A STUDY RELATING TO AWARENESS AND RECOGNITION OF STRUCTURAL CAPITAL BY ACCOUNTING PROFESSIONALS

ABSTRACT
To complement a firm's human capital, the structural capital (or "organizational" capital) provides the necessary infrastructure for coordinating efforts and turning knowledge into products. As with other types of intellectual capital, it emphasizes the importance of knowledge-based assets in the production function. Structural capital represents a company's "know-how" that is embodied in corporate processes, tools, and organizational structure. It includes a firm's unique capabilities, proprietary tools and data, corporate technologies, intellectual property, as well as structures and mechanisms that aid in collaborative design and project execution.

Key Words: *Structural capital, Intellectual Capital*

INTRODUCTION

Structural Capital (SC) is the backbone of the organization. It is the skeleton and glue of an organization. Its value depends on how well it enables a company to package, move and use human capital - the company's knowledge-in service to corporate goals. Structural capital is not to be confused with equipments which are already on the books as assets. Structural capital consists of organizational processes and systems, software and databases, business processes and brands; structural capital provides the necessary infrastructure for coordinating efforts and turning knowledge into products. As with other types of intellectual capital, it emphasizes the importance of knowledge-based assets in the production function. To extend an earlier metaphor: if human capital is an engine for the firm, then structural capital serves as its vehicle for product development and value creation.

REVIEW OF LITERATURE

Organizational culture is a source of sustainable competitive advantage (Barney, 1986). It is defined as shared perception of organizational practices within organizational units and shared assumptions and understandings, often at a no conscious level (Lund, 2003). . Brookings identified six key components to structural capital namely Management philosophy, Corporate culture, Information technology systems, Management processes and Financial relations. Band (1991) suggested that culture is reflected in an organization's market orientation, strategy direction, human resources policies and practices, internal networks, and information sharing. It is defined as shared perceptions of organizational members and also practices within an organization. Culture is reflected through management orientation and strategy direction of organizations, it also includes information systems. Information system refers to IT usage in managing knowledge. Finally, the process directly affects day to day actions and companies having unique process enjoy high level of SC. These elements of SC were identified with 15 indicators by means of extensive survey of literature.

OBJECTIVES OF THE STUDY

- To study the level of awareness and also the recognition of Structural Capital Indicators
- To study the impact of the level of IT literacy and Professional Qualification on Structural Capital Indicators

METHODOLOGY

The analysis pertaining to identifying the level of awareness and recognition about Structural Capital - a component of IC among accounting professionals in their reporting, using Likert five point scale on a set of 15 indicators -Patents , R &D Expenses, R & D to Adm. Expenses, R & D investments, IT implementation ,Database access, IT system in use, IT system to Rev. software, Software's ,Multifunctional teams, New product, Product life cycle, Product design time, IT expenses per worker and Knowledge database. Mean and Standard deviation and ANOVA were the statistical tools used for analysis.

AWARENESS OF STRUCTURAL CAPITAL INDICATORS

The Accountants perceptions about their awareness on fifteen indicators were measured with the help of Likert five point scale. The mean values are given in below table.

Table 1 – Mean and Standard deviation of awareness on SC indicators

SC Indicators	N=440	
	Mean	Std. Deviation
Patents	2.90	1.269
R &D Expenses	3.07	1.267
R & D to Adm. Expenses	2.93	1.289
R & D investments	3.24	1.314
IT implementation	3.71	1.256
Database access	3.80	1.197
IT system in use	3.76	1.087
IT system to Rev. software	3.50	1.141
Software's	3.58	1.195
Multifunctional teams	3.51	1.270
New product	3.38	1.386
Product life cycle	3.28	1.384
Product design time	3.09	1.348
IT expenses per worker	3.26	1.251
Knowledge database	3.65	1.224

The above table clearly indicates that accountants' awareness on SC components is slightly lower. It is evident from the results that the mean values on fifteen SC indicators range from 2.93 to 3.80 The level of awareness on process related and R & D items are minimal. A Lower level of awareness clearly indicates that a proper consideration should be made for enhancing the level of knowledge on SC. This can be made possible only by providing orientation to the accountants by means of circulars, seminars and workshops by their affiliated institutions.

RECOGNITION OF STRUCTURAL CAPITAL INDICATORS IN REPORTING

The next level of analysis was carried out about the recognition of structural capital components. Application of these fifteen SC indicators in their reporting is given in table 2.

TABLE 2 – MEAN AND STANDARD DEVIATION OF RECOGNITION OF SC INDICATORS.

SC Indicators	Useful in reporting	Not used in Reporting	Undecided
Patents	120 (27.3)	237 (53.9)	83 (18.9)
R &D Expenses	160 (36.4)	199 (45.2)	81 (18.4)
R & D to Adm. Expenses	167 (38)	190 (43.2)	83 (18.9)
R & D investments	193 (43.9)	167 (38)	80 (18.2)
IT implementation	266 (60.5)	99 (22.5)	75 (17)
Database access	251 (57)	113 (25.7)	76 (17.3)
IT system in use	281 (63.9)	77 (17.5)	82 (18.6)
IT system to Rev. software	231 (52.5)	132 (30)	77 (17.5)
Software	232 (52.7)	127 (28.9)	81 (18.4)
Multifunctional teams	218 (49.5)	146 (33.2)	76 (17.3)
New product	216 (49.1)	141 (32)	83 (18.9)
Product life cycle	184 (41.8)	174 (39.5)	82 (18.6)
Product design time	170 (38.6)	184 (41.8)	86 (19.5)
IT expenses per worker	210 (47.7)	152 (34.5)	78 (17.7)
Knowledge database	260 (59.1)	109 (24.8)	71 (16.1)

After identifying the level of awareness on SC components, the next level of analysis was carried out with regard to recognition of SC components in their reporting.

The above table indicates the usage of the structural Capital indicators in their reporting. The recognition concept was measured by the mean of usage of SC components in their reporting. Since the level of awareness of the SC components is low the recognition of SC is also minimal in their reporting. It is evident from the table that a majority of the indicators usage in the valuation of IC is low Of the total sample of 440 accounting professionals, respondents agree upon the application of each of these indicators in their reporting ranging from to 27 to 60 percent to different indicators while 22 to 53 percent of the samples have disagreed about usage of these indicators and less than 18 percentage are indecisive. Though a majority of the sample accountants are using structural capital indicators in their reporting, the level of usage is low. The usage of indicators in reporting can be improved only by creating better awareness of SC indicators.

IMPACT OF THE LEVEL OF IT LITERACY ON STRUCTURAL CAPITAL INDICATORS AWARENESS

The IT literacy level of the respondents (grouped as high, medium and low) plays a very vital role in the recognition of SC indicators. The mean value of the accountants perceptions on fifteen SC indicators based on these three categories of respondents are given in table 3

Table 3 – Mean and F values of SC indicators related to IT literacy levels

SC Indicators	Level of IT literacy			F- value	P
	Low	Medium	High		
Patents	3.01	2.84	2.97	0.816	0.443
R &D Expenses	3.23	2.95	3.36	3.246	0.040
R & D to Adm. Expenses	3.04	2.86	3.00	0.870	0.419
R & D investments	3.38	3.19	3.11	1.097	0.335
IT implementation	3.95	3.58	3.75	3.927	0.020
Database access	4.00	3.70	3.78	2.778	0.063
IT system in use	3.92	3.68	3.69	2.250	0.107
IT system to Rev. software	3.58	3.47	3.33	0.800	0.450
Software's	3.77	3.49	3.64	2.632	0.073
Multifunctional teams	3.77	3.44	3.17	4.492	0.012
New product	3.61	3.31	3.06	3.252	0.040
Product life cycle	3.40	3.25	3.11	0.838	0.433
Product design time	3.18	3.11	2.64	2.368	0.095
IT expenses per worker	3.48	3.23	2.75	5.163	0.006
Knowledge database	3.89	3.58	3.33	4.323	0.014

ANOVA was carried out to test whether any significant difference exists in the perceptions of the accountants' based on this grouping. It was noticed that out of 15 indicators of SC , there is no significant difference among the 9 indicators namely patents, R&D to administration expenses, R&D investments, IT system in use, IT investments to rev software's, multifunction teams, product design time IT, expenses per worker and Team building. Lower mean ratings of SC indicators also indicate the restrained recognition of the same. Hence, it can be concluded that the perception of majority of the indicators do not vary significantly in relation to levels of IT literacy of the sample accountants.

PROFESSIONAL QUALIFICATION AND AWARENESS OF STRUCTURAL CAPITAL INDICATORS

The respondents were grouped on the basis of professional qualification and ANOVA analysis was carried out based on accountants' professional qualification also. The mean values of accountants' perception on fifteen SC indicators with F value and significant level are given in table 4

TABLE 4 – MEAN VALUES AND F VALUES OF SC INDICATORS RELATED TO PROFESSIONAL QUALIFICATION

SC Indicators	CA	ICWA	ACS	Others	F-value	P
Patents	2.66	2.90	2.85	3.26	6.626	0.000
R &D Expenses	2.86	3.25	3.31	3.25	3.587	0.014
R & D to Adm. Expenses	2.70	3.18	3.23	3.12	4.637	0.003
R & D investments	3.07	3.65	3.73	3.27	4.211	0.006
IT implementation	3.77	3.73	3.92	3.58	0.975	0.404
Database access	3.88	3.78	4.04	3.64	1.499	0.214
IT system in use	3.74	3.80	4.23	3.68	1.965	0.119
IT system to Rev. software	3.40	3.75	3.73	3.51	1.727	0.161
Software's	3.65	3.73	3.19	3.50	1.649	0.177
Multifunctional teams	3.42	3.75	3.88	3.50	1.699	0.167
New product	3.21	3.65	3.54	3.50	2.123	0.097
Product life cycle	3.05	3.75	3.46	3.44	4.848	0.002
Product design time	2.94	3.39	3.15	3.19	2.025	0.110
IT expenses per worker	3.08	3.61	3.38	3.38	3.336	0.019
Knowledge database	3.73	3.53	3.35	3.64	0.995	0.395

It was noticed that the mean values among the three categories were moderately distributed and its F values also indicated that on majority of indicators there is no significant difference. Only for the indicators such as patents, R&D expenses, R&D to administration expense, R&D investments, Product life cycle, expenses per worker, a significant difference was identified. Hence, it can be concluded that the perception of majority of the indicators do not vary significantly in relation to their professional affiliation.

FINDINGS

The above analysis reveals that the majority of the indicators of Structural Capital have gained a fairly good recognition. 27– 60 percent of the Accounting Professionals have agreed to the usage of structural capital indicators. It is understood that the accounting professionals' level of awareness and recognition is moderate relating to structural capital. Variations are exhibited in the perception of structural capital indicators in relation to IT literacy level of the respondents. The analysis also depicts that there is no significant variation in the perception of Structural Capital indicators based on the professional qualification of the respondents.

CONCLUSION

The emergence of knowledge management field demonstrates the positive effect that improving structural capital value can have on corporate profitability. The way in which a company uses its information technology and networking systems would definitely have a profound effect on its ability to do business on a global level to assure uniform standards of quality in different locations. It also helps to share important information relating to customers, production innovations and new management processes. The challenge in valuing Structural Capital is in measuring how well it serves a company's goals. Structural capital can be either a liability or an asset. Investing in a computer network does not necessarily increase the value of structural capital. In fact, it is the way in which the network is used to increase profitability that matters.

REFERENCE

- Barney, J.B(1986). Organizational culture: can it be a source of sustained competitive advantage? Academy of Management review, 11(3), 656-665.
- Lund, D.B. (2003). Organizational Culture and Job Satisfaction. Journal of Business & Industrial Marketing, 18(3), 219-237.