that supports the organization (Sveiby, 1997, p.175). IT investments, expressed as percentages of sales or in absolute figures, or the number of computers or other IT packages per person can provide valuable clues as to how the internal structure is developing (Sveiby, 1997, p. 175); i.e. *IT (such as computer hardware and software), servers, number of computers per employee, IT packages per person,* and *information systems (such as databases).* |
| 26.<br>IT systems and their usage in the company | Business is conducted in market space on the internet and customers are serviced, tracked and marketed to via a myriad of technology (Brooking, 1996, p. 10). IT system includes information technologies [which] encompass a broad array of communication media and devices which link information systems and people including voicemail, voice conferencing, the internet, groupware and corporate intranets, car phones, and fax machines, personal digital assistants, etc (Dewett & Jones, in Steenkamp, 2007, p. 266). These encompass enterprise-wide systems designed to manage all major factions of the firm (Dewett & Jones, in Steenkamp, 2007, p.265). It is the network of all communication channel used within an organisation (Campbell & Abdul Rahman, 2010, p. 67). The quality of IT solutions can impact on efficiency, customer care, employee satisfaction etc. (Brooking, 1996, p. 75). Remove the computer systems and the enterprise can't function (Brooking, 1996, p. 11) refers to how intensive computer usage in one company; i.e. *computer network, internet, e-mail, voicemail, voice conferencing, the general use of information technologies within a company,* and *corporate intranets.* |
| 27.<br>Documentation of knowledge manuals, databases, etc. | Knowledge can be explicit, tacit or implicit. Tacit knowledge is internalized and therefore not readily available for transfer. Explicit knowledge is available as it has been formalized in our heads, or documented in books and papers, therefore it can be disseminated. The organization should seek to take steps to make implicit and tacit knowledge explicit (Brooking, 1996, p. 150). Knowledge elicitation is a technique which aims to capture the knowledge of an individual so that it can be shared with others and usually ends up stored in a knowledge base – the most important thing to do is document it (Brooking, 1996, pp. 115-118). Roos et al. (1998) considered it under process/structural capital which is related to the procedures and routines of the company's internal process. The information about this item are; *organization resources, descriptions of processes/procedures/routines, documentation of processes, manuals, methodologies, best practices, a documentation service, the existence of a knowledge centre, blueprints* and *intranet resources.* |
| 28.<br>Management (including financial control system | It is a process [which] comprises a series of action that are principally concerned with relation between people that lead to the accomplishment of objectives (Newman, Summer & Warren in Steenkamp, 2007, p. 265). Management styles contribute to the creation of organizational capital/structural capital (Roos et al., 1998, p. 46). Management also refers to |

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| | those mechanisms that implement the management philosophy of the company, including systems, policies, procedures and staff suggestion boxes (Brooking, 1996, p. 75). It also includes creating a corporate culture which promotes and supports the process of innovation (Brooking, 1996, p.154); i.e. *management philosophies, management processes, create value to shareholders.* In many organizations the work of a financial controller is largely to preserve, maintain, and develop the internal/structural rather than the external/relational structure. Disclosure of management enables the readers to understand the direction in which a firm is being managed, which assists investment and credit decision making. This work is absolutely essential to the long-term viability of the organization. (Sveiby, 1997, p. 164); i.e. information on financial dealings identified were often about *favourable relationships the firm has with investors, banks, fund managers, other funders and analysts, its financial ratings, financial relations,* and *financial facilities available.* |
| 29.<br>Execution of corporate strategies | Any technological activity that contributes to the creation of organization capital/structural capital (Roos et al., 1998, p. 49). It is the implementation of companies' philosophy, policies, quality control processes, kaizen practices etc., so it is essential to put the mechanisms in place to turn them into practice and ensure that the people are in place to implement the best practice (Brooking, 1996, pp. 74-74). It is systems, procedures, and technologies practiced or used by companies (Campbell & Abdul Rahman, 2010, p. 67); i.e. *quality control/ processes/standards, performance appraisal, technological process* and *production process.* |
| 30.<br>Organizational culture in written form | The set of key values, beliefs and understandings shared by members of the firm (Samson & Daft in Steenkamp, 2007, p. 265). Corporate culture can be described as 'the way we do things around here'. There are several types of cultures, each determining the way individuals work and play together for examples macho, work-hard/play-hard, high-risk/high-reward, family-based, team-based etc. (Brooking, 1996, p.66). Having a culture means you are easy to work with, hence, is a business asset (Brooking 1996, p.10). The attitude of employees toward the workplace, customers, and superiors is also referred to as organizational corporate culture. If those attitudes are favourable, they contribute consciously or unconsciously to enhancing the company's image among its customers (Sveiby, 1997, p. 176). Corporate culture is the pattern or arrangement (material or behavioural) which has been adopted by a company (Campbell & Abdul Rahman, 2010, p. 67); i.e. *vision, mission, code of conduct/practice, principles of operation, caring for society, organizational culture/spirit, philosophy of the organization, macho, work-hard/play-hard, high-risk/high-reward, family-based, team-based* and *protection of the environment.* |
| **RELATIONAL/EXTERNAL CAPITAL** | |
| **Market Perspectives** | |
| 31.<br>Market share | The extent of market share held in relation to the total market share for a given product or service (Ailawadi, Farris & Parry in Steenkamp, 2007, p. 267). Once market share was won, it became easier to sell (Sveiby, 1997, p. 22); i.e. *percentage of sales by market segment and market presence, statement about companies leadership in the market,* and *market share.* |
| 32.<br>Growth in business or service volume | The natural kind of growth (organic growth) demonstrates that its business concept is appreciated by the market (Sveiby, 1997, p. 100). An increase in billings with income from acquisitions deducted is a measure of how well a business concept is received by the market. Purchased growth, i.e. growth from corporate acquisitions is not necessarily a sign of success. It may be such a sign |

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| | if the acquisition was a disguised mass recruitment of a group of professionals. But if a knowledge company grows by buying companies in other lines of business, it may actually be a sign that the original business concept is no longer generating enough growth (Sveiby, 1997, p. 182); i.e. *business acquisition* and *purchase of business*. |
| 33. Potential/ opportunities for business alliances/ partnerships/ collaborations | Collaboration established with other business partners. The ability to collaborate easily is an asset as it enables partners to pursue an opportunity together that they may not have been able to pursue independently (Brooking, 1996, p. 31). Alliances can be equity or non-equity based (Chap, Kensinger, Keown & Martin in Guthrie et al., 2003, p. 28). An analysis of intangible resources indicate that firms enter into co-operation agreements to establish medium and long-term relations to obtain technology and exchange information (Fernandez, Montes & Vszquez in Guthrie et al., 2003, p. 28), and by pooling their resources, both small and medium size firms can take advantage from synergy (Chetty & Holm in Guthrie et al., 2003, p. 28). Disclosure of relationships with the society and governing bodies signals the firm's commitment to being a sustainable business, which also helps in building a positive image of the firm. Such relationships could also form part of the firm's market knowledge and competitive advantage. It is the favourable relationships the firm has with others (Brooking, 1996, p.80); i.e. *business alliances, outsourcing, partnerships collaborations, research collaborations, government collaboration, business partnering, favourable relationships they have with their suppliers, industry associates, various contracts and agreement* and *relationships with stakeholders (mainly refer to firms' relationships with the community, shareholders, competitors, government and other governing bodies).* |
| 34. Society's image of the company | It could also be known as company reputation i.e. the image of the firm as perceived by various stakeholders. The resource-based view states that firm's reputation is a resource that leads to competitive advantage. A definition of reputation is that it is the evaluation of a firm by its stakeholders in relation to their affect, esteem and knowledge (Guthrie et al., 2003). Company names, as a result of clever positioning, good public relations and word of mouth, are also an asset as it can be an input to marketing and public relation strategy (Brooking, 1996, pp. 28-29). They can include service brands that speaks about its quality and reliability, or corporate brands that speak for the value in the market place in association with the name of the company (Brooking 1996, pp. 20-21). It is any action and activity that would position the company's reputation at a higher level (Campbell & Abdul Rahman, 2010, p. 67); i.e. *company image, company awards, company name, community involvement, CSR activities, environmental activities, reputation,* and *brand names.* |
| **Data on Customers** | |
| 35. Dependence on key customer | Proportion of big customers; if a company's dependence on a few large customers is great. Two indicators can measure this; *percentage of billings attributable to the five biggest customers or number of customers accounting for 50 percent of billings* (Sveiby, 1997, p.183). |
| 36. Up dated customer list/profile | There are several types of customers and some types of customers are typically more valuable than others. Therefore it is important for the organization to understand the value of its customer base as an asset. Other important information when considering customers is the *number of customers* (as well as its increase and decrease). Information disclosed refers to general customer information, such as the *type of customer, name of customers, reputation of* |

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| | *customers, the customer base and its change over time, knowledge of customers or markets, customer databases, number of customers, and customer purchasing histories*. Updated customer databases is a valuable market asset (Brooking 1996, p. 28). |
| 37. Customer profitability | There is often surprisingly little information in companies on the profitability of customers because the costs are not accrued to customers but to products or functions. To calculate the control figure – profitability per customer – costs and revenues must be categorized. This is a much more valuable criterion than profitability per product or market segment (Sveiby, 1997, p. 182). Sales per customer ratio- because selling more to the same customer is usually easier and less costly than finding a new customer, this ratio measures the efficiency of a company's existing network to customers. An effort to expand the sales per customer should therefore be profitable (Sveiby, 1997, p. 183). An information-focus strategy generates some intangible revenues from customers, such as product feedback. Some can be used as references; they talk to one another and so spread the word and an organization's image; and they encourage the development of competence with their demands. The most valuable revenue from customer is not money but knowledge (Sveiby, 1997, p. 118); i.e. *profitability per customer, sales per customer ratio,* and *product feedback.* |
| **Customer Service and Relationships** | |
| 38. Timeliness of product/ service delivery | Information about activities that could enhance customer relationships, e.g. on-time deliveries. Companies need to choose its distribution mechanism which is appropriate and acceptable to customers. Where a one-product company fails to deliver on time, the company's greatest asset can be its under-utilized distribution mechanism (Brooking, 1996, p. 30); *on-time deliveries* and *timeliness of product/service delivery*. |
| 39. Customers' complaints and responses to complaints | Customer care programmes will help, as will reputation for quality, responsiveness and service beyond the call of duty (Brooking, 1996, p. 164); i.e. *complaint management* and *customer service/support.* |
| 40. Customers' loyalty to your company/ product e.g. repeat sales | Customer loyalty leads to repeat businesses as a percentage of the customer base. Businesses normally use advertising to ensure that their market position is maintained, for example, companies position themselves as green companies or as high technology companies (Brooking, 1996, pp. 26-27).<br>Age structure; in this case the longer customers have been with a firm, the better its relations with them are likely to be and the easier it ought to be to retain them (Sveiby, 1997, p. 182) i.e. devoted customers ratio; what proportion of sales comes from companies that have been customers for longer than five years? This measure indicates how devoted the customers are (Sveiby, 1997, p. 183). Frequency or repeat orders; The willingness of customers to place repeat orders is a further indication of customer-perceived quality and whether the company has found the right customer base (Sveiby, 1997, p. 183); i.e. *customer loyalty schemes, customer trust, devoted customers ratio, frequency or repeat orders* and *customer with long-term relations.* |
| 41. Customers' satisfaction (e.g. via survey) with company /product | Customer satisfaction is related to customer loyalty (Johanson et al., in Steenkamp, 2007, p. 267). It is the customers' after-purchase judgment or evaluation of a specific product or service. The benefits are associated with higher economic returns, profitability, customer loyalty and less reliance upon price based competition (Stank, Daugherty & Ellinger in Steenkamp, 2007, p. 267). The customer satisfaction has at least one of the three |

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| | measurable characteristics, which are: loyalty represented by retention rates; increased business by increase in revenue; and insusceptibility to rival's tactics and be price tolerant (Stewart, 1997, p. 240). Customer satisfaction also refers to the customers' perception of quality and other attitudes about the company (Sveiby, 1997, p. 182); i.e. *customer satisfaction survey, initiatives taken for improvement in customer satisfaction, relationship value with customers, value for money,* and *customer satisfaction.* |
| 42. Market demand for products/services | To stay competitive, organizations must respond to market needs, i.e. products and services must respond to market pull (Brooking, 1996, p. 46). Brands are powerful reminders to customers to buy the products and services of one company in preference to another (Brooking ,1996, p. 22); i.e. *increase in sales volume* and *repeat purchase/contracts*. |
| 43. Company's distribution channels allowing customers access to products/ services | Appropriate mechanism of getting products and services into market. They can include direct sales, telesales, retail, dealerships, the web etc. (Brooking, 1996, p. 30). Distribution channels are one of the key elements to create value in most firms (Guthrie et al., 2003, p. 28). The ability to use internet to sell goods also provides the organization with a distribution channel (Brooking, 1996, p. 16). This includes the commercial process involves in promoting, selling and distributing products and services into market (Campbell & Abdul Rahman, 2010, p. 68); i.e. *supply/distribution channel, business network, delivery system, marketing, advertising, new stores, outline selling* and *promotion activities*. |
| 44. Quality of product/service supplied | It includes maintaining of requisite standards in products and services (Steenkamp, 2007, p. 265). This means that every customer who ever bought the products would buy them again (Brooking, 1996, p. 87). Assessing standard means both internal and external standards which should contribute towards the achievement of corporate goals (Brooking, 1996, p. 113); i.e. *quality of product, quality standards,* and *quality of service supplied.* |
| 45. Customer acquisitions (new customers) | Customers can be very expensive to acquire. A customer is an individual who has purchased products or services. Brooking (1996, p. 24) identifies five types of customers throughout the sales cycle, they are: suspect, prospect, champion, customer and evangelist. A suspect is a person or organization that appears to be a target for the products or services of a company. A prospect is a person or organization that fits a pre-determined formulated profile for a potential customer. A champion is an individual inside the profiled organization who works to help the sale of an external company's products and services. An evangelist, the most valuable type of customer, is an individual inside a customer organization who actively promotes the products and services of the external company; i.e. *customer identified* and *customer acquisitions.* |

**Appendix B**

Descriptive Statistics (2006)

| | N | Sum | Maximum | Minimum | Mean | Std. Deviation | Variance | Rank |
|---|---|---|---|---|---|---|---|---|
| TIC | 55 | 32,331 | 1,421 | 209 | 587.84 | 334.50 | 111,890.40 | |
| THC | 55 | 15,138 | 763 | 109 | 275.24 | 135.06 | 18,240.96 | 1 |
| TSC | 55 | 5,360 | 488 | 11 | 97.45 | 92.13 | 8,488.37 | 3 |
| TRC | 55 | 11,837 | 717 | 19 | 215.22 | 158.11 | 24,997.66 | 2 |

Descriptive Statistics (2011)

| | N | Sum | Maximum | Minimum | Mean | Std. Deviation | Variance | Rank |
|---|---|---|---|---|---|---|---|---|
| TIC | 55 | 32,040 | 1,820 | 60 | 582.55 | 348.05 | 121,138.85 | |
| THC | 55 | 15,517 | 597 | 57 | 282.13 | 127.96 | 16,373.15 | 1 |
| TSC | 55 | 5,871 | 594 | 1 | 106.75 | 101.92 | 10,387.60 | 3 |
| TRC | 55 | 10,652 | 715 | 2 | 193.67 | 164.32 | 27,000.78 | 2 |

Compare by companies; year 2006 and 2015

1. Malaysian Bulk Carriers

| | **2015** | | | | **2006** | | |
|---|---|---|---|---|---|---|---|
| TIC | 187 | % | Rank | TIC | 282 | % | Rank |
| THC | 144 | 77 | 1 | THC | 158 | 56 | 1 |
| TSC | 17 | 9 | 3 | TSC | 23 | 8 | 3 |
| TRC | 26 | 14 | 2 | TRC | 101 | 36 | 2 |

2. Malaysian Pacific Industries

| | **2015** | | | | **2006** | | |
|---|---|---|---|---|---|---|---|
| TIC | 271 | % | Rank | TIC | 264 | % | Rank |
| THC | 156 | 58 | 1 | THC | 139 | 53 | 1 |
| TSC | 45 | 17 | 3 | TSC | 48 | 18 | 3 |
| TRC | 70 | 26 | 2 | TRC | 77 | 29 | 2 |

3. Batu Kawan Bhd

| | **2015** | | | | **2006** | | |
|---|---|---|---|---|---|---|---|
| TIC | 274 | % | Rank | TIC | 247 | % | Rank |
| THC | 130 | 48 | 1 | THC | 154 | 62 | 1 |
| TSC | 39 | 14 | 3 | TSC | 38 | 15 | 3 |
| TRC | 105 | 38 | 2 | TRC | 55 | 23 | 2 |

TIC – Total IC Disclosure; THC –Total human capital disclosure; TSC – Total structural capital disclosure; TRC- Total relational capital disclosure