

The Survey of Correlation between Social Capital and Knowledge Management (The Case Study in National Refining and Distribution of Oil Company in Iran (Shiraz))

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Abstract

The aim of current study's aim is to investigate the relationship between social capital & the knowledge management in the Iranian National Company of Oil Refining and Distribution. Therefore, after a thorough literature review, the researcher has chosen the Filius knowledge management model, with the four dimensions of knowledge acquisition, knowledge documentation, knowledge transfer, knowledge creation and knowledge application and a model for social capital with five dimension that Mr.molaii used for her research

The standard scale for the KM is consisted of 33 statements and the social capital is consisted of 31 statements.

The statistical sample of this study was the manager and employees of Iranian National Company of Oil Refining and Distribution, therefore based on a random sampling method, we have survey 60 respondents, among these respondents, 11 belonged to the general engineering unit and 8 belonged to refinement engineering unit, 8 belonged to technical inspection, 13 belonged to financial unit, 15 belonged to supplies and store units and 5 belonged to clerical unit.

Based on the proposed research model, we have examined the research hypothesis, which consisted of one main hypothesis and five sub hypothesis. At last, the research hypotheses were tested by Spearman Correlation Factor and four hypotheses were accepted and one of them weren't accepted and their significance factor was confirmed.

Afterward, by the multi factor data analyze, it was noticed that the independent variables of research has multi dimension correlation with km as a dependent variable.

Keywords: Capital, Knowledge, Social Capital, Knowledge Management.

Introduction:

Social capital is a new concept that plays a greater vital role than physical and human capital in organizations. Nowadays in sociology and economics and quite recently in management and organization the social capital has been used widely. The social capital concept considers the communications and relations of a network members as a valuable resource that by creating norms and mutual confidence provides the members goals achievement. In the absence of social, then the other capitals lose their effectiveness and the continuation of development routines and cultural and economic evolution become difficult. Social capital either at macro-management level or at management level of an organization can create a new cognition of economic-social systems, and helps managers in better conducting of the system; many parameters have been mentioned for social capital and one of the aspects that in considering social capital must be dealt with is, this concept can contain many aspects, and the reason is, the social capital has a significant potential and capacity to fulfill a wide range of works (Nahapiet and Ghoshal, 248:1998).

Modern management has found an endless resource of competitive benefits and advantages in knowledge for an organization, by considering wide and increasing spread of this organizational necessity and accurate management commitment of this vital aspect of organization, the concept and appreciation of its effect on factors and factors which affect it must be examined. Knowledge management is known as knowledge storing, collecting, creating process and facilitating its use, so that organization can use it effectively (Turban et al 2002).

Also, social capital can facilitate the intellectual capital movement, since the intellectual capital from different aspects is based on combination of knowledge and experiences, the social capital existence facilitates the intellectual capital creation. Social capital has been theorized to play a role to develop axial merits, because they are necessary to create knowledge (Kogut and Zander, 525 :1996).

Other knowledge management definitions have been suggested that the difference of definitions could be realized from the expressed dimensions, but in any in any case. The knowledge is a vital and necessary part of nowadays organizations and could be expressed as knowledge acquisition, recording, conveyance, creating and use (Filius & Jan 2000).

The social capital existence can help the knowledge recoding, compiling, and conveyance. Social capital promotes these knowledge management processes through sharing in organization capabilities to create value in innovation model by facilitating exchange and combination of resources in an organization (Kanter,1988; Kogut and Zander, 630:1996).

Social capital:

In 1916, the social capital subject, for the first time was suggested by Honeycutt, University of West Virginia. Despite its significance in social research it was ignored until 1960 that Jean Jacob used it in civil programming in 1970s Lury entered it into economic realm. Social capital is an inter-connection course, i.e., it is used in sociology, economy, psychology, and other social realms (Renani,2006). Social capital axial idea is summarized in relationships expression, society members by communicating with each other and making it sustainable they are capable to cooperate and through this they acquire something that in alone they cannot obtain, or by a lot of difficulty is obtainable. Human beings communicate with each other through an assembly of networks are willing to have a common relationship with other members of this network. By spreading that communication, they form a kind of property

that consider it as a sort of capital. It is obvious that the more points of view among individuals the richer the social capital.

About social capital significance and necessity in organization, can be said that in the past social was not a necessary merit of organization. But at the moment, information technology's full accelerated changes, daily increased needs to information and education, necessary requirements to creativity, continuous learning and improvement, changing towards designing a flat and flexible organizational structure, and a close relation between organization and customers networks make the dealing with social capital an inevitable for organizations leaders (Rahman Pour 2003). Social capital is an available resource from networks internal of work and business. These resources include: information, thoughts, instructions, job and business opportunities, financial capitals, influence power, emotional support, benevolence, confidence, and cooperation. The social expression denotes in the title of social capital, and these resources are not private properties per se. No single person is their sole owner. These resources are located in the center of relationship networks. The capital expression denotes that the social capital like human or economic capital has productive and generative nature, i. e. , enables human brings to achieve their goals, and creates additional value. It means without social capital nobody can succeed (Baker 2002).

Social capital is a collection of actual and potential benefits, that is created by membership in social networks of activists and organizations. In the other words, it is a definite assembly of normalities or informal values, that members of a group are sharing, whose cooperation is authorized and permitted (Fukuyama 2006).

Burdio suggests the social capital as the container of valuable social relations among people (Ritz, 725:1999). Social capital is considered as structures, relations, and normalities which form the quantity and quality of social interactions in a society and like a glue sticks them to each other (world bank, 1999).

Social capital is the capital and resources, which individuals and groups can achieve through communicating with each other and regarding relationships (coleman, 96:1998). Social capital denotes the available resources in social structures internal including confidence, mutual interaction normal ties and goals that prepare individuals to fulfill collective aching, and it emerges as social relations by-product and civil engagement in informal organizations (Kawachi, 33:2001).

Social capital consists of social networks and its related normalities that influence the social utility; this denotes the horizontal relationships among people (Putnam 2000). Bert defines the social capital as friends, colleagues, and more general relations that through them the opportunities to use the economic and human capital can be achieved (ports, 315:2005).

Ports considers the social capital as activist's capabilities for achieving benefits which can be concluded by membership in social networks or in other social structures (Narayan Cassidy, 59:2001).

Social capital consists of positive interpersonal and social relation ships and meanwhile based on confidence (winter 2000).

Social capital is the individuals relations, social networks, mutual normalities, and the social confidence which is obtained through this (Putnam 2000).

Knowledge management:

Malhutra believes that, knowledge includes an organizational process which seeks a co-increment combination of data and information processing capacity by information

technology, and creativity and innovation capacity by human being. Buctiz William se (1999) defines the knowledge management as a process that an organization through which produces value and wealth by utilizing the intellectual capabilities and relying on its own knowledge. Pukek et .al., (2000), following their own experimental research define the knowledge management as the using and offering process of individuals skills and specialties in an organization that is supported by information technology.

Bahat (2001) considers the knowledge management as the process of individuals knowledge creation, offering, distribution, and application in an organization. Although all of the above definitions have several differences in the knowledge management definition and explanation, it seems that these cases have an identical consideration of the knowledge management, i.e., a process to circulate knowledge among individuals and organization as a tool to achieve innovation in processing knowledge decision making services and products and organizational conformity with competitive market dynamic environment. One can separate several main activities from knowledge management.

Bahat (2001) mentions the five major processes as follows:

- knowledge creation;
- knowledge confirmation;
- knowledge offering ;
- knowledge distribution;
- knowledge use.

Filius et al., (2000), separates the five major realms of knowledge management as follows:

- Knowledge acquisition;
- Knowledge recording;
- Knowledge conveyance;
- Knowledge creation;
- Knowledge application (Alvani and Shirvani 2006).

According to Simon and Davis(1996) knowledge management is an intelligent designing of processes, tools, structures, etc. by the intention of increment, reconstruction, subscription or the use improvement of knowledge that appears in either elements of intellectual capital, i . e . , structural, human, and social. According to sint (2004) the knowledge management definition puzzle solution is that which omits any articles that the knowledge management can not be inserted in. knowledge management includes knowledge creation, acquisition, storing, publication, subscription and use (Jafari moghadam, 2004). From the other point of view, knowledge management is the process of knowledge creation, confirmation, offering, distribution, and application (Ganp, 36:2005). Also the principles allocate to knowledge management are as follows (jafari moghadam, 2004):

- Knowledge originates from thoughts and locates in individuals;
- Knowledge sharing requires confidence;
- Making the new knowledge behaviors are possible by technology;
- knowledge sharing must be couraged and a warded;
- management support and allocating resources to knowledge management is necessary;
- knowledge must be created;
- starting the knowledge management programs, experimently first is better;
- knowledge management enhances and supports the applied and major elements in a powerful organization (Ray 1994).

1. The new knowledge discovery or creation processes, purifying the available knowledge, and creating the availability of the knowledge;

2. share the knowledge among individuals and manage the knowledge circulation in all organizational borders level;
3. Creation and the use of knowledge as a part of individuals daily routine and as a part of decision making to make knowledge applicable. Creating an effective knowledge management system is one of the key factors in improving job and business processes. Most of the knowledge management requirements are only available implicitly, and converting them to the clear models is a difficult task and meanwhile it is vital. Specific organizational will form for knowledge management and distribution, and necessary processes create for promoting knowledge management. Too much money in these structures is spent to improve the members productivity. This is specially true about simulated work and business systems which exchange in formation through internet (knowledge management forms the interactive patterns among technologies, techniques, and individuals).

For example, information technology concerning data collecting, storing, and distributing works well, but it is unable to interpret it (Bhatt, 1998). Technical solutions achievement is possible, but for knowledge management, the organization must create the partnership, assistance, and sharing environment of knowledge. Human being behavior change is one of the management current problems, so in the knowledge management projects, the change of traditional processes and enhancing structures and technologies is recommended. (Classer, 1998).

One can say that the knowledge subject is a social phenomenon, computer, information technology, and alike s can not guarantee the knowledge management success. The knowledge management is endless, because the movement from data to information and from information to knowledge never ends. Organizational staff and managers (intrinsic environment), customers and other beneficiaries (extrinsic environment) belong to knowledge management realm (Abtahi and Salavati 2006). The researches about the social capita relation with knowledge management in a research by Robert D. Mayfield (2008), titled "organizational culture and knowledge management in power producing industry", he considers the electric power industry's big challenge as lack of knowledge and skill and knows the organizational culture as one of the most principal factors in the knowledge acquisition, conveyance, and application area. In the Iranian national company of oil refining and distribution (shiraz).

4. Determining the relationship between social capital and knowledge creation in the Iranian national company of oil refining and distribution (shiraz).

5. Determining the relation of social capital with knowledge application in the Iranian national company of oil refining and distributing (shiraz).

Research hypotheses:

Concerning the research purposes and based on relation between social capital essential indexes and knowledge management process several hypotheses in combination with one most significant hypothesis and five specific hypotheses have compiled as follows:

The research main hypothesis:

There is a meaningful relation between social capital and knowledge management in the Iranian national company of oil refining and distribution (shiraz).

Specific hypotheses: there is a meaningful relationship between social capital and knowledge acquisition in the Iranian national company of oil refining and distribution (shiraz).

There is a meaningful relation between social capital and knowledge record in the Iranian national company of oil refining and distribution(shiraz).

There is a meaningful relation ship between social capital and knowledge transfer in the Iranian national company of oil refining and distributing (shiraz).

There is a meaningful relation between social capital and knowledge creation in the Iranian national company of oil refining and distribution (shiraz).

There is a meaningful relationship between social capital and knowledge application in the Iranian national company of oil refining and distributing (shiraz).

Research method:

Since, the researcher in this study deals with regular and irreplaceable description of social capital and knowledge management in the Iranian national company of oil refining and distribution (shiraz), and he analyses based on research findings, an organizational culture in which human resources management processes, education, utilizing, and pattern imitating are essential principles, can be concerned as a vital factor to prove the knowledge management aims.

In a re search by we Hee (2009), titled `` social communications and their roles in knowledge management application. He states, although the knowledge management has found an appropriate importance in organization, it doesn't guarantee that staff intend to spend time and money for applying it. He continues, `` we found that knowledge management stresses on social relationships``. The social capital theory is used specifically to create social communication and dimensions(strong relations, common norms, and confidence). In continuation, he says that in a research of a company that uses the knowledge management systems, he has figured out the significance of social relations and staff knowledge management systems use.

Research objectives: this by concerning the social capital issue and its relation with knowledge management, follows the following purposes:

The main goal:

Determine the relationship between social capital and knowledge management in the Iranian national company of oil refining and distribution (shiraz). Concerning the research main purpose, the following minor aims are offered:

1. Determining the relation between social capital and knowledge acquisition in Iranian national company of oil refining and distributing (shiraz).
2. Determining the relationship between social capital and knowledge record in the Iranian national company of oil refining and distribution(shiraz).
3. Determining the relation between social capital and knowledge transfer the existing condition of these tow parameters in the mentioned society; thus, this study is based on data collecting of the type of descriptive and measurement.

The number of statistical society members in this research include Iranian company of oil refining and distribution employees(shiraz),that contain 103people.This study sample based on following formula is 60people.

$$n = 3 + \frac{4C}{\ln\left(\frac{1+r}{1-r} \cdot \frac{1-r_0}{1+r_0}\right)}$$

The required data to fulfill this study was collected in the two following method:

Library method: In this method to collect data, books, these, articles, databases, and internet resources that refer to subject literature and research background were used.

Field method:

In this procedure the factors like consoul ting and interviewing with experts of designing and analyzing questionnaire were used. In the present paper, the measurement major tool questionnaire, because it is one of the common tools for research and the direct method for research data collection.

Tow questionnaire types were used for measuring variables, one has been prepared to measure social capital and determine its type, and the other to measure knowledge management parameters.

Mullaii’s social capital experts questionnaire (2001) consists of 31 questions that deals with social capital. The knowledge management questionnaire constitutes 33 questions which based on Filius model (2000) deals with knowledge management present situation. To describe and analyze gathered data, the descriptive and inferential statistic was used. The used tests in this paper include, the kolmogrov- smirnov Test and spearman correlation factor.

Kolmogrov- smirnov Test:

To determine the research hypotheses test type, first the hypo theses related data normality and abnormality should be verified, then the suitable parameteric and non- parameteric statistical methods to test hypotheses will be used by applying the test results.

Ho : $p=0$	→ observations distribution follows normal distribution.
H1: $p\neq 0$	→ observations distribution doesn’t follows normal distribution.

Normal distribution	→0.491	0.833	60	Social capital
Normal distribution	→0.308	0.966	60	Knowledge management

Table (1) kolmogrov —smirnov test

As it is shown in table 1 the statistical amount of the test in the level of 0.05 is less than critical amount , therefore , the zero hypothesis , i.e. , the normality of data is acceptable and the opposite hypothesis which indicates the data abnormality is refused .thus, concerning the data normality , to test these hypotheses , the spearman correlation Factor is used .

Research findings and conclusion:

Nowadays organizations must be able to acquire their requirement knowledge to innovate and improve their products and processes and issue it among their employees and use it in all their daily activities. Only through this they are able to response to the competitive environment senses and the customers exteremly variable needs. Regarding the knowledge management significance and organizational learning importance, it is necessary to recognize the influential factors of facilitating this process. With due attention to social capital definitions, it seems that since both concepts emphasize on the individuals relations and interactions in organization, it is necessary to check the knowledge management impressible rate from social capital rate in organization. The social capital presence can also help the knowledge record, compile, and transfer. Social capital promotes the knowledge management processes by sharing in organization abilities to create value in the innovation

model through facilitating resources and combination in an organization (Schumpeter, 1934; Kanter, 1988; Kogut and Zander 1993).concerning the above mentioned subject –matters , and the social capital significance in this paper the researcher tries to study its relation with knowledge management by studying social capital in the Iranian national company of oil refining and distribution (shiraz) regarding the research objectives the most significant hypothesis and five specific hypotheses were offered and tested then the results are as follows :

Research findings relates to main hypothesis:

There is a meaningful relation between social capitul and knowledge management in the Iranian company of oil refining and distribution. using spearman correlation factor between the social capital and knowledge management in the Iranian national company of oil refinery and distribution 0.373 was acquired, so the colleration of these two variables is meaningful , and this colleration factor rate indicates that the social capital in the Iranian national company of oil refining and distribution has an essential role in establishing knowledge management in this company, so the stronger the social capital the more successful the knowledge management establishment. This research findings support Alderoun(2002) studies results based on social capital relation with knowledge transfer, kogut (2004) in the area of social capital mutual relation and effect on knowledge creation and application. Also this conclusion agrees with the Hunt studies (1999), kohen(1999), and Hufman studies(2005) based on relation between social capital and knowledge management.

Research findings relate to the first minor hypothesis:

The research first minor hypothesis allocates to the relationship between knowledge acquisition and social capital, it was compiled so that there is a meaningful relation between knowledge acquisition and social capital. This hypo thesis was analyzed by spearman correlation Test, the result was in such a way that the knowledge acquisition at a meaningful level of 1% and by considering correlation Factor of 0.375 has a direct and meaningful relation with social capital.

Knowledge acquisition deals with utilizing knowledge resources, and these resources are: individuals, databases, and documents. In relation with this hypothesis the social capital development and improvement through creating a stronger interactive relationship among individuals that it considers as one of the knowledge resources, provides improvement process and facilitates its fulfillment. Since the social networks and normalities belong to social capital dimensions and by a brief deep thought can realize that to inhance these networks and creating social normalities one can hope to have more interaction and co-aggrandizement among individuals towards facilitating the achievement of this knowledge management parameter through social capital improvement.

Thus, it can be concluded that the more movement of the company to work social capital development, the more facilitate the knowledge acquisition, and it can move to more improvement.

Research findings relate to second minor hypothesis:

The research second minor hypothesis specifies to relation between knowledge record and social capital. Therefore, it was compiled so that there is a meaningful relationship between knowledge record and social capital. For confirming or rejecting the hypothesis, the knowledge record collected data and social capital were analyzed by spearman correlation Test, the result was such a way that the knowledge recording compatibility at a meaningful level of 1% and by considering the correlation Factor of 0.348 has a direct and meaningful relation with social capital.

Knowledge recording is a part of difficult knowledge management dimensions. Among the other resources which in addition to individuals for the knowledge acquisition process was mentioned, is the use of databases and documents. The presence of rich data bases and referring to consultant and instructive documents need an infrastructure under the title of knowledge recording. To create and enhance tendency in individuals for fulfillment this knowledge management dimension two parameters must be considered, first the technological infrastructures existence, and the other the availability of a tendency and motivation to fulfill much more better the knowledge recording and documentation, but by referring to social capital dimensions may one be able to realize the essence of an atmosphere that confidence there, is felt, and a unity to achieve a goal that attracts all people's attention. Doubtless that paying attention to individuals moral ownership right in documentation their properties and knowledge and enhancing motivation and tendency to fulfill this dimension of knowledge management in a best way, acquires its share of social capital improvement. So it can be concluded that to fulfill the better knowledge recording, as one of the knowledge management parameters, the social capital must be enhanced and improved in the company. Research findings relate to the third minor hypothesis:

The research third minor hypothesis allocates to the relation between knowledge transfer and social capital. Therefore, it was compiled so that there is a meaningful relation between knowledge transfer and social capital. This hypothesis was analyzed by Spearman correlation Test, the obtained result was in such a way that compatibility at a meaningful level of 5% and by considering correlation Factor of 0.314, has a direct and meaningful relation with knowledge management.

The knowledge transfer dimension in knowledge management relates to that very knowledge acquisition process from several aspects. As earlier mentioned, individuals are the resources of knowledge acquisition and it should bear in mind that social capital development and enhancing by providing a position for improving interaction, solitary, common normalities and networks provide the main infrastructures for knowledge transfer. It can be concluded that the firm and stronger the social capital the better knowledge transfer in the company. An organization with a good social capital, boosts the individuals new ideas, because of its effect on information exchange and knowledge transfer implicitly and explicitly.

Research findings relate to the fourth minor hypothesis:

The research fourth minor hypothesis allocates to the relation between knowledge creation and social capital. Therefore, it is compiled so that there is a meaningful relation between knowledge creation and social capital. This hypothesis is analyzed by Spearman correlation Test, the result is so that the organizational mission at a meaningful level of 1% and by considering the correlation coefficient of 0.380, has a direct and meaningful relation with knowledge management.

Knowledge creation needs conditions to be emerged, knowledge creating is done either to improve the under ways of governing task and modifying the past errors or finding a higher of task accomplishment and or problem- solving and a spark to find new lines in scientific areas. But the achievement of anything that is based on knowledge creation requires a great attempt in organization to accomplish that dimension of knowledge management. An atmosphere overwhelmed with confidence makes the problems and barriers pursuance possible, tolerance (interaction) and solitary to achieve a common goal that under a stronger social capital protection can hope a part of this dimension meets. Then it could be concluded that the higher the social capital the more successful the knowledge creation.

Research findings relate to the fifth minor hypothesis.

The research fifth minor hypothesis specifies to the relation between the knowledge application and social capital. Thus it was compiled so that there is a meaningful relation between the knowledge application and social capital. To confirm or reject the hypothesis, the gathered data related to knowledge creation and social capital was analyzed by spearman correlation Test, the obtained result was in such a way that the knowledge application at a meaningful level of 1% and by considering correlation coefficient of 0.229, There is no direct and meaningful relation with social capital. The knowledge application dimension in the knowledge management like the knowledge acquisition and recording is a part of the difficult knowledge management dimensions. The difficult knowledge management activities include those categories of activities in the knowledge management cycle, which are based on appropriate structure and technology in organization. Including the structural and technological factors are: information and telecommunication technology, formal methods and procedures of organization, awarding and encouraging system in organization, and management style. With due attention to the subject that a relation has been found between social capital and the knowledge application in this organization, the result can be obtained that this knowledge management dimension is affected by other parameters which among them notice to technological infrastructure is mentioned, so more work and studies that affect knowledge application are needed.

Concerning the research goals, produced results, and researchers observation during research the following suggestions are offered:

1. Provide the data relate to employees requests and requirements, employment and recruitment of staffs with needed abilities and information, causes more toleration and creates an atmosphere full of confidence.
2. Holding training courses and seminars proportion to staff information needs creates more dynamic to wards knowledge management establishing in the organization.
3. Facilitate more access to internet through free of charge subscription for staffs to use at home or after work hours in office to up-to-date the staff knowledge.
4. SWOT analyzing fulfillment (analyzing opportunity and strength, weakness and intimidation) by the research institutes and university assistance.
5. The knowledge will be stored in the organization's memory. This memory includes: documents, databases, and their creating possibility by using information technology; organization must record and documentarize individuals knowledge, create data base and/ or the information that the employees knowledge could be documentarized in their names, which causes a kind of sense creation of commitment in individuals.
6. Holding training classes under the experienced staff management supervision those who have quit the company and are retired. This itself creates a more dynamic atmosphere to learn duty- fulfillment methods.
7. To consider the moral ownership right which relate to the employees previous knowledge and findings, i.e., if a project based on employees researches has been improved to an acceptable stage its constant under those very people management or monitor ship and in the case of their absence, the organization should enjoy their assistance.
8. Creat data base (including web sites) to inform employees about their colleagues function and using their co-workers knowledge and abilities.
9. Publishing the journals that they offer the company accomplishments and finding at the colleagues disposal.

10. Using the electronic post systems- Email, chat- for establishing on- line communication inside organization.

References

- Abtahi, S. H. and Salavati A. (2006) Knowledge Management in Organization, 1st ed., Payvan- e- Now Press, Tehran
- Baker W. (2002) Management and Social Capital ,Translated by S. M. Alvani, M. R. Rabiee Mandjin, Industrial Management Organization Press.
- Putnam, R., (2000) Democracy and Civil Traditions, Italian Experience and Lessons for Developing Counties » translated by M. T. Delforooz, 1st ed., Interior Ministry and Political Research Office, Tehran.
- Jafari Moghadam, S. (2004) Managers Experiences Documentation from Knowledge Management Point of View, Management Training and Research Institution.
- Rahman Pour, L. (2003) Social Capital Management, Development Management Journal, 19:79-86.
- Riterz George (2000) Contemporary Sociology Theory, Translated by M. Salasi, Elmi Press, Tehran.
- Fukuyama, Francis (2006) End of Discipline (Social Capital and Preserve It, Translated by G. A. Tavasoli, Hekayat - e- Oalam –e- Nawin Press, Tehran
- Coleman, J.(1999) Social Theory Foundations, Translated by M. Sabouri, Nashre Ney, Tehran
- Alvani, S. M., A. R. Shirvani (2006) Social Capital (The Theories and Applications Concepts), Mani Press, Esfahan.
- Bhatt, G. (1998), Managing Knowledge through People, Knowledge and Process Management: Journal of Business Transformational, 5(3):165-171.
- Coleman, J. S. (1988) Social Capital in the Creation of Human Capital,, American Journal of Sociology, 94: 95-120.
- Filius R., Jan A., De E. (2000) Knowledge Management in the HRD Office : A Comparison of Three Cases, Journal of Workplace Learning ,12(7):286-295.
- Kanter, R. M. (1988), When 1,000 Flowers Bloom: Structural, Collective, and Social Conditions for Innovation in Organizations,, in Staw, B.M. and Cummings, L.L. (Eds), Research in Organizational Behavior, Vol. 10, JAI Press, Greenwich, CT,:169-211.
- Kogut, B. and Zander, U. (1993) Knowledge of the Firm and the Evolutionary Theory of the Multinational Corporation, Journal of International Business Studies, 24(4): 625-45.
- Kogut, B. and Zander, U. (1996), What Do Firms Do? Coordination, Identity, and Learning, Organization Science, 7(5): 502-18.
- Lewicki, R .J. and Bunker, B.B. (1996) Developing and Maintaining Trust in Work Relationships, in Kramer, R.M. and Tyler, T.M. (Eds), Trust in Organizations: Frontiers of Theory and Research, Sage, Thousand Oaks, CA, pp. 114-139.
- Nahapiet, J. and Ghoshal, S. (1998) Social Capital, Intellectual Capital, and the Organizational Advantage, Academy of Management Review, 23(2): 242-266.
- Portes, A. (1998) Social Capital: Its Origins and Applications in Modern Sociology, Annual Review of Sociology, 24(1): 1-24.
- Putnam, R. (2000), Bowling Alone: The Collapse and Revival of American Community, Simon & Schuster, New York, NY.
- Ray, P. (1994) Collaborative Information Systems and Business Process Design using Simulation, IEEE communications 32:44-50.

Schumpeter, J.A. (1934) *The Theory of Economic Development*, Harvard University Press, Cambridge, MA.

Simon, L. and Davies, G. (1996) *A Contextual Approach to Management Learning*, *Organization Studies*, Vol. 17, pp. 269-89.

28. Turban. E., Mclean. E. (2002) *Information Technology for Management*, 3rd ed. , John wiley & Sons.Inc.

29. Winter, Lan. (2000), *Towards a Theorised Understanding of Family Life and Social Capital*, Working Paper No.21, April 2000 Australian Institute of FamilyStudies