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RELATIONSHIP BETWEEN INTELLECTUAL CAPITAL AND INTRAPRENEURSHIP DEVELOPMENT: AN EMPIRICAL STUDY OF SELECTED INFORMATION TECHNOLOGY SECTOR OF NORTHERN INDIA

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Abstract

The current study aims to find out the relationship between intellectual capital and intrapreneurship development in selected top 06 IT firms in northern India. This study uses three dimensions of intellectual capital namely: human capital, structural capital and relational capital. Developments of four hypotheses were based on the dimensions of the study as well as relevant literature. A questionnaire containing (71) questions covering the dimensions and hypotheses of the study was designed in order to collect the required data for examining hypotheses and reaching conclusions. The standardized questionnaire used in this study to find the relationship between the two said variables. The sample comprised of 185 respondents from top 06 Information Technology firms of northern India. Pearson correlation was used to find out the relationship and it was found that there is strong positive relationship between intellectual capital and intrapreneurship development in the selected IT firms of northern india. Thus out the three dimensions of intellectual capital, structural capital found to be more significant than other dimensions of intellectual capital (r= .874, p<0.01).

Keywords: *Information Technology, Intellectual capital, Intrapreneurship development, human capital, relational capital and structural capital.*

INTRODUCTION:

Nowadays technology plays a very vital role in the survival of every organisation and there are certain internal as well as external factors affectiong the environment of the business such as competitors, government policies, legal policies, technology etc. In countries like India, information technology sector is one of the fastest growing sectors. The contribution and development of the Indian IT sector has built a high stature in the world. The Indian IT and ITeS industry is divided into four major segments – IT services, Business Process Management (BPM), software products and engineering services and hardware.

Importance of Intellectual capital in today's scenario is intense. The role of IC in universities as well as in information technology sector is crucial, as universities are the focus of

intangible activities: professors are repositories of knowledge and transmit it to students (Silvestri and Veltri, 2011; Stewart, 1997; Vidrascu, 2016). Therefore, the governments of developing countries should nurture their national intellectual capital (IC) (Aubert and Reiffers, 2003) through policies aimed to remodel the structure of primary, secondary, and tertiary education (Weber, 2011). With the increase in technology many organizations have started using intellectual capital which is also known as knowledge management in India. Especially Information technology sector played a vital role in developing intellectual capital. A Systematic role of Intrapreneurship development which is also known as corporate entrepreneurship is required to retain in the organisation for the continuous development of intellectual capital in India.

Intrapreneurship is mainly about creativity and innovativeness among employees within a mature organization. A lot of work in this discipline is still to be done as the already conducted studies have covered more entrepreneurship in preference to intrapreneurship. Also, intellectual capital becomes inevitable when intrapreneurship development is to be considered for the progress of any organization.

The development of organization as well as the economy is substantially dependent upon entrepreneurship. The importance of intrapreneurship has been mostly revealed with respect to large corporations in developed economies. In a developing country like India, there is a need to develop intrapreneurship which is usually called corporate entrepreneurship or corporate venturing. It is a special type of entrepreneurship by which employees in the organization undertake new business activities and develop strategies to implement change. Many studies have been done to identify the role of different entrepreneurial eco-systems and moreover, both state and central government have taken a number of initiatives to promote entrepreneurship. But few studies have been conducted in the field of intrapreneurship. Intrapreneurs constitute the backbone of any organisation; as a result, the prosperity of business depends upon the intrapreneurship development. Moreover, the study will explore the experience of intrapreneurs in the organization.

REVIEW OF LITERATURE:

We understand intellectual capital as intangible assets within a company (Stewart, 1991).Edvinsson and Malone (1997) defined "intellectual capital as a two-dimensional construct namely human capital and structural capital." Structural capital is additionally divided into organisational and customer capital. Nowadays, customer capital, from a

sociological point of view, represents social capital (Subramaniam and Youndt, 2005; Delgado, 2011). But various researchers of Europe classified intellectual capital broadly into 3 categories i.e. Human capital, Structural capital and Relational capital.

The concept of Intrapreneurship is taken from entrepreneurship. Intraprenuership which is also known as corporate entrepreneurship (CE) is crucially important to the profitability, survival and growth of a firm. Intrapreneurship (corporate entrepreneurship) has been explained by various researchers from several perspectives. Sharma and Chrisman (1999) defined intrapreneurship as "a process whereby an individual or group of individuals in an established company attempts to create a new organization or to instigate renewal or innovation within the current organizational structure."

Morris and Kuratko (2002), on the other hand, defined corporate entrepreneurship as "a term used to describe the entrepreneurial behaviour inside an established organization."

In some situation, the term has also been referred as corporate venturing or intrapreneurship (Zahra & Dess 2001; Hornsby et al., 2002). Additionally, the literature of intrapreneurship has been seriously discussed in theoretical (Aktan and Bulut, 2008) and field studies, in exploring its multidimensional structure such as risk-taking, innovativeness, pro-activeness and competitive aggressiveness (Lumpkin and Dess, 1996; 2001; Sharma and Chrisman, 1999).

Various empirical found that there is a strong and positive relationship between intellectual capital and its dimensions with intraprenuership development. Monnavarian & Ashena (2009), Corbett et al. (2011), Kia et al. (2013) are in the support of this.

Kia et al. (2013) revealed that a meaningful and strong relationship existed between intraprenuership and intellectual capital. However, among the three elements of intellectual capital, structural capital played an important role to determine the relationship with intraprenuership.

Sajadi et al. (2017) in their study results revealed that the 65% of variance is explained by intellectual capital in organizational entrepreneurship of the staff. The study also revealed that, there was found significant and positive correlation between the elements of intellectual capital and organizational entrepreneurship, by using the Pearson's correlation co-efficient. Thus present study endeavors to find out the relationship between intellectual capital and intraprenueship development in the selected IT firms in Northern India.

METHODOLOGY

Present Study

The above mentioned and other similar studies made the plot for present study. The researchers attempt to study intellectual capital and intraprenuership development in the selected IT firms in Northern India. The standardized questionnaire is distributed to the middle level employees who has wok experience of minimum 3 years of 6 top IT firms of northern India i.e. TCS, Cognizant, Infosys, Wipro, HCL technologies and Tech Mahindra. The list has been provided by Data Quest in the year 2017 of Top 20 IT firms in India. A total of 240 employees from six IT firms were approached out of which 185 respondents respond the questionnaire thus yielding 77.03%.

Objectives

The paper studies the relationship between intellectual capital and intraprenuership development. The main objectives of the study are as follows:

1. To find the relationship between Intellectual Capital and Intrapreneurship Development in the selected IT firms in Northern India
2. To find the relationship between the dimensions of Intellectual Capital and Intrapreneurship Development in the selected IT firms of Northern India.

- To find the relationship between human capital and Intrapreneurship Development in few selected IT firms of Northern India.
- To find the relationship between Structural capital and Intrapreneurship Development in the selected IT firms of Northern India.
- To find the relationship between relational capital and Intrapreneurship Development in the selected IT firms of Northern India.

Hypothesis

H1. Intellectual Capital is positively related to intrapreneurship Development in selected IT firms of Northern India.

H1a. Human Capital is positively related to intrapreneurship Development in selected IT firms of Northern India.

H1b. Structual Capital is positively related to intrapreneurship Development in selected IT firms of Northern India.

H1c. Relational Capital is positively related to intrapreneurship Development in selected IT firms of Northern India.

Research Design

The study is descriptive and empirical in nature. A total number of 240 respondents from 06 IT firms (source Data Quest) were contacted, out of which 185 people useful for the purpose of analysis have responded thus yielding a response rate of 77.08%.

Data Collection Tools

Primary data were collected through standardized questionnaire. The questionnaire of intellectual capital developed by Bakshi and Chahal (2016) was used. This measure consists of 36 items divided into three dimensions i.e. human capital, relational capital and structural capital. The questionnaire of intrapreneruship development developed by Hill (2003) used. This measure consists of 35 items divided into seven dimensions i.e. intrapreneurial growth, brand image, collaborative approach, democratic leadership, employee autonomy, knowledge management and entrepreneurial growth.

Reliability and Validity Analysis

The reliability of the research study was tested using the reliability analysis coefficient called cronbach's alpha. Given below in Table 1

Table 1

Variable	Dimensions	Number of Items	Cronbach's Alpha
Intellectual Capital	Human Capital	13	**.934**
	Structural Capital	7	
	Relational Capital	16	
Intrapreneurship Development	IntrpreneurialGrowth	6	**.936**
	Brand Image	4	
	CollaborativeApproach	3	
	Democratic Leadership	5	
	Employee Autonomy	4	
	KnowledgeManagement	6	
	Entrapreneurial Growth	7	

Note: Values of 0.70 and above testifies strong reliability of the scale

Data Analysis

Pearson's correlation was used to investigate the relationship between intellectual capital and intrapreneurship development. As shown in table 2, relations between all the variables are found to be significant at 0.01 level and there was no violation of assumptions of homoscedasticity and linearity. In the case, the strongest relation is between intellectual capital and intrapreneurship development ($r=.862$, $p<0.01$) the dimensions of intellectual

capital namely; human capital (r= .762, p<0.01), structural capital (r= .874, p<0.01) and relational capital (r= .792, p<0.01) have a positive and significant relationship with intrapreneurship development in the few selected IT firms of northern India.

Results show a positive and significant relationship between intellectual capital and its dimensions with intrapreneurship development in the few selected IT firms of northern India. The correlation between intellectual capital and intrapreneurship development is 0.862, at significant level .01 or 99%.

Table 2: Correlation Analysis of Intellectual Capital and its Dimensions with Intrapreneurship Development

		Human Capital	**Relational Capital**	**Structural Capital**	**Intellectual Capital**
Intrapreneurship Development	Pearson Correlation	.762**	.792**	.874**	.862**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	185	185	185	185

**. Correlation is significant at the 0.01 level (2-tailed).

From the above results it can be concluded that hypotheses:

H1. Intellectual capital is positively related to intrapreneurship development in the selected IT firms of Northern India. - **Accepted**

H1a. Human capital is positively related to intrapreneurship development in the selected IT firms of Northern India. - **Accepted**

H1b. Structural capital is positively related to intrapreneurship development in the selected IT firms of Northern India. - **Accepted**

H1c. Relational capital is positively related to intrapreneurship development in the selected IT firms of Northern India. – **Accepted**

It can be rightly said that intellectual capital played an important role in today's organizations in determining the relationship with intrapreneurship development. It was also found that to attain better atmosphere for entrepreneurial activities in the organizations, intellectual capital is must.

The results were similar to the findings of Sajadi et al. (2017) stating that there was a significant correlation between the elements of intellectual capital and organizational entrepreneurship (intrapreneurship development). Other similar studies conducted were Kia et al. (2013) and Alipour et al. (2012). Thus, for a successful long term growth of the organization, the inter-relationship of both the variables plays a vital role.

Findings and Discussions:

As the strongest association was observed between intellectual capital and its dimension with intraprenuership development, thus, it is recommended that to attain better atmosphere for entrepreneurial activities in the organizations, intellectual capital is must. Intellectual capital played an important role in today's organizations in determining the relationship with intrapreneurship development. Thus, for a successful long term growth of the organization, the inter-relationship of both the variables plays a vital role.

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