Intellectual Capital Disclosure in BSE Sensex Companies of India

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Abstract

Disclosing Intellectual Capital is vital to enabling companies to appreciate their exact corporation value. Recognition and disclosure of intangibles is an important contemporary issue in the accounting and finance. There is no provision for disclosing intangibles under the prevailing reporting practices. Rather, the disclosure of such intangible assets is presently restricted. Worldwide, the accounting standards require that financial reporting should provide information that is useful to present and potential investors, creditors and others, in making rational investment, credit and other financial decisions. Since these accounting standards, do not accord proper treatment and recognition to Intellectual Capital, providing such information to stakeholders is considered as an important activity within a company. The present study analyses the extent of Intellectual Capital Disclosure on leading Bombay Stock Exchange Index (BSE-SENSEX) companies. The study has identified 41 attributes associated with Intellectual Capital and used Content Analysis method to identify the same from the Financial Statements of the companies. The study found that the sample companies have disclosed 61 percent of the attributes associated with Intellectual Capital.

Keywords: Intellectual Capital, Accounting Standards, Disclosure, Intangible Assets.

Introduction

Knowledge, as embodied in human beings (as "human Capital") and in technology, has always been central to economic development. Output and employment are expanding fast in high-technology industries, such as computers, electronics and aerospace. . Knowledge-intensive service sectors, such as education, communications and information, are growing even faster. Indeed, it is estimated that more than 50 per cent of Gross Domestic Product (GDP) in the major economies is now knowledge-based. The knowledge economy is a phrase often used but seldom defined. It essentially describes a process whereby the economic competitiveness and performance of organizations and firms is increasingly determined by their investment in 'knowledge based' or intangible assets such as R&D, design, software, human and organizational Capital, and brand equity and less by investment in physical assets such as machines, buildings, and vehicles.

The global market is progressively moving towards knowledge and technological innovation, seeking methods to boost competitive advantage. For years, Intellectual Capital (IC) has been synonymous

with intangible assets and knowledge Capital. The importance of IC has been revealed and discussed by many scholars. Handy (1989) mentioned that Intellectual assets are three or four times the tangible book value of a company. Van Burren (1999) suggested that intangible assets represent more than two-thirds of the corporate value, while, Osborne (1998) indicated that 80 per cent of a company's value is not tangible. Furthermore, traditional accounting measures are inadequate to determine the real value of the company, in the so-called"knowledge-based society"(Stewart, 1991). Thus, valuing and disclosing Intellectual Capital is vital to enabling companies to appreciate their exact corporation value.

Significance of the Study

Recognition and disclosure of intangibles is an important contemporary issue in the accounting and finance literature (Avery 1942, Lev & Schwartz 1971, Hall 1992, 1993, Lev 2003, Guthrie et al, 2003). There is no provision for disclosing intangibles under the prevailing reporting practices. Rather, the disclosure of such intangible assets is presently restricted. Worldwide, the accounting standards require that financial reporting should provide information that is useful to present and potential investors, creditors and others, in making rational investment, credit and other financial decisions. Therefore, recognition, measurement and disclosure of the intangible resources and providing such information to stakeholders are considered as an important activity within a company.

Conceptual Framework

There is no fixed definition for the term Intellectual Capital. Different authors have described and defined the term Intellectual Capital in different ways. Among them few are discussed as follows: Itami (1987) defined Intellectual Capital as an intangible resource that includes brand name, technology, customer goodwill, loyalty, trademarks and copy rights etc. According to Stewart (1997) Intellectual Capital is a knowledge and information which creates the value added efficiency to create wealth of corporations. According to Bontis (2000), Intellectual Capital is measured by individual worker and organizational know-how that contributes to maintaining competitive advantages of firms.Sullivan (2000) believed Intellectual Capital to be a pool of knowledge that can be transformed into profitability. Roos et al (1997) defined Intellectual Capital as the 'total knowledge' of its employees and practical conversion of the 'total knowledge' into branding strengths, copy rights, trademarks and process differences. Edvinsson and Malone (1997) define Intellectual Capital as the ownership of knowledge, application of experience, technology resources of organisations, customer relationships and professional expertise that give a competitive edge to the firms in the market place.

It can thus be inferred that Intellectual Capital tends to create value in the course of knowledge transfers among human resources, technology, procedures, culture, top management philosophy, customers and other stakeholders who symbolize the internal and external environment of the company. Many words with similar meanings exist to define the concept of Intellectual Capital. Intangible resources (Haanes and Lowendahl, 1997), invisible assets (Itami 1987), intangible assets (Sveiby 1997), core competencies (Hamel and Prahalad, 1990) are a few most commonly used terms that define Intellectual Capital. Thus there is no universally acknowledged term and all these terms are used as substitutes, as done by Lev (2001).

Components of Intellectual Capital

Similarly, Intellectual Capital is not detached. It is composed of different components. Several researchers have grouped Intellectual Capital into different categories. Among them, Intellectual Capital is composed of (a) human Capital; (b) customer Capital; (c) structural Capital; and innovation Capital (Edvinsson and Malone, 1997; Roos et al., 1997; Stewart, 1997; Sveiby, 1997; Chen et al., 2004 and Tseng and Goo, 2005).

Human Capital (HC) represents the individual knowledge asset of a company's employees (Bontis et al., 2001). Roos et al. (1997) argued that employees generate IC throughout their competency, their attitude and their Intellectual alertness. Even though employees are considered the most important corporate asset in a learning organization, they are not owned by the organization. Similarly, Hudson (1993) described HC as a combination of four factors: (a) culture; (b) experiences; (c) inheritance; and (d) attitude. Edvinsson and Richtner (1999) supported the view that HC is the skills, relationship ability and standards; the employee works on transforming an individual into a combined know-how and a more long-term organizational Capital. In essence, HC is the brainpower of the employee inside the company.

Customer Capital(CC) is the knowledge that is developed to the customer-supplier relationship when conducting business. Bontis (1999) represented customer Capital as any potentials of the company regarding its customers. Saint-Onge (1996) has included the 'relational Capital', which covers the knowledge, surrounded by all relationships in an organization from customers, competition, suppliers, associations or the government. Moreover, Edvinsson and Richtner (1999) showed that customer Capital is the value of customer position, customer relationships and customer potential, and finally, Chen et al. (2004) argued that customer Capital cannot be achieved without human Capital.

Structural Capital (SC) contains 'all the non-human storehouses of knowledge in organisations, which include the databases, organizational charts, process manuals,

strategies, routines and anything whose value to the company is higher than its material value' (Bontis, 1999). Additionally, Roos et al. (1997) defined Structural Capital asthe knowledge inside the company when employees stop working. In accordance withBontis (1998), if organisations have inadequate procedures and systems, IC will notreach its peak of prospective. Another important feature of SC is its capacity tocompose, allowing IC to be calculated and managed, in any stage of examination, (Bontis, 1998).

Review of Literature

Many studies have been conducted to analyse the Intellectual Capital reporting practices by using the content analysis of annual reports. Some of the prominent studies are: Guthrie and Petty, (2000); Brenan, (2001); Olsson, (2001); Bontis, (2003); Bozzolan et al., (2003); Abeysekera and Guthrie, (2004). Researchers have used similar approach to investigate Intellectual Capital trends in Australia: Abeysekera, (2007), UK: Striukova el al., (2008), Sri Lanka: Abeysekera and Guthrie, (2005), Spain : Oliveras el al., (2008) and India: Kamath, (2008). Intellectual Capital trends between countries: Australia and Sri Lanka: Abeysekera, (2007); Singapore and Sri Lanka: Abeysekera, (2008). In the Indian-context, there has been very limited number of Intellectual Capital reporting studies, as compared to its developed partners. However, very few recent studies are available on Intellectual Capital reporting in India using content analysis, by Kamath (2008), and Joshi et al. (2009), Chander & Mehra (2010) & Paramshiviah & Puttaswamy (2013).

Research Gap

The review of literature shows that numbers of studies have been conducted worldwide and only few studies are found in India. Most of the studies have focused on specific industries. Thus, the present study, based on the previous literature of Intellectual Capital disclosures, is undertaken on leading companies of India, which considered as benchmarks for their respective industry. The present study is undertaken on BSE SENSEX companies representing 12 major industries.

Materials and Methods/Research Methodology

Objectives of the study

The specific objective of the present study is to evaluate the extent of Intellectual Capital Disclosure among the BSE SENSEX companies of India.

Research Methodology

The sample of the study consists of India's top 30 companies of Bombay Stock Exchange, representing 12 major sectors in India i.e BSE Sensex. The annual reports of the selected companies were obtained for the year 2012-13 and 2013-14 from the respective websites of the companies. Content Analysis methodology has been used to analyse the Intellectual Capital disclosure of the companies under study.

Analysis

Data recording and coding-Content analysis method

Content Analysis is used to measure the extent of disclosure for the sample companies. It is a technique for gathering data by codifying qualitative and quantitative information into predetermined categories in order to derive patterns in the presentation and reporting (Guthrie et al, 2004). In the process, intangible assets disclosure index was prepared under the framework of Sveiby (1997). Many researchers have followed this framework in their studies. In the Indian scenario, this framework has been adopted by Chander & Mehra, (2010) However, in this study it has been slightly modified to include some other attributes related to Intellectual Capital, as shown in table - 1.

Table- 1Reporting of Intellectual Capital Attributes for the year 2013 and 2014

S.No	Items of IC Variables	2013		2014	
		No. of companies reporting	%	No. of companies reporting	%
1	Business knowledge	0	0.00	1	0.09
2	Company reputation	0	0.00	0	0.00
3	Competitive intelligence	1	0.09	0	0.00
4	Corporate learning	0	0.00	7	0.61
5	Corporate university	0	0.00	0	0.00
6	Cultural diversity	0	0.00	1	0.09
7	Customer Capital	0	0.00	0	0.00
8	Economic value added	18	1.55	44	3.80
9	Employee expertise	0	0.00	0	0.00
10	Human Capital	0	0.00	0	0.00
11	Human Value	23	1.98	24	2.07

12	Employee know-how	0	0.00	1	0.09
13	Employee knowledge	0	0.00	0	0.00
14	Employee productivity	0	0.00	0	0.00
15	Employee efficiency	1	0.09	5	0.43
16	Employee skill	0	0.00	0	0.00
17	Employee value	2	0.17	7	0.61
18	Knowledge assets	6	0.52	11	0.95
19	Employee attitudes	0	0.00	0	0.00
20	Expert teams	0	0.00	0	0.00
21	Knowledge sharing	8	0.69	12	1.04
22	Management quality	1	0.09	1	0.09
23	Intellectual Capital	4	0.34	14	1.21
24	Structural Capital	0	0.00	0	0.00
25	Information systems	15	1.29	25	2.16
26	Knowledge Management	14	1.21	12	1.04
27	Human assets	3	0.26	1	0.09
28	Intellectual property	47	4.05	60	5.19
29	Relational Capital	0	0.00	3	0.26
30	Brand	670	57.76	543	46.93
31	Customer knowledge	0	0.00	0	0.00
32	Intellectual resources	0	0.00	0	0.00
33	Franchising agreements	1	0.09	3	0.26
34	Organizational culture	3	0.26	5	0.43
35	Organizational learning	2	0.17	2	0.17
36	Intellectual assets	0	0.00	0	0.00
37	Supplier knowledge	1	0.09	3	0.26
38	Goodwill	303	26.12	317	27.40
39	Loyalty	35	3.02	50	4.32
40	Trade marks	1	0.09	0	0.00
41	Copy right	0	0.00	1	0.09
42	Core competence	1	0.09	4	0.35
	TOTAL	**1160**	**100**	**1157**	**100**

Source: Author's calculations based on annual report of the selected companies were obtained for the year 2012-13 and 2013-14.

It may be observed from the table-1, Brand, followed by Goodwill are the highly reported Intellectual Capital attributes for the year 2013 and, 2014. Goodwill shows a substantial increase in reporting compared to the brand value. The other attributes are miniscule, compared to Brand and Goodwill. Intellectual Property, Loyalty, Human value, Information Systems, Knowledge management, Economic Value Added are the series of attributes which are disclosed in the year 2013. Intellectual Property, Loyalty, Information Systems, Human Value, Economic Value Added, Knowledge Management and Knowledge Sharing are the order of disclosure for the year 2014. Irrespective of the year, the other attributes which are disclosed, include Knowledge Assets, Organizational Culture, Employee efficiency, Intellectual Capital, Core competence, Intellectual Capital, Relational Capital, Franchising Agreements, Human Assets, Organizational learning, Business knowledge, Corporate learning, cultural diversity, Employee know-how, employee value and management quality. Thus, in total, 61 percent of the attributes are disclosed, out of the chosen attributes of Intellectual Capital.

Table -2Reporting of Intellectual Capital Attributes for the year 2013

S.No	BSE 30 Companies	2013	%	2014	%
1	AXIS Bank	13	1.12	21	1.82
2	Bajaj Auto Ltd	16	1.38	10	0.86
3	Bharat Heavy Electricals Ltd	4	0.34	14	1.21
4	Bharti Airtel Ltd	111	9.57	51	4.41
5	Cipla Ltd	6	0.52	13	1.12
6	Coal India Ltd	7	0.60	12	1.04
7	Dr. Reddy's Laboratories Ltd	58	5.00	56	4.84
8	GAIL (India) Ltd	12	1.03	7	0.61
9	HDFC Bank Ltd	7	0.60	20	1.73
10	Hero MotoCorp Ltd	64	5.52	50	4.32
11	Hindalco Industries Ltd	13	1.12	14	1.21
12	Hindustan Unilever Ltd	123	10.60	131	11.32
13	Housing Development Finance Corporation Ltd	7	0.60	12	1.04
14	ICICI Bank Ltd	10	0.86	2	0.17
15	Infosys Ltd	45	3.88	51	4.41
16	ITC Ltd	197	16.98	193	16.68
17	Larsen & Toubro Ltd	32	2.76	27	2.33
18	Mahindra and Mahindra Ltd	12	1.03	11	0.95
19	Maruti Suzuki India Ltd	6	0.52	13	1.12
20	NTPC Ltd	0	0.00	11	0.95
21	Oil and Natural Gas Corporation Ltd	18	1.55	32	2.77
22	Reliance Industries Ltd	80	6.90	86	7.43
23	Sesa Goa Ltd	1	0.09	24	2.07
24	State Bank of India	15	1.29	34	2.94
25	Sun Pharmaceutical Industries Ltd	38	3.28	37	3.20
26	Tata Consultancy Services Ltd	33	2.84	46	3.98
27	Tata Motors Ltd	87	7.50	11	0.95
28	Tata Power Company Ltd	13	1.12	13	1.12
29	Tata Steel Ltd	46	3.97	70	6.05
30	Wipro Ltd	86	7.41	85	7.35
	Total	**1160**	**100**	**1157**	**100**

Source: Author's calculations based on annual report of the selected companies were obtained for the year 2012-13 and 2013-14.

Table-3Ranking of Companies based on Intellectual Capital Disclosures for the year 2013 and 2014 – Company wise

BSE 30 companies	2013 Rank	2014 Rank
AXIS Bank	17	16
Bajaj Auto Ltd	15	28
Bharat Heavy Electricals Ltd	28	18
Bharti Airtel Ltd	3	7
Cipla Ltd	26	20
Coal India Ltd	23	23
Dr. Reddy's Laboratories Ltd	8	6
GAIL (India) Ltd	20	29
HDFC Bank Ltd	23	17
Hero MotoCorp Ltd	7	9
Hindalco Industries Ltd	17	18
Hindustan Unilever Ltd	2	2
Housing Development Finance Corporation Ltd	23	23
ICICI Bank Ltd	22	30
Infosys Ltd	10	7

ITC Ltd	1	1
Larsen & Toubro Ltd	13	14
Mahindra and Mahindra Ltd	20	25
Maruti Suzuki India Ltd	26	20
NTPC Ltd	30	25
Oil and Natural Gas Corporation Ltd	14	13
Reliance Industries Ltd	6	3
Sesa Goa Ltd	29	15
State Bank of India	16	12
Sun Pharmaceutical Industries Ltd	11	11
Tata Consultancy Services Ltd	12	10
Tata Motors Ltd	4	25
Tata Power Company Ltd	17	20
Tata Steel Ltd	9	5
Wipro Ltd	5	4

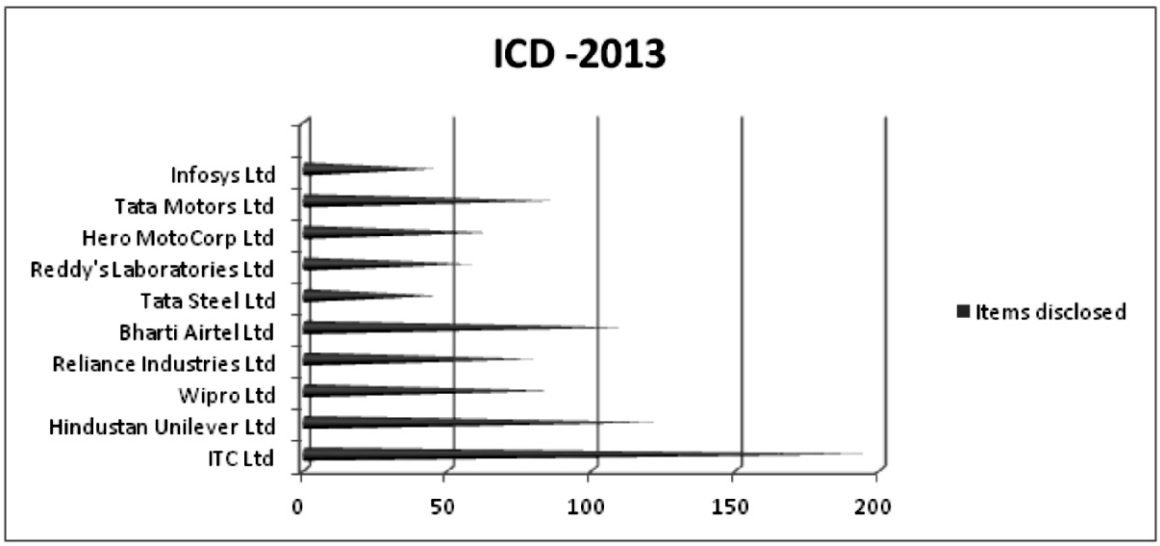
Source: Author's calculations based on annual report of the selected companies were obtained for the year 2012-13 and 2013-14.

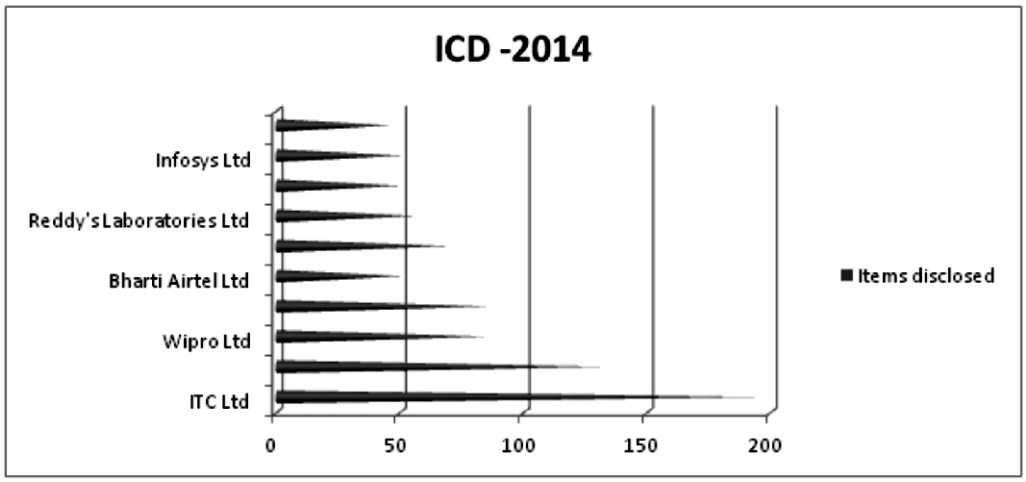
From the table-3, it is observed that ITC Ltd. and Hindustan Unilever Ltd. occupies the first and second position in disclosing Intellectual Capital by disclosing 197 to 131 attributes in their respective annual reports. This shows that FMCG industry give more highlights to Intellectual Capital, particularly the Brand and Goodwill. Bharti Airtel Ltd which ranked third in the year 2012-13, moved to seventh position in 2013-14. Tata Motors dipped to twenty fifth positions on account of less disclosure compared to the previous year. Reliance industries improved in terms IC disclosure practices and improved to the third position. HeroMotor Corp slipped from seventh to ninth position. Dr. Reddy's Ltd. improved in terms of IC disclosures and rose to sixth position compared to the previous year. Over and above, the top ten companies, more or less occupy the same position, except Tata Motors Ltd. and Bajaj Auto Ltd, which have drifted too much away from their disclosure rankings.

Top-ten Companies based on Intellectual Capital Disclosure

It may be observed from the following charts that the companies from the FMCG industry top the list, followed by, IT industry. It is also interesting to note that traditional industries occupy a prominent position in Intellectual Capital disclosure, along with knowledge intensive industries.

Figure-1 Ranking top 10 Companies performing Intellectual Capital Disclosure in the year 2013 and 2014





Source: Author's calculations based on annual report of the selected companies were obtained for the year 2012-13 and 2013-14.

Conclusion

This is a preliminary study on identifying the attributes related to Intellectual Capital from the financial statements of BSE SESEX companies in India. It is found in the present study that nearly 61 percent of the Intellectual Capital attributes are disclosed by the sample companies. Further the study observed that Brand and Goodwill are the terms widely used by the sample companies in their financial statements. This is in conformity with the traditional view of the accounting standards. This study leads us to explore further in analyzing the relationship between Intellectual Capital Disclosure and the firm performance.

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