

DOCUMENTATION HR CONFIGURATION, ORGANISATION CAPITAL & BOTTOM-LINE- A CASE OF INDIAN IT SECTOR

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ABSTRACT

Since organizational knowledge is at the crux of sustainable competitive advantage, the burgeoning field of intellectual capital in general and organisational capital specifically is an exciting area for both researchers and practitioners. The thrust of the research work is to examine operational HR practices and procedures of Indian Software organisations. Three sets of questionnaires were designed on documentation HR practices, organisational capital and organisational performance in five point likert scale and were administered on the basis of field survey to the top management team of Indian software companies randomly. The outcome of the study shows that documentation HR configuration is positively related to a firm's level of organization capital which in turn adds appreciably to the organizations bottom-line.

Keywords: *HR configuration, knowledge documentation, knowledge codification, organization capital, bottom-line*

Introduction:

With the globalisation of the economy that put more emphasis on creativity and innovation, organisations are increasingly competing on the basis of intellectual assets. Drucker (1993) stressed the importance of development of new economic theory that puts knowledge at the centre of wealth creation. He (Drucker, 1994) added to it by saying, "We are entering the knowledge society in which the basic economic resource is no longer capital or natural resources, or labour but is and will be knowledge". It is also pointed out by Stewart (1997) that firms are entering the new economy, where knowledge and information "have become the economy's primary raw material and its most important outcome". Similarly it is very clearly stated by Pablo, (2003), knowledge has become the strategic resource for firms competing in dynamic environment. Business leaders (Davenport & Prusak: 2000, p. 23) and Sharon et al, (2000) talk about knowledge as the chief organizational asset and the key to a sustainable competitive advantage and effective knowledge management (KM) initiatives won't take hold unless they are supported by an organization's culture, structure, system and process. Although organizations increasingly recognize knowledge as a key source of competitive advantage, one of the challenges of knowledge management is that of getting people to share their knowledge. Knowledge is created only by individuals. An

organization cannot create knowledge on its own without individuals and knowledge created by individuals amplifies and crystallizes at the group level through dialogue, discussion, experience sharing, or observation, documentation and codification.

However, Knowledge is a significant asset that must be managed and shared to maximise its value to the company. In today's enterprise, where so much depends on teamwork and collective knowledge, it is only a handful of people who have knowledge. Unless these veteran silo users continually transfer his wisdom to the less experienced up-coming future stars of the organization, other users and the company will suffer. Failure to share knowledge could cause the firm to be less competitive, lose market share, and possibly go out of business. After all, when an employee departs the firm, either voluntarily or involuntarily, all the knowledge he has accumulated over the course of his career leaves the firm as well. In order to mitigate the risk of personnel changes disrupting business operations, it is crucial to manage user knowledge and constantly document and update a firm's best practices, processes, and procedures. As a result of which knowledge *needs* to be explicitly documented and shared between employees in order to have effective knowledge management practices.

HR configurations facilitate flow of knowledge leading towards sustainable competitive advantage and play key

role for human resource management and human resource development for effective knowledge management practices. In knowledge intensive service based industries HR practices have immediate effect on its stock of intellectual talent. Hence management, measurement and control of such resources have become a source of managerial action. The idea of knowledge in the form of human capability or human resources is the key in driving organisational performance and success in modern learning organisations. They are value creators and value adders whose major contributors came from their abilities to process and apply knowledge and information to completing tasks, making decisions and solving problems. The management of knowledge workers in to-days organisation and society where there are increased educational and learning opportunities requires organisational leaders and policy planners to rethink and redefine their roles as knowledge leaders whose very duties and responsibilities are to develop a system of participative knowledge sharing in attempting to solve organisational problems, accomplish mission and vision, critical tasks, manage effectively and survive. With the aforementioned background the study aims at probing into operational HR architecture of software sector of Indian economy and purported that, a documentation HR configuration focused on knowledge documentation, employee work redesign, and employee suggestion system is positively related to firm's level of organisational capital which in turn adds to organisation bottom-line.

Objective:

Objectives of the study are to examine the operational documentation HR practices of the Indian software companies and the idiosyncrasies created by it for enhancing organisational capital. The research thrust also proposes organisation capital as a unifying managerial construct to manage and report on intangibles and focuses on looking into the role of organisational capital on future value creation of the organisation by driving its bottom-line.

Literature Review:

Organisation Capital:

As stated by Winter (1987, p. 171), "the organization is accomplishing its aims by following rules that are not known as such to most of the participants in the organization". This construct is known as organisational capital or structural capital and deals with the mechanisms and structures of the organization that can provide support to the employees in their quest for optimum intellectual performance and thereby overall business performance. In other words, the intellect of individuals, need proper organisational systems and procedures which track his or her actions and thereby the overall intellectual capital reach at its fullest potential.

Roos et al, (1997) defined organisational capital as the knowledge that stays within the company at the end of the working day. According to Bontis et al (2000),

organisational capital encompasses all the nonhuman store houses of knowledge in organisations which include the databases, organisational charts, process, manuals, strategies, routines and anything whose value to the company is higher than its material value. Pablo (2003) extended the element of organisational capital into quality improvement to assess accreditations and certifications in the firm. Brooking, (1996) suggested organisational capital should include management philosophy, corporate culture and financial relations. Roos et al (1997) has also added the importance of culture since people require different management methods from organisational capital. Moreover, Fernandez et al (2000) extends the scope towards the norms and strategic alliance that constituted organisational capital.

Edvinson and Malone (1997) convinced that organisational capital can be broken into innovation capital and process capital. Innovation capital refers to the explicit, packaged result of innovation in the form of protected commercial rights, intellectual capital and other intangible resources and value. Process capital is "the combined value of value creating processes". Brooking (1996) pointed out that the organisational capital can be devised into two elements namely infrastructure assets and intellectual property, in the case of infrastructure assets, brooking has included all the technologies and processes, which enable a company to function. Similarly Stewart (1997) classifies information technology under this category. Brooking (1996), Ross (1998) and Stewart (1997) have included trademarks and patents into organisational capital. Bontis (1999) however has excluded intellectual property (IP) stating that IP is a protected asset as a legal definition.

However Organisational capital belongs to the organisation as a whole has been defined by Youndt *et al.* (, 2004), as the institutionalized knowledge and codified experience residing within firms utilized through databases, patents, manuals, structures, systems, routines and processes. Organisational capital is extremely important to organisations, as it is the only type of intellectual capital the organisation actually owns. This form of capital is more of an enabler, as it allows the firm to hold on to knowledge as incoming employees replace those leaving. Organisational capital offers established databases and technology conduits. It allows firms the ability to better share practices across subunits within the organisations.

An organization with strong organisational capital will have a supportive culture that allows individuals to try things, to fail, to learn, and to try again. In effect, without organisational capital, intellectual capital would just be human capital. This construct therefore contains elements of efficiency, transaction times, procedural innovativeness and access to information for codification into knowledge. It also supports elements of cost minimization and profit maximization per employee. The essence of organisational capital is the knowledge embedded within the routines of an organization. HR's primary responsibilities in developing organisational capital centre on creating and filling knowledge storage devices or bins.

Institutionalising organisational capital – (Doc- HRC):

Codification and documentation of knowledge may refer to representation of knowledge. It includes converting tacit knowledge into explicit and usable form, converting undocumented information into documented information as well as representing and organising knowledge before it is accessed and making institutional knowledge visible, access able and usable for decision making. Codification and documentation of knowledge may go back to scientific management age of Fredric Taylor (1911) who attempted to formalise workers' experiences and tacit skills into objective rules and formulae. Barnard (1938) extended scientific management by also considering "behavioural knowledge" in management processes. Simon (1945) was also influenced by the development of the computer and cognitive science and its nature in the processes of decision making while performing administrative function. As defined by Davenport and Prusak, (1998, p. 68) and Tiwana, (2000), knowledge documentation or codification refers to the mechanisms that an organization uses to institutionalize its knowledge so that it can be reused in the future. These mechanisms are in the forms of documents, databases, pictures, illustrations, spreadsheets on a disk, e-mails, and video tapes, web pages to make it explicit, portable, accessible and usable.

According to Nonaka and Takeuchi (1995, p. 8) "knowledge documentation helps individuals internalise what they have experienced, thereby enhancing tacit knowledge". He (1995, p. 59) also suggested that the productivity of new knowledge involves "a process that organizationally amplifies the knowledge created by individuals and crystallizes it as a part of the knowledge network of the organization". According to him documentation or manuals facilitate the transfer of explicit knowledge to other people, thereby helping them experience the experiences of other indirectly. Schulz (2001) found that higher the level of codification of the domain knowledge, the stronger the horizontal and vertical out flow of knowledge. Institutionalising knowledge in databases, manuals, and standard operating procedures most likely requires HR's involvement in knowledge codification. For example, encouraging employees to write, "Lessons learned" reports after learning experiences like sabbaticals, employee exchange programs, projects etc facilitate the development of organisational capital. Similarly, encouraging employees to continuously update electronic resumes, knowledge "yellow pages" and other knowledge-mapping devices, as well as supporting the formal documentation of customer suggestions, complaints, preferences, etc are also likely to help build better organisational capital.

Beyond these methods for codifying explicit knowledge, HR systems can also play a role in helping to institutionalise tacit knowledge that is more informal and difficult to articulate. For example, empowering employees to initiate the redesign of their work may be a useful method for capturing organisational capital. As employees redesign work systems and structures, their

knowledge can become institutionalised in organisational routines, procedures, and the like. Similarly, employee suggestion systems may also help the entire organisation to expose to individual knowledge. Hence the Hypothesis for the study is:

HYPOTHESIS 1:

A documentation HR configuration (DOC-HRC) focused on knowledge documentation, employee work redesign, and employee suggestion system is positively related to a firm's level of organisational capital (OC)

3.2 Organisational Capital & Performance

According to Dixon (1994) organisational capital can play a significant role in reducing organisational costs as well. Those cost reductions result from three primary forces. First, when failure leads to learning it can be the ultimate teacher. Thus, institutionalised experience and knowledge (organisational capital) can prevent organisations from repeating mistakes, thereby reducing their operating costs. Second, organisational capital can be retrieved and brought to bear on new situations. Whether this institutionalised knowledge is used "wholesale" in its current form, or transferred to meet existing needs, it reduces costs by eliminating the need to "reinvent the wheel". Lastly, organisational capital embedded in routines, procedures, information systems, and the like can help filter information as well as direct and simplify information processing and organisational sense making diminishing organisational costs.

These three forces (minimising repeat mistakes, increasing knowledge utilisation, and facilitating better information processing/ sense making) enable organisational capital to reduce organisational costs and extend customer benefits. Minimising mistakes helps organisations increase their speed to market with new products and services. Organisational members can access stored knowledge directly and use their entire company's knowledge-base to quickly and accurately address customer issues.

Additionally, storing important customer information in organisational memory devices enables companies to better keep track of their customer's preferences, needs, behaviours, etc, thereby increasing customer alignment and, hopefully, customer benefits and satisfaction. Malone and Rockart (1993) indicated that latest change in information technology would lead to evolution of new technology intensive organisational structures. As a result of which there would be dramatic decline in the costs of co-ordination. As pointed out by Dess and Picken (1999, p 11), the role of organisational capital is to link the resources of the organisation together into processes that create value for customers and sustainable competitive advantage for the firm. Hence the hypothesis for the study is:

HYPOTHESIS 2:

An organisation's level of organisational capital (OC) is positively related to organisational performance (OP).

Method:

Sample and Procedure:

Top management team of various Indian IT companies engaged in software business and located in and around Bhubaneswar, ORISSA was the target group of the study. Top management team (TMT) refers to all those who are decision makers and event makers in the organisation. This includes the owners, board of directors, departmental heads, delivery manager, unit heads and project heads too. Participants were contacted personally as well as via an e-mail. Follow up requests to complete the online survey were e-mailed two weeks later. Although initially the targeted sample was 150, finally 126 respondents completed the survey process and returned the questionnaires back. Respondents ranged in age from 21 to 45, 26% were female and 73% were male. 44 % of the respondents have on an average 10 years experience in the industry where as 56% posses more than 10 years experience.

Measures:

Documentation HR configuration was measured with eight items from Youndt et al. (2004) study with a little modification and coded 1= strongly disagree, 5= strongly agree. The items included our training and development incorporate team building and we encourage group based incentives and so on. This measure has Cronbach’s alpha of 0.71.

For the present study, the items to measure organisational capital were quoted from Youndt et al. (2004) study and comprises of six variables. The items too coded as 1= strongly disagree, 5=strongly agree. The items taken into account are, much of our organisation’s knowledge is contained in manuals, and databases and our organisation embeds much of its knowledge and information in structures, systems and processes etc. This measure has Cronbach’s alpha of 0.69.

So far as firm performance is concerned, In many cases financial performance measures such as percentage of sales resulting from new products, profitability, capital employed and return on assets (ROA) (Selvarajan et al., 2007). Besides, return on investment (ROI), earnings per share (EPS) and net income after tax (NIAT) can also be used as measures of financial performance (Grossman, 2000). Interestingly, researchers also tend to benchmark managerial accounting indicators against the financial measures in six dimension; ‘workers compensation’ (workers’ compensation expenses divided by sales); ‘quality’ (number of errors in production); ‘shrinkage’ (e.g. inventory loss, defects, sales return); ‘productivity’ (payroll expenses divided by output); ‘operating expenses’ (total operating expenses divided by sales) (Wright et al., 2005).

On the other hand, firm performance can also be measured using ‘perceived performance approach’ (also referred to as subjective performance measure) where Likert-like scaling is used to measure firm performance from the top management perspectives (Selvarajan, 2007). The primary reason is that some of

them are leading indicators of financial performance (Kaplan and Norton 1992; 2001). In the present study organisation performance was measured with 18 items, under the domain of customer service, quality, productivity and innovation. The items were coded 1= strongly disagree, 5= strongly agree. The questionnaire was designed from the balance scorecard literature of Kaplan and Norton (1992) from three perspectives under the domain of customer, internal process and innovation and learning. The items incorporated were, customers are delighted with our service capabilities and our defect injection rate is below the industry average and so on. This measure has Cronbach’s alpha of 0.72.

Results:

All variables used in the study exhibited normal distributions. The descriptive statistics with mean, standard deviation and co-relations are shown below.

Co-relation and descriptive statistics of the study variables

Variables	Mean	SD	1	2	3
1. Documentation HR configuration	3.61	0.58	-		
2. Organisational capital	3.77	0.41	0.406	-	
3. Organisational performance	3.68	0.53	.878	0.572	-
N=126 p<0.01					

Source: Data Analysis by author

Simple regression analysis was conducted to establish the relationship between documentation HR configuration, organizational capital and organizational performance with the help of SPSS controlling size of the organization. It was found that, Documentation HR configuration (Beta = .245, p<.05) was significantly related to organizational capital corroborating Hypothesis 1 and organizational capital (Beta = .396, p < .05) too was significantly related to organization performance supporting Hypothesis 2.

Contribution and Future Direction of the Study:

The study can help in propelling other organisations within India as well as across globe to understand the importance of organisational capital which is a significant source of firms’ value in the event of information and communication era. It is thereby, they may focus and invest more on their organisational capital and translate more of their human capital to organisational capital since the organisational capital is the only capital that is owned by the organisations.

Conclusion:

Organizational capital represents the organization’s capabilities to meet its internal and external challenges. Since the software companies are basically decentralized sector and human capital intensive in nature they are trying to document valuable information about organization’s important process and procedure for further reference by users. They are having systematized, packaged and codified competencies as well as proper systems for leveraging that capability. They invest in systems,

operational philosophy, and suppliers and distribution channel so as to strengthen their organisation capital. The increasing sophistication of management of knowledge and information technology of the organisations has led to automation of more and more repetitive tasks resulting in economies of scale which are major sources of competitive advantage. That is how the company's knowledge management process is converting human capitals, into organisation capital so as to make it shareable.

Knowledge documentation helps the organisations to replicate many successful approaches. Lessons learned are shared and integrated, success or opportunities for improvement are discovered from past experience of the companies. As part of the continuous improvement process, documenting lessons learned and promising practices helps the organisations to discover the cause of critical problems that occurred and how to avoid those problems in future roll-out. Organization capital plays critical role in commercialization of innovations too. They also engage in customer networking activities to better target commercialization of marketing efforts and ongoing process of knowledge documentation helps in preservation and sharing of organisational knowledge and business excellence. Moreover it helps the employees to do their day to day job optimally and effectively.

References:

- [1] Berglund, R., Gronvall, T., Johnson, M. and Edvinsson, L. (2002), 'Intellectual capital's leverage on market value', unpublished Master's thesis, Lund School of Economics and Management, Lund University, Lund.
- [2] Bontis, N. (2001). "Review of Organizational Learning by Schwandt and Marquardt", *Management Learning*, 32(2), 274-277.
- [3] Bontis, N.(1999) Managing Organisational Knowledge by Diagnosing Intellectual Capital: Framing and advancing the state of the field. *International Journal of Technology Management* 18(5/6/7/8):433-462
- [4] Bontis, N., Chang, W.C. and Richardson, S. (2000) Intellectual Capital and business performance in Malaysia Industries, *Journal of Intellectual Capital* 1(1): 85-100
- [5] Brooking, A.(1996) Intellectual Capital – Core Asset for the third Millennium Enterprises, International Thomas Business Press, London 8(12-13):76-92
- [6] Davenport, T.H. and Prusak, Laurence. (2000). *Working Knowledge: How Organizations Manage What They Know*. Boston, Massachusetts: Harvard Business School Press.
- [7] Davenport, Thomas H., and Lawrence Prusak. (1998). *Working Knowledge: How Organizations Manage What They Know*. Cambridge, MA: Harvard Business School Press.
- [8] Dess, G. and J. Picken(1999). *Beyond Productivity: How Leading Companies Achieve Superior Performance by Leveraging their Human Capital?* New York: American Management Association.
- [9] Dixon, N. M. (1994). *The organizational learning cycle: How we can learn collectively*, New York: McGraw-Hill.
- [10] Drucker, P.F.(1994), *post capitalist society*, Harper Business.
- [11] Edvinsson, L. and Malone, M.(1997) *Intellectual Capital*. Harper Business, Newyork
- [12] Fernadez, E., Montes, J.M. and Vazquez, C.J.(2000) *Typology and strategic analysis of intangible resources: A resource based approach*, *Technovation* 20(2): 81-92
- [13] Frederick W. Taylor (1911); *The Principles of Scientific Management*
- [14] Malone, T., & Rockart, J. (1993). How will information technology reshape organizations? In S. Bradley, J.Hausmann, & R. Nolan (Eds.), *Globalization, technology, and competition: the fusion of computers and telecommunications in the 1990s* . Boston: Harvard Business School Press.
- [15] Pablo, P.O.(2003), *Intellectual capital reporting in Spain: a comparative view*. *Journal of Intellectual Capital* 4(1):61-81
- [16] Roos, G., Roos, J., Edvinsson, L. And Dragonetti, N. C.(1997), *Intellectual Capital –Navigating in the New Business Landscape*: New York University Press. New York, NY
- [17] Roos, J. (1998), *Exploring the concept of intellectual capital (IC)*. *Long range planning* 31(1), 150-153
- [18] Simon, H.A. (1945); *Administrative Behaviour*; The Free Press
- [19] Stewart, T., (1997), 'Intellectual Capital: The New Wealth of Organisations,' *Doubleday Business*, New Work, USA.
- [20] Sharon, J., Sasson, L., Parker, A., Horvath, J., and Mosbrooker, E. (2000). *Identifying the Key People in Your KM Effort: The Role of Human Knowledge Intermediaries*. *Knowledge Management Review*, 3 (5), 26-29.
- [21] Selvarajan, T., Ramamoorthy, N., Flood, P. C. , Guthrie, J. P., & MacCurtain, S. (2007, August). *The Role of Human Capital Philosophy in Promoting Firm Innovativeness and Performance: Test of a Causal Model*. *International Journal of Human Resource Management*, Vol.18, No.8, pp: 1455-1469.
- [22] Tiwana, A. (2000). *The knowledge management toolkit: Practical techniques for building a knowledge management system*. Upper Saddle River, N.J: Prentice-Hall, Inc.
- [23] Winter, S.G.(1987) , *knowledge and competence as Strategic Assets. The competitive challenge : strategies of industrial innovation and renewal* .David J. Teece (Eds), Cambridge, MA: Ballinger Publishing Company.159-184
- [24] Wright P. M., Gardner L. M., Moynihan L.M., & Allen M.R. (2005). *The relationship between human resource practices and firm performance: Examining causal order*. *Personnel Psychology*, 58, PP: 409-446.
- [25] Youndt, M. A., and Snell, S.A., (2004), *Human Resource Configurations, Intellectual Capital, and Organizational Performance*, *Journal of Managerial Issues*, Vol.16, No.3, pp: 337 - 361
