Chapter Six

FINDINGS AND CONCLUSION

6.1 Introduction

The current chapter outlines how the objectives of research have been accomplished in the section on findings of the study. It then lists down some implications and suggestions that have arisen from the current study. The chapter then focuses on the major limitations of the study following it up with contributions of the study and way forward. Before that, the major themes of the different chapters have been summarised below.

In chapter 1, the significance of intellectual capital or intangible assets in the performance of an organisation was explained together with the need for measuring intellectual capital of Indian financial services industry. The research problem and research questions were stated which had to be answered through the use of different methods. A thorough literature review was done in chapter 2 with regards to the various methods of measuring and reporting intellectual capital. An overview of those studies was done which also focused on analysing the relationship between organisational performance and its intellectual capital. Reference was also made to the studies in which IC disclosures were analysed and proxies of intellectual capital were developed in order to investigate the relationship between business performance and intellectual capital.

Chapter 3 described the research methodology in detail with special emphasis on the conceptual model of Skandia Navigator, the research objectives and the various research methods - both qualitative and quantitative, used to achieve those objectives. Subsequently, the scope of research was defined together with the final sample details, different data collection and data analysis methods. The chapter ended with the description of variables used in the testing of hypotheses.

Qualitative data analysis was done in chapter 4 where the data collected from qualitative interviews as well as annual reports of sample firms was analysed and reported. Chapter 5 focused on the quantitative data analysis part of the study where the intellectual capital indicators identified from chapter 4 served as independent
variables in the multiple regression technique employed. The chapter ended with the results from the analysis that focused on analysing the relationship between these IC indicators and the performance of the sample organisations. Partial support was found for the hypothesis with the exception of one where strong evidence was found that intellectual capital is related to organisational profitability measured in terms of return on assets.

6.2 Findings

The research was designed to explore the current state of intellectual capital field in the context of Indian financial services sector as well as to measure the intellectual capital of these firms with the help of the Navigator model. The following research questions were posed at the beginning of the current study and we conclude the work with a summary of answers to these questions, which are the significant findings of the study:

Research Question 1: How has Skandia Navigator Model been applied before?

With the help of literature review, we came across a number of cases where the Navigator model served as the basis of measurement and reporting of IC. With examples of how it was developed at Skandia, the Scandinavian insurance company, various methods that developed from SNM were described. One of the most important ones is IC-Index which combines all the indicators into one composite index by assigning different weights to them and then analysing the relationship between this index and the market value. The second one is National Intellectual Capital Index where different indicators are developed under the four components of intellectual capital as classified under the Navigator Model.

Research Questions 2: What is the significance of Intellectual Capital for Indian financial services firms?

This question was answered through qualitative research methods – semi-structured interviews with the senior managers of various sample firms and content analysis of the annual reports of the sample firms. The results from both the methods complemented each other. It was clear that there is a clear understanding of the
various elements of intellectual capital viz. knowledge, skills and experience of employees, loyalty and satisfaction of customers, efficiency of processes etc. and that they are significant in the value creation process. However, the term ‘Intellectual Capital’ is not very known among the industry professionals and there is no coherent framework to measure the same. During textual analysis of the annual reports, it was found that lot of narratives describe the importance of these elements, however, there are no indicators mentioned that aim to measure these elements. In fact, the term ‘Intellectual Capital’ has been used to define human capital in two of these cases. In a nutshell, the different components of IC are understood well and considered to be highly critical in achieving competitive advantage however there is no coherent structure or consistent framework to measure and report them.

Research Question 3: How can a relevant set of Intellectual Capital indicators be developed in the Indian context?

After thorough literature review, the best way to answer this question was deemed to be direct feedback of the participating senior managers. During the semi-structured interviews, the Skandia Navigator Model was explained to them and their opinion on the same was sought. Following this, a list of relevant indicators in the Indian context was finalised. However, it was also made clear by the participants that it would be difficult to find data on all the indicators therefore annual reports be analysed in order to finalise the intellectual capital indicators.

Research Question 4: What is the relationship between Intellectual Capital and Business Performance?

Quantitative data analysis employing the method of multiple linear regression provided the empirical evidence to support the assumptions about the relationship between intellectual capital and business performance. The intellectual capital is measured in terms of nine indicators selected from the earlier stage whereas business performance is measured in terms of four variables that have been used in extant literature. The results partially support the hypotheses of research, with the exception of one sub-hypothesis where there was strong evidence that profitability measured in terms of return on assets is strongly related to most of the indicators of intellectual capital. Out of the different IC indicators, increase in the number of employees (HC1),
operating profit margin (CC2) and business development expenses as a percentage of operating expenses (RD1) are found to be strongly related to business performance.

By answering these research questions, the following research objectives have been achieved:

(i) To study the Navigator model in the context of Indian financial services sector
(ii) To develop an IC measurement model by selecting appropriate indicators under the various Intellectual Capital components viz. human capital, customer capital, process capital and renewal & development capital
(iii) To empirically investigate the relationship between intellectual capital components and the business performance of Indian financial services firms.

6.3 Suggestions

Based on the findings of the study, clear implications and suggestions are listed below covering the major themes of research:

(i) Performance Measurement System

Although the primary means of measuring business performance are financial, the organisations must develop a set of non-financial indicators in line with their business strategy, because those are the ones that cannot be easily copied and provide the organisations with competitive edge. The results from qualitative interviews support this statement. The firms must keep their performance measurement system in line with the changing times. They must look for measures that assist them in understanding potential future performance as well as in analysing historical financial performance. At present, firms are not required to report on intellectual capital or intangible assets which leaves the traditional accounting system ineffective for measuring the true impact of such intangibles. However, for internal management, the firms must determine which key performance indicators will help them gain insights into the underlying business performance beyond a purely financial view.
(ii)  Human Capital

Human Capital is undoubtedly the most vital asset of an organisation, as acknowledged by the senior managers as well as by most firms in their annual reports. However, there is no consistent method to measure the effectiveness of the human resources. Apart from focusing on measures like attrition rates at various levels, not many human capital indicators are tracked. The firms must work on building models to measure the efficiency of their human capital so that areas of improvement could be analysed in detail. This is the first step to designing effective compensation policies which are in a major way responsible for the motivation of employees. Given the emerging challenges to the sector, the firms will have to think of ways of not only hiring but also retaining and developing high-performance employees.

Organisations also need to look at their training and development programmes in more detail. Effectiveness of different training programmes must be rigorously tracked as this is one area that highly contributes to their competitive edge.

(iii)  Customer Capital

Although more research is warranted in this area yet, firms should investigate the role of their marketing departments as they play a vital role in developing the brand and reaching more customers. The efficacy of advertising and marketing initiatives must be enhanced through proper market research. This issue was raised in quite a number of interviews that the firms need to be more aggressive and focused in their marketing efforts.

Updated customer data is essential to make applications like CRM (Customer Relationship Management) work and therefore organisations, especially public sector banks, must make it a top priority to have relevant and updated data about their customers. Customer segmentation is essential to understand customer needs and develop value-added products and services for them. But without customer data, it is difficult to achieve this goal.
(iv) Non-Financial Reporting

Although the firms disclose a lot of qualitative information about the different elements of IC yet efforts must be initiated in order to provide more details about such elements. For example, more details could be provided about the training and development efforts of the organisation or the attrition rates. Such information could lead to reducing the information asymmetries and enhancing the image of the firm.

6.4 Research Limitations

There have been many constraints in the conduct of this study and these are explained below:

(i) The field of Intellectual Capital is still at a nascent stage and is continuously evolving. Therefore it was expected that the subject would not be well-known in the Indian financial services context. Unavailability of data due to this factor has been the biggest challenge for the study. The important indicators like training expenses or the investments in technology could not be included because they are not disclosed in the annual reports and the firms are not ready to disclose them.

(ii) The study is focused only on the financial services sector, hence the results cannot be generalised to other sectors. Even within this sector, there are differences among the way of working of private banks, public banks and non-banking finance companies (NBFCs). Therefore certain IC measures that could have applied to banks could not be applied to NBFCs for example current and savings account deposits. Dealing with these separate industry segments is beyond the scope of the study and would form a part of future research.

(iii) There could not be found proxy indicators which were non-financial in nature. For example, there is staff composition in terms of officers and sub-staff etc. but not many firms have displayed the composition in terms of male and female employees which would have been a reflection of the cultural diversity of the human capital of the organisation. The use of financial indicators like operating profit margin and sales growth in the
regression models is to make up for the lack of variables like brand value and revenue from new products and services which could not be found either through annual reports or interviews.

(iv) There are certain limitations with the multiple regression method. First, variable controlling for the size of the firms is not used in the equations as only the big market capitalisation firms were chosen for the study. However, in case of bigger samples, control variables must be used in the regression models. Second, the quantitative analysis is undertaken as an exploratory tool to give an overview of how the relationship between intellectual capital and business relationships can be tested. It is just a starting point as more indicators are needed to build robust models.

(v) For exploratory purpose of the study, the analysis was done only on the top financial services firms. Also, only three years data was utilised. This limitation could be overcome in future studies.

6.5 Contribution of the Research

The research study makes the following contributions:

(i) Contribution to practice

Business managers do recognise the importance of intellectual capital that is why they invest in training and development of employees, building brand equity, innovating for customer delight etc. However, it is quite difficult to develop systems to capture and monitor such intangibles and linking them to the business profitability. This study advances a methodological framework that can be employed by financial services firms to undertake a component-by-component analysis of their intellectual capital. The current research could help the management in designing and implementing their own performance indicators related to intellectual capital.

There are many emerging challenges for financial services firms, the study provides an overview of how an intellectual capital point of view can help them in managing their intangibles better and hence initiate the process of working on identifying and developing their own methods of measuring IC. They can monitor these metrics either for internal management or for external reporting purpose. If a set of intangible
indicators is published, then it could also help in reducing information asymmetry for external stakeholders.

(ii) Contribution to methodology

The study shows how multiple methods can be used to understand a relatively new subject from different perspectives. Usually, researchers resort to a specific quantitative or a qualitative method in their works; however the use of both qualitative and quantitative methods helps to look at a problem from different angles and arrive at a best way of interpreting them. This way of analysis is particularly useful in an exploratory study.

The study is intended to serve as a platform to raise awareness about the concept of IC and its significance in organisational performance. The study intends to result in more debate and discussion as to what components of IC should be focused upon, which method of measuring IC are best suited in the Indian context and how much of this information should be made public in published annual reports.

(iii) Contribution to literature

This is the first study of its kind that applies the concept of the intellectual capital to the financial services firms in India. Although research has been done using another IC measurement method in the context of Indian banks yet, no precedent could be found in literature that utilizes Skandia Navigator Model or a component-by-component analysis of intellectual capital of the Indian financial services firms.

Moreover, no instance was found where senior professionals were interviewed on the subject of Intellectual Capital. These qualitative interviews shed important light on the constraints that are present in adoption of such a multi-dimensional performance measurement system. The study has contributed to the body of literature by providing additional evidence on the relationship between IC and business performance. The study contributes to the literature on intellectual capital and financial services performance measurement through this empirical study.
6.6 Future Research

The study aims at increasing the awareness about Intellectual Capital, advances a method to measure IC and analyses the relationship between IC and organisational performance. However, the research has certain limitations in terms of data-availability, generalisation etc.

An exploratory study of this kind that deals with a new topic plays an important role to serve as a platform to undertake future studies in the area. It opens up space for more empirical studies which is what is required to advance the field. Off late, there has been a rise in the number of empirical studies in the field of intellectual capital from all parts of the world. India, being an emerging economy that already has a significant presence in knowledge intensive sectors such as information technology and pharmaceuticals, shall witness the rise of many more knowledge intensive firms. Hence, the quest for developing a method to measure the intangible assets or intellectual capital is essential because this is what will drive the value of the organisations in the knowledge era.

Going forward, following areas need to be explored further building up on the current study and advance the state of the field:

(i) To further develop the IC measurement model used in the current study by identifying more indicators which are non-financial in nature. Also, the analysis to be done separately for different segments of Indian financial services industry and with bigger samples.

(ii) To gather more empirical evidence by undertaking further research in different Indian firms and industries. The methodological framework shall be tested in other knowledge intensive sectors like information technology and pharmaceuticals which publish details about their on-going research and development work and patents (intellectual property) etc.

(iii) To further explore the different types of intangible assets/components of intellectual capital that are important in different firms and industries. By undertaking research in different types of organisations and from different backgrounds, we can conduct an in-depth comparative analysis of the nature of intellectual capital in the Indian context.
(iv) To conduct more in-depth case studies that would help in identifying the intangible value drivers in different organisations. As the current study has shown that it is difficult to find industry wide common set of indicators due to constraints in availability of data, therefore studying individual organisations would result in a richer set of data and provide more clarity on how IC generates value in these organisations.

(v) To investigate the interrelationships among the various components of intellectual capital and how they interact to enhance the performance of organisations. This is one aspect which could not be covered in the study. By analysing how the different elements of IC affect each other, more effective strategies can be designed by the organisations.

(vi) To examine and compare the different methods of measuring intellectual capital and to explore the most appropriate methods for Indian context. There are number of other methods apart from the Navigator so future work would also involve exploring if other methods are more suited to the Indian context.