Content Analysis of Reporting Intellectual Capital in Indian Pharmaceutical Industry

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ABSTRACT

Intellectual capital (IC) is becoming a major part of companies' value in today's knowledge-based economy. To manage and control IC requires companies to not only identify, but measure and report internally on IC. Intellectual capital reporting concept has been gaining increasing importance in the recent years. The purpose of this study is to present an analysis of the intellectual capital reporting among the Indian pharmaceutical companies. Content analysis technique was used to analyse intellectual capital reporting among the top 15 pharmaceutical companies in India. The analysis was done using the annual reports of these pharmaceutical companies for the year 2011-12. The analysis reveals that the intellectual capital reporting among Indian pharmaceutical companies is very low.

Introduction

Knowledge appears to be a new engine of corporate development and has become important for organizational existence in this complex and turbulent business environment. Organizations are increasingly realising that knowledge (underlying capabilities) is the most important factor in fully understanding the performance of their business for creating economic value. As far as the reporting of intellectual capital in the annual reports is concerned, very rarely organizations are disclosing intellectual capital (IC) in their annual reports. Due to non-availability of intellectual capital reporting standards, organizations are finding it difficult to disclose the same in the annual reports. Considering the future prospects of financial reporting system for capital markets and other stakeholders, organizations are now motivated to evolving a dialogue on finding new ways to measure and report on their organizational Intellectual Capital.

The decline of conventional industries and the simultaneous growth of knowledge industries resulted in measurement and disclosure of IC. This phenomenon helped the concept of IC in gaining relevance in the current era of knowledge economies. Globally, many firms and management consulting organizations have begun looking at different ways of capturing and reporting IC within organizations.

Reconstruction of organizational financial reporting to include IC indicators was initiated in the last decade of the twentieth century by a few

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corporations which were particularly interested in the area of IC. The resultant of this initiative is the development of a number of new measurement techniques that aimed at synthesizing the financial and non-financial value-generating issues of the organization into one external report.

Several research studies have been conducted all over the world, particularly in developed countries, using the content analysis of annual reports to analyze the IC reporting practices. However, research in other developing and less developed countries found that IC reporting phenomenon is well-behind compared to the developed economies, despite the seeming importance by corporate professionals. When we look in the context of Indian corporate firms, there have been very few IC reporting studies, as compared to the other nations. However, recent studies available on IC reporting in India were done by Kamath (2008), Joshi et al (2009) and Bhasin (2011).The authors of these studies have used content analysis as their research method to report about the status of IC reporting in Indian firms. The very limited availability of literature on the reporting of IC in Indian corporate sector presents a window of opportunity for more research in this area. Therefore this study builds on the previous literature of IC reporting practice, and overall IC reporting scenario in the Indian corporate-sector, especially knowledge-based industries like pharmaceutical firms which have not yet been studied.

The remainder of this paper is outlined as follows: Section 2 discusses review of literature based on previous IC reporting studies. Section 3 describes the process of collecting and analyzing the data while section 4 provides discussion of results. The final section draws a conclusion for this paper that includes future directions of this research.

Review of Literature

There have been many studies examining intellectual capital disclosures, few of them are discussed as follows: Content analysis of 10,000 Canadian companies concluded that only 68 companies used terms related to intellectual capital in their annual reports (Bontis, 2003). In a study that carried out analysis of top 30 listed companies selected on the basis of market capitalization in the Colombo Stock Exchange, it was found that intellectual capital reporting in Sri Lanka was not consistent and lacked a theoretical framework (Abeysekera and Guthrie, 2005).Vandemaela et al. (2005) found that Swedish companies report significantly more, as compared to the Dutch and UK companies, in their annual reports, that are consistent with the lead taken by Sweden in the debate on IC management, measurement, and disclosure. Guthrie, Petty, and Ricceri (2006) have shown different results as compared to other studies. Their study conducted on Australian companies during the year 1998 found an increase in internal and external capital reporting from 30 percent and 40 percent respectively, in year 1998, to 41 percent and 49 percent in the year 2002.In a study of the voluntary intellectual capital disclosures by 30 Indian TecK companies by using content analysis revealed that intellectual capital disclosures by TecK companies were negligible (Kamath, 2008).Joshi et al (2009) examined the annual reports of the top 20 information technology companies listed on the Bombay Stock Exchange and found that average number of items reported by the companies is deplorably low and only a small percentage of firms have actually reported intellectual capital in their annual reports. In a study that measured the intellectual capital disclosures by private commercial banks

in Bangladesh, it was found that disclosures were mainly in the human capital area, with internal capital being the least reported item (Khan and Ali, 2010). Bhasin (2011) attempted to provide an insight into the style of IC reporting done by the top 16 information technology sector corporations in India by using "content analysis" on 2007 to 2009 annual reports and confirmed that IC reporting in these corporations is almost negligible.

From the aforementioned backdrop it can be gauged that IC disclosure researches have been conducted all over the world particularly in developed economies whereas in Indian context very few researches have been done and so far as the industry specification is concerned IT and Teck industries were only studied. In this backdrop the present study is conducted to analyze the intellectual capital disclosure of pharmaceutical industry in India.

Research Methodology

The study aims at mapping the current state of IC-related reporting in the Indian scenario. Accordingly, the sample-size of this study consists of 15 top Pharmaceutical companies. These corporations were selected on the basis of sales value of 2011-2012.

Table 1 : Sales Value of Top 15 Pharmaceutical Companies (alphabetical order)

Company	Sales (Rs. Millions)
Alembic Pharmaceuticals	15084.2
AurobindoPharma	43787.3
Biocon	15631.0
Cipla	70775.6
DrReddys Labs	67802.0
Glenmark Pharmaceuticals	16336.7
IPCALaboratories	23848.7
Lupin	54105.2
Mylan Laboratories	39744.9
OrchidChem&Pharma	17506.2
Ranbaxy Laboratories	76671.7
Sun Pharmaceuticals	24789.6
Torrent Pharmaceuticals	20862.7
Wockhardt	25663.2
ZydusCadila	10516.0

Source: CMIE Prowess Database

The annual reports for these selected corporations were obtained for one year, 2011-12 from their respective corporate websites. Based on the previous studies conducted in various countries a content analysis tool is used to analyze the IC reporting practices of companies. 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 selected pharmaceutical companies. 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 (2003) was considered comprehensive for this type of research on knowledge-based information technology corporations. The final list of IC terms is reported in Table 1.

Table 2 : Intellectual Capital (IC) 39 Search Terms

Business Knowledge	Employee Efficiency	Intellectual Property
Corporation Reputation	Employee Skill	Intellectual Resources
Competitive Intelligence	Employee Value	Knowledge Management
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	Intellectual Capital	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. (2003) Intellectual Capital Reporting in Canadian Corporations, Journal of Human Resource Costing and Accounting, page 7).

Analysis and Discussion

Analysis of the reporting of intellectual capital items is done using content analysis. The annual reports for the year 2011-12 were considered for the analysis.

Table 3 : Reporting of Frequency of IC Items

Company (Frequency)	BK(1)	CD(1)	HA(1)	HC(5)	HV(3)	IC(2)	IP(14)	KS(1)	OC(1)	OL(3)
Alembic Pharmaceuticals(4)	0	0	0	2	1	0	1	0	1	0
Aurobindo Pharma(4)	0	0	0	1	1	2	6	0	0	0
Biocon (2)	0	0	0	0	0	0	8	1	0	0
Cipla (0)	0	0	0	0	0	0	0	0	0	0
DrReddys Labs (1)	0	0	0	0	0	0	7	0	0	0
Glenmark Pharmaceuticals(1)	0	0	0	0	0	0	3	0	0	0
IPCA Laboratories(1)	0	0	0	0	0	0	5	0	0	0
Lupin (2)	0	0	0	0	0	0	8	0	0	3
Mylan Laboratories(1)	0	0	0	0	0	0	1	0	0	0
Orchid Chem & Pharma(1)	0	0	0	0	0	0	9	0	0	0
Ranbaxy Laboratories(6)	1	1	2	3	0	1	1	0	0	0
Sun Pharmaceuticals(1)	0	0	0	0	0	0	3	0	0	0
Torrent Pharmaceuticals(1)	0	0	0	0	0	0	1	0	0	0
Wockhardt (3)	0	0	0	1	0	0	3	0	0	1
Zydus Cadila (3)	0	0	0	1	0	0	4	0	0	13

BK: Business Knowledge **CD:** Cultural Diversity **HA:** Human Assets

HC: Human Capital **HV:** Human Value **IC:** Intellectual Capital

IP: Intellectual Property **KS:** Knowledge Sharing **OC:** Organizational Culture

OL: Organizational Learning

Table 3 presents an analysis of the reporting of intellectual capital items in the annual reports of the Top 15 pharmaceutical companies in India. Out of 39 items which are part of the intellectual capital items reporting standards, only 10 items appear in at least one of the top 15 pharmaceutical companies in India. It is very discouraging to note that the number of intellectual capital items listed in annual reports of Indian pharmaceutical companies is very less in number.

Among all the companies, surprisingly, Cipla's (second largest company) annual report did not feature even a single item from list of the intellectual capital reporting terms.

Content Analysis in terms of the reporting of intellectual capital items in Table 4 also reveals that the item 'Intellectual Property' is the only item that is reported by all the companies except Cipla (14 companies). The next highest reported item was human capital (5). This is followed by human value and organizational learning which were reported by three companies. Intellectual capital was reported by two companies and the remaining items (business knowledge, cultural diversity, human assets, knowledge sharing and organizational culture) were reported in five companies.

Table 4 : Reporting of Content analysis of IC items

Company (Frequency)	BK	CD	HA	HC	HV	IC	P	KS	OC	OL
Alembic Pharmaceuticals (4)	X	X	X	"	"	X	"	X	"	X
Aurobindo Pharma (4)	X	X	X	"	"	"	"	X	X	X
Biocon (2)	X	X	X	X	X	X	"	"	X	X
Cipla (0)	X	X	X	X	X	X	X	X	X	X
DrReddys Labs (1)	X	X	X	X	X	X	"	X	X	X
Glenmark Pharmaceuticals (1)	X	X	X	X	X	X	"	X	X	X
IPCA Laboratories (1)	X	X	X	X	X	X	"	X	X	X
Lupin (2)	X	X	X	X	X	X	"	X	X	"
Mylan Laboratories (1)	X	X	X	X	X	X	"	X	X	X
Orchid Chem & Pharma (1)	X	X	X	X	X	X	"	X	X	X
Ranbaxy Laboratories (6)	"	"	"	"	X	"	"	X	X	X
Sun Pharmaceuticals (1)	X	X	X	X	X	X	"	X	X	X
Torrent Pharmaceuticals (1)	X	X	X	X	X	X	"	X	X	X
Wockhardt (3)	X	X	X	"	X	X	"	X	X	"
Zydus Cadila (3)	X	X	X	"	X	X	"	X	X	"
Total	**1**	**1**	**1**	**5**	**3**	**2**	**14**	**1**	**1**	**3**

Table 5 : Company-wise Percentage Reporting of IC items

Company (Frequency)	Percentage of 10 IC Items	Percentage of 39 IC Items
Alembic Pharmaceuticals	40	10.3
Aurobindo Pharma	40	10.3
Biocon	20	5.1
Cipla	0	0.0
DrReddys Labs	10	2.6
Glenmark Pharmaceuticals	10	2.6
IPCA Laboratories	10	2.6
Lupin	20	5.1
Mylan Laboratories	10	2.6
Orchid Chem & Pharma	10	2.6
Ranbaxy Laboratories	60	15.4
Sun Pharmaceuticals	10	2.6
Torrent Pharmaceuticals	10	2.6
Wockhardt	30	7.7
Zydus Cadila	30	7.7

Among all the sample firms presented in Table 5, Ranbaxy is the only company with 6 items out of the 10 (60%) appearing in their annual report. 7 companies reported the appearance of only one item from the intellectual capital reporting items in their annual report. 2 companies reported the appearance of only two items in their annual reports while 2 companies reported the appearance of 3 items. The remaining 2 companies have reported the appearance of 4 items in their annual reports.

Conclusion

Intellectual capital reporting concept has been gaining increasing significance in the recent years. Content analysis of the annual reports of Indian pharmaceutical companies have been found out to be very low in case of intellectual capital reporting among Indian pharmaceutical companies. Pharmaceutical industry is an intellectual capital-intensive industry and hence it was expected that the intellectual capital reporting levels would be fairly high. But it was found that the intellectual capital reporting among Indian pharmaceutical companies is very low. This analysis can further be extended to all the other large, medium and small public limited Indian pharmaceutical companies.

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