

INDIAN ECONOMY AND PRACTICES: AN ANALYSIS

DR. RENU NAINAWAT
ASSISTANT PROFESSOR

DEPARTMENT OF ECONOMIC ADMINISTRATION AND FINANCIAL MANAGEMENT
GOVERNMENT COMMERCE GIRLS COLLEGE KOTA, RAJASTHAN.

Abstract: India's progressing knowledge sector has attracted the attention of the entire globe. The future drivers of any economy will no longer be capital, land or equipment; but the people and their knowledge. Indian corporate sector, now, is in search of a new paradigm in accounting, which would enable it to record its new journey from financial capital to intellectual capital. With this background in mind, the study of 15 leading Indian Information Technology companies, considered to be highly knowledge intensive, is undertaken in order to find out the disclosure level of recording and reporting of intellectual capital by these companies. An effort has been made in this paper to identify the meaning and significance of intellectual capital and to evaluate the prevailing practices of recording and reporting of intellectual capital by the Information Technology sector in India by using the content analysis method.

Keywords: intellectual capital, knowledge capital, Indian economy, information technology sector, human capital.

Introduction

The world is fast changing from industrial to knowledge economy and Indian economy has attracted the attention of the whole globe with its fast growing knowledge sector. In its 11th five year plan (2007-08), the Planning Commission, Government of India highlighted that Information technology had made a revolutionary change in the history of global trade and services. Today, India has made its presence felt in the Information Technology world and is considered as the premier destination for the global sourcing of Information Technology and IT-enabled Services. The exceptional growth of the Indian Information Technology Software and Services and IT-enabled Services-Business Process Outsourcing (ITES-BPO) sector has put a perceptible multiplier effect on the Indian economy as a whole. According to the estimates of the Planning Commission, "India's success in the export of Information Technology Software and Related Services over the past decade remains unparalleled. Total export revenues earned by this sector have grown from US\$ 7.7 billion in 2001-02 to US\$ 31.3 billion in 2006-07, thus showing a near 32% compound growth rate. India now accounts for 65% of the global market in the offshore Information Technology and 46% of the ITES market. A majority of the Fortune 500 and Global 2000 corporations are sourcing Information Technology and ITES from India." Dun and Bradstreet in its survey (2008) depicts that the contribution of the Information Technology industry to the GDP of India has grown significantly from 1.8% in 1999-2000 to around 5.4% in the financial year 2007. According to The National Association of Software and Services Companies (NASSCOM), the size of the Indian Information Technology industry was estimated to be approximately US\$ 47.8 billion in the financial year 2007. The exports

market constitutes the largest segment accounting for around 65.5% of the total revenue generated by the Indian Information Technology industry, including hardware. It is more aggressive in tapping the global market. Thus, it is convenient to interpret that during the last few years, Indian Information Technology companies have established themselves in the global market and the country is on the threshold of becoming a knowledge superpower because one of its strongest assets as a nation is the toiling nature and creativity of its people. It is evident from the above description that knowledge assets have a significant role in defining the growth of a high-tech company. It is with this background in mind that the study of 15 leading Indian Information Technology companies, considered to be highly knowledge intensive, is undertaken to ascertain their disclosure level of recording and reporting of intellectual capital. An effort has been made in this paper to identify the meaning and significance of intellectual capital along with studying the view point of early exponents of intellectual capital and to evaluate the prevailing practices of recording and reporting of intellectual capital by the corporate sector in India. The scope of the paper has been limited to the selected 15 companies of the Information Technology sector on the basis of the total income generated by them in the year 2007-08.

Concept of intellectual capital

The concept of intellectual capital gained momentum in the 1990s with the rapid emergence of information and communication technologies. The Organization for Economic Co-operation and Development (2000) describes intellectual capital as the economic value of two categories of intangible assets of a company: organizational capital and human capital. It is possession of knowledge, applied experience, organizational technology, customer relationships and professional skills that provide a competitive edge in the market (Edvinsson, 1997). As a consequence; it signifies that information is an important factor of production along with land, labour, capital and energy. It is the prime source of organisation that needs to be sustained, nurtured and accounted for. Natrajan and Ganesh (2003) describe Intellectual capital as the documented knowledge available in the form of research papers, reports, books, articles, manuscripts, patents and software. Magdaraog (2004) believes that the essence of knowledge capital does not lie in its creation or codification rather in its use and realization because knowledge created and codified is worthless until it is put to use and people benefit from its use. The following descriptions of Intellectual capital available in the existing literature on the subject are worth noting and quoting:

- Intellectual material that has been formalized, captured and leveraged to produce a higher valued asset (Klein and Prusak, 1994); *f*
- Accumulated value of investments in employee training, competence and the future (Skandia, 1996); *f*
- Combined intangible assets of market, intellectual property, human-centred and infrastructure which enable the company to function (Brooking, 1996);
- Information and knowledge applied to create value (Edvinsson, 1997);
- Intellectual capital is the net difference between the market value of a corporation and its tangible assets (Strassmann, 1999); *f*

- Knowledge, information, intellectual property, experience that can be put to use to create wealth (Stewart, 1997); *f*
- The holistic meta-level capability of an organisation to generate creative and effective responses to extant and emerging, present and potential challenges facing it, in an ongoing manner (Rastogi, 2000a, 2000b);

On the basis of the above descriptions, it can be concluded that the collective intellectual capital of an organization is represented by the skill and experience of its employees as also by its corporate information repositories. Petty and Guthrie (2000) conclude that intellectual capital is a reliable indicator of the future earning potentialities or net worth of a company and in one form or the other, it is implied in recent economic, managerial, technological and sociological developments in a manner previously unknown and largely unforeseen.

Constituents of intellectual capital

Broadly speaking, Intellectual capital consists of two components which are not only interrelated but are also interactive. These are: human capital and information. Of these two, human capital is the collective human competence comprising intelligence, education, skills, experience, intuition and imagination as influenced by emotional and motivational attributes. Apparently, this kind of knowledge is difficult to be documented, communicated and transmitted. The second component information constitutes those achievements and experiences of individual which can be documented, communicated and transferred. These include books, papers, studies, reports, software, databases, CDs, and patents etc. This information becomes independent of its creators once it is documented and communicated. It can be tested objectively for its reliability and validity and can also be altered, improved and used simultaneously by any number of people. Thus, intellectual capital exists within the minds of the people as well as in the form of formal information which is outside the minds.

Early exponents of intellectual capital

The evolution of knowledge capital management and intellectual capital as a discipline can be traced to the long past though no visible pattern was discernible then. Sullivan (2000) describes, "Knowledge capital management movement is believed to have taken off from three distinctly different origins. The first was the pioneer work of Hiroyuki Itami of Japan who studied the impact of invisible assets on the management of Japanese corporations. The second was the work of economists like Penrose, Rumelt, Wemerfelt and others on technology commercialization. Finally, there was the work of Karl-Erik Sveiby in Sweden which addressed the human capital dimension of intellectual capital." Sveiby (1997) is regarded as the founding father of knowledge management and intellectual capital movement in Sweden, who gave a logical explanation about the management of the organizations who had only knowledge and creativity of their employees as key elements of growth of their business but not the traditional production function. He proposed a theory for measuring knowledge capital by dividing it into three categories: Customer Capital, Individual Capital, and Structural Capital. His contributions have been widely recognised by various researchers in the field of knowledge management and are proven to be guiding source for

knowledge based companies. The Swedish insurance company Skandia published the first intellectual capital report in 1994 signifies intangible assets that included human capital; customer/market capital; process capital; and, renewal and development capital. According to the report, the potential financial returns that are attributable to these intangible or non-financial assets represent the value of intellectual capital. This model provides a comprehensive and integrated view of financial as well as intellectual capital. Generally, it is the hard quantitative data that is used as indicators for scrutinizing the internal and external processes taking place in a country. However, this model declared that such indicators failed to provide full and accurate assessment of the country's assets and its potential for future growth. Thus, it described intellectual capital as a complement of financial capital. It is a point to be noted that as an outcome of this model it becomes evident that while financial capital highlights the history and achievements of the past of a country, the intellectual capital reflects its hidden national potential for future growth. Strassmann (1999) laid emphasis on the value of corporate knowledge. According to him, intellectual capital is nothing but creative energy which springs forth from something that is intangible, as if it were an artistic conception. It ultimately leads to management value addition. It is because of this value addition that market value of a company is different from its book value. Apparently, management value-added depends, to a large extent, on the level of knowledge capital. This accumulated knowledge increases work efficiency which ultimately increases the total value of products or services of a company.

Lev (2001), who started his research in the early 1990s on the valuation of intangibles, focused on quantifying the value of intangibles and correlating the values so obtained with financial measures adopted in the capital markets. He opines that the traditional accounting model which recognizes only tangibles assets and focuses only on legal transactions while ignoring other value-changing events was not appropriate to deal with the new economic environment. He asserts that it no longer meets the needs of the managers and investors of the present times. He presented an improved GAAP; double-entry system based on the economic definition of an asset as Financial-Economic Capital and an information system aimed at capturing the links between resources and outcomes as Non-financial-Path Matrices.

Methodology

The main objective of the paper is to evaluate the prevailing practices of recording and reporting of intellectual capital by the corporate sector in India. The sample of the study consists of 15 top Information Technology companies of India 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 annual reports of the selected companies were obtained for the year 2007-08 in abode acrobat format from the respective websites of the companies. Content analysis has been used to analyse the extent of disclosure of intellectual capital reporting by the companies under study. Many studies have been conducted to analyse the intellectual capital reporting practices by using the content analysis of annual reports (Guthrie and Petty, 2000; Brenan, 2001; Olsson, 2001; Bontis, 2003; Bozzolan et al., 2003; Abeysekera and Guthrie, 2004; Ordonez de Pablos, 2005). Researchers have used similar

approach to investigate intellectual capital trends in Australia (Abeysekera, 2007), UK (Striukova et al., 2008), Sri Lanka (Abeysekera and Guthrie, 2005), Spain (Oliveras et al., 2008) and India (Kamath, 2008) intellectual capital trends between countries; Australia and Sri Lanka (Abeysekera, 2007); Singapore and Sri Lanka (Abeysekera, 2008). In India, one such study is available on Intellectual capital disclosure in India: Content analysis of 'TECK' firms (Kamath, 2008). The items of intellectual capital selected for the purpose of study depicts the same list of 39 terms that was summarized by a panel of researchers from World Congress on Intellectual Capital which were found comprehensive enough to represent IC literature (Bontis, 2003). The annual reports were searched electronically to find out the presence or absence of the said terms. Results were tabulated on the basis of the number of companies disclosing these terms in their annual reports. Company-wise analysis, along with testing the degree of variance, has also been undertaken.

Analysis of the results

Quality of our human resources charts the success and growth potential of our business. The Company 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 intellectual capital. The Company continues to drive organization development and also build management resources for a multi-business enterprise.

Patni Computer System Ltd. makes a mention of its intellectual capital 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.

Conclusion

The above analysis makes it amply clear that intellectual capital recording and reporting in the Indian knowledge sector companies is almost negligible. It is evident from the above results that intellectual capital reporting has not received any preference or priority for the mentors of the Indian corporations. The average number of items reported by the companies is deplorably low which suggests that there is neither awareness nor any interest to record and report intellectual capital variables by the companies. Even the items which were reported were expressed in discursive rather than in numerical terms. It has also been found that there exists no clear cut pattern or system of intellectual capital disclosure in the annual reports. The reporting was not uniform and no evidence of its well defined measurement basis was found in the annual reports. Thus, Indian companies are also lagging behind in the field of measurement, reporting and disclosure of intellectual capital. However, it is surprising to find that the Information Technology companies which are most dominating group in the knowledge sector, have failed in reporting Intellectual capital in their annual reports. It is evident that human knowledge is the key factor of the future industrial growth and the intellectual capital is the key driver of market value in the knowledge economy. It is strongly recommended that companies must create a culture that emphasizes the importance of intellectual capital in

achieving business advantage. The accounting bodies at the global level should join heads to develop an internationally accepted valuation system and approaches for reporting of intellectual capital.

References

- Abeysekera, I. and Guthrie, J. (2005), “An Empirical Investigation of Annual Reporting Trends of Intellectual Capital in Sri Lanka”, *Critical Perspectives on Accounting*, Vol. 16, No. 3, pp. 151-63.
- Abeysekera, I. and Guthrie, J. (2004), “Human Capital Reporting in a Developing Nation”, *The British Accounting Review*, Vol. 36, No. 3, pp.251-268.
- Abeysekera, I. (2007), “Intellectual Capital Reporting between a Developing and Developed Nation”, *Journal of Intellectual Capital*, Vol. 8, No. 2, pp.329-345.
- Abeysekera, I. (2008), “Intellectual Capital Disclosure Trends: Singapore and Sri Lanka”, *Journal of Intellectual Capital*, Vol. 9, No. 4, pp. 723-737.
- Bontis, N. (2003), “Intellectual Capital Disclosure in Canadian Corporations”, *Journal of Human Resource Costing & Accounting*, Vol. 7, No. 1, pp. 9-20.
- Bozzolan, S., Favotto, F. and Ricceri, F. (2003), “Italian Annual Intellectual Capital Disclosure”, *Journal of Intellectual Capital*, Vol. 4, No. 4, pp. 543-58.
- Brennan, N. (2001), “Reporting Intellectual Capital in Annual Reports: Evidence from Ireland”, *Accounting, Auditing & Accountability Journal*, Vol. 14, No. 4, pp. 423-36.
- Bruggen, A., Vergauwen, P. and Dao, M. (2009), “Determinants of Intellectual Capital Disclosure: Evidence from Australia”, *Management Decision*, Vol.47, No. 2, pp. 233-245.
- Brooking, A. (1996), *Intellectual Capital: Core Asset for the Third Millennium Enterprise*, International Thomson Business Press, London.
- Edvinsson, L. (1997), “Developing Intellectual Capital at Skandia”, *Long Range Planning*, Vol. 30 No. 3, pp. 366-73.
- Guthrie, J. and Petty, R., (2000), “Intellectual Capital: Australian Annual Reporting Practices”, *Journal of Intellectual Capital*, Vol. 1, No. 3, pp 241-251.
- 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*, Vol. 5, No. 2, pp 282-293.
- Guthrie, J., Petty, R and Ricceri, F. (2006), “The Voluntary Reporting of Intellectual Capital”, *Journal of Intellectual Capital*, Vol. 7, No. 2, pp 254-271.
- Kamath, B. (2008), “Intellectual Capital Disclosure in India: Content Analysis of ‘Teck’ Firms”, *Journal of Human Resource Costing & Accounting*, Vol. 12, No. 3, pp. 213-224.
- Kaplan, R.S. and Norton, D.P. (1992), “The Balanced Scorecard – Measures that Drive Performance”, *Harvard Business Review*, Vol. 70, No. 1, pp. 72-90.
- Kaplan, R.S. and Norton, D.P. (1993), “Putting the Balanced Scorecard to Work”, *Harvard Business Review*, Vol. 71, No. 5, pp. 134-47.
- Klein, D.A., and Prusak L. (1994), *Characterizing Intellectual Capital*, Center for Business Innovation, Ernst & Young LLP. Lev, B. (2001),

- Intangible Management, Measurement, and Reporting, The Brookings Institution, Washington D.C. Marr, B., Gray, D. and Neely, A. (2003), "Why Do Firms Measure Their Intellectual Capital?", *Journal of Intellectual Capital*, Vol. 4, No. 4, pp. 441-464.
- Magdaraog, V. L., The essence of knowledge capital, http://www.itmatters.com.ph/columns.php?id=magdaraog_111504
- Oliveras, E., Gowthorpe, C., Kasperskaya, Y. and Perramon, J. (2008), "Reporting Intellectual Capital in Spain", *Corporate Communications: An International Journal*, Vol. 13, No. 2, pp.168-181.
- Olsson, B. (2001), "Annual Reporting Practices: Information About Human Resources in Corporate Annual Reports in Major Swedish Companies", *Journal of Human Resource Costing & Accounting*, Vol. 6, No. 1, pp. 39-52.
- Organisation for Economic Co-operation and Development (OECD) (2000), *Final Report: Measuring and Reporting Intellectual Capital: Experience, Issues, and Prospects*, OECD, Paris. Petty, R and Guthrie, J. (2000), "Intellectual Capital Literature Review-Measurement, Reporting and Management", *Journal of Intellectual Capital*, Vol. 1, No. 2, pp 155-176.
- Ordonez de Pablos, P. (2003), "Intellectual Capital Reporting in Spain: A Comparative View", *Journal of Intellectual Capital*, Vol. 4, No.1, pp. 61-81.
- Ordonez de Pablos, P. (2005), "Intellectual Capital Reports in India: Lessons from A Case Study", *Journal of Intellectual Capital*, Vol. 6, No.1, pp. 141-149.
- Patibandla, M. and Petersen, B. (2002), "Role of Transnational Corporations in the Evolution of a High-Tech Industry: the Case of India's Software Industry", *World Development*, Vol. 30, No. 9, p. 1561-1577.
- Rastogi, S. (2000a), "Knowledge Management and Intellectual Capital – The New Virtuous Reality of Competitiveness", *Human Systems Management*, Vol. 19, No. 1, pp. 39 -49.
- Rastogi, S. (2000b), "Sustaining Enterprise Competitiveness – Is Human Capital the Answer?" *Human Systems Management*, Vol. 19, No. 3, pp. 193-204.
- Stewart, T. (1997), *Intellectual Capital: The New Wealth of Nations*, Doubleday Dell Publishing Group, New York, NY Strassmann, Paul A. (1999), "Calculating Knowledge Capital", *Knowledge Management Magazine*,
- October.Striukova, L., Unerman, J., and Guthrie, J. (2008), "Corporate Reporting of Intellectual Capital: Evidence from UK companies", *The British Accounting Review*, Vol. 40, No. 4, pp.297-313.

