INTELLECTUAL CAPITAL REPORTING
STUDY OF IT-SECTOR CORPORATIONS IN INDIA

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ABSTRACT:

Intellectual capital (IC) can prove to be a source of competitive advantage for businesses ultimately leading to wealth generation in the long-term. At present, reporting of IC information is done by very few leading corporations purely on a "voluntary" basis. Unfortunately, the omission of IC information may adversely influence the quality of decisions made by shareholders, or lead to material misstatements. India presents an ideal case for the analysis of IC reporting by the IT corporations because the economy has been undergoing rapid transformation.This study attempts to provide an insight into the style of IC reporting done by the top IT-sector corporations in India. In order to survey the recent IC reporting practices, we conducted a study of 16 IT corporations in which "content analysis" was performed on their 2007 to 2009 annual reports. The results of this study confirmed that IC reporting in these corporations is almost negligible, and IC reporting had not received any preference from the mentors of these corporations. A major recommendation for corporations is to develop strategic and tactical initiatives that provide for 'voluntary' reporting of IC. These initiatives may initially be used for internal management purposes, but an external stakeholder-focus IC report should be the ultimate long-run goal.

Keywords: Intellectual capital, reporting, Information Technology corporations, India, IC reports.

1. INTRODUCTION

Business dynamics of the 21st century are increasingly determined and driven by Intellectual Capital (IC) elements. The future drivers of any economy will no longer be capital, land or equipment, but the "people" and their "knowledge" reservoir. A knowledge-intensive corporation leverages their know-how, innovation and reputation to achieve success in the market place. Market participants, practitioners and regulators alike argue that there is an important need for greater investigation and understanding of IC reporting as the usefulness of financial information in explaining firm profitability continues to deteriorate. For example, Bukh asserts that traditional reporting mechanisms are not able to cope adequately with the reporting requirements of "new" economy firms. He observed an increasing dissatisfaction with traditional financial reporting and its ability to convey to investors the wealth-creation potential of firms. Despite growing interest and demand for IC information, prior research suggests a persistent and significant variation in the 'quantity' and 'quality' of information reported by firms on this pivotal resource. As existing economic and business metrics track a declining proportion of the real economy, the deficiency and inconsistency in the reporting of IC-related information is creating growing information "asymmetry" between informed and uninformed investors. This provides a fertile ground for informed investors to extract higher 'abnormal' returns. Thus, IC is increasingly being recognized as having much greater significance in creating and maintaining competitive advantage and shareholder value. This clearly calls for a refreshed understanding of business principles, information reporting, and decision-making processes.

The concept of IC measurement, management, and reporting is relatively new. Accountants, business managers and policy makers have still to grapple with its concepts and detailed application. Sveiby (2004) first proposed a classification for IC into three broad areas of intangibles, viz., *Human capital, Structural capital and Customer capital*—a classification that was later modified and extended by replacing customer capital by *relational capital*. Some examples of IC are shown in **Table-1**. One of the most comprehensive definitions of IC is offered by the Chartered Institute of Management Accountants (CIMA): "The possession of knowledge and experience,

professional knowledge and skill, good relationships, and technological capacities, which when applied will give organizations competitive advantage."

The various forms of IC reporting provide valuable information for investors, as they help to reduce uncertainty about future prospects, and facilitate a more precise valuation of the corporation. However, financial reports fail to reflect such a wide-range of value-creating "intangible-assets," giving rise to increasing "information-asymmetry" between firms and users, and creating "inefficiencies" in the resource allocation process within capital markets. Despite the fact that the importance of IC has increased in recent times, there are inadequate reporting of IC in the financial statements of corporations.

Table-1: Components of Intellectual Capital

Human Capital	Structural Capital	Customer Capital
Knowledge	Business processes	Customer relations
Competence	Manuals/ policies	Customer Loyalty
Skills	Information systems	Repeat business...
Individual & Collective Experiences	Research findings	
Training	Trademarks	Relational Capital
Communities of practice...	Brands...	Relations with vendors
		Investor trust and feedback...

Annual reports are an ideal place to apply an IC framework because they allow us to compare IC positions and trends across different corporations, industries and countries. In the past, several research studies have been conducted in various countries, using the "content analysis" of annual reports, to analyze the IC reporting practices. However, research in other countries revealed that reporting practice stays well-behind on a global scale, despite the perceived importance by corporate managers. In the Indian-context, there has been very limited number of IC reporting studies, as compared to its European counterparts. However, two recent studies are available on IC reporting in India using content analysis, which were done by Kamath (2008), and Joshi et al. (2009). The foregoing discussion suggests that the literature on the determinants of IC reporting in Indian-context is very limited and inconclusive. Thus, this study builds on the previous literature of IC reporting practice, and overall IC reporting scenario in the Indian corporate-sector, especially knowledge-based IT firms. The primary objective of this study was to survey the prevailing practices of IC reporting made by the IT-sector in India. Therefore, an attempt has been made here to use the same technique to analyze the extent of reporting of IC by these IT corporations. The scope of this study has been confined to 16 corporations from the IT sector, and "content analysis" was performed on their annual reports for two years, namely, 2007-08 and 2008-09, respectively. This study aims at mapping the current state of IC-related reporting in the Indian scenario. A list of IC-related terms was searched within the annual reports yielding a significantly small number of instances in which IC reporting took place.

2. LITERATURE REVIEW:

The main IC reporting studies were typically cross-sectional and country-specific, although some longitudinal studies have been reported too. Some of the leading IC reporting studies, widely reported in the literature, were conducted in Australia, UK & Ireland, Sweden, Canada, Malaysia, Sri Lanka, New Zealand, Bangladesh and India. In the past, most studies employed 'content analysis' as the research methodology, some other studies had also used questionnaire surveys. Despite the fact that the importance of IC has increased in recent times, there are inadequate reporting of IC in the financial statements of corporations.

In a review of the current state of financial and external reporting research, Parker identified IC accounting as a major area for further research. However, most of the IC reporting studies were cross-sectional and country-specific. Examples include studies in Australia (e.g. Guthrie and Petty, 2000; Sujan and Abeysekera, 2007), Ireland (Brennan, 2001), Italy (e.g. Bozzolan et al., 2003), Malaysia (Goh and Lim, 2004), UK (e.g. Williams, 2001), and Canada (Bontis, 2003). Relatively very few longitudinal studies have been reported (e.g. Abeysekera and Guthrie, 2005). Moreover, some studies focued on the specific aspects of IC reporting, such as human capital reporting (e.g. Subbarao and Zeghal, 1997), while others conducted international comparative studies (e.g. Vergauwen and van Alem, 2005; Cerbioni and Parbonetti, 2007). Some IC reporting studies have looked beyond annual reports to examine other communication channels, such as, analyst presentations.

Studies have also been conducted to explore IC related issues from the firm's perspective. Chaminade and Roberts (2003) investigate the implementation of IC reporting systems in Norway and Spain. Habersam and Piper (2003) employed case studies to explore the relevance and awareness of IC in hospitals. Studies that looked at possible determinants of voluntary IC reporting include García-Meca et al. (2005) and Cerbioni and Parbonetti (2007). Guthrie and Petty's (2004) analysis of IC reporting practices suggests that reporting has been expressed in discursive rather than numerical terms and that little attempt has been made to translate the rhetoric into measures that enable performance of various forms of IC to be evaluated.

India presents an ideal case for the analysis of IC reporting by the IT corporations because the economy has been undergoing rapid economic transformation in the financial services, tourism, information-technology sectors, and the niche manufacturing gaining momentum. In the Indian-context, there has been very limited number of IC reporting studies, as compared to its European counterparts. However, two recent studies are available on IC reporting in India using content analysis, which were done by Kamath (2008), and Joshi et al. (2009). The foregoing discussion suggests that the literature on the determinants of IC reporting in Indian-context is very limited and inconclusive. Thus, our study builds on the previous literature of IC reporting practice and overall IC reporting scenario in the Indian corporate sector, especially knowledge-based IT firms. The scope of the study has been confined to 16 corporations from the IT sector, and a content analysis was performed on their annual reports for two years, namely, 2007-08 and 2008-09 respectively.

3. RESEARCH METHODOLOGY:

With the rise of the "knowledge economy," the management of IC is becoming even more important and, therefore, it should be reported in the annual reports. In the knowledge-based economy most of the organizations have realized that the true potential of creating value for their organizations lies in the measurement, valuation, and reporting of their IC. This research study aims at mapping the current state of IC-related reporting in the Indian scenario. Accordingly, the sample-size of this study consists of 16 top IT corporations. However, these corporations were primarily selected on the basis of their total income, as per the 2008 publication of "Dun and Bradstreet," a premier survey agency of the country. The electronic/soft copies of the annual reports for these selected corporations were obtained for two years, 2007-08 and 2008-09 from their respective corporate Websites. In the past, several research studies have been conducted in various countries, using the "content analysis" of annual reports, to analyze the IC reporting practices. A list of IC related terms was searched within the annual reports yielding a significantly small number of instances in which IC reporting took place. Therefore, an attempt has been made here to use the same technique (i.e., content analysis) to analyze the extent of reporting of IC by these IT corporations. However, research in other countries revealed that reporting practice stays well behind on a global scale, despite the perceived importance by corporate managers.

4. STUDY OF IC REPORTING DONE BY THE IT CORPORATIONS IN INDIA:

Annual reports are an ideal place to apply an IC framework because they allow us to compare IC positions and trends across different corporations, industries and countries. They are an instrument for communicating issues comprehensively and concisely, and they are produced regularly, so they can be used to analyze management

attitudes and policies across reporting periods. The main objective of the present study was to survey the prevailing practices of IC reporting by the information technology (IT) sector in India. The sample-size of this study consists of 16 IT corporations of India. They were primarily selected on the basis of their total income as per the 2008 publication of Dun and Bradstreet. The annual reports of the selected corporations were obtained directly from the Websites of these corporations, and the annual reports for two years (2008 and 2009) were examined.

The "content analysis" of annual reports involves codification of qualitative and quantitative information into pre-defined categories in order to derive patterns in the presentation and reporting of information (Joshi et al., 2010). The coding process involved reading the annual report of each corporation and coding the information according to pre-defined categories of IC. Over the last decade, content analysis has been used by several leading researchers to study the IC performance and reporting. Therefore, as part of the present study, "content analysis" has been used to analyze the extent of IC reporting by the IT corporations. By looking at the reporting of terminology within their annual reports, one can examine the extent to which Indian corporations publicly document the presence (or importance) of IC. In identifying corporations disclosing IC, a list of related terminology was compiled. A survey and review of several IC books and articles was conducted. The panel of researchers from the World Congress on Intellectual Capital finalized the list of IC items into a collection of 39 terms that encompassed much of the IC literature. The list used by Bontis was considered comprehensive for this type of research on knowledge-based information technology corporations. The final list of IC terms is reported in Table-2. Each of these terms was "electronically" searched individually in the annual reports to find out the presence or absence of the said terms, and count of how many times. By and large, most IC terms were reported only once in each annual report, and there was lack of consistency about the terms disclosed. Results were tabulated on the basis of the number of corporations reporting these terms in their annual reports. Corporation-wise analysis, along with testing the degree of variance, has also been undertaken. The content-wise analysis has been shown in Table-3, corporation-wise analysis in Table-4, and the variation in reporting has been presented in Table-5**.**

Table-2: Intellectual Capital--39 Search Terms

Business Knowledge	Employee efficiency	Intellectual property
Corporation reputation	Employee skill	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 expertise	Information systems	Organizational learning
Employee know-how	Relational capital	Intellectual assets
Employee knowledge	Intellectual capital	Structural capital
Employee productivity	Intellectual material	Superior knowledge

(Source: Bontis, Nick, "Intellectual Capital Reporting in Canadian Corporations," Journal of Human Resource Costing and Accounting, 2003, page 7).

5. FINDINGS AND ANALYSIS OF THE RESULTS:

Table-4 indicates that only 18 (46%) items, out of the total list of 39 IC-terms, were reported in the annual reports of the 16 Indian IT corporations. Most of the IC-terms (viz., business knowledge, employee productivity, employee skill and value, knowledge assets, management quality, KM, human value, organizational learning, and intellectual assets) were reported only "once" in the annual reports, and there was utmost "lack of consistency," across-time, about the terms disclosed. Our findings are very much similar to the findings of other studies done in the past. Surprisingly, the most popular term reported in our study was "intellectual property rights" (IPR), which represents such intangibles as patents, brands valuations, and the outcomes of R&D investment. This is quite obvious due to the vital role played by the "intangible assets (or IC)" in the case of

knowledge-intensive IT corporations. However, this term has a very specific legal connotation from an accounting and legal perspectives. Therefore, the term "intellectual property" (IC term no. 27) had the maximum (93%) reporting done by all the 16 IT corporations, followed by the 50% reporting of the term "information systems" (IC term no. 23). This was not surprising due to the nature of knowledge-based IT corporations under study.

Table-3: **Content-wise Analysis of Intellectual Capital Terms Reported**

S. No.	Items of Intellectual Capital	No. of Corporations Reporting
1.	Business Knowledge	1
2.	Corporation reputation	Nil
3.	Competitive intelligence	Nil
4.	Corporate learning	Nil
5.	Corporate university	Nil
6.	Cultural diversity	Nil
7.	Customer capital	Nil
8.	Customer knowledge	Nil
9.	Economic Value added	3
10.	Employee expertise	Nil
11.	Employee know-how	Nil
12.	Employee knowledge	Nil
13.	Employee productivity	1
14.	Employee efficiency	Nil
15.	Employee skill	1
16	Employee value	1
17.	Knowledge assets	1
18	Expert teams	Nil
19.	Knowledge sharing	3
20.	Knowledge stock	Nil
21.	Management quality	1
22.	IC	Nil
23.	Information systems	8
24.	Relational capital	Nil
25.	Intellectual capital	2
26.	Intellectual material	Nil
27.	Intellectual property	15
28.	Intellectual resources	Nil
29.	KM	1
30.	Expert networks	Nil
31.	Knowledge management	5
32.	Human assets	Nil
33.	Human capital	6
34.	Human value	1
35.	Organizational culture	2
36.	Organizational learning	1
37.	Intellectual assets	1
38.	Structural capital	Nil
39.	Superior knowledge	Nil

(Source: Compiled by the author from the Annual Reports of Corporations for the year 2007-08 and 2008-09).

Unfortunately, the term "intellectual capital (IC)," was specifically reporting by just 2 out of the 16 corporations, namely, Moser Baer India Limited, and Patni Computer System Limited. A closer examination of both these corporations clearly revealed that the presence of "IC" term was generally used in the "management discussion & analysis (MD&A)" section of the annual reports. It is very strange, there is no evidence at all in any of the firms identified, that an actual IC statement/report was developed, or that any other IC metrics were being published. Moreover, our survey and subsequent analysis of the IC reporting practices suggests that reporting has been vaguely expressed in very "discursive," rather than "numerical" terms, and that little or no

attempt has been made to translate the rhetoric into measures that enable performance of various forms of IC to be evaluated.

For instance, Moser Baer India Limited declared in its annual report, under the MD&A section, for the year 2007-08 as: "Quality of our human resources charts the success and growth potential of our business. The Corporation has managed to keep attrition rates well in control by imbibing a sense of ownership and pride, and strong HR initiatives geared to nurturing latent talent, and unlocking the power of IC. The Corporation continues to drive organization development and also build management resources for a multi-business enterprise." Recently, Moser Baer had stated in its 2008-09 annual report, as follows: "Your corporation continuously benchmarks HR policies and practices with the best in industry and carries out necessary improvements to attract and retain best talent and build intellectual capital." Similarly, another IT corporation, Patni Computer Systems Limited makes a "casual" mention of its IC in its annual report for the year 2007-08 as under: "The global sourcing market has matured from those days when India was considered to be a source of 'low-cost manpower'. Today, it has earned the distinction of being a 'preferred destination for intellectual capital' that accelerates the trend—globalization of services. Going ahead, Indian corporations are bracing up for the challenge of providing end-to-end business domain-focused solutions, leveraging intellectual property (IP) in form of solution accelerators, frameworks and service delivery technologies."

The term "knowledge management (KM)" (IC term no. 31 & 29), which is supposed to occupy a place of prominence in the knowledge-based IT corporations of India, was reportedby a meager 6 (37%) corporations. However, most of the terms relating to the employees (except employee productivity, skill, value), and customers could not find any worth-mentioning place in the annual reports of the selected corporations. The most important and crucial constituents of IC—relational capital, structural capital and customer capital—did not figure even once in any of the annual reports of the corporations under study.

Table-4: Corporation-wise Analysis of Intellectual Capital Terms, Count of Reporting

S. No.	Name of Corporation	Terms of IC Reported (Count of Item)	Total No. of IC Terms Reported
1	Infosys Technologies Limited	1 (1), 9(6), 16(2), 17(2), 19(1), 21(1), 23(8), 27(15), 29(3), 31(7), 33(6), 36(1), 37(1)	13
2	Moser Baer India Limited	25(1), 27(1), 33(4), 34(1), 35(1)	05
3	Patni Computer Systems Limited	23(1), 25(1), 27(10)	03
4	Tata Consultancy Services Limited	9(2), 23(1), 27(5), 31(5), 33(1)	05
5	Wipro Limited	27(5)	01
6	HCL Infosystems Limited	23(1)	01
7	MphasiS Limited	23(2), 27(2), 35(1)	03
8	CMC Limited	19(1), 27(1)	02
9	Polaris Software Lab Limited	15(1), 23(1), 27(14)	03
10	Siemens Information System Limited	23(2), 27(1)	02
11	Financial Technologies (India) Limited	23(2), 25(1), 27(3)	03
12	I-Flex Solutions Limited	27(1), 31(2), 33(2)	03
13	Satyam Computer Services Limited	27(1)	01
14	Tech Mahindra Limited	27(4)	01
15	HCL Technologies Limited	27(3), 33(1)	02
16	Larsen &Toubro Infotech Limited	9(2), 13(2), 19(1), 27(4), 31(1), 33(1)	06

(Source: Compiled by the author from the Annual Reports of Corporations for the year 2007-08 and 2008-09).

Table-4 very clearly highlights that Infosys Technologies Limited, a corporation acclaimed widely by the international community and the media too, had reported the maximum number (13) of IC-related items from the total list of 39 items. It is worth mentioning here that Infosys was the "first" Indian corporation to win the 'Most Admired Knowledge Enterprise in Asia' award in the year 2002. However, it is surprising to note that this corporation did not make any mention of term "IC" in its annual reports for the years 2007 to 2009. Perhaps, Infosys is the only IT-corporation in India, which has been regularly reporting its "*Intangible Assets Score Sheet*," as a measure of intangible assets (or IC). For example, the corporation in its 2008-09 annual report makes the following remarks: "We published models for valuing two of our most important intangible assets—human resources and the "Infosys" brand. This score sheet is broadly adopted from the intangible asset score sheet provided in the book titled, 'The New Organizational Wealth,' written by Dr. Karl-Erik Sveiby and published by Barrett-Koehler Publishers Inc., San Francisco. We believe such representation of intangible assets provides a tool to our investors for evaluating our market-worthiness."

Based on the "content analysis" of this study, Larsen & Toubro Infotech Limited disclosed the second-highest 6 out of 18 (33%) IC-terms, which were followed up by Tata Consultancy Services and Moser Baer India Limited, respectively, both with a reporting score of 5 out of 18 IC-terms. However, we are surprised to note that Patni Computers Limited, MphasiS Limited, I-Flex Solutions Limited, Polaris Software Lab Limited and Financial Technologies (India) Limited, by far comprising the largest segment of the IT corporations having 6 corporations from the sample size of 16 corporations, reported just 3 out of 18 IC-related terms in their annual reports for the period of study. Rest of the 7 corporations, forming a big chunk of our study, reported in the range of just 1 to 2 terms, as for as the reporting of IC-terms are concerned. For example, CMC Limited, Siemens Information System Limited and HCL Technologies Limited reported just 2 items, while only 1 item was reported by Wipro Limited, HCL Infosystems Limited, Satyam Computer Services Limited, and Tech Mahindra Limited. It is also important to note that the reported IC items have been shown at widely "scattered-places" in the annual reports, and there appears to be a "lack of consistency" over time regarding the terms disclosed. The "mean" reporting, as shown in Table-5**,** comes to be as low as 3.9 items. There is a variation of 3.12 items, on average, as suggested by the value of "standard deviation". The "coefficient of variation" comes to be as high as 80%, which indicates a significant variation in item-wise reporting in the annual reports of the corporations. However, there is no "specific" reporting of IC as a special part or content of the annual report, despite its very high relevance in the knowledge-intensive IT industries.

Table-5: **Variation in Item-wise Reporting**

Number of Items Covered	**2007 to 2009 No. of Reporting Corporations**
0-3	7
3-6	6
6-9	1
9-12	0
12-15	1
Mean Reporting	3.9
Standard Reporting	3.12
Coefficient of Reporting	80%

(Source: Compiled by the author from the Annual Reports of Corporations for the year 2007-08 and 2008-09).

Mr. Nandan Nilekani, the CEO, President and MD of Infosys Technologies remarked: "At Infosys, we are effectively transforming enterprise knowledge into wealth-creating ideas, products and solutions. We are building portfolios of intellectual capital (IC) and intangible assets, which will enable them to out-perform their competitors in the future. We consider KM as a powerful medium for creating sustainable networks of people across intra-organizational boundaries. It also provides a symbolism for aligning individual initiative and creativity with organizational growth." Thus, Infosys has been duly recognized for its organizational learning and for transforming enterprise knowledge into shareholder value. It is worth mentioning here that Infosys is

regularly disclosing in its annual report details about the "**Intangible Assets Score-Sheet**," as developed by Dr. Seveiby, human resources accounting, brand valuation, etc. (see **Table-6** for details).

Similarly, Mr. Sambuddha Deb, Chief Quality Officer, Wipro Technologies, observed: "Our knowledge management initiative continues to be one of the most strategic initiatives and our knowledge portal, "Knet," provides an effective and efficient means of capturing knowledge, both tacit and explicit across the organization, distilling it through a review process and making it available in a form which is ready to use. Our conscious and significant investment in the KM initiative is providing an important edge that the business needs." No doubt, comprehensive IC reporting would not only help in retaining the competitive advantage in the long-run, when other firms start emulating such pioneering practices, but it would also prove as an added information available, which can also be used to measure the link between the performance, growth and stability of the firm with its IC.

Based on the results of the present research study, the following broad generalizations can be made: (a) IC reporting is very much an academic discussion; (b) There is no evidence at all that IC reporting has generated any traction for Indian corporations; (c) IC reports published by the Indian corporations is almost negligible; and (d) IC reporting has not received any priority from the mentors of the Indian corporations. Obviously, using the language of IC is an important antecedent to developing IC reports, but Indian corporate-sector seems to be significantly behind its Scandinavian and other counterparts. We are hopeful that as the field of IC gains momentum, IC reporting evidence would also gradually increase. However, the average number (3.9) of items reported by the Indian IT corporations is very low, which suggests that there is neither awareness nor any interest to record and report IC variables by these corporations. Even the few items which were just reported were expressed in "discursive" rather than in "numerical" terms. Moreover, it has also been found that there exists no clear-cut pattern or system of IC reporting in the annual reports. The reporting was not uniform and no evidence of its well-defined measurement basis (except for the Infosys "Intangible Score-Card") was found in the annual reports. It is very surprising to note that the Information Technology corporations, which are most dominating group in the knowledge sector, have failed to report IC in their annual reports. Undoubtedly, Indian corporations are far lagging behind in the field of measurement, management and reporting of IC, as compared to the Scandinavian and/or European corporations. Thus, there is an urgent need to highlight the importance of IC reporting to these knowledge-based IT firms and encourage them to provide "voluntary" IC reporting.

Surprisingly, our findings are very similar in comparison to the various other studies on the same subject (viz., Bontis, Brennan, Ordonez de Pablos, Kamath,etc.), which also signify very low-level of IC reporting. Corporations in the Europe are way ahead of their counterparts elsewhere when it comes to the measurement, reporting and management of their IC." While there is some evidence that Australian enterprises are engaging in the process of identifying their stock of IC, overall Australian corporations do not compare favorably with their overseas counterparts in their ability to manage, develop, support, measure and report their IC". Similarly, Bontis concludes: "There is no evidence at all that IC reporting has garnered any traction for the Canadian corporations. Only a small percentage of Canadian corporations (68 out of 10,000) even used the terms in their annual reports. Obviously, using the language of IC is an important antecedent to developing IC statements, but Canada seems to be significantly behind its Scandinavian counterparts."

6. CONCLUSION AND SUGGESTIONS:

Intellectual capital can be a source of competitive advantage for businesses and stimulate innovation that leads to wealth generation. So far, the findings of over 20 international research studies reflect the 'exploratory' nature of the IC reporting work, and the fact that we are at an 'embryonic' stage of investigation. However, research in a developing country like India, and other developed countries (such as, Australia, Canada, European Union, etc.) revealed that IC reporting practice stays well behind on a global scale, despite the perceived importance by corporate managers. A careful examination of the history of IC clearly indicates that there is a long way to move ahead in this field.

Leading IT corporations in India that were applying IC measures have found that it gives them better understanding of the drivers of value and is improving management and growth of these vital assets. Both, Wipro Technologies and Infosys Technologies corporations have been recognized for their organizational

learning and for transforming enterprise knowledge into shareholder value. Unfortunately, IC reporting in the Indian IT firms for the period of study is seen to be almost negligible and partial, in tune with the developed countries. Only a small number of the total firms studied actually reported IC-related terms. The reporting of IC was not at all uniform, and there is lack of evidence regarding the usage of the measurement, management techniques, and tools by these firms. Thus, there is an urgent need to highlight the importance of IC reporting to these knowledge-based IT firms and encourage them to provide voluntary IC reporting. It can be said that though many firms accept that IC is a very useful part of their asset and appreciate its role and know that it surely enhances the firm's valuation in the market, very few firms actually understand its meaning, use any specific management and measurement tools, and adopt uniform reporting and voluntary reporting practices. A strong recommendation, therefore, comes for adopting voluntary IC reporting practices, especially for IT firms in the knowledge-sector where competitiveness of the firms are determined by their intangible assets.

A major recommendation for corporations that are concerned with their relationship with the capital markets, therefore, is to develop strategic and tactical initiatives that provide for voluntary reporting of IC. These initiatives may initially be used for "internal" management purposes only. However, an "external" stakeholder-focus report will be more than likely being the ultimate goal. Even though, IC has a very strong impact on the drivers of future earnings, but unfortunately, it is largely ignored in the financial reporting.

We strongly recommend that corporations must create a culture that emphasizes the importance of IC in achieving business advantage. Moreover, the professional accounting bodies at the global level should also join hands to develop an internationally accepted valuation system, and standardized and harmonized approaches for reporting of IC. Similarly, the regulatory bodies should establish "key" parameters for the reporting of IC in a similar fashion, as have been defined for reporting of Corporate Governance (CG), as per Clause 49 of the Securities Exchange Board of India (SEBI) in order to make a beginning in the field.

Real-life corporate experience suggests that rushing into the details of IC measurement and reporting, before understanding the fundamentals, is going to prove counter-productive. Now, the time is ripe for international professional bodies to develop that understanding and to develop new measures that will guide them more clearly to a prosperous future.

REFERENCES

1. Annual Reports, The Annual Reports of 16 Indian IT corporate-sector were collected by the author, from their respective Websites.
2. Abeysekera, I. (2007). Intellectual capital reporting between a developing and developed nation, *Journal of Intellectual Capital*, 8(2), 329-345.
3. Andriessen, D. (2004), Intellectual capital valuation and measurement: classifying the state of the art, *Journal of Intellectual Capital*, 5(2), 230-242.
4. Beattie, V, and Thomas, S.J. (2006) Lifting the lid on the use of content analysis to investigate intellectual capital reporting, *Discussion Paper Series in Accounting & Finance*, Heriot-Watt University, School of Management and Languages, September, URL: http//www.sml.hw.ac.uk/research/discussion/DP2006-AF01. Pdf.
5. Bernard, M, Dina, G. and Andy N. (2003) Why do firms measure their intellectual capital?, Journal of Intellectual Capital, 4(4), 441-464.
6. Bukh, P. N., Nielsen, C., Gormsen, P. and Mouritsen, J. (2005) Reporting of information on intellectual capital in Danish IPO prospectuses, *Accounting, Auditing and Accountability Journal*, 18(6), 713-732.
7. Brennan, N. (2001) Reporting intellectual capital in annual reports: evidence from Ireland, *Accounting, Auditing Accountability Journal*, 14(4), 423-36.
8. Bontis, Nick (2003) Intellectual capital reporting in Canadian corporations, *Journal of Human Resource Costing and Accounting*, 7(1), 9-20.
9. Bruggen, A., Vergauven, P., and Dao, M., (2009) Determinants of intellectual capital reporting: evidence from Australia, *Management Decision*, 47(2), 233-245.
10. Cuganesan, S., Petty, R., and Finch, N. (2006) Intellectual capital reporting: a user perspective, *Academy of Accounting and Financial Studies*, Spring International Conference, New Orleans, USA.
11. CIMA (2001) Understanding corporate value: managing and reporting intellectual capital, Cranfield University, Publisher: *Chartered Institute of Management Accountants* (CIMA), 1-28.

12. Chiucchi M.S. (2008) Exploring the benefits of measuring intellectual capital: The Aimag case study, *Human Systems Management*, 27(3), 217-230.
13. Daniel Andriesen (2004) IC valuation and measurement: classifying the state of the art, *Journal of Intellectual Capital*, 5(2), 230 – 42.
14. Danish Agency for Development of Trade and Industry (DATI) (2001) A Guideline for Intellectual Capital Statements: a key to knowledge management, *Danish Agency for Development of Trade and Industry*, Stockholm.
15. Financial Accounting Standards Board (FASB) (2001) Improving business reporting: insights into enhancing voluntary reporting, *Business Reporting Research Project*, Steering Committee Report, Financial Accounting Standards Board.
16. Financial Technologies (India) Limited, Annual reports for the year 2007-08 and 2008-09. Available at the Corporation Website.
17. Guthrie J., Petty, R. Yongvanich, K. and Ricceri, F. (2004) Using content analysis as a research method to inquire into intellectual capital reporting, *Journal of Intellectual Capital*, 5(2), 282-293.
18. Guthrie, J., Petty, R. M., and Ricceri, F. (2006). The voluntary reporting of intellectual capital: comparing evidence from HK and Australia, *Journal of Intellectual Capital*, 7(2), 254-271.
19. Gibbins, M., Richardson, A., and Waterhouse, J. (1990) The management of corporate financial reporting: opportunism, ritualism, policies and processes, *Journal of Accounting Research*, 28(1), 121-143.
20. Holmen, J. (2005) Intellectual capital reporting, *Management Accounting Quarterly*, Summer, 6(4), 1-9.
21. ICM. (2009). Intellectual capital management, *Comprehensive Intellectual Capital Management*, visited: July 2009. [Online] Available**:** http://www.wdc-econdev.com/
22. Infosys Technologies Limited: Annual reports for the year 2007-08 and 2008-09, available at corporation Website.
23. Jing, Li, Richard Pike and Roszaini Haniffa (2007) IC reporting in knowledge rich firms: the impact of market and CG factors, *Bradford University Working paper series* no. 07/06, April, 1-29.
24. José G. Vargas-Hernández and Mohammad Reza Noruzi (2010) How intellectual capital and learning organization can foster organizational competitiveness?, *International Journal of Business and Management* , 5(4) April 1-11.
25. Joshi, M. and Ubha, D.S. (2009), Intellectual capital reporting: the search for a new paradigm in financial reporting by the knowledge sector of Indian economy, *Electronic Journal of KM*, 7(5), 575-582.
26. Joshi, M., Ubha, D.S., and Sidhu, J. (2010) Reporting intellectual capital in annual reports from Australian S/W & I/T corporations, *Journal of Knowledge Management Practice*, 11(3), September, 1-19.
27. Kamath, B. (2008) 'Intellectual capital reporting in India: content analysis of teck firms, *Journal of Human Resource Costing and Accounting*, 12(3), 213-224.
28. Li, Jing, Pike, R. and Haniffa, R. (2008) Intellectual capital reporting and corporate governance structure in UK firms, *Accounting and Business Research*, 38(2), 137-59.
29. Marr, B., Gray D., and Neely, A. (2003) Why do firms measure their intellectual capital?' *Journal of Intellectual Capital*, 4(4), 441-464.
30. Meritum Project (2002) Guidelines for managing and reporting on intangibles, *Intellectual Capital Report*, Fundación Airtel Móvil, Madrid.
31. Nielsen C., Bukh P.N., Mouritsen J., Johansen M.R., Gormsen P. (2006) Intellectual capital statements on their way to the stock exchange, *Journal of Intellectual Capital*, 7(2), 221-240.
32. OECD report (1999) Symposium on measuring and reporting IC: experience, issues, and prospects, Organization for Economic Cooperation and Development (OECD).
33. OECD Report (2006) Principle of Corporate Governance, The Organization for Economic Cooperation and Development, Paris, 1–69 available at http://www.oecd.org.
34. Ordóñez de Pablos, P. (2001) Relevant experiences on measuring and reporting intellectual capital in European pioneering firms in Bontis, N., Chong, C. (Eds) *World Congress on Intellectual Capital Readings*, Butterworth-Heinemann, Oxford.
35. Ordóñez de Pablos, P. (2002) Evidence of intellectual capital measurement from Asia, Europe and Middle-east, *Journal of Intellectual Capital*, 3(3), special issue, 287-302.
36. Parker, L.D. (2007) Financial and external reporting research: the broadening corporate governance challenge, *Accounting and Business Research*, 37(1), 39–54.
37. Petty R., Ricceri F., Guthrie J. (2008) Intellectual capital: a user's perspective, *Management Research News*, 31(6), 434-447.

38. Pike S., Fernström L. and Roos G. (2006) Intellectual capital: origin and evolution, *International Journal of Learning and Intellectual Capital*, 3(3), 233-248
39. Rodriguez Perez, J.M., Ordóñez de Pablos, P. (2002) Strategic resources management: an organizational learning perspective, *International Journal of Human Resources Development and Management*, 2(3/4), 249-63.
40. Singh, I.P. and Van der Zahn (2008) Determinants of intellectual capital reporting in prospectuses of initial public offerings, *Accounting and Business Research*, 38(5), 409-31.
41. Stewart, T.A., 2002 'The wealth of knowledge: intellectual capital and the twenty-first century organization, Currency Doubleday, 2002.
42. Sveiby, K.E. (2004) Methods for measuring intangibles, available at www.sveiby.com**.**

Table-6

Table-6: Infosys Technologies Limited-- Intangible Assets Score Sheet for 2008-09

External Structure--Our Clients			**Internal Structure--Our Organization**
	2009	**2008**	
Growth/renewal			Growth/renewal
Revenue growth (%)			**R&D:**
In US Dollar terms	12	35	**R&D/total revenue (%)**
In Rupee terms	30	20	**R&D/value-added (%)**
Exports/total revenue (%)	99	99	**Technology investment:**
Clients:			**Investment/revenue (%)**
Total	579	538	**Investment/value-added (%)**
Added during the year	156	170	**Total investment:**
Marque clients:			**Total investment/total revenue (%)**
Total	99	113	**Total investment/value-added (%)**
Added during the year	7	24	
Revenue contribution (%)	44	46	
Revenue derived--No. of countries	67	58	
Efficiency			Efficiency
Sales/client			Sales per support staff:
US $ million	8.05	7.76	US $ million
Rs. Crore	37.47	31.03	Rs crore
Sales & marketing expense/revenue (%)	5.09	5.49	General & admn expense/revenue (%)
DSO (days)	62	72	Average proportion of support staff (%)
Provision for debts/revenue (%)	0.35	0.26	
Stability			Stability
Repeat business (%)	97.6	97.0	Average age of support staff (years)
No. of clients accounting>5% of revenue	1	1	
Client concentration			
Top client (%)	6.9	9.1	
Top 5 clients (%)	18.0	20.9	
Top 10 clients (%)	27.7	31.4	
Client distribution:			
1 million dollar +	327	310	
5 million dollar +	151	141	
10 million dollar +	101	89	
20 million dollar +	59	47	
30 million dollar +	39	32	
40 million dollar +	30	22	
50 million dollar +	20	18	
60 million dollar +	16	13	
70 million dollar +	12	12	
80 million dollar +	10	10	
90 million dollar +	7	6	
100 million dollar +	4	6	
200 million dollar +	1	1	
300 million dollar +	1	1	

		Competence--Our People	
2009	**2008**		**2009**
		Growth/renewal	
		Total employees	104,850
1.24	1.2	**Added during the year**	
1.41	1.36	**Gross**	28,231
		Net	13,663
2.93	2.67	**Lateral added**	5,796
3.33	3.0	**Staff education index**	272,644
		Employee--no. of nationalities	76
6.12	8.95	**Gender classification (%)**	
6.96	10.08	**Male**	66.6
		Female	33.4
		No. of non-Indian national employees	4,698
		Efficiency	
		Value-added/employee (Rs crore)	
0.94	1.08	**Software professionals**	0.20
4.35	4.32	**Total employees**	0.19
7.51	7.97	**Value-added/employee ($ million)**	
5.04	4.71	**Software professionals**	0.04
		Total employees	0.04
		Stability	
29.6	29.4	**Average age of employees (years)**	26
		Attrition--excluding subsidiaries (%)	11.1
		Attrition--excluding subsidiary separation (%)	9.1

Note: The above figures are based on consolidated financial statements. (Source: Annual Report of Infosys Technologies Limited 2008-09, page 135)