

PhD. PROPOSAL

The broad area of study under which my proposal falls is in the area of **Financial Performance within Management Accounting and Strategy**. *The thesis will examine the relationship among the components of intellectual capital (human capital, structural capital and relational capital) and financial and nonfinancial performance in the hotel industry in the English speaking Caribbean.* The motivation behind this research is recognising that in the advent of globalisation, small companies in the Caribbean must compete with international companies in domestic market. These small companies need information that would assist them in the deployment of resources to ensure that they are competitive. The lack of this critical information on an appropriate mix of personnel, technology and physical assets could lead to the demise of small indigenous businesses in the Caribbean. Additionally, the study's contribution to the extant literature would provide literature on small developing nations such as the Caribbean in terms of the reporting, managing, an appropriate mix and performance of intellectual capital components.

Research Questions and Aim of Study

The aim of the study is to explore the concept of intellectual capital and performance measurement in the hotel industry by exploring the potential relationship between intellectual capital and business performance. In addition one would seek to investigate the knowledge and data produced by an intellectual capital evaluation and conclude by building a model for evaluating intellectual capital in a hotel chain.

The research questions that the study would explore are:

1. Can a hotel chain evaluate its intellectual capital? If so, how can it be done and can a model for evaluating intellectual capital in a hotel chain be developed?
2. Is there an optimal mix of the intellectual capital components?
3. Do hotels in the Caribbean evaluate their performance? If so, how? What factors contribute to performance?
4. Is there a relationship between the components of Intellectual capital and performance in the hotel industry?
5. How might the current methods of measuring intellectual capital and business performance be improved?
6. Does culture impact on the intellectual capital measurement and management?

Background and motivation:

Saudagaran 1997 asserted that the crucial role of financial reporting in Emerging Capital Markets – such as the Caribbean - could be located more broadly within the context of capital market development in less-developed countries. This information could influence positively the economic culture existing in lesser-developed countries. Well functioning markets allow individuals to have a stake in enterprises in their respective countries to help change the cultural attitudes with respect to participating in economic development activities and monitoring the socioeconomic contributions of enterprises. In turn domestic enterprises are encouraged to become more responsive and accountable to a greater number of stakeholders in society.

Companies have to remain vital in current hyper competitive environments. Companies have to rethink their organization and their flexibility to adapt themselves to new business situations (Volderba, 1996). These changes in basic principles have increased the importance of investments

in intangibles. We are witnessing a new phase in economic development that is characterized by continuous innovation; the spread of digital and communications technologies; the relevance of network forms of organisations; and the prevalence of soft, intangible and human factors. The so-called New or Intangible economy is the environment in which organisations have to cope today. Many researchers and institutions have turned their attention to economic and business implications of the intangible economies. This new era presents significant challenges for reporting and accounting by companies.

Reporting in this new environment has created a new research agenda. Over the years several researchers (Stewart, Edvinsson, Malone, Sveiby and et al) have developed models for the valuation of intangible assets such as people, customer value and technology. However, there appears a gap in the literature. The researchers have not indicated whether there is an optimal mix of people, technology and physical capital to achieve organisational effectiveness in terms of profitability and sustainability. The purpose of my research is to extent the literature by providing literature on intellectual capital management in developing countries and the development of a model that can be used in the Caribbean in determining an appropriate mix of people, technology and physical capital to achieve organisational effectiveness.

Prior Research:

Both theoretical and empirical research has been undertaken on intellectual capital in recent years. Early research focused on defining intellectual capital and on methods of classification (e.g. Brooking, 1996; Edvinsson and Malone, 1997; Sveiby, 1997; Roos *et al.*, 1997). In 1993 Leif Edvinsson, in a supplement to Skandia AFS's annual report, used for the first time the word "intellectual capital" instead of the accounting term "intangible assets" (Edvinsson and Malone, 1997). Skandia, a Swedish financial services company, was also one of the first companies to report the "hidden" intellectual capital assets of the business. Skandia went on to develop one of the most important models, the Skandia Navigator, for managing intellectual capital. Another important researcher is Karl-Erik Sveiby; he has carried out a considerable amount of the pioneering research on intellectual capital management. He points out that the increasing importance of intellectual capital may require a fundamental shift in the way we think about organizations. Research objectives have focused on intellectual capital statements, intellectual capital frameworks and measuring and reporting of intellectual capital. Even though intellectual capital research has been performed in a variety of industries and with different perspectives, little research has been conducted on the hotel industry and developing countries.

Roos et al 1997 argues that the conceptual roots of intellectual capital can be divided into two streams of thought: the strategy stream which focuses on developing and using knowledge and the relationship between knowledge, success and value creation; and the measurement stream that focuses on the need for developing a new information system which measures intangibles together with financials. One of the most important and widely referenced empirical researches is the one by the Danish Trade and Industry Development Council's (1998). This study of ten firms working on measuring intellectual capital found that measuring and actively managing intellectual capital was important for a company's long-term success. Companies measuring and managing their intellectual capital clearly outperformed other companies. Bontis' (1998) study shows a valid, reliable, significant, and substantive causal link between dimensions of intellectual capital and business performance. This study used statistical analysis of survey data to investigate the causal relationship between a company's investments in intellectual capital and its performance.

The literature has identified a number of classification schemes, which divide intellectual capital into the categories of external (customer-related) capital, internal (structural) capital, and human capital (e.g. Sveiby, 1997; Roos *et al.*, 1997; Stewart, 1997; and Edvinsson and Malone, 1997). One aspect of Intellectual capital that has received significant attention over the years is the area of human capital. During 1960 to 1966 Human Resource Accounting focused on concepts from related bodies of theory. As early as 1925 Scott and in 1962 Paton provided support for treating people like assets and accounting for their value. Likert (1961) and Odiorne (1963) were concerned with leadership effectiveness and the human resource perspective that is based on the premise that people were valuable organizational resources. The second stage in Human Resource Accounting turned to the development of measurement models. Brumett's (1968) Acquisition Cost Method asserted that a value could be placed on an employee within the organization by capitalizing the costs of recruiting, selecting hiring, training, placing and developing the employee. This total cost should then be amortized over the expected service lives of the employee. In 1967 Hekimian and Jones developed the Opportunity Cost Model and in 1974 Flamholtz developed the Replacement Cost Method. These methods were all cost based methods. On the other hand some researchers developed value-based methods. These include Hermanson's (1964) Discounted Future Wages Model and Lev and Schwartz Discounted Wages Model. These methods utilize data from salaries of employees over a specific period and discount them at a rate of owned assets, and multiply the result by an efficiency factor. Lev and Schwartz value-based method utilizes the future earnings of an employee and discounts this by using a discount rate specific to that person.

Literature identified the second element of intellectual capital is the internal structure, which includes such things as organizational structure, legal parameters, manual systems, research and development and software systems all relate to the processes and procedures within the firm. This organizational capital is responsible for the company's renewal and value creating processes. The third element is the external structure, which includes items such as brands and customer-supplier relationships and any market assets. These elements are part of the literature on the management of intellectual capital. The literature has been focusing on the valuation issues and the management of Intellectual Capital. Dzinkowski 2000 asserts that Intellectual capital management (ICM) attempts to grow, extract, and measure a firm's intangible assets through assessments of systems, processes, procedures and other organizational wealth not typically quantified under standard management and accounting practices. ICM is based on the assumption that value is created through the integration of human, organizational and customer capital. However, the literature is silent on the appropriate mix of the components.

The literature has identified a number of methods for calculating intellectual capital in organisations. The Direct Intellectual Capital Methods, which are based on an estimation of the monetary value of intangible assets by identifying its various components; Scorecard Methods for example Kaplan and Norton's Balance Scorecard; Market Capitalization Methods for example Tobin's Q. and the Return on Assets Methods. The link between intellectual capital management and performance measurement can be achieved through the use of these methods. Key examples of the recent developments of performance measurement frameworks are Fitzgerald et al (1991) Results and Determinants Model and Kaplan and Norton 1992 Balance Scorecard. Results and determinants Model – by using six key performance dimensions, the model specifically incorporates both financial and non-financial metrics while also balancing internal and external perspectives. Most significantly though it combines results measures which reflect the success of an organisation's chosen strategy with determinant measures which focus on those activities and factors necessary to achieve the organisation's strategic goals. The balance scorecard provides a multifaceted view of an organisation's performance. More specifically the scorecard not only

includes financial measures, which again highlight the results of actions already taken by an organisation but it balances these with operational measures concerning customer satisfaction, internal processes and the organisation's innovation and improvement activities.

There is apparent however a considerable degree of concern that despite the progress taking place with regard to the design of more effective performance measurement systems. Hotels organisations are still focusing on more traditional forms of performance measures. Such measures are associated with a number of fundamental weaknesses, including limitations in their accuracy and neutrality; a dominance of lag/result over lead/determinant measures; an emphasis on the short term often at the expense of strategic issues; little appreciation of the links and relationships between key areas and aspects of an organisation and an overall lack of balance (Kaplan and Johnson 1987). There is a concern that in using inappropriate measures hotel managers may be ignoring issues that really matter, potentially to the serious detriment of their organisation (Brander Brown and McDonnell 1995). It is also necessary for the performance measurement systems to reflect the complex nature of the service delivery process within hotels – including as it does such typical characteristics as high degrees of perishability, intangibility, heterogeneity and simultaneity as well as outputs which combine pure service elements with retailing and manufacturing functions.

The literature has identified a number of methodologies for measuring intellectual capital. The five more popular methodologies are The Technology Broker, The IC-Index, The Intangible Assets Monitor, The Skandia Navigator, and the ICAP Methodology. The technology broker by Annie Brooking (1996) makes a practical contribution to intellectual capital measurement by offering three measurement models to help calculate the dollar value of intellectual capital as identified through the Technology Broker's intellectual capital audit. Roos et al 1997 IC-Index is an example of "second generation" practices that attempt to consolidate all the different individual indicators into a single index, and to correlate the changes in intellectual capital with changes in the market (Bontis, 2001). Leif Edvinsson, the chief architect behind Skandia's initiatives developed a dynamic and holistic intellectual capital reporting model called the Navigator with five areas of focus: financial, customer, process, renewal and development, and human capital. This new accounting taxonomy sought to identify the roots of a company's value by measuring hidden dynamic factors. The Teleplan's ICAP methodology does not strive to measure but to evaluate intellectual capital based on the organization's value chain. An analysis of the intellectual capital needed for that value chain to work the best and generate the most income. By focusing on the value chain, the ICAP method emphasizes the strong link between intellectual capital and business performance.

Methodology

The literature has identified a variety of research methodologies which were used (interview, case study, questionnaire, survey of annual reports, focus groups), the most popular being case study, to evaluate intellectual capital. Interviews and questionnaires were often used to supplement each other. Given this background I proposed to use a triangulated approach drawing on qualitative and quantitative research methods. The ultimate objective could be a qualitative score or index that can be manipulated, however the process of building the index would require that components of intellectual capital be measured and valued and this is often a highly subjective exercise requiring input from several different perspectives.

The steps that would be taken would include a series of qualitative interviews to identify the components of intellectual capital that are applicable to the hotel industry. Using the information

provided from the interviews together with indicators suggested by Roos et al (1997), Sveiby (1997) and Edvinsson and Malone (1997) develop a set of constructs that would be incorporated into a questionnaire using a seven point Likert scale. This questionnaire that would be used to evaluate intellectual capital would consist of statements that aim to operationalize and reflect the constructs mentioned. In addition, these statements would be weighted according to their importance and relevance for optimizing the value creating activities in the hotel chain. This questionnaire would be piloted, refined and administered.

The data would be recoded to reflect scores and indices using some form of weighting according to their relative importance in the value chain. The proposed indices would be presented to a range of stakeholders for comments and refinement. Data from the hotels on organizational performance both financial and operational would be collected. The data on performance measures would be cross-referenced to data from a number of agencies (Barbados Board of Tourism, Barbados Hotel Association, and Caribbean Tourism Organisation) for establishing benchmarks. The final step would be to present case studies employing indices as developed. In using case studies a sample of hotels would be used to test the model using technique for measuring efficiency such as data envelopment analysis.

Conclusion:

The contribution that this research should make is extending the literature on small companies and hotels in developing regions such as the Caribbean as they compete with international companies in the advent of globalization. This research finding should also assist them in their recruiting of personnel, acquisition of fixed assets and deployment of other resources to ensure that they are competitive. This research should also contribute to the extant literature by providing a model for evaluating intellectual capital in the hospitality industry as well as on the appropriate mix of people, technology and physical assets in the organisation.

References:

- Bontis, Nick (1996), "There is a price on your head: managing intellectual capital strategically", *Business Quarterly*, Vol. 60 No. 4, pp. 40-47.
- Bontis, Nick (1998a), "Intellectual Capital: an exploratory study that develops measures and models." *Management Decision*, Vol. 36 No. 2, pp. 63-76.
- Bontis, Nick (1998b), "Managing Organizational Knowledge by Diagnosing Intellectual Capital: Framing and advancing the state of the field", *Journal of Technology Management*, Vol. 18 No. 5/6/7/8, pp. 433-462.
- Brooking, Annie (1996), *Intellectual capital: Core Asset for the Third Millennium Enterprise*, International Thomson Business Press, London.
- Crawford Richard (1991), *The changing economic and business environment*. Harper Collins
- Danish Agency for Trade and Industry (1998), "Intellectual Capital Accounts – Reporting and managing intellectual capital", Available online at: <http://www.efs.dk/publikationer/rapporter/engvidenregn>
- Demas William (1965), *The Economics of development in small countries with special reference to the Caribbean*. Centre for Developing Area Studies. Mc Gill University
- Dzinkowski Ramona (2000), "The value of intellectual Capital" *Journal of Business Strategy*
- Dzinkowski Ramona (1999), "Mining Intellectual Capital" *Strategic Finance*.
- Edvinsson L. and M.S Malone (1997), *Intellectual Capital: Realizing your company's true value by finding its hidden brainpower*. Harper Collins. New York. NY.

- Firer, S and Williams S (2003) "Intellectual capital and traditional measures of corporate performance" *Journal of Intellectual Capital* Vol. 4 No. 3,
- Flamholtz E. , M Bullen and Wei Hue (2002) "Human Resource Accounting: A historical perspective and future". *Management Decision* London Vol 40 Iss. 10.
- Guthrie, James and Petty, Richard (1999), "Managing Intellectual Capital: From Theory to Practice", *Australian CPA*, Vol. 69, No. 7, pp. 18-21.
- Guthrie, James and Petty, Richard (2000), "Intellectual capital literature review: Measurement, reporting and management", *Journal of Intellectual Capital*, Vol. 1 No. 2, pp. 155-176.
- Hand J. and Baruch Lev (2003) *Intangible Assets – values, measures and risks*. Oxford University Press. Great Britain.
- Kaplan Robert S. and David P Norton (1996), "Using the balanced scorecard as a strategic management system", *Harvard Business Review*, Vol. 74 No. 1, pp. 75-86.
- Larsen H.T, P.D Buku and T. Mouritsen (1999) "Intellectual capital statements and Knowledge Management measuring, reporting and analyzing" *Australian Review*
- Organization for Economic Cooperation and Development (OECD) (1999), *Measuring What People Know, Human Capital Accounting for the Knowledge Economy*, OECD, Paris, 114 p.
- Organization for Economic Cooperation and Development (OECD) (1996), "Guidelines and Instructions for OECD Symposium", International Symposium Measuring and Reporting Intellectual Capital: Experiences, Issues, and Prospects, OECD, Amsterdam, June, Paris.
- Porter Michael E. (1985), *Competitive Advantage: Creating and sustaining superior performance*. The Free Press, New York.
- Roos, Goran and Johan Roos (1997), "Measuring your Company's Intellectual Performance", *Long Range Planning*, Vol. 30 No. 3, pp. 413-426.
- Roos, Johan; Goran Roos; Nicola C. Dragonetti; Leif Edvinsson (1997), *Intellectual capital: Navigating the new business landscape*. Macmillan Press Ltd, London.
- Stewart, Thomas A. (1997), *Intellectual Capital: The New Wealth of Organizations*. Nicholas Brealey Publishing, London.
- Sveiby, Karl- Erik (1998), "Intellectual capital: Thinking ahead." *Australian CPA*, Vol. 68 No. 5, pp. 18- 22.
- Sveiby, Karl-Erik (1997b), *The New Organizational Wealth: Managing and Measuring Knowledge-Based Assets*. Berrett-Koehler Publishers, Inc., San Francisco.
- Volderba, Henk W. (1996), "Toward the Flexible Form: How to remain Vital in Hypercompetitive Environments", *Organization Science*, Vol. 7 No 4, pp. 359-374.
- Yin, Robert K. (1989), *Case Study Research: Design and Methods*. Revised edition. Sage Publications, California.