



The Impact of Process Approach on Social Capital

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Abstract

In our competitive world, increasing the organizational capital will lead to market growth. It is argued that social capital is formed by individuals' communications; therefore, any change in the organization to improve the spirit of network formation, will lead to reinforcement of the capital. Despite its importance, we encounter an insufficient social capital in the Iranian companies. Researchers believe that the main reason for this problem is the functional approach in organizations. This paper examines the relationship between process approach and social capital. We analyzed a sample of 104 managers of the Iranian process-based companies using the Structural Equation Modeling. Based on the results, the process-based entrepreneurial organization has a stronger social capital. Also it is in a better position to take advantage of this capital in the recognition and exploitation of opportunities.

Keywords: Business Process, Organizational Capital, Process Approach, Social Capital

Introduction

Companies are constantly affected by competitive pressures and are forced to re-evaluate their business models. Business processes represent a core of the functioning of an organization because the company primarily consists of process, not products or services. (Rok et al, 2008). In the 1980s and at the time of significant changes in the business environment, a new approach to organizational research was developed. Adoption of a systematic approach in organizations in different works of research such as Rummler and Brache (1988) and the Harrison's open system model, led to vast changes in organizational approaches. As a response to these changes (Porter and Ketels, 2003, Laura and Nick, 2009) recommended to put less emphasis on hierarchy and develop the whole chain of business operation (Gardner, 2004; Reijers, 2006; Markus et al, 2009).

Some other research on business process management (Davenport, 1993; Hammer and Champy, 1993; Harmon, 2003) considers that the implementation of process orientation in a company can lead to the enhancement of its performance and assets. Process Orientation (PO) is extremely important for the implementation of Process Management (PM) efforts and its shortage can cause all kinds of problems (Reijers, 2006). However, there has not been much

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empirical research on the impact of PM practices and process orientation on organizational assets (especially non-financial assets) and performance (Rok et al; 2008; Chiwoon and Lee, 2011).

This paper investigates the impact of business process orientation on the reinforcement of the organizational Social Capital (SC) as an important part of non-financial organizational performance and assets. In other words, assessment of the impact of PM and PO on non-financial organizational assets and performance is the contribution of this study.

The paper is structured as follows: the next section reviews the relevant literature, the research model is conceptualized and research hypotheses are presented. Section 3 aims at presenting a methodological framework for the study and provides the results of data analysis. Section 4 concludes with a summary of the main findings along with relevant discussions.

Literature review

Process Orientation and Organizational Social Capital

PIn our competitive world, the market value of an organization is defined as: (Eduinsson and Malone, 1997)

“Organization market value = tangible (financial) asset+ intangible (non-financial) asset”

One of the most important intangible assets in companies is SC. It emerges in various dimensions (Koka and Prescott, 2002). According to Nahapiet and Goshal (1998), the organizational social capital exists in three different forms: cognitive (shared codes and language and shared narratives), relational (trust, norms, obligations and identification) and structural (network ties, network configuration and appropriate organization) for analytical purposes.

Many researches examine the importance of this capital in the organization. Zaheer *et al.* (1998) mentioned that there is a positive relationship between interorganizational trust and performance. The result of a study illustrate that social embeddedness should be beneficial to the financial performance of a company (Uzzi & Gillespie, 2002). Flora *et al.* (1997) identifies the factors affecting the formation of SC such as trust, social interaction, social groups, collective identity and teamwork.

The definition of the company's processes is the horizontal linkage of activities needed to achieve a desired result (Glykas, 2011). A process-oriented company also applies the concept of process performance measurement. By concentration of the measurement on processes rather than functions, alignment and streamlining of separate organizational units can be achieved (Hammer, 2007). These measurements can be related to financial performance, quality and service levels, operational performance and/or productivity (Glykas, 2011). Popova and Sharpanskykh (2010) argue that performance measurement and analysis are crucial in steering the organization towards realization of its strategic and operational goals. According to Kohlbacher (2010), PO is a construct consisting of ten dimensions as follows:

- Process design and documentation
- Managerial support
- Existence of a process owner
- Applying the concept of process performance measurement
- Information technology (IT)
- Adaptation of organizational structure to process orientation

- Presentation of appropriate knowledge
- The establishment of human resource systems
- The existence of a formal pattern coordinating and integrating all process projects
- Cultural dimension such as teamwork, readiness to change, flexibility and customer orientation

Due to the scope of this paper, only the cultural dimension is selected. This dimension includes: teamwork, customer orientation and readiness to change and flexibility. According to Sharifi and Zhang (1999), readiness to change and flexibility consolidate the organizational agility. These factors indirectly affect two dimensions of SC. Organizational communication, customer process, and problem sharing are considered as mediator variables. Since the three cultural dimensions of PA will impact on communication through customer process and problem sharing and then communication per se will impact structural and relational dimensions, communication is considered as the main variable. Communication includes interpersonal relations and connections between different units of the organization.

Theoretical Background

Teamwork (TW) – Teamwork defines how the team takes decisions and how the members behave. According to Schein (1988), a team can be considered as:

"Any number of people who (1) interact with one another, (2) are psychologically aware of one another, and (3) perceive themselves to be a team".

Other characteristics of effective teamwork include "shared aims and objectives", "mutual trust and dependency" and "decision-making by consensus" (Mullins, 2002)

Process-based companies support teamwork where teams are networks of 'process operatives' who work together to deliver process performance (Smart *et al.*, 2009). When a team is formed, one important function is to establish interaction and communication between team members. People who perceive themselves as team members will definitely have common goals and try to reach the organizational goals with support of other members.

Hence, the following hypothesis is proposed.

Hypothesis 1: The teamwork in process-based companies is positively related to interaction between personnel and different units (organizational communication).

Nahapiet and Goshal (1998) defined trust as the belief that the "results of somebody's intended action will be appropriate from our point of view". In other words, it means the action of other people is consistent with our expectations. Within a team, shared perceptions will develop when meaningful phenomena and specific relations exist. Also, Granovetter's embedded view believes that specific relations can generate trust (Zheng, 2010). Across all teams, there is a concern regarding trust between members (Webber, 2002).

On the other hand, trust is based on frequent social interaction between members and is where the moral integrity of members is involved. A team provides the necessary elements for continuous social interaction and moral integrity. Consequently, trust is an important consequence of teamwork. Also, identification is where individuals see themselves as part of the collective (Nahapiet and Goshal, 1998). Also, because the members believe that the team is a part of the company, affiliation with it is created. As Nahapiet and Goshal (1998) point out trust and identification are the two major elements of SC relational dimension and thus their reinforcement will lead to the reinforcement of this dimension.

Hence, the following hypothesis is proposed.

H2: Teamwork in process-based companies is positively related to relational dimension of SC.

Communication and relational dimension - Communication in a company involves two overlapping areas: interpersonal communication and communication between units. We name both as organizational communication.

Research into the effects of communication on individuals' attitudes toward the company provides a theoretical link between communication and organizational identification (Wiesenfeld *et al.*, 1999). Communication reinforces organizational identification because it affects employees' attitudes and provides company members with an opportunity to share their subjective perceptions of the norms, values and culture (Wiesenfeld *et al.*, 1999). Since the frequent communication leads individuals to feel that they are active members, the frequency in which individuals communicate with others reinforces organizational commitment (Huff *et al.*, 1989). In process-based companies, existence of a culture supporting teamwork, will prepare the context for frequent communication. Consequently, communication improves organizational commitment and identification as the two factors of relational dimension. Moreover, communication affects trust because:

(1) Communication assists in resolving disputes and ambiguities, and aligning perceptions and expectations (Etgar, 1997).

(2) Trust is based on the assumption about partners which is shaped through information. Consequently, more information (both aspects of quality and quantity) leads to higher trust

(3) Communication also creates a base upon which to develop and review our assumptions about others, especially about the ability of our partners (Mayer *et al.*, 1995). In addition, communication creates new network ties and improves the old network ones.

Hence, the following hypothesis is proposed:

H3: Communications in the process-based companies is positively related to relational dimension of SC.

H4: Communications in the process-based companies is positively related to structural dimension of SC.

Agility – Aitken *et al.* (2002) defined agility as the ability to have visibility of demand, flexible and quick response and synchronized operations. If companies want to be flexible to customers' needs and demands, they should define processes to identify these needs continuously. Also to respond quickly to customers' needs and maintain flexibility to environmental changes, these processes should be promoted, which for all intents and purposes, will lead to quick distribution of newly identified needs of customers in different units of the company and responding to them.

Hence, the following hypothesis is proposed:

H5: Agility in the process-based companies is positively related to cooperation (problem sharing)

H6: Agility in the process-based companies is positively related to customer processes.

Reinforcement of cooperation that is one of the agility outcomes promotes the inter-firm alliances and leads to collective thinking. Adbor (2006) argues that deterrence-based trust depends on the fear of the consequences of violating trust, identification-based trust, which is based on group and kinship, and cognitive-based trust that emerges from ongoing relationship. Reinforcement of trust and alliance will improve communications.

Hence, the following hypothesis is proposed:

H7: Cooperation (problem sharing) in the process-based companies is positively related to communication.

H8: Cooperation (problem sharing) in the process-based companies is positively related to the relational dimension of SC.

Customer orientation (CO) - As noted by Pine et al. (1993), customer focus refers to organizational commitment to satisfy customers' concerns about the quality and timeliness of their orders as well as meeting their demands. Process-based companies create some processes for acquiring necessary information such as: customer needs, customer satisfaction and customer complaints, which are named "customer processes". In addition, when this information is acquired, it should be distributed in the different units of a company. Distribution of information leads to new interactions between personnel and units as well as reinforcement of old interactions. Also, creating customer processes leads to forming new customer contacts in organizations and improvement of staff communication skills (Paula and Antti, 2008).

Hence, the following hypothesis is proposed:

H9: Customer focus (customer orientation) in the process-based companies is positively related to customer process.

H10: Customer Process in the process-based companies is positively related to communication.

Process Orientation

SocialCapital

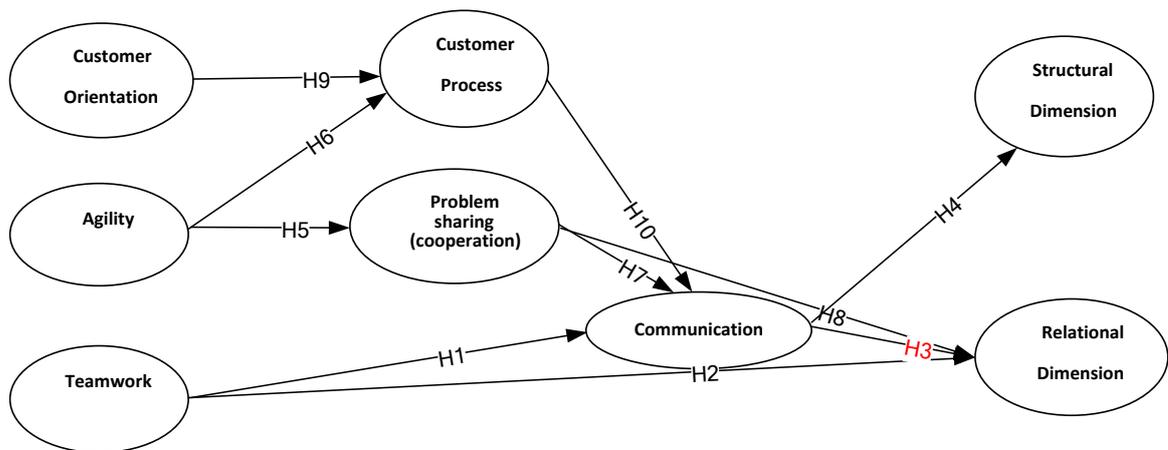


Fig 1- Conceptual Model

Methodology

The methodology will be discussed in terms of research instrument, sampling and data collection, statistical analysis and data analysis.

Research Instrument

In order to test the proposed hypotheses, our instrument was composed of three parts. The first part measuring SC was adopted from the original study conducted by Nahapiet and Ghoshal(1998). This part of the instrument was amended in two sections:

- (1) Three questions were added to "structural dimension".

(2) Four questions were added to “relational dimension”.

The second part measuring process orientation was adopted from the original study conducted by Cristina (2003), Sherehiy et al.(2007), Qumer and Henderson(2008) and Haozhe et al.(2009). This part of the instrument was amended in five sections:

- (1) Four questions were added to “teamwork”.
- (2) Four questions were added to “agility”.
- (3) Four questions were added to “Customer Orientation”.
- (4) Five questions were added to “Problem Sharing (Cooperation)”.
- (5) Four questions were added to “Customer Process”.

The third part measuring Organizational Communication (especially internal communication) was adopted from the original study conducted by Robert and O’Reilly (1974), Sussman and Krivons(1979) and Robbins(1979). This part of the instrument had five questions.

Also, the questionnaires were edited by three expert professors. A Likret-type scale was adopted for the questionnaire, ranging from (1), strongly agree, to (5), strongly disagree

Sampling and Data Collection

A survey study was conducted in sixty-five Iranian process-based companies. In this survey, Iranian process-based companies were the companies that received EFQM awards from the Ministry of Industries and Mines before December 2009. Target respondents were top quality managers and senior experts of quality units (each company = 2 potential respondents; totally 130 potential respondents); because it was assumed that they were qualified key informants. The questionnaire was made available to the respondents in three different ways-traditional paper-based format, email and fax. Surveys were sent to 130 potential respondents and follow-up telephone calls were made at one-week intervals. At the end of the specified time period, a total of 110 completed surveys were returned. Of the completed surveys, 104 were deemed usable and 7 surveys were removed for the following reasons:

- Too much missing data;
- The participant's position within the firm was deemed inappropriate for the purposes of the study.

Analysis

The research model (Fig.1) was tested by using Structural Equation Modeling (SEM) by applying the Partial Least Squares (PLS). PLS is a much less known method of SEM, which puts minimal demands on measurement scales, sample size and residual distributions (Chin, 1998). Considering the small sample size (n=104), PLS was used to analyze the data in this study. It appears that the structural equation approach has several advantages over traditional analyses (Bagozzi and Yi, 1989).

The data were analyzed, using the two-step approach suggested by Anderson and Gerbing (1998). In the first step, a Confirmatory Factor Analysis (CFA) was performed to assess the adequacy of the measurement model. In the second step of the data analysis, the structural model was tested, using SEM. Structural equation models specify the causal relationships among latent variables (Chatzoglou and Vraimaki, 2009).

Data Analysis and Results

To ensure the reliability of all the scales used, a Cronbach Alpha test was applied to all the scales. All of the scales exhibited satisfactory alpha larger than the acceptable threshold of 0.60 (Nunnally, 1978) (Table1).

Table 1. Communalities, Cronbach's Alpha and R Squares in PLS Model

	R Square	Cronbach's Alpha	Communality
Agility	N/A	0.633320	0.470586
Customer Orientation	N/A	0.733185	0.554046
Customer Processes	0.421 700	0.763790	0.585156
Communication	0.501 319	0.780838	0.525175
Problem Sharing	0.420 519	0.686912	0.516097
Relational Dimension	0.462 779	0.672368	0.502247
Structural Dimension	0.222 465	0.598771	0.555874
Teamwork	N/A	0.722424	0.539594

Construct Validity

Construct validity is actually an operational issue: “[...] it asks whether the measures chosen are true constructs describing the event or merely the artifacts of the methodology itself” (Straub, 1989). There are a large number of aspects regarding the construct validity offered by the psychometric theory (Bagozziet *et al*; 1991). Construct validity of an instrument can be tested in terms of convergent and discriminant validity (Straub, 1989). In this study, construct validity was assessed through CFA.

Convergent validity was tested by examining the factor loadings of each construct (item) using CFA. The results of the measurement model fit were summarized in Table 2. In more detail, factor loadings ranged from 0.53(PS3) to 0.86 (ST2, PS1), all of them exceeding the recommended cut-off value of 0.5, suggested by Straub (1989), for a sample of 103 observations at a 0.05 level of significance ($p < 0.05$). It should also be noted that, there are suggestions in the literature of accepting a threshold of 0.40 for factor loadings (Hulland, 1999).

Table 2. Measurement Model Fit

Latent Construct	Factor/Item	Measurers	Factor loading	Composite Reliability	AVE
Teamwork	Teamwork1	In our different organizational teams, we provide each other with timely information	0.70	0.8231	0.5395
	Teamwork 2	I prefer to engage in collective activities rather than individual activity	0.69		
	Teamwork 3	The personnel are reluctant to leave the team	0.69		
	Team work 4	Collective activities are valuable in my organization	0.84		
Agility(AG)	Agility 1	In our organization, the method adapts both expected or unexpected changes	0.63	0.7793	0.4705

	Agility 2	In our organization, the personnel accept the changes	0.76		
	Agility 3	In our organization, the structure is constantly changed	0.69		
	Agility 4	In our organization, the personnel resist new technology	0.63		
Customer Orientation(CO)	Customer Orientation 1	Our business objectives are driven primarily by customer satisfaction	0.80	0.8319	0.5540
	Customer Orientation 2	In our organization, we have a comprehensive system for insurance whereby the customer's needs are met in products and services	0.69		
	Customer Orientation 3	Our ability to Attract new customers is better than that of our competitors	0.69		
	Customer Orientation 4	In our organization, the customer is a part of organization	0.77		
Problem sharing or Cooperation(PS)	Problem Sharing 1	Exchange of information takes place frequently informally and openly between me and my coworker for solving problems	0.86	0.8042	0.5160
	Problem Sharing 2	If I have any problem, I will ask my coworker to help me	0.74		
	Problem Sharing 3	I know that my coworker has a good intention of helping me	0.53		
	Problem Sharing 4	In our organization, the personnel have willingness to help others	0.59		
	Problem Sharing 5	In our organization, sharing the problem with others is not a bad thing	0.59		
Customer Processes(CP)	Customer Processes 1	In our organization, the customer satisfaction is continuously evaluated by defined processes	0.79	0.8486	0.5851
	Customer Processes 2	In our organization, Customer information can be transferred and utilized among departments	0.82		
	Customer Processes 3	In our organization, the customer's criticism is important and is sincerely welcome	0.66		
	Customer Processes 4	In our organization, various methods is defined for gaining the	0.76		

		customer's feedback			
Communication(CU)	Communication 1	My coworkers feel responsible for initiating good communications	0.72	0.8466	0.5251
	Communication 2	I receive the information needed in my job from coworkers in good time	0.71		
	Communication 3	In our organization, the personnel participate in meetings and transfer information	0.75		
	Communication 4	Our organization has interaction with its business partners based on its defined objectives	0.76		
	Communication 5	In our organization, we do not have a good attitude to interaction with other partners	0.68		
Relational Dimension(RE)	Relational Dimension 1	Our unit members believe that they can rely on other coworkers and units without any fear when they will take advantage of our unit even if the opportunity arises	0.83	0.7994	0.5022
	Relational Dimension 2	We never worry that our business partners will take advantage of us	0.67		
	Relational Dimension 3	Our business partners never act opportunistically	0.68		
	Relational Dimension 4	In our organization, I am sure that my coworker will give me the necessary information	0.62		
Structural Dimension(ST)	Structural Dimension 1	My unit maintains close social relationships with other units	0.63	0.7870	0.5558
	Structural Dimension 2	In our organization, due to numerous contacts , I have easily access to my manager and coworkers	0.86		
	Structural Dimension 3	In our organization, due to transparent relations , mutual cooperation is clear and easy	0.71		

Composite reliability helps assess the internal consistency of the measurement model (Chatzoglou and Vraimaki, 2009). There are many propositions in the literature regarding the reliability measure. Chin (1998) suggests that 0.7 should be the recommended value for a reliable construct value, while Bagozzi and Yi (1988) propose the benchmark of 0.5. In this study, the composite reliability of the latent constructs exceeded even the highest of the above

suggested cut-off values (0.7). Finally, average variance extracted (AVE) measures ranged from 0.4705 for AG to 0.5851 from CP. The recommended threshold value for variance measures is 0.5, apart from AG that is marginally acceptable.

For testing of the structural model, the global goodness-of-fit formula suggested by Tenenhaus et al. (2005) is used:

$$GOF = \sqrt{\text{Communality} \times \overline{R^2}}$$

As the above formula shows, goodness of fit is calculated by taking the square root of the product of the average communality of all constructs and the average R2 value of the endogenous constructs. Communality values and R square value of the endogenous constructs (opportunity recognition and self-efficacy) are given in table I. For the conceptual model of the present study, the goodness of fit is 0.4641, which is above the large effect size cut-off value of 0.36 discussed by Fornell and Larcker (1981). Therefore, the conceptual model of the research has been accepted.

Results

H1 and H4 proposed a positive influence of teamwork (TW) on communication (CU) and a positive influence of CU on Social Capital (Structural Dimension), respectively (Table 3). As shown in Table III, the resultant coefficients indicate that TW has a positive effect on CU (Path Coefficient: 0.21), followed by the direct effect of CU on ST (0.47). In addition, H2 proposed a positive influence of TW on RE (0.25).

Table 3. Hypotheses Testing Results

Hypotheses	Path	Path Coefficient	T statistics*	Remarks
H1	Team work → Communication	0.21	2.64	Positively supported
H2	Team work → Relational Dimension	0.25	2.84	Positively supported
H3	Communication → Relational Dimension	0.04	0.53	Not supported
H4	Communication → Structural Dimension	0.47	6.46	Positively supported
H5	Agility → Problem Sharing	0.64	14.28	Positively supported
H6	Agility → Customer Processes	0.28	2.57	Positively supported
H7	Problem Sharing → Communication	0.34	5.54	Positively supported
H8	Problem Sharing → Relational Dimension	0.47	5.29	Positively supported
H9	Customer Orientation → Customer Processes	0.44	5.41	Positively supported
H10	Customer Processes → Communication	0.33	4.34	Positively supported

Note : * significant at the p<0.05

H5, H7 and H8 proposed a positive influence of agility (AG) on problem sharing (PS), a positive influence of PS on CU and a positive influence of PS on RE. As shown, the resultant coefficients indicate that AG has a strong effect on PS (0.64), followed by a direct effect of PS on CU (0.34) and RE (0.47). In addition, as the resultant coefficients indicate, AG has a positive effect on customer process (CP) (0.28) (H6), followed by a direct effect of CP on CU (0.33). H9 proposed a positive influence of customer orientation (CO) on CP (0.44). Finally, H3 was dropped during the process of statistical analysis. These results seem to support the previous studies that were explained in preceding sections.

Discussion

This paper examined SC in the context of the business processes of a company. The study contributes to prior research by providing a description of the application of process approach in organizations with the reinforcement of non-financial capitals, especially of social capital. It also defines and describes conceptually and, in practice, how the concepts process orientation and social capital are related to each other. Even though the paper is quite descriptive in nature, it can be considered a valuable contribution due to the small amount of research published so far on the impact of process orientation on organizational capitals, especially on social capital.

Most of the literature so far developed on business process orientation (Davenport, 1993; Hammer and Champy, 1993; Harmon, 2003) suggests that organizations can enhance their overall performance and capitals by adopting a process view of business, but there has not been much empirical research on the impact of business process orientation on non-financial capitals, especially social capital as the most important part of non-financial capitals in organizations (Rok et al, 2008; Chiwoon and Lee, 2011). This study contributed to the research field by providing a conceptual model for the impact of process orientation on social capital and empirically evaluated it by using the construct validity, the cultural dimension of process approach (i.e. teamwork, agility and customer orientation) and two dimensions of SC (i.e. relational and structural) were detected. This article demonstrated that process approach provides a suitable way to reinforce non-financial capitals in organizations. On the basis of the experiences gained from this study, we conclude that it is possible to reinforce organizational social capital by applying process approach and managing business processes. In addition, process orientation serves the development of SC at operational level. However, BPO and BPM might be regarded as a tool for reinforcing SC. On the other hand, the establishment of business processes and related management practices might be considered as a strategic management activity to aim to control and reinforce SC, among other things.

The results of our study also have many practical implications for managers. As organizations renovate and adopt new practices striving to attain higher levels of process orientation, it enables them to improve their organization market value and competitiveness by reinforcing social capital as the most important part of non-financial capitals. Therefore, as the business environment gets more competitive, business process orientation offers a way to adapt itself to new conditions and circumstances. Since higher maturity levels of business process orientation lead to stronger organizational capitals, managers need to familiarize themselves with this concept and practical implementation issues.

Due to time limitations, in this study, we considered only SC as representative of non-financial capitals. Further research would also be necessary to identify the relationship between process orientation and other aspects of non-financial capitals such as intellectual and human capital. Also, the conceptual model was tested only in Iranian companies. Evaluation of this model in other countries, will lead to improvement of its validity. In addition, further research about other organizational factors (for example leadership style) that affect this model would be necessary.

References

- Adobor, A. (2006). Optimal Trust? Uncertainty as a Determinant and Limit to Trust in Inter-Firm Alliance. *Leadership and Organization Development Journal*, 27(7), 537-553.
- Aitken, J., Christopher, M., & Towill, D.R. (2002). Understanding, Implementing and Exploiting Agility and Leanness. *International Journal of Logistics Research and Applications*, 5 (1), 59-74.
- Anderson, J., & Gerbing, D. (1998). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103(3), 411-423.
- Bagozzi, R., & Yi, Y. (1989). On the Use of Structural Equation Models in Experimental Design. *Journal of Marketing Research*, 26(3), 271-284.
- Chatzoglou, P., & Vraimaki, E. (2009). Knowledge-Sharing Behavior of Bank Employees in Greece. *Business Process Management Journal*, 15 (2), 245-266.
- Chiwoon, C. , & Lee, S. (2011). A Study on Process Evaluation and Selection Model for Business Process Management. *Expert Systems With Applications*, 38, 6339-6350.
- Chin, W. (1998). The Partial Least Squares Approach to Structural Equation Modeling, in Markoulides, G.A. (Ed.), *Modern Methods for Business Research*, Lawrence Erlbaum, Mahwah, NJ, 295-336.
- Cristina , C. (2003). Work Team Trust and Effectiveness. *Personnel Review*, 32(5) , 605-622.
- Davenport, T. H. (1993). *Process Innovation: Reengineering Work Through Information Technology*. Boston: Harvard Business School Press.
- Eduinsson, L., & Malone, M. S. (1997). *Intellectual Capital, Realizing your Company's True Value by Finding its Hidden Brainpower* . New York: Harper Collins.
- Etgar, M. (1997). Sources and Types of Intrachannel Conflict. *Journal of Retailing*, 55, 77-78.
- Flora, J. L., Sharp, J., Flora, C., & Newlon, B. (1997). Entrepreneurial Social Infrastructure and Locally-Initiated Economic Development. *Sociological Quarterly*, 38, 623-645.
- Fornell, C.R. , & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18 (3), 39-50.
- Gardner, R. (2004). *The Process-Focused Organization: A Transition Strategy for Success*. Milwaukee, WI : ASQ Quality Press.
- Glykas, M. M. (2011). Effort Based Performance Measurement in Business Process Management. *Knowledge and Process Management*, 18(1), 10-33.
- Hammer, M. (2007). The Process Audit. *Harvard Business Review*, 85, 111-123.
- Hammer, M. , & Champy, J. (1993). *Reengineering the Corporation: A Manifesto for Business Revolution*. New York : Harper Collins.
- Haozhe, C., Yu, T. , & Patricia, D. (2009). Measuring Process Orientation. *International Journal of Logistics Management*, 20(2), 213-227.
- Harmon, P. (2003). *Business Process Change: A Managers Guide to Improving, Redesigning and Automating Processes*. San Francisco: Morgan Kaufman Publishers.
- Huff, C., Sproull, L., & Kiesler, S. . (1989). Computer communication and organizational commitment: Tracing the relationship in a city government. *Journal of Applied Social Psychology*, 19, 1371-1391.
- Hulland, J. (1999). Use of Partial Least Squares (PLS) in Strategic Management Research: a Review of Four Recent Studies. *Strategic Management Journal*, 20(2), 195-204.
- Kohlbacher, M. (2010). A Model for Measuring a Firm's Degree of Process Orientation. *Proceedings of the Academy of Strategic Management*, 8(1), 31-37.
- Koka, B. , & Prescott, J. E. (2002). Strategic Alliance as Social Capital: a Multinational View. *Strategic Management Journal*, 23, 795-816.
- Laura, M. , & Nick, R. (2009). Redesigning Business Processes: a Methodology Based on Simulation and Process Mining Techniques. *Knowledge Information System*, 21, 267-297.

- Markus, K. (2009). A Model for Measuring a Firm's Degree of Process Orientation. *Proceedings of the Academy of Strategic Management*, 8(1), 31-37.
- Mayer, R.C., Davis, J.H. , & Schoorman, F.D. (1995). An Integrative Model of Organizational Trust. *Academy of Management Review*, 20, 709-734.
- Mullins, L. (2002). *Management and Organizational Behavior*. London: Financial Times/Prentice-Hall.
- Nahapiet, J. , & Ghoshal, S. (1998). Social Capital, Intellectual Capital and Organizational Advantage. *Academy of Management Review*, 23(2), 242-266.
- Nunnally, J.C. (1978). *Psychometric Theory*. New York: Mc-Graw-Hill.
- Paula, K. , & Antti, L. (2008). Business Process Management as a Tool for Intellectual Capital Management. *Knowledge and Process Management*, 15(3), 159-169.
- Pine, B.J.II, Victor, B., & Boynton, A.C. (1993). Making Mass Customization work. *Harvard Business Review*, 71(5), 108-119.
- Popova, V. , & Sharpanykh, A. (2010). Modeling Organizational Performance Indicators. *Information Systems*, 35(4), 505-527.
- Porter, M. E. , & Ketels, C. H. M. (2003). *UK Competitiveness: Moving to the Next Stage*. London: Harvard Business School, DTI.
- Qumer, A. , & Henderson-Sellers, B. (2008). An Evaluation of the Degree of Agility in Six Agile Methods and Its Applicability for Method Engineering . *Journal of Information and Software Technology*, 50, 280-295.
- Reijers, H. A. (2006). Implementing BPM Systems: The Role of Process Orientation. *Business Process Management Journal*, 12(4), 389-409.
- Robbins, S. P. (1979). *Organizational Behavior* . Englewood Cliffs: NJ: Prentice Hall.
- Rok, S., Vesna, B., & Mojca, I. (2008). The Impact of Business Process Orientation on Financial and Non-Financial Performance. *Business Process Management*, 14(5), 738-754.
- Rummler, G. , & Brache, A. P. (1988). The Three Levels of Quality. *Quality Progress*, 21, 46-51.
- Sharifi, H. , & Zhang, Z. (1999). A Methodology for Achieving Agility in Manufacturing Organizations: An Introduction. *International Journal of Production Economics* , 62, 7-22.
- Sherehiy, B., Karwowski, W. , & Layer, J. (2007). A review of Enterprise Agility: Concepts, Frameworks and Attributes. *International Journal of Industrial Ergonomics*, 37(5), 445-460.
- Schien, E. H. (1988). *organizational psychology*. Englewood Cliffs, NJ: Prentice Hall.
- Smart, P., Maddern, H., & Maull, R. (2009). Understanding Business Process Management: Implications for Theory and Practice. *British Journal of Management*, 20(4), 491-507.
- Straub, D. (1989). Validating Instruments in MIS Research. *MIS Quarterly*, 13 (2), 147-169.
- Sussman, L. , & Krivonos, P. D. (1979). *Communication for Supervisors and Managers*. Sherman Oaks: Calif Alferd Publishing.
- Tenenhaus, M., Vinzi, V.E., Chatelin, Y.M., & Lauro, C. (2005). PLS Path Modeling. *Computational Statistics and Data Analysis*, 48 (1), 159-205.
- Uzzi, B., & Gillespie, J. J. (2002). Knowledge Spillover in Corporate Financing Networks: Embeddedness and The Firms' Debt Performance. *Strategic Management Journal*, 23, 595-618.
- Webber, S. S. (2002). Leadership and Trust Facilitating Cross-Functional Team Success. *Journal of Management Development*, 21(3), 201-214.
- Wiesenfeld, B., Raghuram, S. , & Guard, R. (1999). Communication Patterns as Determinants of Organizational Identification in a Virtual Organization. *Organization Science*, 10(6), 777-790.
- Zaheer, A., McEvily, B., & Perrone, V. (1998). Does Trust Matter? Exploring the Effects of Interorganizational and Interpersonal Trust on Performance. *Organization Science*, 9(2), 141-159.
- Zheng, L. (2010). Structural Analysis of Social Capital. *Canadian Social Science*, 6(5), 26-32.