

RESEARCH PAPER

ELEVATING CROSS FUNCTIONAL TEAM FOR KNOWLEDGE SHARING IN HIGH PERFORMING INDIAN ORGANIZATION

¹Anjali Rai*, ²K.Venkat Rao and ³Baby Niviya Feston

¹Assistant Professor, Department of Management Studies,
New Horizon College of Engineering, Bangalore, Karnataka, INDIA.

²Director, Reachout Analytics Pvt. Ltd., Hyderabad, Telangana, INDIA.

³Senior Assistant Professor, Department of Management Studies,
New Horizon College of Engineering, Bangalore, Karnataka, INDIA.

*Corresponding Author's Email ID: anjali.abes@gmail.com

ABSTRACT

Purpose: The purpose of this research is to provide a conceptual framework for measuring the performance of cross functional teams for knowledge sharing in high performing Indian Organization. In this study following factors that contribute to the success of cross functional teams: Team Spirit, Relationships, Purpose and Objectives, Communication, Role Clarity, Problem Solving and Decision Making, Development (Team and Individual) & Cross Functional Working.

Design/Methodology/Approach: The research was carried out on selected 300 employees from large industrial firms in India. Data mining Tools and Techniques i.e. R programming, R Rattle and SPSS 20 software's (Regression, Classifying& Clustering) has been used to analyze the data.

Findings: This paper provides a conceptual framework that defines knowledge creation and sharing as primary functions of a cross functional team, and provides a platform for understanding the factors that contribute to the high performing Indian organization. The main aim of cross functional team Indian organization is to provide purposeful knowledge creation.

Managerial Implications: This paper provides such a framework. Cross-functional teams have been used by many organizations as a way of involving expertise from different functional areas in the implementation of innovative technologies. An appropriate use of the dimensions that emerged from this research, in the context of cross-functional teams, will assist organizations to properly utilize cross-functional teams with the aim of improving operational performance.

Future scope: This study should be repeated on a regular basis, or after major changes in the high performing organization in India.

Limitations: The research was carried out only on 300 employee of high performing Indian organization. High performing organization location can be one of limitation of the study.

Originality/ Value: This research papers represents the concept of knowledge sharing through cross functional team in India along with the empirical analysis in a novel way.

Keywords: *Cross Functional Team, Organization Performance, Knowledge Creation, Knowledge Sharing & Team Cooperation.*

1. INTRODUCTION

A cross-functional team is a group of people with different functional expertise working towards a common goal. It may include people from finance, marketing, operations, and human resources departments. Typically, it includes employees from all levels of an organization. A cross-functional team is an organizational team consisting of members at the same level of hierarchy in the organization but serving in different areas. Cross-functional teams provide an organization with some significant advantages. Cross-functional team can greatly increase creativity and problem solving with the use of cross-functional teams because of their composition. Members of cross-functional teams come with a diversity of experience, expertise, and knowledge. This diversity can help broaden perspectives and create synergy, where

interaction of the members create a greater effect than the sum effects of each member acting alone, leading to a high level of creativity. Cross-functional teams are not without disadvantages. The team can take significantly longer to develop cohesion because members come from different experiences and backgrounds. Moreover, a team leader must take care of managing team relationships carefully because there may be a high level of conflict in these teams due to unit rivalry, egos, and possible conflict between the interests of the various parts of the organization represented by team members. A cross-functional team is simply a team made up of individuals from different functions or departments within an organization. Teams like this are useful when these need to bring people with different expertise together to solve a problem, or when these want to explore a potential

solution. For example, these might put together a team made up of people from finance, engineering, production, and procurement to come up with a solution to reduce the lead-time for a new product. One approach is for team members to be "loaned" full-time to the cross-functional team, returning to their day-to-day role once their contribution has finished. Alternatively, they may work on a part-time basis, continuing with their existing responsibilities alongside their cross-functional team-work. The most important distinction between the creation of a cross-functional team and the formation of a new department is that members of a cross-functional team maintain substantial links to their day-to-day responsibilities and to managers in their "home" department. Cross-functional teams are significantly different from teams that are aligned on one functional level. For example, a group of marketing people generally "speak the same language," and they have a solid understanding of what their department is trying to accomplish. With a cross-functional team, you may have representatives from a wide array of specialties – finance, accounting, operations, legal, human resources – and each person has his or her own perspective and issues. This diversity is both the reason why cross-functional teams can be highly effective, but it's also the reason that they're often problematic.

2. LITERATURE REVIEW

The cross-functional virtual work team is commonly known as the one where members are separated by space and time to work together (Dubé and Paré, 2003; Montoya-Weiss et al, 2001). Cross-functional virtual team membership composition is more dynamic than in traditional teams, as it includes members from locations that would not have traditionally worked together. It represents a major structural alternative from traditional workgroups because of the ability to transform quickly according to changing task requirements and responsibilities. This dynamism requires virtual team members to be particularly adaptable to cope with different management challenges. However, the management and co-ordination of transfer of knowledge and ideas among individuals and functional groups could be a challenging aspect of the job (Lovelace et al, 2001; Sethi et al, 2001). It is of vital importance for the cross-functional virtual team members to share the information and know-how required for the implementation of joint tasks. Lussier and Achua (2004) state that the premise behind any cross-functional teams concept is that the opportunities for sharing information and cross-fertilization of ideas amongst people from different functional areas (production, marketing, R&D, information systems, etc.) are essential. This is especially true for cross-functional virtual teams charged with developing innovative products/services or new technologies. Developing an effective cross-functional virtual team goes well beyond the technical problem of linking them together. As all the team members increasingly interact in a virtual mode, it is imperative that they participate in the situated knowledge processes (Sole and Edmondson, 2002) that are crucial for the organizational success. There are both long-term and

temporary project teams. Longer-term teams tend to have more commonalities among members which generally help to facilitate better group performance (Katzenbach and Smith, 2003). Webber (2002) characterized cross functional team from three basic elements: functional diversity, time allocation, diversity and multiple reporting relationships. Findings from Webber's (2002) performance indicated that the higher the heterogeneity among the elements, the lower the level of trust among the participants in the cross functional team. Group leaders found that reducing diversity generally increases trust. In the search of investigating the knowledge-sharing phenomena within cross functional teams, Ghobadi and D'Ambra (2012) conducted a survey with software development group leaders in Australia. These authors evidenced that different characteristics of internal competition could originate mixed impacts: competition for tangible resources positively affects cooperative communication. Alternatively, competition for intangible resources (like political interests) negatively affects both cooperative communication and task orientations. Cross functional team's are an important tool used to overcome inter-functional barriers, but to be effective, managers must promote mutual understanding among members (Majchrzak, More, and Faraj, 2012). Different ways of intense interaction are necessary to expand knowledge beyond functional silos, and also among different project teams. According to Ratcheva (2009), the cross functional team comprises the interaction through: accomplishment of the boundary spanning activities, professional commonalities and social commonalities. More recently, Anthony et al. (2013) found that high levels of inter-functional integration in the firm contribute to reduce conflicts within teams. Teams with members located in different countries should have mechanisms to overcome the effects of the geographical and time diversities. These undesired effects can be avoided through integration mechanisms including reward systems based on team indicators, job rotation, information technology and power of the leader to support the team (Hauptman and Hirji, 1999). Jugend and Silva (2012) highlighted mechanisms to synchronize product and technology development processes. According to this research, the addition of practices like job rotation and inter-functional meetings in cross functional team may accelerate team's processes, and help to accomplish activities according to the scheduled timeframe. Holland, Gaston and Gomes (2000) suggest three critical factors for success in cross functional team applied on new product development: strategic alignment between functions, organizational support for team and project needs, and a culture which prizes teamwork, i.e. team based accountability. These authors also highlight that team leaders should be able to promote teamwork, managing the boundary spanning activities and members' needs. Meanwhile, team members need to have openness to change, trust, and ability to deal with personal conflicts. Cross functional team members should realize that roles within cross functional team's can introduce differences in both status and treatment within the group. These status differences may negatively affect team functioning. Lichtenstein et al., (2004) studied this particular issue in the healthcare context, and concluded that hierarchy status differences generate consequences in

attitudes and behavior of members. The finding that higher status clinicians are more likely than individuals with lower occupational status to actively participate in team discussions suggests that relationships defined in broader social contexts affect status, roles, and functions within the medical team setting and, in turn, affect the team's interpersonal processes (Lichtenstein et al., 2004). Dasput et al. (2013) argued that the level of effectiveness of cross functional team can be increased as: 1) their members engage in activities in which leadership is shared among members; and 2) a positive internal environment within cross functional team exists, because it generates cohesion among members. Katzenbach and Smith (1993) propose that team members must have three different types of skills in order to achieve effectiveness: technical or functional expertise, problem solving and decision making (managerial skills), and interpersonal skills. Feng et al. (2010) highlight that team members have to be selected based on their ability to generate high levels of both individual and collective performance.

3. OBJECTIVES

This study focuses on following research objectives:

- The main aim of the study is to understand the factors which influence cross functional team for knowledge sharing in high performing Indian organization.
- To analyze the demographic variables influence on cross functional team.

4. CROSS FUNCTIONAL TEAM

This basically refers to the practice of assembling teams using members of the organization from different functions. Typically, this would involve selecting a number of specialists under a generalist project manager. The role of project manager can be particularly demanding when using cross-functional project teams. Apart from being an expert at project management, the project manager must also have enough general knowledge to understand what his specialists know and how it can be used. The project manager must also be skilled at conflict resolution, which is more likely to happen within a diverse group. As with all projects but perhaps more so for cross-functional project teams, proper planning is required, which involves clear definitions of the roles and responsibilities of the project team, as well as a timeline and cost estimation (Zoerman 2008). Cross-functional project teams have several key benefits related not only to knowledge management but also to innovation. These are:

- **Creation of new knowledge:** Project teams have often been considered to be a particularly important source of new knowledge, particularly when they are given a certain degree of freedom and autonomy (Zoerman 2008, Nonaka & Takeuchi 1995, Peters 1988). Ideally, the project team should be self-organizing and be able to make its own project decisions. Using cross-functional project teams allows for the integration of a wider knowledge base into the project.
- **Knowledge sharing across organizational boundaries:** The team members work together during the project, enabling the transfer of all types of knowledge. In the absence of this kind of arrangement, often

only explicit knowledge could be transferred, since these specialists would typically not socialize professionally.

- **Support of the creation of informal knowledge networks:** As we have previously determined, particularly in the section on communities of practice, informal networks are a crucial part of organizational learning. Cross-function project teams bring people together from different parts of the organization, encouraging future collaboration and the expansion of personal informal networks.

Upon completion of a given project (whether carried out by a cross-functional team or otherwise), after-action reviews are used to enhance knowledge sharing and retention.

Factors influencing Cross functional team success:

A number of factors may influence a cross functional team's success. In this study following factors that contribute to the success of cross functional teams:

- Team Spirit
- Relationships
- Purpose and Objectives
- Communication
- Role Clarity
- Problem Solving and Decision Making
- Development (Team and Individual)
- Cross Functional Working

5. HYPOTHESIS

H1: There is a significant relationship between factors influencing demographic variables and cross functional team for knowledge sharing in high performing Indian organization.

H2: There is a significant association between cross functional team for knowledge sharing in high performing Indian organization.

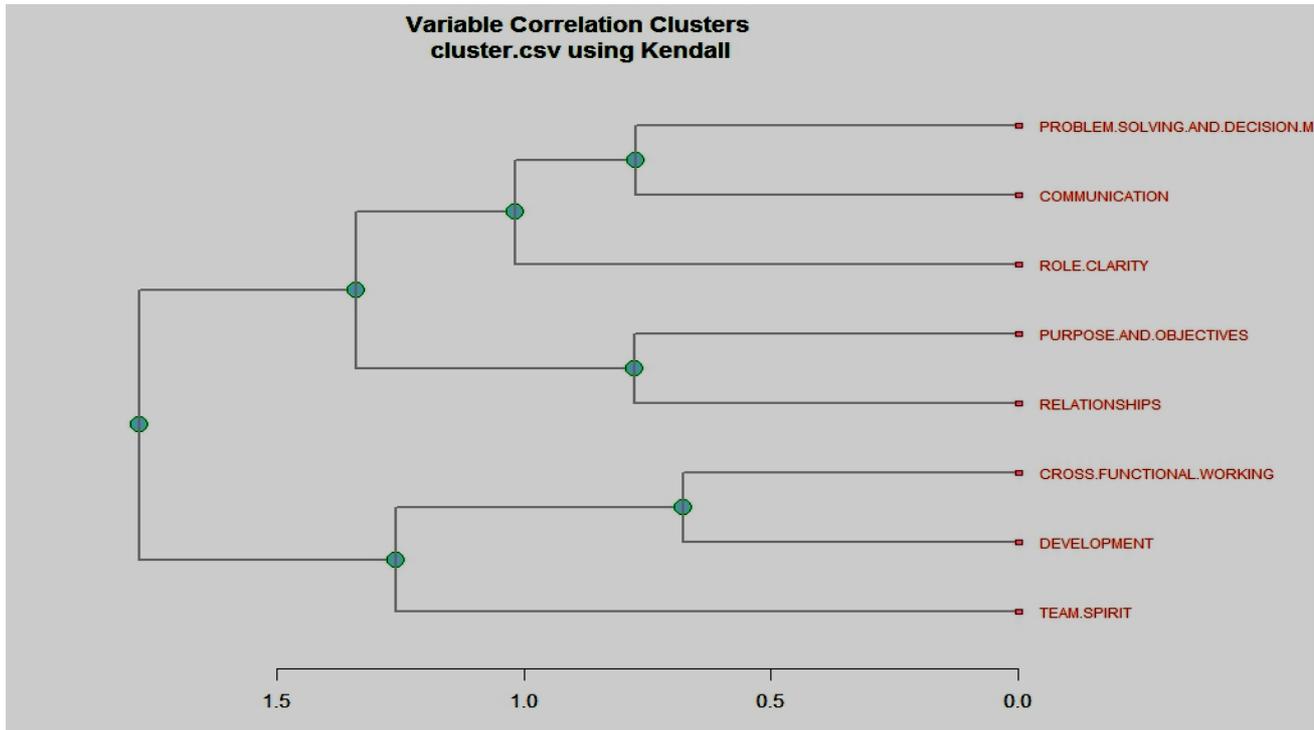
6. RESEARCH METHODOLOGY

Questionnaire Design: Based on the research objectives, a structured questionnaire with 43 independent variables demographic information contained, mainly with a 5-point Likert scale was used, in which 1 = Strongly disagree and 5 = Strongly agree.

Data Collection: Customers were considered as population of research interest. The total sample size was fixed at 300 usable responses for data analysis. For data collection random sampling was adopted. To ensure all questions being answered in a proper way, questionnaires were completed and screened one-by-one.

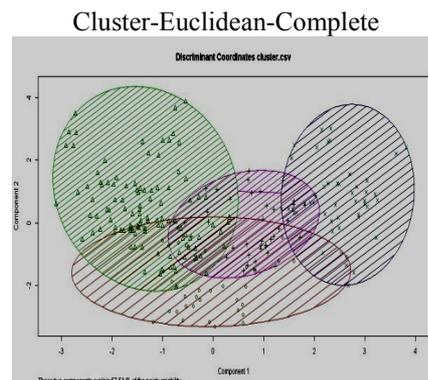
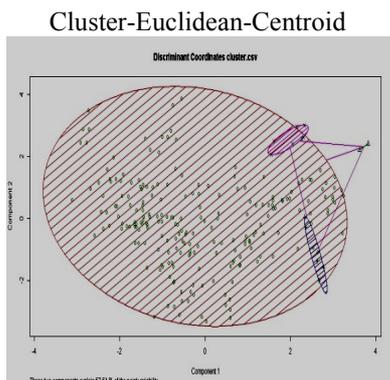
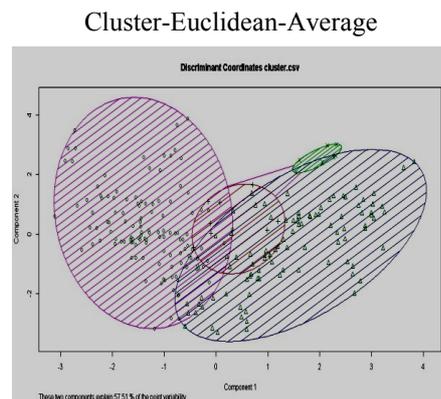
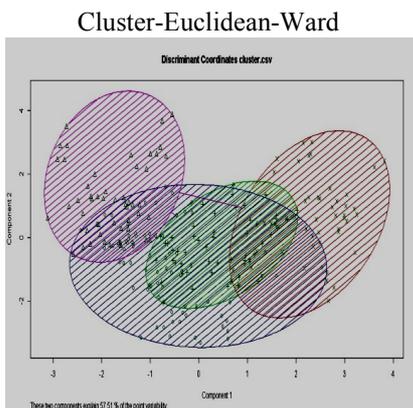
Data Cleaning: Data was screened for missing values and no missing value was found. Further data was analyzed. In this research, the survey method was selected to understand the challenges faced by High performing Indian Organization, how to enhance knowledge sharing across locational and functional boundaries. Data mining tools and techniques i.e. R programming, R Rattle and

SPSS 20 software's (Regression, Classification & Clustering) have been used to analyze the data. **7. DATA ANALYSIS**



The hierarchical clustering correlation dendrogram is produced by Kendall Method. Since our Cross functional variables are Ordinal categories the dataset is showing their association (correlations) of Cross Functions. We found groupings of variables that are highly correlated. The length of the lines in the dendrogram provides a visual indication of the degree of correlation. The Cross

Functional Variables Development, Team Spirit, Cross Function working, have a grouped correlation of 60 % of Distance variation. Relationship, purpose and objective have been grouped together with a 70 % of distance Variation. Communication, Role Clarity, problem solving and decision making have 90% of Wald distance Variation as per the above Kendall Clustering Correlation.



For the Cross Function Analysis we followed cluster analysis. We choose hierarchical clustering because data requires classification and selected distance methods as Euclidean and for agglomerate clustering ward, Centroid, complete, average methods are applied. For graphical representation discriminate coordination techniques are adopted for this cross functional team. In modelling we

presented four cluster- figures for measuring various distances. All together 57.54 % is extracted in complete and in agglomerate method 60.40% is extracted. In the cross function cluster the above Fours Clusters have given best grouping. Those grouping observation details are given below.

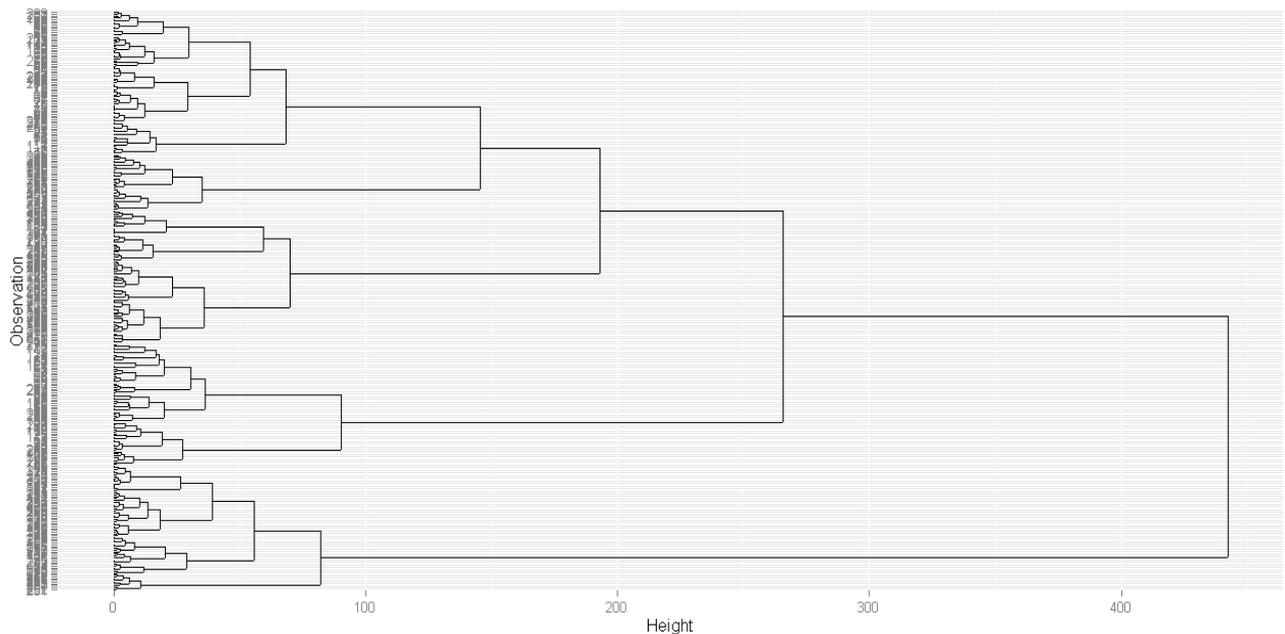
Table 1: Cluster Centroids are Categorization Summary

Cross Functional Factors	Total Instances	Cluster-1	Cluster-2	Cluster- 3	Cluster-4
	(320)	(99)	(84)	(53)	(84)
Team spirit	20.35	21.00	20.58	17.98	20.83
Relationships	23.17	23.38	18.86	25.26	25.90
Purpose and objectives	16.04	16.28	13.89	17.15	17.21
Communication	37.00	38.43	33.64	37.89	38.11
Role clarity	21.22	21.92	20.11	21.60	21.25
Problem solving	16.67	17.44	15.46	16.66	16.95
Development	15.89	17.46	16.92	12.70	15.01
Cross functional	19.08	21.35	19.39	15.30	18.49
Within cluster sum of squared errors: 62.57					

Above cluster Centroid is categorized in to 4 clusters. Total instances are 320. First cluster contains 99 observation, Second cluster has 84 groping observation,

third cluster has 53 Grouping observations and Fourth Cluster contains 84 observations with 62.57 % of SSE.

Cluster Dendrogram cluster.csv
 Rattle 2015-Nov-18 08:24:06 B S SASTRY



8. CONCLUSION

This research study revealed that performance of cross functional team for knowledge sharing followed by Team Spirit, Relationships, Purpose and Objectives, Communication, Role Clarity, Problem Solving and Decision Making, Development (Team and Individual) & Cross Functional Working. In order to promote knowledge sharing among cross functional team, it is inevitable for high performing Indian organization to give due emphasis to all the above-mentioned factors. There are two main types of problems and challenges related to knowledge sharing in cross functional teams. The first problem is to overcome team members' reluctance to participate in the

knowledge sharing works. The second problem is to minimize the problem related to the lack of "mutual knowledge" (Cramton, 2001), or "knowledge that the communicating parties share in common" (p. 346), due to unequal distribution of prior knowledge critical for the task on hand and work-related competence puts each member on an unequal footing, thus undermining their apathy to cooperate interdependently and give contributions to the ongoing knowledge processes. Knowledge sharing methodology in a cross-functional team is the level of cognitive overlap and commonality in beliefs, expectations and perceptions about a given target. Generally cross-functional team members come from

different departments, business disciplines and geographical locations; they have different ways of perceiving the tasks and taking up the issues together (Rivenbark and Frost, 2003). The present research focuses on cross-functional teams has given some advantages and challenges to the high performing Indian organizations, while it is difficult to say that all members would share their requisite knowledge effectively due to geographical dispersion, lack of prior collaborative experience and diverse membership background (Criffith and Sawyer, 2006; Rasmussen and Wang, 2006). This paper argues on factors that are influencing cross functional team for Knowledge Sharing in High Performing Indian Organization.

9. REFERENCES

- [1] Andrews, K. and Delahaye, B. N. (2000) 'Influences on Knowledge Processes in Organizational Learning: The Psychosocial Filter', *Journal of Management Studies*, Vol. 37, No. 6, pp. 797- 810.
- [2] Argote, L. P., Ingram, J. M., Levine, A. and Moreland, R. L. (2000), 'Knowledge Transfer in Organisations: Learning from the Experience of Others', *Organizational Behavior and Human Decision Processes*, Vol. 82, No. 1, pp. 1-8.
- [3] Boer, H., Caffyn, S., Corso, M., Coughlan, P., Gieskes, J., Magnusson, M., Pavesi, S. and Ronchi, S. (2001), "Knowledge and continuous innovation: the CIMA methodology", *International Journal of Operations & Production Management*, Vol. 21 No. 4, pp. 490-504.
- [4] Bokhari, R.H. (2005), "The relationship between system usage and user satisfaction: a meta-analysis", *Journal of Enterprise Information Management*, Vol. 18 Nos 1/2, pp. 211-34.
- [5] Gupta, A.K., Govindarajan, V. and Malhotra, A. (1999), "Feedback-seeking behavior within multinational corporations", *Strategic Management Journal*, Vol. 20, pp. 205-22.
- [6] Hippel, E. (1994), "Sticky information and the locus of problem solving: implications for innovation", *Management Science*, Vol. 40 No. 4, pp. 429-39.
- [7] Holsapple, C.W. and Singh, M. (2001), "The knowledge chain model: activities for competitiveness", *Expert Systems with Applications*, Vol. 20, pp. 77-98.
- [8] Hughes, M. (2000), "Knowledge creation a new value perspective for technical communicators", *Technical Communication*, Vol. 49 No. 3, pp. 275-85.
- [9] Knudsen, M. (2007), "The relative importance of interfirm relationships and knowledge transfer for new product development success", *Journal of Product Innovation Management*, Vol. 24 No. 2, pp. 117-38.
- [10] Kogut, B. and Zander, U. (1992), "Knowledge of the firm, combinative capabilities, and the replication of technology", *Organization Science*, Vol. 3 No. 3, pp. 383-97.
- [11] Kogut, B. and Zander, U. (1996), "What firms do? Coordination, identity, and learning", *Organizational Science*, Vol. 7 No. 5, pp. 502-18.
- [12] Lane, P.J. and Lubatkin, M. (1998), "Relative absorptive capacity and inter organizational learning", *Strategic Management Journal*, Vol. 19 No. 5, pp. 461-77.
- [13] Leonard-Barton, D. and Sinha, D.K. (1993), "Developer-user interaction and user satisfaction in internal technology transfer", *Academy Management Journal*, Vol. 36, pp. 1125-39.
- [14] Mahnke, V., Pedersen, T. and Venzin, M. (2005), "The impact of knowledge management on MNC subsidiary performance: the role of absorptive capacity", *Management International Review*, Vol. 45, pp. 101-19.
- [15] Matusik, S.F. and Hill, C.W.L. (1998), "The utilization of contingent work, knowledge creation, and competitive advantage", *Academy of Management Review*, Vol. 23 No. 4, pp. 680-97.
- [16] Nahapiet, J. and Ghoshal, S. (1998), "Social capital, intellectual capital and organizational advantage", *Academy of Management Review*, Vol. 23 No. 2, pp. 242-66.
- [17] Ndlela, L.T. and du Toit, A.S.A. (2001), "Establishing a knowledge management program for competitive advantage in an enterprise", *International Journal of Information Management*, Vol. 21, pp. 151-65.
- [18] Nonaka, I. (1994), "A dynamic theory of organizational knowledge acquisition", *Organization Science*, Vol. 5 No. 1, pp. 14-37.
- [19] Mohrman, S., Finegold, D. and Klein, J. (2002), "Designing the knowledge enterprise: beyond programs and tools", *Organizational Dynamics*, Vol. 31 No. 2, pp. 134-50.
- [20] Prohl, R. (1997), "Enhancing the effectiveness of cross-functional teams", *Team Performance Management*, Vol. 3 No. 3, p. 137.
- [21] Sarin, S. and McDermott, C. (2003), "The effect of team leadership on learning, knowledge application and performance of cross functional new product development teams", *Decision Sciences*, Vol. 34 No. 4, pp. 707-39.
- [22] Sarker, S., Sarker, S., Nicholson, D. and Joshi, K. (2005), "Knowledge transfer in virtual systems development teams: an exploratory study of four key enablers", *IEEE Transactions on Professional Communication*, Vol. 48 No. 2, pp. 201-18.
- [23] Venkatraman, N. and Ramanujan, V. (1986), "Measurement of business performance in strategy research: a comparison of approaches", *Academy of Management Review*, Vol. 11 No. 4, pp. 801-15.
- [24] Yang, J., Lai, F. and Yu, L. (2006), "Harnessing value in knowledge acquisition and dissemination: strategic sourcing in product development", *International Journal of Technology Management*, Vol. 33 Nos 2/3, pp. 299-317.
- [25] Yli-Renko, H., Autio, E. and Sapienza, H.J. (2001), "Social capital, knowledge acquisition, and knowledge exploitation in young technology-based firms", *Strategic Management Journal*, Vol. 22 Nos 6/7, pp. 587-613.
- [26] Zahra, S.A. and George, G. (2002), "Absorptive capacity: a review reconceptualization, and extension", *Academy of Management Review*, Vol. 27 No. 2, pp. 185-204.
- [27] Zander, U. and Kogut, B. (1995), "Knowledge and the speed of transfer and imitation of organizational capabilities: an empirical test", *Organization Science*, Vol. 6, pp. 76-92.

