Analyzing the Level of Intangible Assets Reporting Practices of Indian Knowledge-Based Companies and Traditional Product-Based Companies

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Abstract

Business dynamics of the 21st century have much dependence on the intangible assets rather than on tangible assets in order to create wealth for the long period. The objective of this study is to examine the level of intangible assets reporting practices of Indian companies for the year 2013-14 and year 2014-15, by comparing five Knowledgebased companies with five Traditional Product-based companies. Further, Category-wise Analysis and Time period-wise Analysis is used in this study. The sample companies are selected as per rating of ET 500 for the year 2015 by using hidden value method (M.V-B.V./M.V.*100). Content analysis on annual reports of respective companies is used to examine the reporting level. The research findings showed that the reporting level of Intangible assets was increased from the year 2013-14 to 2014-15. The study revealed that Knowledge-based companies have much dependence on brands, customer, and business partnership rather than on organizational culture, business processes and financial relations. Knowledge-based companies have much reporting level of intangible assets than Traditional Product-based companies both in the years 2013-14 and 2014-15. This study suggested that whether there are several frameworks to classify the intangible assets, even though there is a need for the revised general accounting guidelines that is useful for the companies to disclose their hidden assets in their annual reports in uniform manner. This advancement will help the companies for achieving the sustainable competitive advantage and also it is useful for the stakeholders to take the efficient decisions by considering both the tangible as well as intangible assets.

Key Words

Intangible Assets, Reporting, Indian Companies, Content Analysis, Annual Reports, Hidden Value

INTRODUCTION

Business dynamics of the 21st century has progressively switched from the industrial era to knowledge-based era. The intensification of the competition, the development of new business sectors, sophisticated customers, competitors, suppliers, technological progress and many more arise the need of investment in the intangible assets. But, prior to knowledge-based era, where the business world is that of tangibles in which the physical assets like the land, labour, money, machines etc. are the major factors to achieve the economic wealth and knowledge as the production factor is quite small (Seetharaman et al., 2002). In the world of tangibles, the business valuation is done through double entry accounting system. Now the business world is full of intangibles, where the traditional model of accounting is incapable to measure the assets, which are intangible in nature. Intangible Assets are the invisible and important assets. In knowledge-based economy, these assets have the capability to generate wealth for the organization. These assets are very important even though there is great controversy within the accounting academic community as to whether or not intangibles should be reported in company financial statements. The term intangible assets, knowledge-based assets and intellectual capital have been used interchangeably assert that these terms differentiate with their nature of stream like intangibles used in accounting literature, Knowledge-based assets used by economists and intellectual capital used in management practices (Lev 2001, Rodgers 2003). Andreou et al. (2007) state that intangible assets are considered the most critical resource of today's enterprise and yet, most enterprises cannot clearly define what constitutes an intangible asset. Indian Accounting Standard 38 (Ind AS 38) defines, "Intangible asset is an identifiable non-monetary asset without physical substance." The reality is that till today the accounting standards are still not capable enough to develop a generally accepted set of guidelines for the identification and measurement of all intangibles, as most accounting standard setting bodies have put emphasis on the reliability of financial statements rather than on their practical relevance.

CLASSIFICATION OF INTANGIBLE ASSETS

There is a vast amount of elements that currently receive consideration as intangible assets, but like their definition, there is no generally accepted classification. Several accounting professional bodies and researchers have attempted to classify the intangible assets. Sveiby (1997) categorized the intangible assets as: Internal Capital, External Capital and Human Capital. This classification is used in various studies such as Guthrie *et al.* (2000), Brennan (2001), April *et al.*

(2003), Bozzolan *et al.* (2003), Goh *et al.* (2004) and many more. Brooking (1996) classified Intellectual capital (hereafter mentioned as IC) as: Market Assets, Intellectual Property Assets, Human-centered Assets and Infrastructure Assets. Leif Edvinsson classified the Intangibles as: Human Capital, Organizational Capital and Customer Capital (Edvinsson, 1997). Lev (2001) categorized the Intangible Assets as: Discovery (Innovation), Human Resources and Organizational Practices. The concept of intangible assets is too wide and it is very difficult to isolate and value them.

REVIEW OF LITERATURE

Some of the studies made by the researchers in the field of intangible assets disclosure practices are explained as follow:

The first IC report was published in 1994 at Skandia under the leadership of Leif Edvinsson who is termed as the "Father" of the IC report, to visualize the hidden value and generate the taxonomy of IC. In India, Reliance Industries limited published the first IC report in 1997 and Shree Cement Limited and Balrampur Chini Mills also published the IC report on voluntary basis (Pablos, 2005). Further Pablos (2005) examined the main similarities and differences between the Indian IC report and European IC report and also made an attempt to know the idiosyncratic features that define the Indian IC report. He found that Indian IC report does not focus on the business model, values, mission and vision and/or knowledge management issues like European IC reports. Indian companies present a narrative style reporting that describes a firm's IC and analyzed the components without focus on the specific indicators. Researcher concluded that Indian reports also much larger than the European intellectual reports.

Joshi and Ubha (2009) conducted a study on the IC reporting practices of 15 leading Indian Information Technology companies. Bhasin (2011) analyzed the IC related information of 16 top IT sector companies of India for the year 2007-08 and 2008-09. Common findings from these studies are Intellectual Property Rights (IPR) was the most disclosed item of IC and Infosys Technology Limited was widely disclosing company of IC related items. Chandra and Mehra (2011) assessed the extent of intangible assets disclosure practices of the Indian companies for the year 2003-04 and 2007-08. The results showed that number of employees, market share and research activities were most disclosed attributes in the case of human capital, external capital and internal capital respectively. Infosys Technologies Limited was the top company for disclosing the intangible assets for the both years. Study found significant difference in the intangible assets reporting practices of the companies in the year 2003-04 and 2007-08. Researcher concluded the study by

saying that there is a need to develop an index of intangible assets disclosure to incorporate both quantitative as well as qualitative description of intangible assets. The overall reporting of intangible assets was unorganized and unsystematic.

Vishnu and Gupta (2014) measured IC of top 22 Indian pharmaceutical firms and also studied its impact on their performance. Performance variables were return on assets (ROA) and return on sales (ROS) whereas IC components were human capital, structural capital and relational capital. Results showed positive relationship between IC components and performance variables. Further, results revealed that relational capital has no significant relationship with performance variables.

Several studies suggested that knowledge-based industries or high-tech industries disclosed more intangible assets-related information (Bozzolan *et al.*, 2003; Oliveira *et al.*, 2006; Whiting *et al.*, 2011). Boujelbene and Affes (2013) classified knowledge intensive industries and traditional industries. Knowledge intensive industries include IT, distribution, media, software, biotechnology, entertainment, retail, high-tech manufacturing and web services. Traditional industries consist of chemicals, food, oil, utilities, automobiles, electronics, textile/clothing and tourism and leisure. Bruggen (2009) stated that industry type is a determinant of IC disclosure. Industries that rely more on IC disclose more information on IC. He found that firms of Healthcare industry and firms of Information Technology industry disclosed significantly more information-related to IC compared to firms of other industries.

OBJECTIVES OF THE STUDY

- To study the intangible assets reporting practices of selected Indian companies during the year 2013-14 and 2014-15.
- To study the time period-wise, category-wise and element-wise analysis of selected Indian companies for the year 2013-14 and 2014-15.
- To study and compare the reporting level of five knowledge-based Indian companies and five traditional product-based companies during the year 2013-14 and 2014-15

RESEARCH METHODOLOGY

Universe of the Study

The purpose of the study reported in this paper is to examine the intangible assets reporting practices of Indian companies. The research population

includes top 100 Indian companies rated as per ET 500 for the year 2015, selected as per market capitalization.

Sample Selection

For the sample selection, Hidden value (MV-BV i.e. Market value less Book value) method was used for making the difference between knowledge intensive companies and traditional product-based companies. The hidden value in percent form was then calculated by (MV – BV/MV*100). The companies with the largest positive hidden value were classified as knowledge-based companies and companies with the negative hidden value were traditional product-based companies. Five companies in each category were selected based on the magnitude of their hidden value ratio, giving a total sample size of 10 companies. This is comparable to Brennan (2001) who sampled 11 Irish companies. The following is the list of sample companies used for the study:

Table 1
List of Sample Companies

| Five Knowledge-Based Companies | Five Traditional Product-Based Companies | | |
|---------------------------------|---|--|--|
| Castrol India Limited | Reliance Communication Limited | | |
| Hindustan Unilever Limited | Tata Steel Limited | | |
| Colgate-Palmolive India Limited | Vedanta Limited | | |
| Blue Dart Express Limited | Rural Electrification Corporation Limited | | |
| Britannia Industries Limited | Hindalco Industries Limited | | |

Technique for the Analysis

To measure the level of reporting practices of intangible assets, Content analysis is used on the annual reports of the respective companies for the year 2013-14 and 2014-15. For the present study, the Modified Intangible Assets Monitor of Sveiby (1997) framework is used. The previous research also indicates use of same index (Guthrie & Petty, 2000; Brennan, 2001; Bozzolan *et al.*, 2003). The reason for selecting this framework is that result of this study might be generally comparable with other studies. This study uses a framework similar to Silva *et al.* (2014) and Abeysekera (2008), consisting 20 elements showed in following manner:

Table 2 Classification of Disclosure Index as per Sveiby's Framework

| Internal Capital | External Capital | Human Capital | | |
|--------------------------------|--|--------------------------|--|--|
| • Processes | • Brands | Work-Related Knowledge | | |
| • Systems | • Customer | Training & Development | | |
| Philosophy | Corporate Image Building | • Entrepreneurial Skills | | |
| • Culture | Business Partnering | • Equity Issues | | |
| Intellectual Property | • Distribution Channels | • Employee Safety | | |
| Financial Relations | Market Share | • Employee Relations | | |
| | | • Employee welfare | | |
| | | • Employee related | | |
| | | Measurement | | |

Recording Unit

Sentences were chosen as recording unit and each sentence was coded with the value of (0) or (1). If the value is of (0), it means there is no variable is in the annual report. If the value is of (1), then the variable is presented in the annual report. If the same information is disclosed more than once, the researcher considered that information only once.

FINDINGS OF THE STUDY

The study found that the extent of intangible assets reporting is increased from the year 2013-14 to 2014-15. As shown in Table 3, six companies out of 10 companies are increasing their reporting on intangible assets in annual reports from the year 2013-14 to 2014-15.

Category-Wise and Element-Wise Analysis

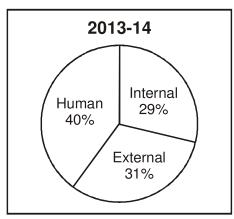
To analyze the extent of intangible assets reporting practices, as per the Sveiby's framework, three intangible assets categories (Internal Capital, External Capital and Human Capital) and 19 elements were also examined. There are only slight changes in the three categories during the year 2013-14 and 2014-15. Figure-I shows that proportion of intangible assets reporting on Internal capital slightly increases, proportion of reporting on external capital decreases across the time period covered by this study and proportion of reporting on Human capital remains unchanged in both of the years. The maximum reported elements are Philosophy, Brand, Customer, Business partnership, Training and Development while least reported element is culture and equity issues during the year 2013-14 and 2014-15. Knowledge-Based companies have much dependence on brands, customer, and business partnership rather than on organizational culture, business processes and financial relations as shown in Table 4.

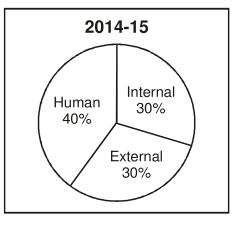
Table 3
Intangible Assets Reporting

| | 2013-14 | 2014-15 | | | | |
|---|---------|---------|--|--|--|--|
| Knowledge-Based Companies | | | | | | |
| Castrol India Limited | 16 | 19 | | | | |
| Hindustan Unilever Limited | 18 | 17 | | | | |
| Colgate-Palmolive India Limited | 15 | 18 | | | | |
| Blue Dart Express Limited | 17 | 19 | | | | |
| Britannia Industries Limited | 18 | 17 | | | | |
| Sub-Total | 84 | 90 | | | | |
| Traditional Product-Based Companies | | | | | | |
| Reliance Communication Limited | 15 | 16 | | | | |
| Tata Steel Limited | 17 | 18 | | | | |
| Vedanta Limited | 18 | 19 | | | | |
| Rural Electrification Corporation Limited | 18 | 18 | | | | |
| Hindalco Industries Limited | 17 | 16 | | | | |
| Sub-Total | 85 | 87 | | | | |
| Total | 169 | 177 | | | | |
| Average | 16.9 | 17.7 | | | | |

Source: Annual Reports of Respective Companies

Figure 1: Intangible Assets Category on Overall Basis Over the Two Years





Source: Annual Reports of Respective Companies

Table 4
Element-Wise Analysis of Selected 10 Indian Companies

| | | - | 2014-15 | | | | |
|----------|---------------------|-----------|------------------------|------------|-----------|-------------|------------|
| Sr. | Elements | Knowledge | 2013-14 Traditional | Total | Knowledge | Traditional | Total |
| No. | | Based | Product | Intangible | Based | Product | Intangible |
| | | Companies | | Assets | Companies | | Assets |
| | | F | Companies | | F | Companies | |
| 1. | Processes | 3 | 5 | 8 | 5 | 5 | 10 |
| 2. | Systems | 4 | 5 | 9 | 5 | 5 | 10 |
| 3. | Philosophy | 5 | 5 | 10 | 4 | 5 | 9 |
| 4. | Culture | 3 | 3 | 6 | 4 | 3 | 7 |
| 5. | Intellectual | 3 | 4 | 7 | 3 | 5 | 8 |
| | Property | | | | | | |
| 6. | Financial | 4 | 5 | 9 | 5 | 5 | 10 |
| | Relations | | | | | | |
| 7. | Brands | 5 | 5 | 10 | 5 | 5 | 10 |
| 8. | Customer | 5 | 5 | 10 | 5 | 5 | 10 |
| 9. | Corporate | 4 | 3 | 7 | 5 | 4 | 9 |
| | Image Building | | | | | | |
| 10. | Business | 5 | 5 | 10 | 5 | 5 | 10 |
| | Partnership | | | | | | |
| 11. | Distribution | 4 | 3 | 7 | 4 | 4 | 8 |
| | Channel | | | | | | |
| 12. | Market Share | 5 | 3 | 8 | 3 | 3 | 6 |
| 13. | Work-Related | 5 | 4 | 9 | 3 | 5 | 8 |
| | Knowledge | | | | | | |
| 14. | Training and | 5 | 5 | 10 | 5 | 5 | 10 |
| <u> </u> | Development | | | | | | |
| 15. | Entreprene- | 5 | 5 | 10 | 5 | 2 | 7 |
| 1.6 | urial Skills | | | | , | | 0 |
| 16. | Equity Issues | | 3 | 4 | 4 | 4 | 8 |
| 17. | Employee | 5 | 3 | 8 | 5 | 4 | 9 |
| 1.0 | Safety | | 4 | 0 | | 4 | 0 |
| 18. | Employee | 5 | 4 | 9 | 5 | 4 | 9 |
| 10 | Relations | 5 | 5 | 10 | 5 | Λ | 9 |
| 19. | Employee | 3 | 3 | 10 |) | 4 | 9 |
| 20 | Welfare | | | | | | |
| 20. | Employee Related | 3 | 5 | o | 5 | 5 | 10 |
| | | 3 | 5 | 8 | 5 | 5 | 10 |
| | Measurement | | Pagnagtiva (| | | | |

Source: Annual Reports of Respective Companies

Knowledge-Based Companies versus Traditional Product-Based Companies

This result showed that on overall basis, knowledge-based companies appear to provide a greater amount of intangible assets reporting than the traditional product-based companies. Figure 2 shows the average number of reporting level of knowledge-based companies and traditional product-based companies as well as average number of reporting level of total 10 companies. The average number of reporting level of knowledge-based companies was 16.8 sentences in 2013-14, 18 sentences in 2014-15. This compares to average number of reporting level of traditional product-based companies which was 17 sentences in 2013-14 and 17.4 sentences in 2014-15. The results showed that in the year 2014-15, knowledge-based companies paid much attention on intangible assets and have increased number of reporting level as compared to traditional product-based companies.

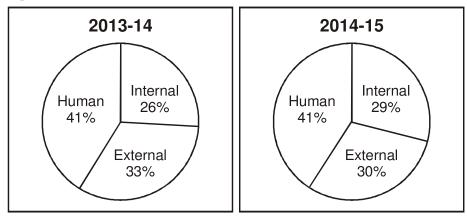
Average No. of Reporting Level 18 17.5 17 16.5 16 All Knowledge Traditional Companies Based **Product Based** Companies Companies **■**13-14 16.9 16.8 17 **14-15** 17.7 18 17.4

Figure 2: Average Number of Reporting Level of Intangible Assets

Source: Annual Reports of Respective Companies

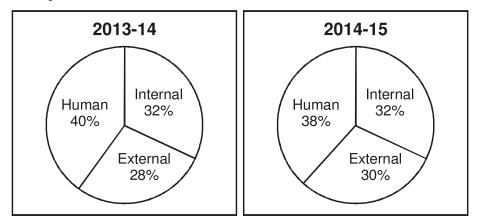
As can be shown in Figure 3 and Figure 4, Human capital was considering the most reporting category for two years examined in this study. The traditional product-based companies consistently provided a greater proportion of internal capital information than the knowledge-based companies in both years covered by this study. While the proportion of external capital information for five knowledge-based companies decreases each period, the opposite occurs for traditional product-based companies.

Figure 3: Intangible Assets Reporting Category Percentages: Knowledge-Based Companies



Source: Annual Reports of Respective Companies

Figure 4: Intangible Assets Reporting Category Percentages: Traditional Product Based Companies



Source : Annual Reports of Respective Companies

However, no strong framework was identified between the elements reported and number of sentences reported per period. This suggests that extent of intangible assets reporting is more associated with an organization's market value (which is a reflection of the size of the organization), than its hidden value (See Guthrie *et al.*, 2006)

CONCLUSION

The purpose of the study is to examine the reporting practices of intangible assets of selected 10 Indian companies during the year 2013-14 and

2014-15. Further, time-wise, element wise and category-wise analysis has been conducted of selected 10 Indian companies. The sample companies are selected by considering Hidden value method (M.V.-B.V./M.V.*100). The largest hidden value was classified as knowledge-based companies and least hidden value were traditional product-based companies. Content analysis on the annual reports of respective companies was used for the analysis. The study found that the extent of intangible assets reporting is increased from the year 2013-14 to 2014-15. The maximum reported elements are Philosophy, Brand, Customer, Business Partnership, Training and Development while least reported elements are culture and equity issues during the year 2013-14 and 2014-15. Knowledgebased companies have much dependence on brands, customer, and business partnership rather than on organizational culture, business processes and financial relations. The results showed that in the year 2014-15, knowledgebased companies paid much attention on intangible assets and have increased number of reporting level as compared to traditional product-based companies. Human capital was considering the most reporting category for two years examined in this study. Specifically, the findings of this study suggest that organizations have a growing awareness on intangible assets but there is an immediate need of further guidance to improve the ways in which various components are reported.

LIMITATION OF THE STUDY

The results of this study have limited generalisability due to the small sample size overall and the small number of companies in both the knowledge-based and the traditional product-based companies. However, the sample size is similar to prior studies (see Brennan, 2001) and the findings of the longitudinal study reported in this paper provide a useful contribution to those promoting the value of intangible assets reporting and developing intangible assets reporting related guidelines.

FUTURE RESEARCH

Further research could be undertaken, using the same research methodology, looking at cultural differences in a cross-country comparison. The use of a larger sample to examine differences between knowledge-based companies and traditional product-based companies would also be beneficial.

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