LINKING TEAM VISION TO TEAM PERFORMANCE: THE MEDIATING EFFECT OF THE TEAM COMMUNICATION

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ABSTRACT

The purpose of this study is to analyze the relationships between of two components of team vision, namely, vision clarity and vision support, team communication and team performance. This study also aims to examine the mediating effect of team communication on the relationship between vision components and team performance. The study was conducted based on data collected from 87 team members. The findings of the study indicated that among the two components of team vision, vision clarity has a positive and significant impact on team communication and team performance, whereas vision support has not a significant impact on team communication and team performance. Additionally, team communication does not mediate the effect of vision clarity and vision support on team performance.

Keywords: Team vision, team communication, team performance, vision

INTRODUCTION

The concept of teams and teamwork is increasingly becoming an important concept key to new product development, productivity and quality in the workplaces (Lynn and Kalay, 2015). New product development is regarded as a basic concept in order to creating new industries, providing economic growth and getting competitive advantage (Kızıldere, 2016). Each passing day team based structures are increasing in firms and in order to improving team performance growing research are conducted by scholars (Troth, Jordan, Lawrence and Tse, 2012). Many researchers have explained and confirmed the positive impacts of team vision on team performance (Lynn and Kalay, 2016). The teams can be built by members closely tied within firm and functional areas (e.g., production), or teams can be cross functional (e.g., accounting, marketing, and production), where members are from a variety of functional boundaries and responsibilities (Hansen, 1994). Recent empirical research shows that to gain competitive edge, most firms have implemented cross-functional teams (Hong, Vonderembse, Doll and Nahm, 2005). Ray and Bronstein (1995) state that in successful teams the members of team can not be supervised, controlled or managed. Instead, purpose of the organization and shared vision of the goals can provide the guidance to members of team. Among team members with a strong shared vision, team members can agreed upon goals can have common sense of goals, and they are most likely to feel empowered, motivated and committed to collective future of their teams (Levine and Moreland, 1991; Liden, Wayne and Sparrowe, 2000; Zhang, Waldman and Wang, 2012). Without effective team vision, project may is pulled in different directions by team members, and hence the team performance is adversely impacted (Ancona and Caldwell, 1992). Thus, developing a common view among team members is important in order to minimize the adverse impacts of the various diversities in team members and to promote higher performance (Revilla and Rodriguez, 2011).

Besides team vision, team communication is evaluated as one of another important factor on team performance in literature (Clampitt, DeKoch and Cashman, 2000; Grice, Gallois, Jones, Paulsen and Callan, 2006). Communication is the main methods of human interaction. Effectiveness of team communication can result in more job satisfaction and organizational commitment, more feelings of personal control, and less employee stress and uncertainty (Straub and Karahanna, 1998; Hargie, Tourish and Wilson, 2002; Bordia, Hunt, Paulsen, Tourish and DiFonzo, 2004). Team members’ communication play a critical role in improving team performance (Hagen and Park, 2013). According to Kanno, Furuta and Kitahara (2013), if the members of a team could not share their cognition perfectly, they could not exchange the entire content of their mind with each other explicitly in communication process. Communication can be used as tool which directly impacts the team’s social dimensions and
communication has a positive influence on satisfaction of team members with the team in addition to performance of the team (Lin, Standing and Liu, 2008). Although many studies done on teams and teamwork, there is still a gap in literature regarding integrated set of factors which contribute to performance of team and teamwork (Lin et al., 2008). Within this framework, this study focuses on the mediating effect of team communication on the relationship between vision and performance of team. In accordance with this purpose, the study will begin by a literature review of vision and vision component and team communication. Then, it continuous on hypotheses development. Research methodology, the results of analyses and the model of research are taking place at second section. Finally the analyses results are being discussed and recommendations are being provided for academicians and managers in the last section.

LITERATURE REVIEW AND HYPOTHESES

Team Vision

Vision of team means the extent to which an achievable, shared, clear vision and set of purposes that the teams have (Gibbon et al., 2002). In other words, vision is an expression of the desired states something in the future (Rice, O’Conner, Peters and Morone, 1998; Lynn, 1999). When teams have an effective vision, goals can be identified and the effectiveness of those goals can be determined. Therefore, in order to establish an effective team, it is needed to be driven forward by either an explicit or implicit shared vision, which has been developed from within the team, and valued by the team members. The most common team problem areas facet by teams in the front end is expressed as follows (Khurana and Rosenthal, 1998): (1) Inexplicit interface of sub systems and the lack of direction of team members (2) unreceptive team strategy and teamwork not prioritized and, (3) inexplicit tradeoff of team goals and inadaptable assignment of individuals to teams.

This study describes two dimensions in the concept of vision. It should be vision clarity, and vision support. These components together allow the development of a team vision that will guide the efforts of the team in a common direction, despite the differences among team members. Similar vision components have been also emphasized by certain scholars. For example, According to Hamel and Prahalad (1989), an effective vision should consists of three components. They should be (a) supported by others in the organization, (b) stable, and (c) clear. Niemes (1996), for example, asserted that vision clarity is critical for teams. Giordan (1995) stressed vision clarity and organizational support. Similarly, McAlister (1998) and Vaughan (1997) emphasize that a clear vision and agreement upon goals or support is important. Lynn and Akgun (2001) state that because there are many ways to achieve the proposed ends, stability of vision at the team level may not be crucial, and those ways may be unknowable in the initial phase of projects where environmental conditions can be quite ambiguous. In other words, it is not possible that stability of vision is a determinant factor at this even more uncertain phase of the vision development process. Therefore, this study does not consider vision stability to be a related component of vision.

The first component, clarity of vision, refers to recognition, the extent of communication, and understanding of a set of project objects which guide development efforts on teams (Hong, Doll, Nahm and Li, 2004). The initial step in creating an effective team vision is vision clarity. With clarity of vision, because the members of team know what they are supporting, it is most likely that all members of team will support team vision. For example, Lucas (1998) points that an obviously defined vision can keep members of team to focus on their job, enable them to learn faster and help them to arrange their various priorities. Moreover, a clearly defined vision helps members of team focus better on environmental changes, technological developments, and market that each of them can be obstacle in order to quick learning and success of team. Eisenhardt (1989) states that teams having a clear vision can reduce cycle time. Conversely, Kessler and Chakrabarti (1996) point that without a clearly defined vision team (the existence of vague project objectives) promotes conflict and suspicion among team members regarding what should be done, what should be produced, which can result in time – readjustment, debates, and consuming.

The second vision component, vision support, refers to securing the commitment from employees within an enterprise for what the firm wants to achieve. In other words, vision support shows the willingness of members to help compose the vision or to do everything that is necessary to achieve the objects. A clear vision is one components of an effective vision; the vision must also be shared and supported by others on the team. Vision support allows members in the team to understand how they might work together or
align themselves to play a role in realizing that vision. According to Lewis (2001), each member will try to achieve the outcome that they imagine, if everyone does not agree on the vision, often with disastrous results. Katzenbach and Smith (1992) have identified four basic factors that need to be existent for teams to show high performance. These factors are having complementary skills, having a common purpose, establishing goals and collective accountability, and agreeing a common to getting the work done respectively.

**Team Communication**

The communication system of a team is a physical set up that enables each member to communicate with other members of the team. For the purpose of this study, team communication includes elements of the behaviors of interpersonal communication in a team. Because of various diversities among team members, effectively management of team communication is vital for high team performance. The following characteristics of the team have been said to be common elements in teams (Schlenkrich and Upfold, 2009):

- Physically dispersion of team members.
- Cross of time boundaries.
- Using of communication technology.
- Having a common purpose among members.
- The existence of various diversities among team members (gender diversity, age diversity, cultural diversity, functional diversity, organizational diversity).
- presence of structural dynamism (cross of functional boundaries, formation and reformation of teams continuously, shifting of team membership, memberships of part of multiple teams, teams reporting to different people at different times, team members having different perspectives and skills).
- Performing of non-routine tasks.
- Performing of interrelated tasks.

These characteristics create barriers to effective teamwork and have negative effects on team communication by creating interpersonal conflict and reducing information sharing. Kimball (1997: 1) states that managing a team is not only management of social and human processes in ways that support the team, but also is management of the all channels of communication strategies and techniques of project. Wong and Burton (2001) conclude that by clarifying role expectations, increasing ease of communication, fostering a common culture within team, and introducing routines to facilitate coordination can be improved team performance.

**Development of Hypotheses**

The concept of shared vision, as a determining factor on performance of team has long been a subject of interest in organization and management literature (Lynn and Akgun, 2001; Lynn and Kalay, 2015). The significant relationship between vision and some measure of team performance is suggested by a few empirical research (Revilla and Cury, 2009; Revilla and Rodriguez, 2011; Patanakul, Chen and Lynn, 2012). For example, Revilla and Cury (2009), in their empirical study, have revealed that clarity of project purposes has a positive influence in the new product performance in terms of process outcomes and teamwork. Patanakul et al. (2012), by studying 555 new product development projects, found that vision clarity is the most important predictor variable of performance of project, among the control variables. Lynn and Akgun (2001), in their project level research, have developed definitions and scales regarding components of project vision (clarity of vision, support of vision, stability of vision), and analyzed the impacts of those three components on radical innovation performance. Their analysis results showed that clarity of vision has a statistically significant impact on success of new product development team. Following these findings this study focused on team communication and the mediating impact of team communication on the relationship between vision components and team performance. The relationship between shared vision and team communication has been stressed by many scholars.
(Crawford and Lepine, 2013). For example, Yukelson (1997) states that having collaborative and synergistic teamwork, an identity as a team, unity of object and a shared vision, peer helping and social support, a cohesive group atmosphere and positive team culture, trust at all team levels, individual and mutual accountability, and open and honest communication processes are core components to take into consideration in establishing an effective team.

With respect to the relationship between team performance and team communication, Marks, Mathieu and Zaccaro (2001) recognized that there is a significant communication component required from each of the teamwork processes that must operate in tandem. Effective professional communication among team members is critical to minimizing or eliminating miscommunication, and increasing team effectiveness. In many cases, the quality and efficiency of the team outcomes corresponds to the communication performance of a team member in team (Troth et al., 2012). Effective and appropriate communication in teams can lead to avoid the violation of relational or situational rules governing the communicative context, and can help accomplish the intended functions of the team member or the objectives and the goals (Troth et al., 2012). Communication networks facilitate the transfer of knowledge among team members. Gardner, Gino and Staats (2012) state that once a team is composed, the members of team are engaging in three basic communication behaviors to utilize it: updating of directory (learning what other team members know), allocating information to deemed experts, and getting information from them. In the light of this information, this study argues that team vision increases the team performance through the team communication and following hypotheses are formulated:

H1: Team communication mediates the relationship between vision clarity and team performance.

H2: Team communication mediates the relationship between vision support and team performance.

METHODOLOGY

Research Goal

The purpose of this study is to reveal the mediating effect of team communication on the relationship between vision components and team performance. In accordance with this purpose a field survey using questionnaires was conducted in order to test the hypotheses of study.

Sample and Data Collection

Data were collected from executive masters students in a business program at a university in the Northeast Region of the United States. To avoid common method bias, we designed a research protocol that involved surveying executive masters students enrolled in several sections in a Marketing Strategy course. For this Marketing course, students competed in teams of four to six students in a computer simulated marketplace for six periods or rounds over eight weeks. The computer simulation was specially created and written for this course and is used by several leading business schools such as Insead and Wharton. Students were surveyed after they had completed the simulation – six rounds. Also prior to completing the six “real” rounds, two practice round were played. Their survey responses were matched to their final results from the simulation, e.g., sales, profits and market share. The outcomes were objective/quantitative measures calculated by the simulation.

We first pilot - tested the survey with ten students from three different Masters of Business programs. After receiving the returned surveys, we corrected several questions in which respondents had difficulty answering or indicated were unclear. These pilot surveys were not used in the final dataset. Once the surveys were refined, we sampled 87 students who were in two sections of Marketing Strategy in an Executive Masters of Business program. We received a 95% response rate. These students were all full-time working professionals with a mean age of 31.8 and standard deviation of 9.2. They came from locations across the United States – from New Jersey to California. At the end of the data collection process, data derived from 87 team members were analyzed by using SPSS statistical packet program and two formulated hypotheses were tested using regression analysis.

Analyses and Results

To test the hypotheses, a questionnaire was developed based on previous research from several disciplines including (1) new product development (e.g., Nijssen, Arbouw and Commandeur, 1995; Bacon,
Beckman, Mowery and Wilson, 1994; Chiessa, Coughland and Voss, 1996), (2) marketing (e.g., Day, 1994; Moorman, 1995), (3) knowledge management (e.g., Davenport and Prussak 1998; Lynn, 1998; Roth and Kleiner, 1998) and (4) psychology (e.g., Larson and LaFasto, 1989; O’Leary-Kelly, Martocchio and Frink, 1994). Vision clarity, vision support and team communication were measured with six items, one item and four items respectively. Each construct was measured using multiple items and Likert type 0 to 10 scale (0 = strongly disagree to 10 = strongly agree). The dependent variable (Team Performance) was measured with cumulative profit and calculated by the simulation at the end of the game in terms of Dollars ($). All items of each scale with their factor loadings have been provided on the Table 1. At the same time, as can be shown on Table 2, the values of Cronbach’s Alpha for each scales exceeds 0.70, that indicated that the reliability of each scales used in that study is enough.

**Table 1. Factor Analysis Results**

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VISION CLARITY</strong></td>
<td></td>
</tr>
<tr>
<td>Prior to beginning the real rounds (after the practice rounds), the team had a clear vision of the required product features.</td>
<td>0.907</td>
</tr>
<tr>
<td>Prior to beginning the real rounds, the team had a clear understanding of target customers’ needs and wants.</td>
<td>0.902</td>
</tr>
<tr>
<td>Prior to beginning the real rounds, the team had a clear vision of the target market.</td>
<td>0.869</td>
</tr>
<tr>
<td>Our overall business goals were clear.</td>
<td>0.826</td>
</tr>
<tr>
<td>Our sales volume goals were clear.</td>
<td>0.822</td>
</tr>
<tr>
<td>Before we began playing SABRE for real (after the practice rounds) a few statements were established that helped guide our efforts (e.g., target price, target market, etc.)</td>
<td>0.739</td>
</tr>
<tr>
<td><strong>VISION SUPPORT</strong></td>
<td>n.a.</td>
</tr>
<tr>
<td>Overall, team members supported the vision of our company.</td>
<td></td>
</tr>
<tr>
<td><strong>TEAM COMMUNICATION</strong></td>
<td></td>
</tr>
<tr>
<td>Team members frequently used SMS or text messaging to communicate with fellow team members.</td>
<td>0.836</td>
</tr>
<tr>
<td>Team members frequently used video chat/video conferencing to communicate with fellow team members.</td>
<td>0.768</td>
</tr>
<tr>
<td>Team members conducted frequent informal communications (e.g., phone, email, text) with others on the team.</td>
<td>0.729</td>
</tr>
<tr>
<td>Team members conducted frequent formal communications through team meetings with fellow team members.</td>
<td>0.523</td>
</tr>
</tbody>
</table>

Total Explained Variance for Vision Clarity %71.611

Total Explained Variance for Team communication %52.383

**Notes:** *Single indicator construct; n.a.: Not applicable.

**Table 2. Cronbach Alpha Values**

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Number of items</th>
<th>Scale format</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision Clarity</td>
<td>6</td>
<td>LRFa</td>
<td>0.918</td>
</tr>
<tr>
<td>Vision Supporta</td>
<td>1</td>
<td>LRFa</td>
<td>n.a.</td>
</tr>
<tr>
<td>Team Communication</td>
<td>4</td>
<td>LRFa</td>
<td>0.675</td>
</tr>
</tbody>
</table>

*Notes: LRFa - Likert Response Format (11 point: 0=strongly disagree to 10=strongly agree); *“Single indicator construct.

In this study, regression analysis is also conducted to test the hypotheses and to define the direction of relations. When the Table 3 was examined, it can be seen that only one dimension of team vision (Vision Clarity) has significant effect on team communication (β=.528; p<.01). However, no statistical significant association between vision support (β=.056, p>.05) and team communication was found. Additionally,
vision clarity ($\beta = .307; p < .05$) has a significant effect on team performance whereas vision support ($\beta = .107; p > .05$) has not a significant effect on team performance. The relationship of team communication to team performance is not significant ($\beta = .131; p > .05$). As Model 4 regression analysis result has showed, when the team communication included in regression analysis, the significant effect of vision clarity on team performance has not disappeared. Thus, regression analysis results do not support H1 and H2 hypotheses.

### Table 3. Regression Analysis Results of Mediating Effect of Team Communication on the Relationship between Vision and Team Performance

<table>
<thead>
<tr>
<th>Regression Model</th>
<th>Independent Variables</th>
<th>Depended Variables</th>
<th>Standardized $\beta$</th>
<th>Sig.</th>
<th>Adjusted $R^2$</th>
<th>F Value</th>
<th>Model Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Vision Clarity</td>
<td>Team Communication</td>
<td>.528</td>
<td>.000**</td>
<td>.297</td>
<td>19.176</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Vision Support</td>
<td></td>
<td>.056</td>
<td>.606</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td>Team communication</td>
<td>Team Performance</td>
<td>.131</td>
<td>.228</td>
<td>.005</td>
<td>1.475</td>
<td>.228</td>
</tr>
<tr>
<td>Model 3</td>
<td>Vision Clarity</td>
<td>Team Performance</td>
<td>.307</td>
<td>.012*</td>
<td>.121</td>
<td>6.919</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>Vision Support</td>
<td></td>
<td>.107</td>
<td>.377</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 4</td>
<td>Vision Clarity</td>
<td>Team Performance</td>
<td>.367</td>
<td>.009**</td>
<td>.119</td>
<td>4.889</td>
<td>.004</td>
</tr>
<tr>
<td></td>
<td>Vision Support</td>
<td></td>
<td>.113</td>
<td>.351</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Team Communication</td>
<td></td>
<td>-.113</td>
<td>.359</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: **Significance at $p < .01$; *Significance at $p < .05$

According to the regression analyses results, research model has been shaped as Figure 1 below:

![Figure 1. Final Research Model](image)

**CONCLUSION**

Team vision and communication in teams are important, however, we surprisingly know little about them. In this research, we tried to shed light on relationship between team vision components, communication in teams and team performance. Within this context, we empirically tested the mediating effect of the team communication on the relationship between vision components (vision clarity, vision support) and team performance. As a result of our analysis, we found that vision clarity was significantly associated with team communication and team performance. This finding is consistent with the scholarship and business press citing the importance of “vision” to success (Lynn and Akgun, 2001; Revilla and Cury, 2009; Revilla and Rodriguez, 2011; Patanakul et al., 2012).

In this study, we did not find any direct and significant effect of vision support on team communication and team performance. This finding is somewhat contradictory to the existing scholarship. However some studies are consistent with our finding. For example, Lynn and Akgun (2001), with regard to vision support, the link to new product teams’ success has been found to depend on where the support comes from (i.e., team managers, team members or top management), and found that vision support by team manager is significantly associated with new product success, whereas the support by team members and by top management is not. Additionally, according to analysis results team communication does not mediate the effect of vision clarity and vision support on team performance.
This study has explored the relationships between team vision, team communication and team performance at the team level. Although these concepts have been largely discussed at the organizational level, there are still some empirical issues to be tapped at team level. This is an attempt to fill some of those gaps. This study helps to understand the important components of vision at team level that contribute to the development of team success. Furthermore, the empirical analysis found that vision clarity is vital for team communication and team performance. These findings emphasized the importance of a clear vision to minimize the effects of team diversity and to promote team communication and team success.
REFERENCES


Niemes, J. (1996), Team Member Must Have Vision, Trust, Confidence, Orlando Business Journal, 12, p. 15.


