

New Business Development Teams: Does managing the knowledge flow lead to success?

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ACADEMIC TRACK

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Successful new business development is critical for many organizations as this is the primary means for organizations to innovate and renew themselves thereby adapting to changing market conditions. Although the literature on the “ideal” type of an innovation organization has grown (Jelinek and Schoonhoven, 1990; Van de Ven 1986, Kanter, 1983), many organizations are still faced with the difficulty of sustained innovation. One of the reasons for the difficulties of sustained innovation is the inability to successfully manage new business development teams.

Why are some new business development teams more successful than others? Teams that are able to solve a steady stream of problems to attain their goals have been shown to develop more new products (Clark and Fujimoto, 1989; Myers and Marquis, 1969) eventually creating new businesses. In the process of developing new products, these teams require new knowledge, creative ideas as well as interdependent individuals. In short, successful new business development involves managing the knowledge flow within and across multifunctional teams.

This research seeks to extend theory on organizing new business development teams by focusing on the flow of knowledge within new business development teams and between the team and the organization. We define new business development teams as multifunctional teams with the goal of generating products that lead to sustainable businesses. To explore the problems of sustained innovation within a large firm, we

followed 29 new business development teams within a large, mature chemical company. Based on our findings, a team's internal knowledge flow can be considered a necessary condition for a team's effectiveness, but insufficient for continuous funding. In order to receive continuous funding, network relationships across teams matter.

Managing the Knowledge Flow at Two Levels

Efficient knowledge flow in new business development teams is frequently associated with overcoming problems at two levels: those affecting the team and those affecting the relationship between teams and the rest of the organization (Dougherty and Hardy, 1996). At the level of the team, problems include positioning the product in the market or understanding new markets (Cooper, 1983, Leonard-Barton, 1991) or forming multifunctional teams (Ancona and Caldwell, 1990). When team level problems are resolved, innovation still does not seem to occur (Dougherty and Hardy, 1996). There is a second level of problems, which affects the interface to the organization (Ancona and Caldwell, 1990). At this level, managing the relations to functions such as production, marketing and sales, securing expertise and managing external relations have been shown to be crucial (Kazanjian, 1988). When problems at the team level and between the team and the organization are resolved at multiple stages of innovation, new businesses can develop (Dougherty and Hardy, 1996).

While the importance of managing the knowledge flow within the team has long been recognized, the importance of the relationship between the team and the organization is an area not sufficiently explored. Given that this relationship has previously not been studied, our study focuses on exploring the relationship between determinants of a team's innovation culture and a team's network congruency on team success.

Determinants of a Team's Innovation Culture

Determinants of successful innovation within mature firms are organizational configurations (Mintzberg, 1979), leadership (Quinn, 1985), culture (Kanter, 1983) and a combination of these (Jelinek and Schoonhoven, 1990). The literature on innovative organizations suggests four characteristics that have reemerged in various forms: (1) strategic direction or mission, (2) involvement of people, (3) consistency in implementation and (4) adaptability to changes (Denison et al., 1996). Although these four categories may not be exhaustive, they do focus the attention on the most important management practices within innovative organizations. Involvement and consistency address the internal dynamics of a new business development team while adaptability and mission take their focus on the relationship between the team and the environment. From a system-oriented perspective, adaptability and involvement introduce more variety, more input, and therefore more possible solutions to a given situation, whereas consistency and mission are likely to reduce variety putting more emphasis on stability. Within the literature on innovation, the need for these opposing forces has been highlighted. As Sheremata (2000: 390) argues "... the co-existence of opposing and contradictory elements of structures and processes can increase the

probability of successful development...”. According to the author successful product development requires structures and processes that generate and retrieve new ideas, knowledge and information, similar to the traits of adaptability and involvement, whereas consistency and mission integrate the intellectual material into collective action (Sheremata, 2000).

A number of researchers have pointed out the importance of explicitly linking an organization’s strategy to innovation (Leonard-Barton, 1988; Kanter, 1988 and Dougherty and Hardy, 1996). By incorporating innovation into a company’s mission, organizational members widely understand the role of new business development teams within the organization. This enables the team to obtain information and resources from different functions and legitimizes their activities. In short, organizations that have included innovation into the mission of strategic management will likely have a higher chance of success (Dougherty and Hardy, 1996). This finding suggests that teams comprised of members who believe in the mission to innovate will be more successful than others.

Hypothesis 1: The existence of a mission is positively related to team success.

Adaptability to the environment throughout the innovation process is another important determinant in ensuring innovation success. Open communication allows unanticipated problems to emerge and thereby enables teams to make adaptive changes (Nord and Tucker, 1987: 311). Being able to respond to new information

from the environment and thereby learn and change enables new business development teams to keep their customer focus.

Hypothesis 2: Adaptability to new inputs is positively related to team success.

According to Jelinek and Schoonhoven (1990) involvement is another determinant, which helps people to understand their part in the innovation process. Involvement essentially creates a shared responsibility for success. Managers should "... involve people well down in the organizational hierarchy to solve problems..." (Dougherty and Hardy, 1996: 1124). The importance of sharing knowledge in multifunctional teams by involving them has long been recognized (Ancona & Caldwell, 1990; Dougherty, 1992).

Hypothesis 3: Involvement of people is positively related to team success.

In addition to involvement, consistency of action has been shown to relate to innovation success. The key to consistency is cross-functional coordination, which entails exchanging expertise from all functions to resolve design and manufacturing problems and testing ideas with marketing and sales. (Dougherty, 1992, Souder, 1987). Especially the interface between marketing and sales and the new business development teams entails development a common customer understanding so that the newly designed product or service meets the needs of the customer. Moorman

(1995), in particular, has pointed to the importance of consistent customer information flow as a key determinant of innovation success.

Hypothesis 4: Consistency of action is positively related to team success.

Team Network Congruency

While the team's innovation culture is a necessary condition for success, studies have increasingly pointed towards the importance of the relationship between the team and the organization (Ancona and Caldwell, 1990; Dougherty and Hardy, 1996). Each new business development team needs to put in place collaborate structures and processes appropriate to each development stage. This involves getting access to resources laterally and vertically so that people throughout the organization can provide the necessary input to the team at each stage of the decision-making process (Kanter, 1983, 1988). Routines have, for instance, been found to inhabit inter-functional interaction, as Dougherty (1990) found in five firms. This interaction between different functions is, however, increasingly seen to be key to innovation as knowledge flow between different functions is necessary to selecting the right product, developing customer understanding or refining the service provided.

Arguments based on work by scholars of social capital have long argued that network relationships are the basis for dealing and coordinating work within organizations and that these relationships, the social capital, are a source of profit (Burt, 1992, Coleman, 1988). It is not *what* an employee knows, but *whom* this employee knows and what

other connections this employee has in order to work effectively which determines success. “The premise behind the notion of social capital is rather simple than straightforward: investment in social relations with expected returns” (Lin, 1999: 28). One of the expected returns of social capital is more efficient knowledge flow by minimizing redundancy. It also encourages cooperative behavior among employees because there are social structures that facilitate and shape their actions (Nahapiet and Ghoshal, 1998; Lin, 1999). Having network relations between new business development teams and the organization addresses one of the two levels of knowledge flow requires for successful innovation (Dougherty and Hardy, 1996). If the relations in the network perceive the team to have an innovation culture, they are likely to solve the “innovation-to-organization” problem. We therefore propose the following four hypotheses.

Hypothesis 5: The higher the congruency of beliefs in the importance of innovation, between the team and organizational members on the mission, the higher is the likelihood of team success.

Hypothesis 6: The higher the congruency between the team and organizational members on the ability of the team to adapt, the higher is the likelihood of team success.

Hypothesis 7: The higher the congruency between the team and organizational members on the ability of the team to involve people, the higher is the likelihood of team success.

Hypothesis 8: The higher the congruency between the team and organizational members on the ability of the team to take consistent action, the higher is the likelihood of team success.

Insert Figure 1

Methods

Research Site and Data Collection

The research was conducted in a multinational chemical corporation. One-site sampling schemes have been used widely in network research as broad contextual factors that are known to influence the innovative ability can be controlled (Tsai and Ghoshal, 1998). In 2000, at the time of data collection, the company had annual sales of \$23 billion and employed over 40,000 people. Its products covered a wide range of markets that are vital to human progress, including food, transportation, health and medicine, personal and home care, and building and construction. The company operated across the Americas, Europe and Asia.

As the leadership of this large chemical corporation recognized that it had to offset stagnant revenues by entering new and faster growing markets, it started a program to establish new business development teams for the purpose of growth, i.e. semi-autonomous start-ups housed within the company. 60 projects were identified as potential prospects for new growth by a team of business unit managers (called the Business Growth Network), and 60 teams were created to pursue growth in the different business areas of the chemical company. After receiving initial funding, each project was evaluated using a stage-gate process consisting of five stages: concept shaping, concept analysis, validation, development, market launch. At the end of the validation stage, the Growth Board, top level management, evaluated the results and either terminated the project or provided additional funding.

Our data were gathered through an internet-based questionnaire on 32 of the 60 teams using the 360° Denison team leadership development survey. This survey is based on the validated Denison culture survey (Cho, 2000). Because the team members completed the questionnaire as one part of a management development program at IMD in 2000, the response rate was 100%. Each team asked organizational members working with the team upstream (marketing and sales), downstream (R&D and manufacturing) and the immediate supervising manager(s) of the team to complete the survey. The data were gathered through questions using Likert-type scales. In order to diminish social desirability bias, we (1) emphasized the importance of accurate feedback to the team, (2) guaranteed that all responses would be aggregated to the level of team, upstream, downstream or immediate manager(s), and (3) ensured that

data would not be routed through the company. Each team received feedback on the evaluation from the different organizational constituents.

Unit and Level of Analysis

All the data generated for each of our variables were measured at the individual level, yet our hypotheses were at the team level. We aggregated responses from organizational members upstream, downstream, bosses and the team into unit-level measures for each of the constructs. To check the extent of consistency in the responses from each unit, we computed inter-rater reliability, which was on average 0.91.

Team's Innovation Culture

To identify the innovation culture of the new business development teams, we used the 360° Denison team leadership development survey, which is based on 96 items measuring four traits of a team's leadership skills and practices – involvement, adaptability, consistency and mission which have been shown to impact performance. Mission provides purpose and meaning by defining a social role and external goals for the team. The factors of the mission trait are: defines strategic direction and intent, defines goals and objectives and creates shared vision. Consistency provides a central source of integration, coordination and control. The factors of the consistency trait are defines core values, works to reach agreement and manages coordination and integration. Involvement encourages others to be involved and create an environment

of experimentation and exploration, as well as a sense of ownership and responsibility. The factors of the involvement trait are empowers people, builds team orientation and develops organizational capability. Adaptability involves receiving and interpreting signals from the environment, and translating them into internal behavioral changes that increase the work group or organization's chances for survival, growth and development. The three factors of the adaptability trait are creates change, emphasizes customer focus and promotes organizational learning. These four traits were assessed by the team, organizational members upstream, downstream and the boss(es) of the team (see Figure 2).

Insert Figure 2

Discrepancy Index

To understand the relationship between the team and other constituencies within the new business development organization, we developed a discrepancy index of the traits of the team's innovation culture to assess the team's congruency with its network. The discrepancy index was measured by cumulating the differences in mean between the team, upstream, downstream and the bosses on each trait of the team's innovation culture.

Team Success

Success was evaluated using two measures: a (1) termination measure and a (2) perceptual measure of team effectiveness. The termination measure was created by

identifying the teams that were still in existence after a period of 12 months. Out of the 29 teams, 12 were terminated. In addition, we asked each team as well as organizational members working with the team upstream, downstream and the immediate manager(s) to rate the team on a number of team effectiveness indicators.

Results

Table 1 shows the means, standard deviations and correlations of all variables.

Insert Table 1

To test the hypotheses, we run two regression models of the eight independent variables on the two measures of success (1) team termination and (2) perceptual measures of team effectiveness. Table 2 shows two models - model 1 tests all of the main hypotheses on termination while model 2 tests all the hypotheses on the perceptual measure of team effectiveness.

Insert Table 2

Hypothesis 1 states that the existence of a mission is positively related to team success. Hypothesis 2 states that adaptability to new inputs is positively related to team success and hypothesis 3 states that involvement of people is positively related to team success. We found no support for any of these three hypotheses looking at the termination model, yet strong support for the perception of team effectiveness model ($p < 0.01$). The existence of a mission, the ability of a team to adapt and involving people are significantly related to team effectiveness. Hypothesis 4 states that

consistency of action is positively related to team success. Again, we found no support for the hypothesis with respect to the termination of teams. We did, however, find support for consistency of action in relation to model 2 suggesting that consistent action is positively related to perceptions of team effectiveness. Based on the results of the first four hypotheses it can be argued that a team's innovation culture significantly relates to team effectiveness and does not relate to the termination of teams.

Hypothesis 5 states that the higher the congruency between the team and organizational members on the mission, the higher is the likelihood of team success. We found strong support for this hypotheses in relation to the termination of teams ($p < 0.01$) suggesting that the greater the discrepancy between the organization and the team on its mission to innovate, the higher the likelihood the team is dissolved. There was, however, no support for this hypothesis for the team effectiveness model. Hypothesis 6 states that the higher the congruency between the team and organizational members on the ability of the team to adapt, the higher is the likelihood of team success. This hypothesis was supported in relation to team termination ($p < 0.05$). A team unable to adapt to changing environmental circumstances was more likely to be terminated. There was no support for this hypothesis in relation to team effectiveness. Hypothesis 7 states that the higher the congruency between the team and organizational members on the ability of the team to involve people, the higher is the likelihood of team success. This hypothesis received no support in either model – team termination or team effectiveness. Hypothesis 8 states that the higher the

congruency between the team and organizational members on the ability of the team to take consistent action, the higher is the likelihood of team success. Model 1 provided no support for this hypothesis. We did, however, find support for this hypothesis in relation to team effectiveness ($p < 0.05$) suggesting that high congruency of action between the team and other organizational members was positively related to perceptions of team effectiveness.

Discussion and Conclusion

This study has enabled us to incorporate the existing literature on innovation and highlight upon the importance of knowledge flow in organizational networks. Based on our findings, a team's innovation culture can be considered a necessary condition for a team's effectiveness, but insufficient for continuous funding. In order to receive continuous funding, network relationships contributing to the flow of knowledge matter.

Networks relationships had a different impact on the termination of teams vs. the effectiveness of teams. Network relations between a new business development team and different functional constituents within the organization appeared to have a greater influence on the termination of teams than the effectiveness of teams in this organization. The greater the discrepancy between the organizational constituents and the team on the "innovation mission" to accomplish by the team, the higher the likelihood was that the team would be terminated. Yet the same discrepancy did not relate to team effectiveness. Apparently, in this organization a team can function well,

yet if it does not receive any strategic support by the organization it will be terminated. These findings are similar to Dougherty and Hardy's (1996) arguments that sustained innovation does not occur if the innovation team can not solve the "innovation-to-organization problems". Although a new business development team can be considered an effective team, its mission has to be in alignment with the organization in order to receive continued funding and not be terminated. The knowledge flow between different organizational constituents and the team itself has to be sustained in order for the organization to see their value. Teams that have a great idea but are not able to act upon the idea by letting their knowledge flow to different functional areas within the organization are more likely to be terminated.

Organizational constituents also need to believe in a team's ability to adapt to changing environmental circumstances in order to receive continued funding. Since changes in the strategic mission in the course of the existence of new business development teams occur frequently, the ability to adapt to these changes as seen by the organizational constituents is crucial. A new business development team's networks and connections are inherently necessary, yet these networks are ineffective from a termination perspective if "uprooted by downsizing, restructuring, and changes in senior managerial focus" (Dougherty and Hardy, 1996: 1146).

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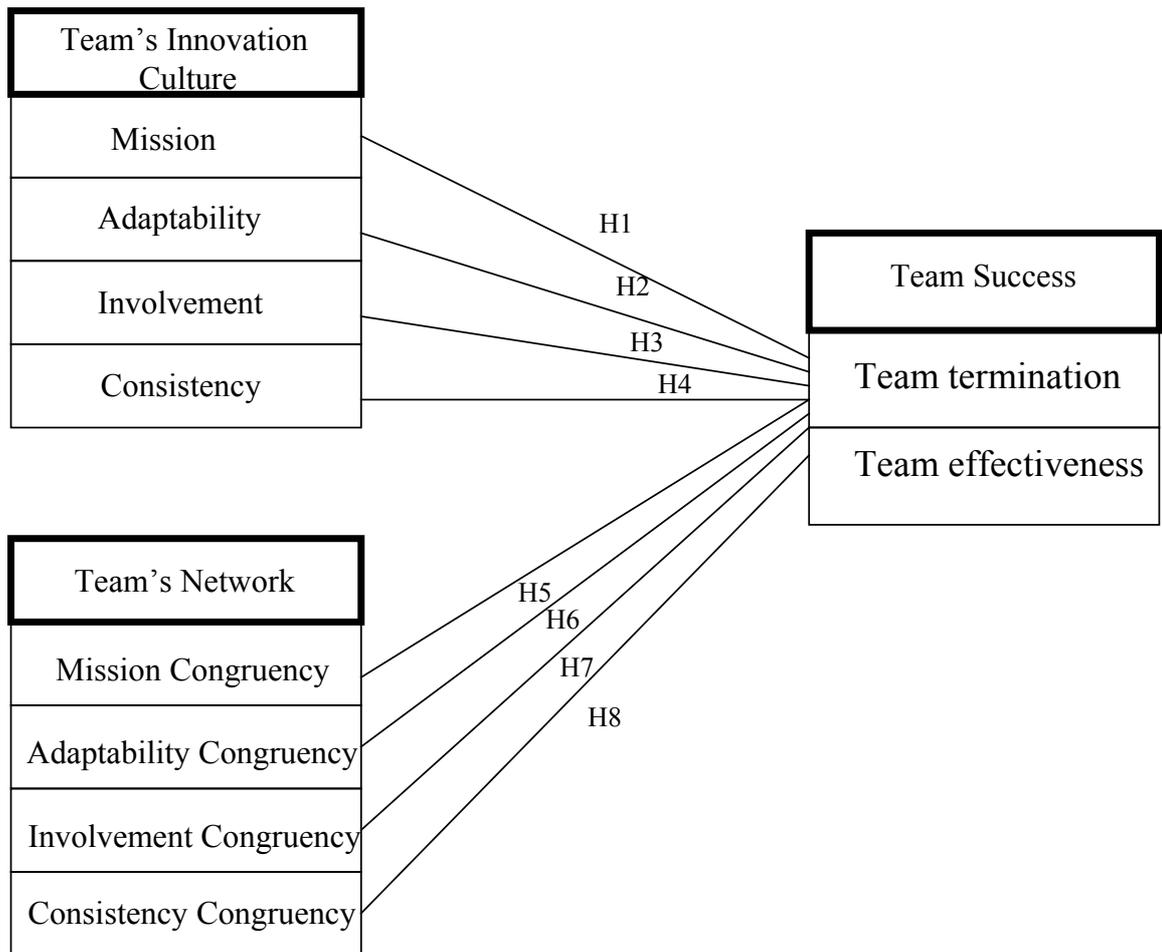


Figure 1: Success of New Business Development Teams

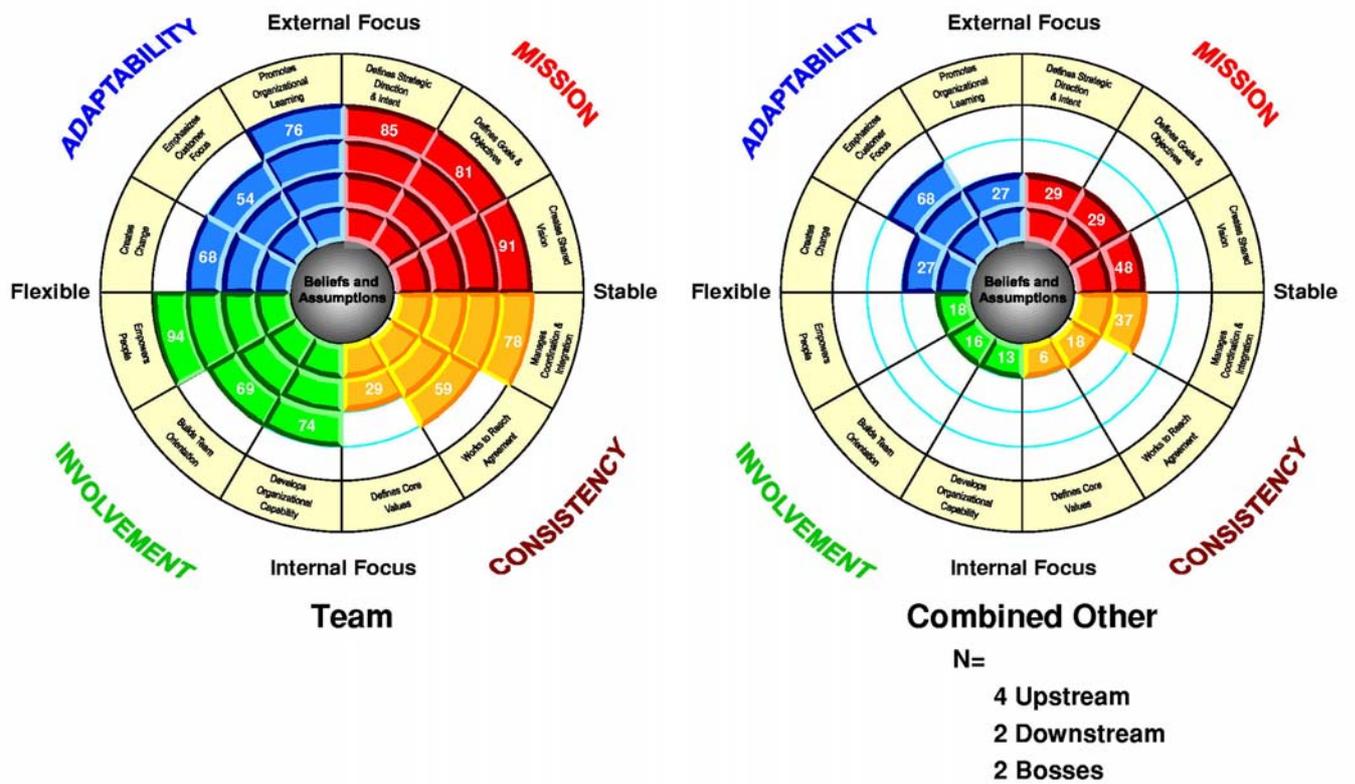


Figure 2: Team's Results

Means, Standard Deviations, and Correlations among Study Variables

Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9
1. Mission	5.04	.75	1.00								
2. Adaptability	5.17	.66	.85	1.00							
3. Involvement	5.08	.63	.88	.84	1.00						
4. Consistency	5.11	.66	.89	.84	.92	1.00					
5. Discrepancy mission	1.86	.82	-.21	-.11	-.18	-.19	1.00				
6. Discrepancy adaptation	.91	.33	-.40	-.36	-.34	-.35	.49	1.00			
7. Discrepancy involvement	.93	.32	-.36	-.30	-.37	-.35	.52	.85	1.00		
8. Discrepancy consistency	.93	.35	-.36	-.29	-.36	-.37	.61	.84	.87	1.00	
9. Team effectiveness	4.91	.76	.91	.91	.89	.89	-.16	-.39	-.35	-.37	1.00

Table 1: Means, Standard Deviation and Correlation of Variables

Results of Regression Analysis

Variables	Team Success	
	Termination Model (1)	Team effectiveness Model (2)
Mission	.32	.29 **
Adaptability	.04	.38 **
Involvement	-.26	.17 **
Consistency	-.21	.13 *
Discrepancy of mission	.46 **	.06
Discrepancy of A.	-.35 *	-.02
Discrepancy of I.	-.07	.09
Discrepancy of C.	-.04	-.14 *
R-Square	.27	.91
F-Statistic	5.03 **	214.45 **

* $p < .05$

** $p > .01$

Table 2: Results of Regression Analysis