

Studies in Managerial and Financial Accounting
Volume 21

Reputation Building, Website Disclosure and the Case of Intellectual Capital

Indra Abeysekera



Emerald Group Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2011

Copyright © 2011 Emerald Group Publishing Limited

Reprints and permission service

Contact: booksandseries@emeraldinsight.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. No responsibility is accepted for the accuracy of information contained in the text, illustrations or advertisements. The opinions expressed in these chapters are not necessarily those of the publisher.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-0-85724-505-2

ISSN: 1479-3512 (Series)



Emerald Group Publishing Limited, Howard House, Environmental Management System has been certified by ISOQAR to ISO 14001:2004 standards



Awarded in recognition of Emerald's production department's adherence to quality systems and processes when preparing scholarly journals for print

ACKNOWLEDGEMENTS

The author is indebted to the financial support provided by The Scottish Accountancy Trust for Education and Research (SATER) of The Institute of Chartered Accountants of Scotland and The University of Sydney for carrying out this study. My appreciation goes to Professor James Guthrie for his encouragement. I am thankful to the executives of the fastest growing companies for responding to the survey questionnaire and giving up their valuable time for interviews. I am thankful to Professor Christine Helliard, Michelle Crickett, Angie Wilkie, and to the anonymous reviewers of SATER for their constructive comments at both the proposal and completion stages which helped improve the content of this study. I am grateful to Professor Marc Epstein at Rice University for reviewing the manuscript and providing valuable feedback as series editor of *Studies in Managerial and Financial Accounting* published by Emerald. The bountiful love of my wife Preethi and son Manil was instrumental in sustaining my enthusiasm and energy while conducting this study. Last but not least is my appreciation of my mum and dad who set the foundation of my learning.

CONTENTS

LIST OF TABLES	<i>xi</i>
LIST OF FIGURES	<i>xiii</i>
LIST OF CHARTS	<i>xv</i>
LIST OF APPENDIX SECTIONS	<i>xvii</i>
ACKNOWLEDGEMENTS	<i>xix</i>
EXECUTIVE SUMMARY	<i>1</i>
1. INTRODUCTION AND OVERVIEW	<i>11</i>
1.1. Introduction	<i>11</i>
1.2. Intellectual Capital	<i>11</i>
1.3. Motivation	<i>12</i>
1.4. Aims and Objectives	<i>13</i>
1.5. Overview of Subsequent Chapters	<i>14</i>
1.6. Summary	<i>15</i>
2. LITERATURE REVIEW	<i>17</i>
2.1. Introduction	<i>17</i>
2.2. Defining Intellectual Capital	<i>17</i>
2.3. Categorising Intellectual Capital	<i>18</i>
2.4. Intellectual Capital Disclosure	<i>20</i>
2.5. Financial Performance of Firms	<i>21</i>
2.6. Firm Reputation	<i>23</i>
2.7. Summary	<i>24</i>

3. THEORETICAL FRAMEWORK	25
3.1. Introduction	25
3.2. Resource-based, Signalling and Agency Theoretical Perspective	25
3.3. Theoretical Constructs	28
3.4. Content Analysis Model	33
3.5. Directors' Perceptions About Intellectual Capital Resources from Survey Findings	36
3.6. Summary	37
4. RESEARCH METHODS	39
4.1. Introduction	39
4.2. Content Analysis of the Websites	39
4.3. Intellectual Capital Disclosure	40
4.4. Intellectual Capital Measurement and Coding Framework	41
4.5. Validity and Reliability of Content Analysis	42
4.6. Sample Size for Content Analysis	45
4.7. Survey Questionnaire	46
4.8. Focused Interviews	48
4.9. Summary	52
5. SAMPLE CHARACTERISTICS	53
5.1. Introduction	53
5.2. Firm Size and Financial Reporting	53
5.3. Intellectual Capital Disclosure	54
5.4. Directors' Equity in the Firm	55
5.5. Share Ownership	56
5.6. Summary	57
6. FINDINGS AND INTERPRETATION – CONTENT ANALYSIS	59
6.1. Introduction	59
6.2. Regression Analysis of Intellectual Capital Data from the Content Analysis	59
6.3. Summary	62

7. FINDINGS AND INTERPRETATION – SURVEY QUESTIONNAIRE	63
7.1. Introduction	63
7.2. Results from the Survey Questionnaire	63
7.3. Summary	68
8. FINDINGS AND INTERPRETATION – INTERVIEWS	69
8.1. Introduction	69
8.2. Aims of Disclosure and Targeted Stakeholders	69
8.3. Selection of Intellectual Capital Disclosure Signals	70
8.4. The Level of Intellectual Capital Disclosure	73
8.5. Summary	78
9. CONCLUSIONS	81
9.1. Introduction	81
9.2. Motivation and Scope of the Research	81
9.3. Data, Methods and Results	82
9.4. Policy Recommendations	84
9.5. Main Limitations of the Research and Suggestions for Future Research	87
REFERENCES	91
APPENDICES	101
SUBJECT INDEX	317

LIST OF TABLES

Table 4.1	The Intellectual Capital Coding Framework Used in this Study	43
Table 4.2	Sample Composition	45
Table 4.3	Firms Interviewed by Industry Sector	50
Table 5.1	Intellectual Capital Disclosure	54
Table 5.2	Number of Directors Holding Shares in a Firm	56
Table 5.3	Shareholder Distribution in Firms	56
Table 6.1	Regression Output Summary of Intellectual Capital	60
Table 7.1	Disparity Between Questionnaire Response and Company-sponsored Website Content (as a Percentage Total of Internal Capital).	65
Table 7.2	Disparity Between Questionnaire Response and Company-sponsored Website Content (as a Percentage Total of External Capital)	66
Table 7.3	Disparity Between Questionnaire Response and Company-sponsored Website Content (as a Percentage Total of Human Capital)	67

LIST OF FIGURES

Fig. 3.1 Model-Testing for Disclosure Signals 34

Fig. 3.2 Empirical Investigation of Survey Data 36

Fig. 4.1 Use of Content Analysis in the Study 42

Fig. 4.2 Triangulation of Research Methods 48

LIST OF CHARTS

Chart 5.1	Frequency Count of Intellectual Capital by Disclosure Signal	55
Chart 5.2	Sentence Count of Intellectual Capital by Disclosure Signal	55

LIST OF APPENDIX SECTIONS

Appendix 3.A	Operational Activities of Firms in the Study	101
Appendix 4.A	An Illustration of Intellectual Capital Items Appearing on Company-sponsored Websites	216
Appendix 4.B	2005 Fastest Growing Company Websites and Company Details.	221
Appendix 4.C	2006 Fastest Growing Company Websites and Company Details.	226
Appendix 4.D	2007 Fastest Growing Company Websites and Company Details.	230
Appendix 4.E	Survey Questionnaire.	235
Appendix 4.F	Semi-structured Interview Questions	239
Appendix 5.A	2005 Company Demographics	240
Appendix 5.B	2006 Company Demographics	244
Appendix 5.C	2007 Company Demographics	248
Appendix 5.D	Intellectual Capital Disclosure by Type of Signal in 2005 by Frequency Count.	252
Appendix 5.E	Intellectual Capital Disclosure by Type of Signal in 2006 by Frequency Count.	253
Appendix 5.F	Intellectual Capital Disclosure by Type of Signal in 2007 by Frequency Count.	255
Appendix 5.G	Intellectual Capital Disclosure by Type of Signal in 2005 by Sentence Count	257
Appendix 5.H	Intellectual Capital Disclosure by Type of Signal in 2006 by Sentence Count	258
Appendix 5.I	Intellectual Capital Disclosure by Type of Signal in 2007 by Sentence Count	260
Appendix 5.J	Director Interest in Ownership in 2005's Fastest Growing Firms	262
Appendix 5.K	Director Interest in Ownership in 2006's Fastest Growing Firms	275
Appendix 5.L	Director Interest in Ownership in 2007's Fastest Growing Firms	284
Appendix 5.M	Shareholder Distribution of Fastest Growing Firms in 2005	296
Appendix 5.N	Shareholder Distribution of Fastest Growing Firms in 2006	299

Appendix 5.O	Shareholder Distribution of Fastest Growing Firms in 2007	302
Appendix 6.A	Intellectual Capital Results of Panel Data with Frequency Count.	305
Appendix 6.B	Intellectual Capital Results of Panel Data with Sentence Count	306
Appendix 8.A	Diverse Aims of Disclosure and Targeted Stakeholders – Interview Excerpts	307
Appendix 8.B	Factors Mediating Disclosure Levels – Interview Excerpts	309
Appendix 8.C	Factors Mediating Disclosure Signals – Interview Excerpts	313
Appendix 8.D	Reputation Enhancement – Interview Excerpts	314

EXECUTIVE SUMMARY

This study investigated the following aspects of the 100 most entrepreneurial firms, widely known as the fastest growing firms in Australia. Firstly, the study analysed the relationship between intellectual capital disclosure types (narrative, visual and numerical) on company-sponsored websites using content analysis and the corporate growth aspect of reputation of these firms over a three-year period (from 2005 to 2007). There are many facets to reputation. The process aspect that is not translated into financial output is part of intellectual capital and is distributed across a wide range of intellectual capital resource items. Secondly, the study investigated the perceptions of directors about the importance of intellectual capital resource items in enhancing corporate reputation. Thirdly, the study identified motivations behind the extent of intellectual capital resource items disclosure on company-sponsored websites when the director perception survey was inconsistent with such disclosures. A firm's reputation plays an influential role in its capacity to generate greater profits and long-term growth. Because corporate reputation has many facets, and many studies have not separated out aspects of corporate reputation in their investigations, some authors have criticised the findings of previous corporate reputation research. This study investigated the revenue growth aspect of corporate reputation, as it is one of the major contributors to corporate growth in firms.

Five major factors motivated the examination of intellectual capital in the fastest growing 100 firms in Australia. Firstly, firms cannot show forward-looking information such as intellectual capital on financial statements due to restrictions imposed by accounting standards. Firms can disclose this information voluntarily, using narrative, visual and numerical data to inform stakeholders about the value relevance of intellectual capital and, in this study, to the corporate growth aspect of reputation. Secondly, the fastest growing firms have demonstrated accelerated revenue growth over the three years of this study, and, of them, the top 100 represent an empirically fruitful site for the examination of corporate reputation.

Thirdly, a review of the fastest growing firms of 2007 indicates that 83% (87% in 2006 and 91% in 2005) belonged to the knowledge-based service and technology industry sectors. The literature claims that the knowledge-based sector is more dependent than other sectors on intellectual capital items for corporate performance, although this has yet to be verified for the fastest growing firms. On the balance sheet, intellectual capital has lost much of its status as a useful option due to the limitations on measurement and valuation criteria imposed by the accounting standards in force. Additionally, firms may be looking beyond the balance sheet to increase any prospect of reporting intellectual capital. Although most of the information found on company websites might also be available from other sources, it is more convenient, less costly and less time-consuming for stakeholders to access it there. Fourthly, the review of the fastest growing firms of 2007 indicates that (90% in 2006 and 91% in 2005) none is listed on the stock exchange. In Australia, unlisted firms are not required to submit a detailed annual report if they are classified as firms having no stakeholders who would depend on a general purpose financial statement to make resource allocation decisions about the firm. This is coined as the reporting entity concept in Australia. Furthermore, along with their rapid growth, the affairs of such companies change quickly. Therefore, it is logical for these firms to be more reliant on their websites than on traditional annual reports to communicate their affairs. Fifthly, the recent changes to industrial laws in Australia, allowing more flexibility for firms to manage their human capital items of intellectual capital, may have influenced their human capital disclosure.

At times, the literature has defined intellectual capital as capturing all intangibles, regardless of whether they are separately identifiable and controllable by firms. The literature offers a number of definitions of intellectual capital. Some consider intellectual assets as synonymous with intellectual capital, whereas others take the view that intellectual capital comprises intellectual assets as well as intellectual liabilities. Most of the definitions encompass the idea that benefits from intellectual capital are not necessarily immediately identifiable, but rather accrue over the long term.

Intellectual capital is a fragile concept and, according to some authors, needs continuous support and must be held together by a whole array of interrelated elements. Debate about both the composition of intellectual capital and its broad categorisation continues. It has been broken down in several ways for the purpose of analysis and interpretation.

The more recent literature, in general, has categorised intellectual capital along three dimensions: (1) 'internal capital', (2) 'external

(relational/customer) capital' and (3) 'human capital'. Although the tripartite categorisation for intellectual capital disclosure is prevalent, the intellectual capital items included for measurement and disclosure in these studies differ. Among them, Abeysekera's book, *Intellectual Capital Accounting* (2007), has provided a more comprehensive list of intellectual capital items, with the external capital category comprising 10 intellectual capital items, the human capital category comprising 25 intellectual capital items and the internal capital category comprising 10 intellectual capital items. The study reported here conceptualises intellectual capital according to the categorisation provided by Abeysekera (2007).

Until recently, researchers investigating the value relevance of non-financial variables in firm performance have mainly used annual reports to obtain data; however, the use of company-sponsored websites as a commercial tool is expanding rapidly. More specifically, there are three key potential benefits from disclosure on company-sponsored websites to firms and investors. First, it reduces the costs of information gathering and dissemination. Second, it provides a forum in which to communicate with stakeholders, such as investors. Third, it enables firms to provide more timely (e.g. weekly or monthly) non-financial information to stakeholders.

This use of company-sponsored websites has provided stakeholders, such as investors and customers, with much speedier access to timely data previously obtained from published financial statements. Many companies are becoming aware of the ability corporate websites have to foster reputation, to contributing to firm performance (through corporate growth), and to be vehicles through which non-financial information such as intellectual capital is disclosed. Researchers have examined this aspect only sparingly, and most interest to date has remained with financial reporting.

Using narrative, visual and numerical types of intellectual capital disclosures, firms can signal their corporate reputation as measured by growth in revenue. The signalling of corporate reputation may result from each disclosure type (i.e. narrative, visual and numerical), and its interaction with the other types. The selection and integration of both narrative and visual engage the reader as co-creator of a story. When disclosing intellectual capital, the interplay of signals between narrative, visual and numerical is important. The narrative provides the mechanisms, visual the wholeness and numbers the seriousness of the information. This study builds the theoretical variables based on the three types of intellectual capital disclosure signals and those resulting from the interaction amongst them. The analysis of content disclosed in company-sponsored websites reveals these signals.

This study has analysed content in company-sponsored websites using a coding framework with 45 intellectual capital items. These pre-defined intellectual capital items were entered into the coding sheet using both sentence count and frequency count, as the literature considers both important (Campbell, Beck, & Shrives, 2005; Linsley & Shrives, 2006). The sentence count is the volume occupied by intellectual capital items disclosed. However, numerical intellectual capital disclosure requires assigning weights to correspond with information condensed into a smaller space. If this is expressed in narrative or in visual signals, more space for their communication is required. One limitation in sentence count measurement is that numerical disclosure signals occupy a smaller count of line space. Therefore, this study has disregarded numerical disclosure signals and their interaction with other types of disclosure signals in analysing sentence count measurement.

As mentioned earlier, this study first recorded the frequency and sentence counts of intellectual capital as narrative, visual and numerical disclosures. It then built a model to determine the interaction of each intellectual capital disclosure type with the corporate growth aspect of reputation. A model was then devised to examine if intellectual capital disclosure associates with the corporate growth aspect of reputation. This model included six mediating variables to ascertain if managers' self-interest has any effect on the corporate growth aspect of reputation and intellectual capital disclosure. These mediating variables were the number of voting shareholders, the type of ownership (whether a firm is listed or unlisted), the firm size measured by total revenue, whether or not the website has an e-commerce site and the proportion of direct and indirect director ownership in the firm.

The models indicate that, independently, narrative and visual disclosures can decrease corporate reputation. However, combining them can increase corporate reputation. The reputation of the previous period does not necessarily assist firms in enhancing their current status. Thus, companies have to work continually to enhance their public image.

Furthermore, this study administered a questionnaire survey about intellectual capital resource items used in the content analysis framework for the purpose of discovering the extent to which they may or may not enhance corporate reputation. The questionnaire survey covered 40 of the 45 intellectual capital resource items mentioned in the coding framework adopted to analyse website content. The intellectual resource items covered in the survey comprised 10 items from the internal capital category, 10 from the external capital category and 20 from the human capital category. Respondents noted corporate culture as the most important item in

enhancing corporate reputation, followed by management philosophy and management processes in the internal capital category of intellectual capital classification. In relation to external capital, respondents reported that customer satisfaction is the most significant factor in enhancing corporate reputation. Following this are the favourable contracts received from external parties and the quality of products and services. The respondents stated that the expertise of their staff contributed most to enhancing corporate reputation. They reported that training programs and the entrepreneurial spirit of staff were the next most important items of human capital that contributed to enhancing corporate reputation.

As an additional exercise, this study compared intellectual capital resources perceived by directors of firms as enhancing corporate reputation with intellectual capital disclosure from the content analysis measured by frequency count. This analysis highlighted that disparities exist between intellectual capital resource items disclosed on company-sponsored websites and perceptions among directors of firms regarding the extent to which they enhance corporate reputation.

The main purpose of the survey questionnaire was to ascertain directors' perception of the importance of intellectual capital resource items in enhancing corporate reputation. However, since previous studies have not examined the extent to which corporate growth enhances firm reputation, this study also explored directors' level of agreement of this hypothesis. Respondents ranked its importance at 89 on a scale of 100 (i.e. 4.46 on a five-point scale), confirming that growth in revenue strongly contributes to enhancing the corporate reputation of firms.

This study focused on interviews with directors who agreed to provide details. The main purpose of the interview was to explore the motivations that give rise to disparities between intellectual capital resource items disclosed on company-sponsored websites and director perception about whether or not they enhance corporate reputation. Directors' responses revealed that the aim of intellectual capital disclosure is to appear to their major stakeholders as leaders or differentiators of their industry. The major stakeholders, both existing and potential, for the majority of firms were customers and staff. Firms considered several factors in making decisions about disclosing intellectual capital resource items on their websites. Some inevitably influenced disclosure and others were considered by directors as relevant in making disclosure decisions. The ultimate intent of the firm is to minimise distraction and maximise favourable impact on their targeted stakeholders. Ownership type, the criticality of the website as a disclosure tool for firms, and competitor pressure were factors considered by firms

when disclosing intellectual capital on company-sponsored websites. Products and services provided by a firm and how search engines rank websites inevitably influenced the composition of intellectual capital disclosure.

Although the main purpose of the focused interviews was to ascertain the motivations behind the differences between company-sponsored intellectual capital disclosure and director perceptions about intellectual capital resource items, they also probed into factors other than the corporate growth aspect that may contribute to reputation. The focused interviews revealed that while other contributors of reputation enhancement vary, they all remain within the attributes of clients (customers), staff and the independent accreditation of aspects of the entire business.

This study is one of the very few on intellectual capital disclosure and their implications on the corporate growth aspect of reputation. As such, it can be considered a benchmark by which to compare corporate reputation studies with different types of firms. The findings of this study offer a standard for future research into directors' perceptions about intellectual capital as resources enabling firms' corporate reputation. The study also highlights the role that the accountancy profession can play in bridging the gap of resources undisclosed in financial statements. It highlights how fastest growing firms are disclosing their unaccounted resources in order to meet regulatory limitations in reporting formats. Stakeholders can benefit from this information. The study demonstrates the benefit of using narrative and visual signals in disclosing capital unaccounted for in financial statements.

POLICY RECOMMENDATIONS

This study gave rise to four policy recommendations. First, firms are encouraged to use both narrative and visual forms of disclosure to complement one another in disclosing intellectual capital resource items on websites. Secondly, it is important to conduct an awareness program about intellectual capital disclosure on websites so that small firms become aware of the positive impact such disclosure can have in enhancing corporate reputation. Thirdly, firms should prepare guidelines for intellectual capital disclosure on websites so that they can favour a best practice model. Finally, fostering a dialogue between stakeholders and the accounting regulators can help to streamline intellectual capital disclosure for more value relevant, forward-looking information. These points are elaborated in the following.