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# INTELLECTUAL CAPITAL DISCLOSURES PRACTICES OF INDIAN FIRMS

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## ABSTRACT

*In the New Economy, Intellectual Capital(IC) can be recognized as an integral factor driving economic growth. Rapid globalization characterized by advances in technology, research & development and increasing competition has been essentially driven by growth in IC. But the current accounting framework do not provide for mandatory reporting of intellectual capital items in the annual financial statements in any country. There is limited disclosure of intellectual capital related items and whatever information is provided, it is based on voluntary disclosures only. At best, the only intangible assets that have found place in corporate financial statements are in the nature of intellectual property such as patents, trademarks and acquired items like goodwill. Tangible assets have failed to explain the increasing gap between market and book value of firms, this creates the need for more comprehensive disclosure practices taking into account the crucial contribution of intangible resources. Thus, the present study has been undertaken to study and analyze the intellectual capital disclosure practices of publicly listed firms in India in which can provide useful information on developing the intellectual capital base of the nation.*

**KEYWORDS:** Intellectual Capital, Intellectual Capital Disclosure, Intellectual Property, Human Capital, Content Analysis

## INTRODUCTION

In today's era, knowledge is being recognized as the currency of every economy. Intangible information and relationship resources are being utilized by companies the way conventional assets like machinery, property and assets have been used for developing a business. As the geographical boundaries for trade shrinks and competition heightens, control of physical resources is no longer the defining factor for most business models. Now and in the future, success or failure is most likely to depend on knowledge, skills, competencies, processes and relationships.

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Stock markets have proved to be consummate than economists and accountants in recognizing future value, which accounts for the apparently high multiples of market value to book value. During the recent years, value of financial assets has grown exponentially when compared to physical assets indicating that intangibles are growing in importance in their contribution to economic growth. It has also been empirically established that intangibles play a greater role than physical assets in creating future value. The trends and developments characterized by the growth in 'New Economy' have highlighted the importance of the ever increasing role of intellectual capital (IC). IC primarily includes the key resources which equip a company for competing in the knowledge economy. It is identified as a crucial success factor not only for knowledge incentive organizations but other kinds of business also. The very rigor of economics and accounting has, however, prevented these disciplines from measuring and quantifying intangibles. Traditional accounting techniques have failed to report the performance of IC owing to the nature of IC which is not reflected in formal transactional .They fail to account for the value generated by internal intangible variables. The absence of such crucial information from financial statements can mislead the decision making process and strategy formulation.

***Intellectual Capital: A New Competitive Paradigm***

The term 'intellectual capital' was first popularized in the management literature in mid-1990s but the concept was initially coined as early as in 1969 by John Kenneth Galbraith (Feiwal,1975).The pioneer work in the field of intellectual capital management was then published in a number of popular management books (Brooking, 1996; Stewart 1997). There is no generally accepted definition of IC. One of the most succinct and widely accepted definitions is that given by Stewart (1997) describing IC as 'packaged useful knowledge'. He explains that this includes an organization's processes, technologies, patents, employees' skills, and information about customers, suppliers, and stakeholders. Various other definitions use concepts such as ability, skill, expertise, and other forms of knowledge that are useful in organizations. Many authors refer to it as the difference between the market value and book value of the firm. Thus IC can be said to be associated with the hidden value of many firms. A comprehensive definition of intellectual capital is offered by Brooking (1996)- 'Intellectual capital is the term given to the combined intangible assets which enable the company to function.'

With the development in the knowledge society over the past three decades, a remarkable shift has been witnessed in major industrial sectors in favor of the knowledge resources. Economic growth today is driven by factors like globalization, competition and technological advancements. Thus, intellectual capital has become a preemptive resource for firms for achieving sustainable competitive advantage and continuous growth, irrespective of the underlying nature of activity. Following are some of the reasons which underline the importance of IC (Marr, Gray & Neely, 2003),

(1) Helps organizations formulate their strategy;

(2) Assesses strategy execution;

(3) Assists in diversification and expansion decisions;

(4) Uses these as a basis for compensation; and finally

(5) Communicates measures to external stakeholders.

## REVIEW OF LITERATURE

Research has affirmed that companies that measure and report intangibles may experience substantial gains. Edvinsson (1997) former corporate director for intellectual capital at Swedish financial services company Skandia, claims that a reduction in the cost of capital of one per cent was directly attributable to the company's ability to measure and report its intangibles. Although it is being rapidly realized that it is important to understand and measure value of IC in today's typical firm, identifying the intellectual capital of a company is not easy, and requires a strategy to be defined beforehand (Johnson, 1999). Acknowledgement of the importance of knowledge is not enough; it must also be managed and tangible results obtained. As Harrison and Sullivan (2000) state, 'calculating the value of intangibles, companies based on their ability to develop and maintain cash flows by converting their ideas and innovations into revenue streams is fundamental to adequately assessing and quantifying the value of these firms.' Here the managers face mainly two kinds of problem. The first is to define the intellectual material which must be accounted for. The second aspect is to define the type of value of intellectual capital that can be estimated, considering the underlying potential of all the elements of a business that can generate wealth.

Nevertheless, during 1990s, pioneer work has been done in the field of IC .Scholars as well as practitioners have developed models such as *The Balanced Scorecard* (Kaplan and Norton,1996), *Skandia's IC Navigator* (Edvinsson and Malone, 1997), *Intellectual Capital Services' IC-Index*$^{TM}$(Roos and Roos,1997),*Value Added Intellectual Coefficient* i.e. VAIC developed by Pulic (1998) to address the issue of measurement of IC. These models have emphasized on the strategic nature of IC and have laid focus on IC as a source of sustainable competitive advantage.

Knowledge and information are considered to be the most influential factors of value creation in the 21$^{st}$ century where firm performance not only depends on tangible or physical assets but also on intangible or intellectual assets (Mondal & Ghosh, 2014).But the current accounting framework do not provide for mandatory reporting of intellectual capital items in the annual financial statements in any country. There is limited disclosure of intellectual capital related items and whatever information is provided, it is based on voluntary disclosures only. Tangible

assets have failed to explain the increasing gap between market and book value of firms, this creates the need for more comprehensive disclosure practices taking into account the crucial contribution of intangible resources. There are very few studies that have studied the disclosure practices of firms in different countries. Below mentioned are the disclosure trends in a few countries.

Guthrie *et al.* (1999) in their study analysed the intellectual capital reporting of Australian organizations and observed that the key components of intellectual capital are poorly understood, inadequately identified, inefficiently managed and are not reported with a consistent framework. The extent of reporting was generally minimal but the types of intellectual capital that was most often reported included human resources, technology and intellectual property rights and organisational and workplace structure. Also, a review of the industry clusters revealed that no individual industry was significantly ahead of any other in its intellectual capital reporting practices.

Bontis (2002) examined the intellectual capital disclosure of 10,000 Canadian firms using content analysis and the study yielded that there was very limited disclosure of intellectual capital items by these firms. Only seven out of a list of 39 items were observed to be reported and these seven items were the most popular items in the intellectual capital literature. Most intellectual capital items were reported only once in the annual reports. There were several companies that did not even report the number of employees that worked in the company. The most popular item disclosed was intellectual property which comprises of items such as patents, copyrights, trademarks etc. The term intellectual capital was disclosed by only 5 companies out of a total sample of 10,000 firms.

Abeyekera (2008) studied the annual financial statements of the top 20 firms listed in Sri Lanka (based on market capitalization) to find out the disclosure of intellectual capital items. The findings indicated an upward trend in the IC disclosure by firms in Sri Lanka. The study also compared disclosure practices of firms in Sri Lanka with the Singapore based firms and found significant difference in the categories of external capital as well as human capital. Singapore has a shortage of land and natural resources but at the same time is endowed with crucial human capital. The transformation of Singapore into a knowledge based economy is reflected in the comparatively increasing disclosure of human capital by firms.

Taliyang and Mansor (2014) determined the level of intellectual capital disclosure for 185 firms listed in Malaysia using content analysis. The findings revealed that 69 percent of the firms were disclosing their intellectual capital items. Financial services industry the most number of items as compared to other industries. The study also reported that intellectual capital disclosure had a positive impact on market capitalization.

Bhasin (2011) in a study of intellectual disclosure practices of IT firms in India revealed the sample firms disclosed only 18 items out of a selected list of 39 intellectual capital items. Most

of the IC items-business knowledge, employee productivity, employee skill and value, knowledge assets, management quality, human value, organisational learning were reported only once in the annual reports an there was a lack of consistency across time about the terms disclosed.

Mondal & Ghosh (2014) studied the intellectual capital disclosure of 30 Indian knowledge intensive belonging to IT, pharmaceutical and financial services sectors for the period 2009-12.Based on content analysis. of annual reports, Intellectual Capital Index was prepared. Empirical results showed that sample companies disclosed low amount of intellectual capital information. Further, a negative association between intellectual capital efficiency and the extent of IC disclosure was observed implying that companies are unwilling to disclose their important intangible assets that contribute to their success to the market for the fear of losing their competitive strength. Finally, it was found that audit committee's size, age and firm size have positive relation with intellectual capital disclosure.

Bhasin (2015) in his study provided an insight into the style of intellectual capital disclosures for the top IT-sector corporations from India and Australia using content analysis. The results of the study confirmed that intellectual capital disclosure by the companies in these countries was low and mostly in narrative form and as such receives no preference from the mentors of these corporations.

## OBJECTIVES

The term 'intellectual capital' is usually taken as a misnomer, often understood to be of relevance to only high-technology industries and information and communication technology companies. But, it is important to understand that 'intellectual capital' is essentially relevant to every business organisation. Rapid technology advancements, fierce competitive environment, deregulations, product innovations etc. have made firms increasingly rely on leveraging intellectual capital, so as to develop strategies for sustained competitive advantage. Thus, the present study has been undertaken with an objective to study and analyze the intellectual capital reporting and disclosure practices of publicly listed companies in India for the period 2015-16.

## RESEARCH METHODOLOGY

The present study is based on the apriori approach for carrying out the content analysis of intellectual capital disclosure of Nifty 50 companies for the period 2015-16.The procedure involved codification of qualitative and quantitative information into pre-defined categories in order to derive patterns in the presentation and disclosing of information (Joshi *et al*. 2010).The categorization of intellectual capital items was based on the list prepared by "World Congress on

Intellectual Capital". The given list consists of 39 items that are mutually exclusive and exhaustive and encompass the diverse aspects of intellectual capital. Next the technique involved electronic search of the individual items in the annual reports in order to ascertain the presence of these item.

**Table 1: List of intellectual capital items**

| | | |
|---|---|---|
| Business Knowledge | Employee Efficiency | Intellectual Property |
| Corporate Reputation | Employee Skills | Intellectual Resources |
| Competitive Intelligence | Employee Value | KM |
| Corporate Learning | Knowledge Assets | Expert Networks |
| Corporate University | Expert Teams | Knowledge Management |
| Cultural Diversity | Knowledge Sharing | Human Assets |
| Customer Capital | Knowledge Stock | Human Capital |
| Customer Knowledge | Management Quality | Human Value |
| Economic Value Added | IC | Organizational Culture |
| Employee Expertize | Information Systems | Organizational Learning |
| Employee know-how | Relational Capital | Intellectual assets |
| Employee Knowledge | Intellectual Capital | Structural capital |
| Employee Know-how | Intellectual material | Superior Knowledge |

*Source:* Bontis (2002)

## FINDINGS & DISCUSSIONS

This section provides an insight into the intellectual capital disclosure practices of the sample firms.

**Table 2: Analysis of Intellectual Capital Disclosure of Nifty 50 Firms**

| S.No. | Name of Company | No. of items disclosed |
|---|---|---|
| 1. | Infosys | 9 |
| 2. | Tata Consultancy Services | 8 |
| 3. | ITC | 6 |
| 4. | ICICI Bank | 5 |
| 5. | Bharti Airtel | 5 |
| 6. | Reliance Industries | 5 |
| 7. | Wipro | 5 |
| 8. | Dr.Reddy's Laboratories | 5 |
| 9. | BHEL | 5 |
| 10. | Tech Mahindra | 4 |

| | | |
|---|---|---|
| 11. | Larsen & Toubro | 4 |
| 12. | State Bank of India | 4 |
| 13. | GAIL | 4 |
| 14. | Indusind bank | 3 |
| 15. | Tata Motors | 3 |
| 16. | Tata Steel | 3 |
| 17. | Punjab National Bank | 3 |
| 18. | Tata Power | 3 |
| 19. | Lupin | 3 |
| 20. | Hero Motorcorp | 3 |
| 21. | Sun Pharamceuticals | 2 |
| 22. | ACC | 2 |
| 23. | Hindalco | 2 |
| 24. | Grasim Cements | 2 |
| 25. | NTPC | 2 |
| 26. | Mahindra & Mahindra | 2 |
| 27. | ACC | 1 |
| 28. | United Spirits | 1 |
| 29. | Power Grid | 1 |
| 30. | NMDC | 1 |
| 31. | Sesa Sterlite | 1 |
| 32. | HCL | 1 |
| 33. | HDFC Bank | 1 |
| 34. | Maruti Suzuki | 1 |
| 35. | ONGC | 1 |
| 36. | Cipla | 1 |
| 37. | Cairn India | 1 |
| 38. | HUL | 1 |
| 39. | HDFC | 0 |
| 40. | IDFC | 0 |
| 41. | Bajaj Auto | 0 |
| 42. | Kotak Mahindra Bank | 0 |
| 43. | Coal India | 0 |
| 44. | DLF | 0 |
| 45. | BPCL | 0 |
| 46. | Jindal Steel & Power | 0 |
| 47. | Ambuja Cements | 0 |
| 48. | Ultra tech Cements | 0 |
| 49. | Bank of Baroda | 0 |
| 50. | Asian Paints | 0 |

*Source:* Author's Self Compilation

It can be observed from Table 2 that only 76 percent (i.e.38 firms) of the sample firms are reporting one or more than one component of intellectual capital as per the list finalized by the panellist of World Congress on intellectual capital. The remaining 24 percent of the firms are not disclosing any kind of information on their intellectual assets (or capital). Infosys has disclosed the maximum number of intellectual capital items i.e.09 items during the period 2015-16. But the reporting is far too less when compared to the aggregate list of 37 items. The key items reported include intellectual property including patents, copyrights, trademarks etc, intangible assets, human capital and employee productivity. It will be important to note here that Infosys is the first Indian firm to release an 'Intangible Assets Score Sheet' in an effort to report its intangible assets or intellectual capital. The score sheet broadly measures the value of its human resources and corporate brand based on Sveiby's (1997) Intangible Asset Score sheet.

TCS is another IT firm closely following Infosys in its disclosure practices. The annual report of the firm provides information on intellectual assets, intellectual property, human capital, employee skills, cultural diversity, employee learning etc. As a human capital development initiative the company pursues a policy of 'Anytime Anywhere Learning' which relies on digital technology and opens up fresh avenues for organisational learning (TCS Annual Report, 2013-14).Some of the other corporate initiatives in reporting intellectual capital items like human capital, employee productivity, knowledge sharing etc. are worth mentioning. ITC, ICICI Bank, Bharti Airtel, Reliance Industries, Dr. Reddy's Laboratories and BHEL are some of the other firms which are reporting around 5 intellectual capital items.62 percent of the firms have reported 4 or less than 4 intellectual capital items in their annual reports. It can be observed that out of the top 10 reporters, 4 firms are from IT sector. As IT sector is a knowledge intensive sector based on rapidly changing technology, it becomes desirable to identify intangible resources contributing to the value added of a firm.

**Table 3: Content Wise Analysis of Intellectual Capital Disclosure**

| S.No. | Items of Intellectual capital | Number of Disclosures |
|---|---|---|
| 1. | Intellectual Property | 24 |
| 2. | Human Capital | 21 |
| 3. | Employee Productivity | 11 |
| 4. | Employee skills | 10 |
| 5. | Information Systems | 9 |
| 6. | Organizational Culture | 5 |
| 7. | Corporate reputation | 4 |
| 8. | Employee Expertise | 3 |
| 9. | Cultural diversity | 3 |
| 10. | Organisational learning | 3 |

| | | |
|---|---|---|
| 11. | Knowledge Management | 3 |
| 12. | Knowledge Sharing | 3 |
| 13. | Intellectual capital | 3 |
| 14. | Intellectual assets | 1 |
| 15. | Management Quality | 1 |

*Source*: Author's Self Compilation

Table 3 provides the list of items that have been reported most in the annual reports of the firm. Intellectual property is the most popular item out of the given list of 37 items. This is understood as the IAS 38 lays down proper guidelines and standard procedures for their measurement and reporting in the annual financial statements. According to IAS 38, "Entities frequently expend resources, or incur liabilities, on the acquisition, development, maintenance or enhancement of intangible resources such as scientific or technical knowledge, design and implementation of new processes or systems, licenses, intellectual property, market knowledge and trademarks (including brand names and publishing titles).Common examples of items encompassed by these broad headings are computer software, patents, customer lists, mortgage servicing rights, fishing licenses, import quotes, franchises, customer or supplier relationships, customer loyalty, market share and marketing rights."

Human Capital is the next most reported item after intellectual property.42 percent of the sample firms are recognizing the importance of human capital as an integral resource of the firm. Mr. K.R.Birla of Hindalco asserts that, "that the company firmly believes that people are its most valuable asset and it is ensuring that all the HR systems, processes and practices are helping people both personally and professionally. For managing people, the company has well laid down HR policies in place including talent management, employee engagement, performance management, rewards and recognition along with all the necessary support systems for the robust implementation of the robust practices."

Mr. Anand Mahindra of Mahindra & Mahindra while emphasizing the role of human resources, asserts that, "the strategic purpose of Human resources is to be a catalyst and change agent for creating the Human Capital transformation required to ensure sustained business outperformance, while simultaneously addressing the needs of its multiple stakeholders (starting with customers and employees) and strengthening the core values of the Group. The emphasis has been on aligning all the HR levers towards achieving these goals. In line with the above, the Group's Human Resources Philosophy is guided by three Rise Pillars of Accepting No Limits, Alternative Thinking and Driving the Positive Change and the Group's Aspiration of being the top 50 most admired global brands by 2021, by enabling people everywhere to Rise.

Closely linked to Human Capital are the other two most frequently reported items – employee productivity and employee skills. Both of them have been identified as important factors in

driving business growth and improving overall operational efficiency. Knowledge aspects related to a business namely knowledge management and knowledge sharing have hardly been reported by 3 companies each. Intellectual capital is again being reported by 3 firms while intellectual assets and management quality both have been reported once only.
It is worth mentioning here that most of the items disclosed have covered the qualitative dimensions only. Intellectual capital is the only item which has been measured in quantitative terms as a proxy of the firms' intangible property.

24 items out of the list of 37 items have not been reported even once in the annual financial statements of these firms. Customer capital, relational capital and structural capital, which have been earlier discussed in the present study as important constituents of intellectual capital find no mention in the annual reports of the sample firms. Other knowledge related aspects like business knowledge, employee knowledge and customer knowledge are too missing from the reports.

The above analysis indicates that intellectual capital disclosure in India is still at a very nascent stage. The prevailing disclosure practices are at best voluntary in nature and apparently the top management as well as the accounting fraternity have not yet realized the need and importance of identifying and measuring their intellectual capital items.

## CONCLUSION

The importance of intellectual capital in improving business performance cannot be doubted but the concern arises from the failure of the firms to take cognisance of their intangible resources. In the absence of any guidelines under the generally accepted accounting principles (GAAP), the firms are not indulging in any formal measurement and reporting of their intellectual resources. The dismal disclosure that is being done voluntarily, as revealed in the finding based on content analysis, is limited to a handful companies. Mere recognition of the importance of intellectual capital will be futile unless the entire business fraternity under takes concrete steps to devise standardized intellectual capital measurement tools and increase their voluntary disclosures. This issue can be addressed by industry associations who work in close proximity with crucial government agencies.Overall the study proposes following concrete measures that can be taken up by the various government agencies to address the above mentioned issues. Firstly, the accounting bodies need to formulate intellectual measurement techniques that can be adopted by companies so that a formal measure is in place for capturing the intellectual potential of business firms in India. Secondly, standardised disclosure and reporting norms should be stated and be made mandatory for all firms so that business organizations start taking cognisance of the unleashed potential. These two measures will not only give a stock of the prevailing intellectual capital scenario but would also facilitate inter-firm as well as intra-firm comparisons.

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