THE EFFECT OF VISION AND ROLE CLARITY ON TEAM PERFORMANCE

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ABSTRACT

Although many studies conclude that vision and role clarity are important at the organizational level, the impacts of vision and role clarity on innovation/teams have received far less attention. A strong vision and role definition can provide direction to a team and can positively impact its ability to succeed. The purpose of this research is to discuss vision components and Role Clarity, and explore their impacts on team performance. After studying the vision on a series of nine innovation teams at three companies (Apple, IBM, and HP), we empirically tested the impact of the two components of vision (Vision Clarity, and Vision Support) and Role Clarity on overall team performance. Data were collected from 75 team members. We found that Vision Clarity has a positive effect on team performance. We also found that, Vision Support and Role Clarity are not significantly related to team performance.

Keywords: Team Performance, Team Vision, Role Clarity, Team Success

JEL Classification: C92, D81, J24, L21, O31

VİZYON VE ROL AÇIKLIĞININ TAKIM PERFORMANSI ÜZERİNDEKİ ETKİSİ

ÖZ

Vizyon ve rol açıklığının organizasyonel düzeydeki önemine vurgu yapan bir çok araştırma yapılmakla birlikte, vizyon ve rol açıklığının takım performansı üzerindeki etkisiyle ilgili olarak yeterince çalışmanın yapılmadığı görülmektedir. Güçlü bir vizyon ve rol tanımı, takıma yön verebilir ve takımın performansını pozitif etkileyebilir. Bu çalışmanın amacı, vizyonun boyutlarının ve rol açıklığının önemini tartışmak ve onların takım performansı üzerindeki etkisini araştırmaktır. Bu amaç doğrultusunda, vizyonun boyutları üç şirkette (Apple, IBM, HP) bulunan dokuz inovasyon takımı üzerinde araştırıldıktan sonra, vizyonun iki boyutu (vizyonun açıklığı ve vizyona destek) ve rol açıklığının takım performansı üzerindeki etkisi ampirik olarak araştırılmıştır. Veriler 75 takım üyesinden toplanmıştır. Analizler sonucunda, vizyon açıklığının takım performansı üzerinde anlamlı ve pozitif bir etkiye sahip olduğu tespit edilmiştir. Bununla birlikte vizyona desteğin ve rol açıklığının takım performansı üzerinde anlamlı bir etkiye sahip olmadığı tespit edilmiştir.

Anahtar Kelimeler: Takım Performansı, Takım Vizyonu, Rol Açıklığı, Takım Başarısı

JEL Sınıflandırması: C92, D81, J24, L21, O31

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1. Introduction

Many companies have changed their organizational structures from hierarchical organizational structure to decentralized work teams in order to improve effectiveness (Mannix and Neale, 2005). Thus, the process of team building requires more sophisticated management skills and has become more complex (Revilla and Cury, 2009). Incomplete or ambiguous specification of team vision and ambiguous role in collaborative team work is important problems among team members (Lynn and Akgun, 2001; Shalley and Gilson, 2004; Esper et al., 2008; Rose et al., 2006; Revilla and Rodriguez, 2011). The teams may be composed from cross-functional (e.g., production, marketing and accounting), where members originate from different disciplines or teams may be composed of members closely tied within functional boundaries and organizational (e.g., marketing) (Hansen, 1994). Without effective team vision and role definition, because members from a variety of functional areas often have various ideas about the project, these members generally shoot the project in different directions, and thereby adversely affect the team performance (Esper et al., 2008; Revilla and Rodriguez, 2011). With a strong shared vision and role definition in teams, members are more likely to feel motivated, empowered, and committed to their teams' collective future and have a common sense of objective and agreed upon goals (Kirkman and Rosen, 1999; Zhang et al., 2012).

Vision is a statement of the desired future state of something (Rice et al., 1998). Team vision refers the extent to which the team has an attainable, shared, clear vision or set of purposes (Gibbon et al., 2002). When the team has a vision, objectives can be set and the effectiveness of these objectives determined. Shalley and Gilson (2004) asserted that a communicative vision can maximize the creativity of individuals by affecting team and organizational conditions that foster innovation. For the purposes of our study, teams are defined as "a distinguishable set of two or more people who interact, dynamically, interdependently, and adaptively toward a common and valued goal/objective/mission, who have each been assigned specific roles or functions to perform, and who have a limited life-span of membership" (Rouse et al., 1992).

Based on the previous literature, our 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. Certain scholars have also emphasized similar vision components. For example, Hamel and Prahalad (1989) asserted that an effective vision has three components. They must 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, and Vaughan (1997) and McAlister (1998) emphasized that clarity of vision and agreement upon goals or support is important. Lynn

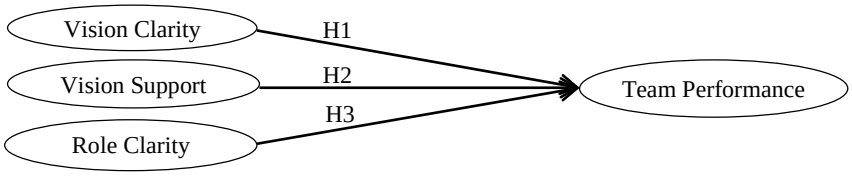
and Akgun (2001) stressed that because there are many paths for achieving the designated ends and these may be unknown or unknowable at the outset of projects where conditions can be quite uncertain, vision stability at the team level may not be critical. In other words, it is not possible that stability of vision is a determinant factor at this even more uncertain phase of the vision development process. Therefore, we did not consider vision stability to be a related component of vision in our study.

There are great deals we still do not know relating vision at the team level, whereas the vision concept is receiving valuable evaluation at the organizational level. As Brown and Eisenhardt (1995) noted, though this aspect of team has a critical important, our understanding of accurately what team vision is, and its relationship with team performance is very blurred. Crawford and Di Benedetto (2000) stated that, surprisingly, there is little study relating vision at team level. Lynn and Akgun (2001), for their project level research, tested the impact of three project vision components (support, stability, and clarity) on team performance for radical innovation and incremental innovation. But, we do not know if their results are applicable for team performance that is measured by objective/quantitative variables. Zhang and Doll (2001) stated that for team success, in the future research, the team vision factor is the most important one needs to be conducted.

A clear and supported vision is important, but if the roles of team members are not clear, it leads to conflict in the team (Gladstein, 1984), and it can confuse and frustrate team members. Role clarity has been found to be an important factor increase employee performance (e.g., Jackson and Schuler, 1985; Shoemaker, 2003), and has been found to has a positive and significant impact on organizational commitment, employee job satisfaction (e.g., Teas, 1980), reduced job-related tension, lower burnout, lower turnover intensions, satisfaction with co-workers (e.g., Foote et al., 2005; Bauer et al., 2007; Agnihotri et al., 2012). However, existing studies of role conflict and clarity of role thus far has been limited to work roles (e.g., supervisors, managers) in organizations and have not yet conducted regarding roles in interdependent work groups (Beauchamp and Bray, 2001; O'Neill et al., 2013). Klein at al. (2009), for example, stated that the conceptual clarity of role may not has come soon sufficient for many scholars who had previously sought to evaluate the efficiency of team building.

In light of the conflicting literature on vision and role clarity at the organizational level and the limited empirical research on vision and role clarity at the team level, the general purpose of this study, as shown in Figure 1, was to explore the impact of vision clarity, vision support, and role clarity on team performance. Consistent with our general objective, firstly, we conducted investigations on nine sequential innovation teams in the computer industry within three companies – Apple, HP, and IBM- on team vision. Products included the Apple II, IIe, III, Mac, and Lisa; Hp125, and 150; IBM DataMaster, PC, and PSjr. Secondly, after studying on a series of nine innovation teams at three companies, we empirically tested the impact of vision clarity, vision support and role clarity on overall team performance.

Figure 1: Proposed Model



2. Theory and Hypotheses

2.1. Vision Clarity

Vision clarity (VC), the first component, means to the extent of acceptance of a set of project goals, understanding, and communication which guide development efforts (Hong et al., 2004). The team purposes should be shared among team members, clearly understood and well-articulated. Zhang and Doll (2001) stated that the project team has to deal with the uncertainty from competitors, technology and customers in order to develop new products successfully. At least the teams can focus on knowledge sharing and a clear team vision building because the uncertainty is beyond control of management (Zhang and Doll, 2001). Lynn et al. (1999) found that one of the two factors considered most critical of the new product development teams success was a clear team vision. The individual learning literature suggests that if an individual has a clear goal, he/she learns their tasks faster (Covey, 1997). For example, Lucas (1998) stated that an explicitly identified team vision keeps members focused on the task and helps them to arrange their various characteristics, allow the individuals to learn faster. In other words, having a clear vision of team can helps team members to better focus on environmental changes, technology and market that can be obstacles for fast team learning and achievement. Eisenhardt (1989) stated that teams having a clear vision can reduce cycle time. Similarly, Kessler and Chakrabarti (1996) stated that an unclear team vision (having ambiguous project goals) promotes conflict and suspicion on a team relating what should be produced, that can conclude in readjustments, debates and time-consuming.

In our initial study of nine innovation teams, all the extraordinarily successful innovations had a clear vision – the team members knew what the team was trying to do- the features, target market, price point were clear. Though not everything was spelled out, team members knew what they were trying to do –what their mission was. As an example, the IBM PC team had a crystal clear vision of its goal. As Larry Rojas, the Director of Planning for the IBM PC team recalls: "We were trying to *out Apple Apple*." The PC was to be a personal computer that would be versatile enough to be used at home, at school as well as by small businesses. The PC's vision was established by a task force, many of whom were recruited from the DataMaster (the precursor to the PC). The vision or blueprint was a plan of when the PC should be launched, what features and benefits it should provide, who the target market would be, and where it would be sold. The plan was established, understood, and agreed to

by Frank Cary, IBM's CEO, Bill Lowe the initial project leader, and the other members of the PC task force team. The team's objective, as Jan Winston, one of the early PC task force members describes, was "to execute the task – force plan." The result of this process was that the PC team had a very clear vision and a sense of purpose.

In contrast to the extraordinarily successful new product teams, the failed Apple Lisa project lacked a clear vision. The vision on the Lisa was ambiguous and vague. The overarching goal of Lisa was to become an office productivity tool, but an office productivity tool can be anything from a fax machine to a ruler. As a result, team members did not agree on what the vision of Lisa was supposed to be nor what it was supposed to do. Over time, the vision changed; the features and functionality of the Lisa grew, and with it, so did the cost. What began as a $2,000, 8-bit computer, became a $9,995, 16-bit computer. Unfortunately, the market was not ready for a $10,000 personal computer; sales for the first year fell woefully below forecast. The first year Lisa forecast called for 1983 sales to reach 50,000 units, but only 11,000 units were actually sold. Repeated attempts to revive to Lisa failed, and in April 1985, at an Apple Board meeting, the Lisa was cancelled and dropped entirely. Consistent with literature in VC and our study of nine innovations, we hypothesize:

H1: Vision clarity is positively related to team performance.

2.2. Vision Support

A clear vision is one important component of an effective vision but, the vision must also be shared and supported by others on the team. Vision support (VS) allows members in the team to understand how they might work together or align themselves to play a role in realizing that vision. Lewis (2001) argued that if all people do not agree on the team vision, probably each member in team will try to accomplish the outcome he or she wants, *often* with inconvenient outcomes. Teams with an innovative team climate are characterized by a high cohesion between team members, high level of challenge and support, high level of implementing and sharing of new ideas and clarity of task and purpose (Anderson and West, 1998; Bain et al., 2001). Briner et al. (1996) stated that have a common and shared idea of what difference team members are trying to make as a result of the project is the most important achievement factor for project teams. Rose et al. (2006), for example, stated that practitioners must work to building a trust atmosphere among team members and later building problem solving methods whereas all members of the team are encouraged to contribute. Similarly, Katzenbach and Smith (1992) asserted four team basics that need to be present for teams to perform well. The team should: (1) has common goals, (2) build objectives for each person and collective responsibility, (3) agree upon a common objective for getting the work done, and (4) has complementary abilities.

In our study of nine sequential innovations, two examples of projects that secured good support or buy-in for the vision were the successful IBM PC and Apple IIe. For the IBM PC, by having Cary as the PC's executive sponsor, by default, the vision had top management support. And by having virtually all the people who had

formulated the initial vision from the task force, being in the actual PC team, the vision was supported by the team members as well. On the Apple IIe, team members similarly bought the vision of the project. Mike Connor, who was the project leader succeeding from Taylor Pohlman, describes the vision on the Apple IIe: "There was a clear sense of mission that everyone really bought." Barry Yarkoni, a marketing manager on the Apple IIe, concurs, "There was absolute agreement by everybody on the vision of the IIe."

In contrast, the unsuccessful projects, such as the Apple III, HP's 125 and 150, and the IBM PCjr exhibited a different pattern. On the Apple III, individual team members had vision about what the Apple III should be and who would be the target market; unfortunately, these visions varied for different team members in different functional disciplines. The marketing people had one vision and the engineering people had another. As Yarkoni, who was the early marketing manager for the Apple III explains:

> "The engineering people had a certain vision of what the product should be which was basically suped up Apple II. The marketing people were saying, 'oh my gosh we've got a cash cow in the Apple II that's generating pot-fulls of money. The last thing we want to do is to start cannibalizing it for no good reason. We want a product that will take us into some new markets and give us some potential new customers that are not being serviced that are not buying Apple II's and we want the Apple III to be a professional machine.' So meanwhile the engineers had loaded it up with goodies in terms of graphics and sound and we much preferred goodies that made it oriented toward businesses professionals. So, right off the bat we had a major war going on between where we needed the product to go from a business point of view and where engineering wanted the product to go because it was fun."

The lack of vision support was one of the primary reasons underlying the fact that it took Hewlett Packard over 12 years to succeed in the personal computer marketplace. HP experienced a series of setbacks in its efforts to compete in the PC business. The main source of the trouble was that engineers in HP had a mindset to be innovative- "to make a substantial technical contribution" despite a vision that was established by HP's consultants that indicated HP's PC must be fully IBM-compatible. The idea of being an IBM clone maker was repugnant to most engineers in HP and they refused to accept it. Larry Kelly, the HP 125 and 150 R&D Lab Manager explains:

> "The test [at HP] always used to be, when you had an idea or were working on a project – what's the contribution? What have you done that nobody's done before? That [mentality] works fine for instruments but that's in direct contrast with being compatible. So you've got a company that's 35 or 40 years old at the time with $1 or $2 billion in revenue. And you've got all these engineers thinking. 'You can't wear your boots unless you know [that] you've done something nobody else's done – you can't come to work.' Overcoming that mentality was very hard. It took them [HP engineers up to its senior management] four or

> five years to realize that it [an HP PC] had to be compatible [with IBM] first and then maybe you could innovate after that."

As a result, many of the HP engineers did not buy-into the vision of designing and building a clone of the IBM PC. In a somewhat similar example, the initial vision for the IBM PCjr. was a powerful, versatile home computer that could compete with the PC at the low-end for home/personal use. But senior management did not agree with the team's vision and as a result, a conflict arose. Bill Sydnes, the IBM PCjr. System Manager (the overall project manager), recalls his team's versus management's position:

> "The IBM PCjr. was originally intended to have a large number of peripherals on it that would have allowed it to compete at the low end of the PC product line. It would have obliterated the low end of the PC product line. IBM's position was, we're not going to allow you to do that."

Behind the scene, another dynamic was unfolding. IBM was having second thoughts about selling a home/game computer. Company executives were concerned about being perceived as a home computer company. After all, they were International "Business" Machines; not International "Home" Machines. As David O'Connor, who took over from Sydnes as the PSjr.'s System Manager, recalls:

> "There were some guys at the top of the corporation who really believed that they didn't want the IBM logo in the retail or consumer distribution channel at the time. [They said] 'IBM is not a consumer company. They are a business company. They sell to professionals and businesses and large corporations … and this home computer stuff is not for us.' The instant there was any problem with the program, it gave those who felt IBM should not be in that market reason to suggest that we delay the program."

What began as a skunk work quickly changed to include a high degree of involvement from top management. Senior management came in and altered the rules. They required that the PCjr. be 1) fully compatible with the PC, 2) de-functionalized so not to cannibalize the low-end of the PC market, and 3) geared to both the home and as well as the business markets. The result of mid-course changes was that Sydnes left. His leaving created a void that was difficult to fill. His leaving combined with the changes, delayed the project, altered its target market and reduced its technical capabilities. Needless to say, the product failed. Therefore consistent with literature in VS and our study of nine innovations, we hypothesize:

H2: Vision support is positively related to team performance.

2.3. Role Clarity

Role clarity (RC) is evaluated to have important outcomes for the teams' performance and success in industry and business which is sometimes referred to by the contrasting term *role ambiguity*, (Rizzo et al, 1970). According to role theory (Rizzo

et al. 1970), clarity of role means ‘‘the degree to which required information is provided about how the employee is expected to perform his or her job.’’ One key of measurable indicators of team structure, as identified by previous research, is the clarity of its goals and members roles (Gladstein, 1984; Deeter-Schmelz, 1997). According to Drach-Zahavy and Freund (2007), two types of organizational structure (mechanistic and organic) are distinguished in terms of how to manage control of job accomplishment of teams and how to differentiate and coordinate roles of individuals within these teams. For example, Richardson (2010: 86), identifies shared objectives and specified roles as criteria for assessing real teams. Newman and Wright (1999: 377) asserted that teams are "characterized by high role differentiation, high task interdependence, distributed expertise and high task differentiation." In this context, when forming the team and selecting the members it must be considered what roles the team needs to complete its task. This coincides with the words of Rogers (2009), "When teams are formed and even after they have existed for a period of time, it is necessary that each team member understand and be reminded… (of) …their role and how they contribute to the team and the organization's goals."

Team members take into consideration a team as a collective group of people working together on the basis of general and shared goals, agreed procedures, cooperation, commitment and resolving disagreements openly by assessment. Team role clarification stresses the importance of communication among members of teams, and it is possible that rise in the level and quality of communication among team members will effect effectiveness of team members (Klein et al., 2009). Similarly, Gladstein (1984) asserted that if higher levels of clarity of role exist within teams it is more possible to each team member presents openly communicate behaviour in team settings. Forsyth (1999) stated that role clarity has both behavioural (e.g., performance) and psychological (e.g., job satisfaction, self efficacy) implications not only for role occupants but also for the rest of the team. Increased clarity of role of members within teams leads to better individual job outcomes (Hartenian et al. (1994). Gladstein (1984) asserted that team structure consisting clarity of role, has a direct effect on team effectiveness. Therefore consistent with literature in team role clarity, we hypothesize:

H3: Role clarity is positively related to team performance.

3. Research Methodology

3.1. 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 75 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.

3.2. Measures

To test our hypotheses, a questionnaire was developed based on previous research from several disciplines including (1) new product development (e.g., Meyer and Pruser, 1993; Chiessa et al., 1996), (2) marketing (e.g., Day, 1994; Moorman, 1995), (3) knowledge management (e.g., Lynn, 1998; Roth and Kleiner, 1998) and (4) psychology (e.g., Larson and LaFasto 1989; O'Leary-Kelly et al., 1994).

VC was measured with seven items. An example item was: 'Prior to beginning the real rounds (after the practice rounds), the team had a clear vision of the required product features'. (Prior to completing the six "real" rounds, two practice round were played). VS was measured with one item. The item was: 'Overall, team members supported the vision of our company'. RC was measured with three items. An example item was: 'The roles of team members on this project were very clear'. 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 was calculated by the simulation at the end of the game in terms of Dollars ($). (Our constructs are shown in Appendix).

3.3. Analysis and Results

The partial least squares (PLS) approach (Chin, 1998; Sosik et al., 2009) was used to path modelling to estimate the measurement and structural parameters in structural equation model (SEM). In the group and team literature, Sosik et al. (2009) have suggested that PLS data analytical technique is a powerful means for team research because PLS (a) can test multivariate structural models with a limited sample size, (b) can be applied to develop theory in early stages of research, and (c) can use the bootstrapping technique to determine the 95% confidence intervals of the path coefficients, providing more accurate findings. As we had a relatively small sample size at the team member level (N=75), we followed Sosik et al.'s (2009) suggestion to use

the PLS approach. The path model was developed and tested applying the statistical software application, SmartPLS 2.0 for measurement validation and testing the structural model.

3.4. Measurement Validation

Firstly, an exploratory factor analysis was performed to assess the dimensionality of the constructs of VC and RC by using principle component with Varimax Rotation. Unidimensionality was exhibited in this two constructs as only one factor surfaced in each set of analyses. Additionally before doing any further analysis, the reliability of constructs items were tested. Appendix shows the constructs whose eigenvalues are greater than one, factor loadings, Crombach's alpha for each construct, and variation explained by each item. Alpha coefficients of constructs are greater than 0.75 which indicates good reliability as suggested by Nunnally (1978).

Secondly, to assess the psychometric properties of the measurement instruments, a similar procedure to that of Henseler et al. (2009) and MacKenzie et al. (2005) was performed, using reflective indicators for all constructs. With respect to constructs, the standardized loadings of indicators on their respective constructs ranged 0.74 to 0.96, which are above the threshold of 0.70 (Chin, 1998) (see the Appendix). Furthermore, each indicator's standardized loading on its respective construct was highly significant ($p<0.01$). As suggested by Henseler et al. (2009) and MacKenzie et al. (2005), indicators of each construct were highly correlated, reflecting the same underlying construct. The scores of a construct are correlated with all other constructs' indicators in its own block (Chin 1998).

Internal consistency reliability was evaluated by means of composite scale reliability (CR). For all measures, the PLS-based CR ranged from 0.84 to 0.95, which exceed the suggested threshold of 0.70 or above (Fornell and Larcker, 1981; Chin, 1998). Convergent validity was evaluated by inspecting the average variance of extracted (AVE). AVE for each measures was exceeded the 0.50 cut-off value, consistent with recommendation of Fornell and Larcker (1981). In addition, convergent validity was evaluated by inspecting the standardized loadings of the measures on their respective constructs (Chin, 1998), and all measures were found to exhibit standardized loadings that exceed .70. Appendix also shows standardized indicator loadings, t values, CR and AVE values. Next, the discriminant validity of the measures was assessed. As suggested by Fornell and Larcker (1981), the square root of AVE for each construct was greater than the latent factor correlations between pairs of constructs. The means, standard deviations, the square root of AVE for each construct, and the correlation coefficients for all constructs were displayed in Table 1. As shown in Table 1, the largest correlation was between vision clarity and role clarity ($r=0.66$), which is less than the square root of the AVE for vision clarity (0.83) and role clarity (0.94). Moreover, as suggested by Chin (1998), the theta matrix (Θ) was inspected, and no item was found to cross-load higher on another construct than it did on its associated construct. Consequently, the determination was that all constructs exhibit

satisfactory discriminant validity. These findings suggest that VC, VS and RC constructs are reliable, valid.

Table 1: Correlations of Latent Variables

	Latent variables	Mean	SD	1	2	3	4
1	Team performance ($million)[a]	59.73	35.17	n.a.			
2	Vision Clarity	7.77	1.74	.40**	**0.83**		
3	Vision Support[a]	8.59	1.74	.27*	.57**	n.a.	
4	Role Clarity	8.30	1.72	.17	.66**	.51**	**0.94**

Notes: Significance at **p<.01; *p<.05 (two-tailed); N=75; the square root of AVE was shown as bold numbers on the diagonals; n.a.: Not applicable; [a]Single indicator construct.

The check for multicollinearity is needed because it causes parameter estimation problems (Hair et al., 2011). To detect multicollinearity, variance inflation factors (VIFs) and tolerances were assessed for each construct component using IBM SPSS 22.0 for Windows. The VIFs of indicators ranged from 1.544 to 2.013; the average was 1.70. Tolerances ranged from 0.497 to 0.648. All VIFs and tolerances were in acceptable threshold levels (VIF< 3.3, tolerance>0.20) (Hair et al., 2011). These findings indicated that multicollinearity did not seem to be problematic.

3.5. Hypothesis Testing

SmartPLS 2.0, which allows for explicit estimation of latent variable scores, and the bootstrapping resampling method were used to test the proposed model (Chin, 1998). As suggested by Hair et al. (2011), this procedure entailed generating 5000 subsamples of cases randomly selected, with replacement, from the original data. Path coefficients were then generated for each randomly selected subsample. T-statistics were calculated for all coefficients, based on their stability across the subsamples, indicating which links were statistically significant. Table 2 demonstrates hypotheses, hypothesized links, the standardized path coefficients, t-values, R^2 value, Q^2 value and results of all hypotheses. As shown Table 2, It was found that values of Vision Clarity (β=0.476, p<0.01) is positively associated with team performance, supporting H1. However, no statistical significant association between vision support (β=0.096, p>0.05), role clarity (β=-0.194, p>0.05) and team performance was found, which indicated no support for H2 and H3.

Table 2: The Results

Hypothesis	Hypothesized links	β	t-values	Results
H1	Vision Clarity → Team performance	0.476*	3.075	Supported
H2	Vision Support → Team performance	0.096	0.923	Not
H3	Role Clarity → Team performance	-0.194	1.334	Not
R^2 = 0.19				
Q^2 = 0.13				

Notes: *p<.01

Findings also indicate that the proposed model explains the 19% of the variance in team performance. In another word, VC, VS, and RC variables together explain the 19% of the variance (R^2=0.19) in team performance. The R^2 index of the variables demonstrated a satisfactory level of predictability (Chin, 1998). In addition, Stone-Geisser's Q^2 were measured using blindfolding procedures (Henseler et al., 2009). Q^2 value ranged above the threshold value of zero (Q^2=0.13), indicating that the variables have predictive relevance for team performance, thus confirming the overall model's predictive relevance.

4. Discussion

This study attempts to provide a contribution to the literature of team performance by presenting a model for scholars and project team leaders to understand potential interrelationships among VC, VS, RC and team performance. As a result of our analysis, we found that VC was significantly associated with 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). For example, Patanakul et al. (2012), by studying 555 new product development projects, found that among the control variables, VC is the most important predictor of team performance. Lynn and Akgun (2001) found that project VC is significantly associated with new product development teams' success. Revilla and Rodriguez (2011), studying the team vision on 78 new product development teams, found that in low ambidexterity strategies clarity dimension is significantly associated with teamwork. Similarly, Rice et al. (1998) found that for successful radical innovation, teams should have a clear vision, but be flexible with their project plans.

In this study, we did not find any direct and significant association between VS and Team Performance. This finding is somewhat contradictory to the existing scholarship. For example, Bessant et al. (2001), by investigating six incremental innovations, found that team VS impacts success for continuous innovation improvements. Zhang et al. (2012), by studying multisource and multimethod data collected at 3 points in time (361 followers in 74 work teams), found that team shared vision is positively associated with individual performance and team effectiveness. 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. Reid and Brentani (2010) stated that the findings on VS are equivocal and pointing to need to further investigate the support dimension. Perhaps what is happening here is that teams typically have little knowledge about market and technology, therefore vision agreement or support may vary depending on the team members. Perhaps another way to look at this is team members can voice support for vision, but actions speak louder than words.

In this study, we also did not find any direct and significant association between RC and Team Performance. Findings in the literature on this subject are complicated. Interestingly, no research has been conducted so far on the direct effect of role clarity in literature whereas there is a remarkable body of work on the relationship of role stress(e.g., Drach-Zahavy and Freund, 2007; Pearsall et al., 2009; Savelsbergh et al., 2012) with team conflict (e.g., Hülsheger et al., 2009; De Wit et al., 2012; O'Neil et al., 2013) The results of the aforementioned study are in agreement with those of ours in spite of the fact that there are some findings suggesting that role stress, role ambiguity, role conflict, and role overload have some negative impact on team processes and performance outcomes (e.g., Drach-Zahavy and Freund, 2007; Pearsall et al., 2009). There are also some studies finding no significant correlation between role ambiguity and team performance(e.g., Savelsbergh et al., 2012). For instance, Savelsbergh et al. (2012) in their study composed of 283 subjects, a total of 38 project teams, they could not find any effect of team role stress on team performance.

5. Implications

First of all, this study has explored the impact of vision components and RC on team performance at the team level. Although these concepts have been largely discussed at the organizational level, only recently the discussion of the impact of team vision and RC on team performance have started and there are still some empirical issues to be tapped. This is an attempt to fill some of those gaps that will allow the development of the team vision and role definition, as well as how exactly they impacts team performance.

This study helps to understand the important components of vision and RC on team level that contribute to the development of team success. Furthermore, the empirical analysis found that team vision is vital for team performance. These findings emphasized the importance of a clear vision to minimize the effects of team diversity and to promote team success.

From this study, the implications for managers and human resources practitioners are three fold. First, human resources management practitioners could play a more proactive role in formatting that could advantage team building. Specifically, the result that the VC component improved performance among the other team vision components could advantage human resources management practitioners and managers by providing more clarity into ways in which managers may best direct their teams (i.e., setting goals and being clear about vision).

Second, for the more successive teams, managers either need to set up to the plate be a visionary and create a clear vision for the team or allow/force the team to develop the vision themselves. Either way, these types of teams will be more successful if teams have a clear vision. In other words, each member of team must be clear about purposes and have feedback on the success of these purposes. Incongruent purposes may prevent integrated work, because team members are probable to be distracted by disagreement and unclear about purposes.

Third, although there exists no correlation between role clarity and team performance based on the results of our study, there is the valuable amount of study indicating detrimental impacts of role ambiguity on team performance outcomes (Drach-Zahavy and Freund, 2007; Pearsall et al., 2009). In this context, project leaders perceiving signs of role ambiguity should encourage team members to with one accord research and reflect on the role assignment in their team, opening the opportunity to experiment with a different role assignment and a redivision of resources, to safeguard the effectiveness of the individual team members as well as of the team as a whole (Charbonnier-Voirin et al., 2010; Savelsbergh et al., 2012). As Drach-Zahavy and Freund (2007) noted, when each role in the team is defined, 'the bigger picture' to see is which leads him or her and cooperate with others.

6. Limitations and Directions for Future Research

Our study has a few limitations. However, these limitations offer new research opportunities in future. Our study has identified six such opportunities. First, the use of a student sample, that may reduce the generalizability of the findings to teams in organizations that exist in longer periods of time and have a more strong effect on real lives of teammates, is one important limitation of our study. But in many studies, related to the team performance, student samples were used (Schippers et al., 2012; Pieterse et al., 2013). As Brown and Lord (1999) noted, it is not possible that student sample differ from other populations in their behavior in accomplishment settings. To maximize generalizability to organizations, we sampled master students who were working professionals with a mean age of 31.8. They came from locations across the United States – from New Jersey to California. However, conducting experimental study with findings from organizational teams is seem equally important for future research.

Second, past studies on team performance suggests that there are several factors such as team characteristics (e.g. team size) and socio-demographics (e.g. team age) that influence the team successes (Rico et al., 2008; Choi et al., 2010). Control variables such as team size and team age weren't used in our study. Future research should take into consideration the more direct effects of these factors as they examine the impact of vision components on team performance.

Third, our study treated vision as a two dimensional construct. In future research, the vision constructs can be expanded and empirically tested. For instance, as Lynn and Akgun (2001) stated, 'perceived-correctness' and 'time/place-in-development' of vision can be added to the vision components in our model. For instance, when the project progresses over time, the team's perception of the vision as being 'correct' may change.

Fourth, in our study, the use of a one-item scale to measure VS may be problematic. The item has not been shown to demonstrate sufficient psychometric properties. At the same time, our finding regarding to the VS is consistent with a number of results on the effect of vision support on team performance (Lynn and Akgun, 2001;

Reid and Brentani, 2010). Regarding VS, future research should iterate the current results with other measures of VS.

Fifth, although a direct association between RC and team performance has not been found in our study, it seems plausible that role conflict may affect team performance through the mediating function of role clarity. Future research should examine how the level of role clarity influences the relationships between role conflict and team performance.

Sixth and finally, as O'Neil et al. (2013) noted, there are three theoretically plausible contingencies of team conflict–team performance relations: the team task type (routine and nonroutine), the type of performance measurement method (self – ratings, supervisor ratings, expert ratings of output), and the teamwork setting (course-based student teams, organizational teams, and laboratory teams). Jehn (1995) suggested that task conflict is likely to facilitate team performance when the task is nonroutine. In contrast, task conflict in routine, predictable work serves less purpose and, indeed, may be inefficient and counterproductive (Jehn and Mannix, 2001). Performance measures taken from other sources (self – ratings, supervisor ratings, expert ratings of output) could generally can be more strongly related to vision and role clarity (O'Neil et al., 2013). Similarly, in the longer term teams, the implications of the conflict are more profound and the increased duration makes the occurrence of conflict spirals more likely (O'Neil et al., 2013). We measured team performance with objectives measures, and our sample was course-based student teams. Thus future research should take into consideration, how task type, performance measurement method and team setting impacts the relationship between VC, VS, and RC and team performance.

7. Conclusion

Team vision and role clarity in teams are important, however, we surprisingly know little about them. In this research, we tried to shed light on team vision, its components, role clarity in teams and their impact on team performance. Within this context, we empirically tested the impact of the two components of vision (VC, and VS) and RC on team performance. We found that VC has a positive effect on the team performance. We also found that, VS and RC have not any significant effect on the team performance.

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Appendix: Measures

Constructs	Items	Factor loading	Standardized indicator loading	t value
Vision Clarity	**VC1)** 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.)	0.734	0.739	11.528
	VC2) Prior to beginning the real rounds (after the practice rounds), the team had a clear vision of the required product features.	0.910	0.895	26.994
	VC3) Prior to beginning the real rounds, the team had a clear vision of the target market.	0.829	0.805	12.848
	VC4) Prior to beginning the real rounds, the team had a clear understanding of target customers' needs and wants.	0.883	0.8872	21.985

	VC5) Our technical goals of the product were clear.	0.775	0.779	13.484
	VC6) Our sales volume goals were clear.	0.795	0.817	17.027
	VC7) Our overall business goals were clear.	0.877	0.891	31.353
	Percent of variance explained = 69.066 Crombach's alpha = 0.923 CR=0.9392 AVE=0.6891			
Vision support	**VS)** Overall, team members supported the vision of our company.	Single item construct		
Role clarity	**RC1)** The expectations for team member behavior were clear to everyone.	0.897	0.899	7.988
	RC2) The roles of team members on this project were very clear.	0.960	0.957	9.655
	RC3) The responsibilities of team members on this project were very clear.	0.949	0.949	9.033
	Percent of variance explained = 87.491 Crombach's alpha = 0.925 CR=0.9544 AVE=0.8748			