

MODELING AMBIDEXTERITY: THE EFFECT OF SOCIAL INTERACTION AND TRUST ON COMPETENCE DIVERSITY AND TEAM VISION

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ABSTRACT

This study investigates trust and social-interaction cohering competence diversity to approach team vision rapidly in cross-field teams. A survey, six major open innovation contests, was conducted. Research model's results find out competence diversity to trust and social-interaction, trust and social-interaction to team vision, and team vision toward ambidexterity positively influence.

Key words: competence diversity, trust, social interaction, team vision, ambidexterity

1. Introduction

Conglomerates equip with powerful resources in human resource, finance, and facilities used to dominate business fields for centuries. However, when economy is recession or faces oil crisis, consumers change spending pattern. Saving money will be the only way for majorities but it makes economy going from bad to worse. Many conglomerates went bankrupted. In order to prevent the issue happened repeatedly, Alliance and collaboration strategies arise and managers adopt them for reallocating resources and focuses on companies' specialties for making the maximum profit.

Owing to the prior study proving that team vision did mediate between functional diversity and ambidexterity innovation. Therefore we know team vision plays incredible role for acquiring ambidexterity. If enterprises want to use the less human resource and capitals to make profit, alliance and collaboration definitely will be good choices. However the arising paradigm of open innovation is another excellent option for companies. Henry (2003) indicated Open Innovation represents wildly accepting the inflow and out flow knowledge to make tasks done efficiently and effectively. Among the strategies of open innovation, alliance, and collaboration, they are all based cooperation with other firms. Therefore equipping with behavioral competence diversity is extremely important to cross-field teams. How to make people with different specialties to become a team and reach a same team vision relies on a platform of trust and social interaction which was interpreted from interviews.

According to the literature review, building up a vision needs a foundation of trust, communication, and interaction. Past studies focus on how importance of team vision cohere team members to approach ambidexterity. Therefore a study of relationship among behavioral competence diversity, trust, social interaction, team vision, and ambidexterity innovation is a quite interesting research framework both in business and academic field.

2. Literature Review

2.1 Open Innovation

Henry (2003) regards that widely adopting inflow and outflow ideas or IPs are the sources to generate novel innovations within open innovation environment. Meanwhile, Henry (2004) also depicted enterprises must constantly improve technologies, probe uncertainty market, and acquire abundant knowledge for surviving in competitive industries so as cross-field teams. In the present competitive business world, group brainstorming is the main stream. It is not only saving human power and manufacturing cost but shrinking the time for developing new products. The benefits that open innovation paradigm brings to enterprises can be easily observed. The common method for companies to develop new ideas, processes, and business

model is holding an open cross-field contest. IBM holds a competition names Global Innovation Jam. Microsoft engages in Imagine cup and Motorola have Motofwrdr. The reason why enterprises held those contests comprised with certain purposes such as adopting ideas to develop products or employing the talent people to work for them either inside or outside of companies. Now the idea of cross-field contest is quite popular in Taiwan both in business and academic field. These competitions attract incredible numbers of student to form teams and it represents people are willing to sharing their thoughts and cooperating during the process for completing the projects. Observing the fact, the era of individual fighting had past; here comes the era of open innovation paradigm. Now open innovation has regarded as the most efficient and useful way to develop new products, processes, and business model in enterprises.

2.2 Competence Diversity

Delamare (2005) described competence is depicted as a basic requirement for teammates who equip with key attitude, knowledge and capability. Hamel and Quigley (1991, 2007) considered different skills can be regarded as an individual knowledge and attitude so competence can be regarded as an individual knowledge and attitude. In the prior studies, Chatenier (2010) depicted professional competence which has certain knowledge, experience, and skills as background in order to execute task efficiently. The early 1990s, Brennan (1996) stated there has been a movement towards dissolving the boundary between academic learning and work-based learning.

The definition of behavioral competence is depicted as the ability to adopt appropriate, observable behaviors in work-related situations. Cheetham (1996) reviewed behavioral competence is regards as using social capabilities to ameliorate the interpersonal relationships, to orchestrate a platform of knowledge sharing, and to lead a greater performance (Chatenier, 2010). Cullen and Klemp (1981) also provided useful insights on personal competencies which contribute to effective professional performance.

In order to smooth and decrease conflicts on cross-field teams, this study mainly focuses on behavioral competence as the construct of competence diversity.

2.3 Trust

Trust is established on frequent and meaningful interaction and individuals must be surrounded in a comfortable environment openly sharing their expertise. Marks (2001) described trust comprises of cognitive, motivational, or affective states. Rousseau (1998) depicted trust is based on positive expectations of the intentions from others. Handy (1995b) reviewed trust, bonding through physical contact and socializing, is assumed as pivotal

importance when forming teams. Zaheer (1998) reviewed trust not only provides increasing information sharing, team vision acceptance and team cooperation, but also decreases social uncertainty and transaction costs. Tagiuri (1968) depicted a stable climate of trust influences employees' behavior by perceiving vision of the organization.

Team work often involves interdependence to approach their personal or team visions; therefore trust is a factor needed to be built up in cross-field teams. Kee and Knox (1970) argued trust must be some meaningful incentives for cross-field teams. Roger (1995) built up a clear understanding of trust facilitating teammates' cohesion. On the basis of trust on cross-field teams, Cultural diversity and competence diversity have highly opportunities to develop innovations and creativities (Dyer, 1995). Finally, Glacel (1997) described the successful formation of work team needs to establish trust as a foundation. These arguments suggest the hypothesis:

H1: Competence diversity positively influences trust in cross-field student teams.

2.4 Social Interaction

Jansen et al. (2009) described social interaction is defined as contacting the channel of inflow-outflow information for competence diversity teams. Nahapiet and Ghoshal (1998) depicted social interaction is a status of linkage and relationships among people. Jansen et al. (2009) regarded social interaction facilitates organizations to develop the same codes and languages as a key element and it benefit teammates with different experiences · knowledge and backgrounds to precede knowledge transformation, integration, and create new knowledge concepts. Chen (2008) depicted social interaction not only provides team members a channel for communication and cooperation on cross-field teams, but also creates innovative solutions when developing new products, processes, business models. With strong ties of social interaction, people are willing to share information, to make commitment, and to reach team vision in the end. Northrup and Wegeriff (2001, 1998) depicted a good social relationship is easier to reach a team vision and community. McConnell (1987) regarded intensive social relationship helps teammates acquaint, decreases conflicts and make cross-field teams function. These arguments suggest the hypothesis:

H2: Competence diversity positively influences social interaction in cross-field student teams.

H3: Social interaction positively influences trust in cross-field student teams.

2.5 Team Vision

Chen (2008) reviewed Shared goals are the formal motivation factor that also can be called as shared version. A shared vision is a crucial element of an organizational vision(House, 1995). Pinto and Prescott (1988) regarded team vision is the key element for teams to reach the goal during the processes of innovation. Rickards (2001) described definition of shared goals is “Team members share a sense of purpose and responsibility that motivates and sustains team progress”. Team vision makes talent people in different fields to work together for developing new products and processes in an effective way. Vision has the tremendous influences on cohering people’s beliefs to inspire teammates for completing the final goal. Coombs (1994) depicted A vision is displaying a scenario and a road map to complete projects for team members. In order to achieve our vision, teams need to be composed of competence diversity people such as designing, manufacturing, and marketing. Kotter (1995) described vision provides a clear path. Quigley (2007) depicted that setting up high-level goals made high-performance. In order to make team members to reach an agreement, team vision not only helps teammates to achieve individual task, but motivate them to create a channel for negotiation, knowledge transferring, and accomplish projects. These arguments suggest two hypotheses:

H4: Trust positively influences team vision in cross-field student teams.

H5: Social interaction positively influences team vision in cross-field student teams.

2.6 Ambidexterity Innovation

Sebastian (2009) described cross-field teams may lead to acquire both exploratory and exploitative innovation, ambidexterity. An interdisciplinary team equips with ambidextrous innovation, exploratory and exploitative innovation(Adler, 1999). Therefore, teammates with the ability of ambidexterity innovation not only improve existing technologies but also develop new applications, technologies, and market.

2.6.1 Exploratory Innovation

Li (2008) reviewed exploratory innovation is called radical innovation. Searching for new knowledge, technologies, and products for existing market is regarded as exploration innovation(Levintha, 1993). Benner (2003) depicted different organizational capabilities help members to develop exploration innovation. Radical innovation is a very different from existing technologies and products. Thus, the extent of exploration was defined as technological and market novelty. Jansen (2009) described exploration innovation is comprised of new products, processes, and new market for the needs of emerging customers. Danneels (2002) depicted for satisfying the emerging consumers so acquiring new knowledge, building up new technologies, and the competence of finding potential consumer are all

regarded as exploratory innovation. We can reason that exploration innovation means developing new products, processes, and service to the emerging market.

2.6.2 Exploitative Innovation

Li (2008) described exploitative innovation is another word for incremental innovation. Jansen (2006) described establishing existing knowledge, technologies, and processes are regarded as exploitative innovation. Li and Chu (2008) depicted incremental innovation is basis on existing customers, markets, knowledge and skills to improve existing products, services, and distribution channels. We can reason that incremental innovation means to develop new products, processes, and service on existing market and technologies.

Owing to the literature being mentioned the relationship between advantages of team vision toward ambidexterity, Therefore the hypothesis is as following:

H6: Team vision positively influences ambidexterity in cross-field student teams.

3. Methodology

We propose the research framework and operational definition. Then we adopt previous studies and collect student competitions information and regulations from enterprises and research institutes to build up the questionnaire. Finally, discuss about sampling, the style of distributing questionnaire, and the returning questionnaires.

3.1 Research Model

This study adopts the concept of Jansen to generate a framework with five major constructs(Jansen, 2009). (see figure 1). The major independent variables are competence diversity, trust, social interaction, and team vision. The dependent variable is ambidexterity.

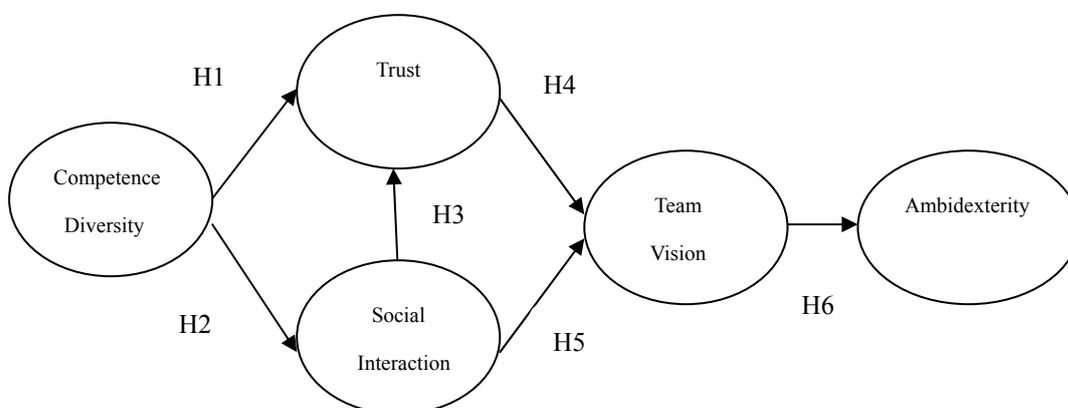


Figure 1. Research Model

3.2 Operational Definition and Measurement of constructs

We modified measurement of behavioral competence diversity as competence diversity from Chatenier, trust from Zaheer et al. (1998), social interaction from Chen et al. (2008) and Jansen et al. (2009) team vision from Chen and Quigley, and exploratory and exploitative innovation from Jansen We made 5 items in competence diversity, 6 items in trust, 6 items in social interaction, 6 items in team vision, 5 items in exploitation innovation and 5 items in exploratory innovation in ambidexterity construct. Operational definitions for each construct are in Table 1.

Table 1. OPERATIONAL DEFINITIOS OF CONSTRUCTS

Operational Definition
Competence Diversity: Sources: Chatenier et al. (2010), Likert 7 point scale
CD1. Members have different communicative styles. CD2. Members have different techniques to interact with others. CD3. Members equip with heterogeneous skills in collaboration to solve problems. CD4. Members own heterogeneous abilities to explore inter-personal networks. CD5. Members own multiple abilities for team negotiations.
Trust: Sources: Zaheer et al. (1998), Likert 7 point scale
TR1. Members believe each other is honest to communicate and share information for the team operation. TR2. Members all believe that the knowledge offered by each other is important for team works. TR3. Members all believe that the information shared by each other is useful for team decisions. TR4. Members all believe that the solutions suggested by each other are accurate for team works. TR5. Members all trust that the members will do their best to help each other. TR6. Members all consider that each other's expertise is reliable for team works.
Social Interaction: Sources: Chen et al. (2008) and Jansen et al. (2009), Likert 7 point scale
SI1. Team members are quick to defend each other from criticism by outsiders. SI2. Team members are friendly and easygoing. SI3. Team members always prepare to work together and support each other.. SI4. Team members constantly contact each other when they off work. SI5. Team members get alone with each other very well.. SI6. Team members have daily conversations when they off work..
Team vision: Sources: Chen et al., (2008), Quigley et al. (2007), Likert 7 point scale
TV1. Members have the same vision to be the champion in the competition. TV2. Members have the same vision to complete the assignments before the deadline of the competition. TV3. Members have the same cooperative direction to gain the commercializing team's ideas. TV4. Members have the same vision to gain the opportunity of starting a business. TV5. Members have the shared vision to acquaint interdisciplinary partners to innovate. TV6. Members have consensus to accumulate the experience of innovating with interdisciplinary people.
Ambidexterity: Sources: Jansen (2006), Likert 7 point scale
EI1. Our team develops new applications for the sponsor's system. EI2. Our team refines and improves the functions of the sponsor's system. EI3. Our team refines and improves the efficiency of the sponsor's system. EI4. Our team develops new contents and services to satisfy the needs of sponsor's existing customers. EI5. Our team refines the business model of sponsor's existing products/ platform. ER1. Our team develops a wholly new product/ technology innovation. ER2. Our team satisfies user's problems and needs that existing products/ technologies can't. ER3. Our team experiments the idea feasibility and generate the technological solution. ER4. Our team makes the prototype or physical model. ER5. Our team develops a wholly new business model.

3.3 Sample and procedure

First we interviewed with top nine project directors in Cross-Field Creative Scenario Value-Adding competition held by Industrial Technology Research Institute and National Science Council. Second, Data were collected from 159 cross-field student teams; including professors and students in universities. The respondents to the questionnaire must have prior experiences in student innovative competition. In this study, we adopt subtracting the standardized exploitative innovation and exploratory innovation by Jansen(Jansen, 2009). This survey instrument was pre-tested by 30 experienced professors and students for ensuring consistency and eliminating potential semantic and syntax bias to form a questionnaire. This survey took place from May to July in 2011. A total 400 questionnaires were mailed, and there were 159 valid responses. The overall response rate was 40%. The majority of the respondents were 98 respondents in engineering, 14 respondents in management, 47 respondents design department, and nearly half of students had 2 experienced in student competition.

4. Analysis and Results

We interpreted interviews first and explained how to form the relationship of constructs among behavioral competence diversity, trust, social interaction, team vision, and ambidexterity. Next, we collected data and adopted SPSS and AMOS for running demographic, validity, reliability regression and CFA to verify the research framework. The following begins with interview.

4.1 Interview

We interviewed with nine project directors. Eight of nine directors agree that team vision equips with functions to cohere behavioral competence diversity to approach ambidexterity. Besides, contests have constraints of deadline so using the minimum time to reach agreement of team vision is relatively important. Seven of nine professionals and six of nine experts consider rapidly reaching team vision from behavioral diversity relies on trust and social interaction as a mechanism to approach ambidexterity. Owing to the criteria, we develop a research model including behavioral competence diversity, trust, social interaction, team vision, and ambidexterity for this study for this study.

4.2 Respondent Demographics

An increasing numbers of students participate innovative competitions. The distribution of respondents is by gender, age and education. Male is 62.9% and female is 37.1%. Over 89.9% of respondents are between 21 and 40 years old and more than 94.3% are college and

graduate school students.

4.3 Validity and Reliability (EFA)

The regulation for proving validity and Reliability are as following: factor loading >0.5, Eigen value >1, KMO >0.5, communality >0.5, Alpha >0.7, Item-total Correlation >0.6. Dependent variable: Ambidexterity innovation is combined by exploitative innovation and exploratory innovation. The measures of exploratory and exploitative innovation are modified from Jansen. We eliminate ER4 and ER5 from exploration and EI4 and EI5 from exploitation because the figure of communality is less than 0.5. We keep three items for exploratory innovation ($\alpha=0.939$) and exploitative innovation ($\alpha=0.826$). Independent and Mediating Variables: Based on the literature review, we modify and develop a five items for competence diversity from Chatenier. We eliminate CD7 item because the figure of communality is less than 0.5. We reserve four items for competence diversity ($\alpha=0.84$). We eliminate TV5, TV6 items because the figure of communality is less than 0.5. We reserve four items for team vision ($\alpha=0.793$). We modify and develop a six items for trust from Zaheer et al. (1998). The items of trust all fit the regulation so we reserve six items ($\alpha=0.924$). We modify and develop a six items for social interaction from Chen et al. (2008) and Jansen et al. (2009) [24]. The items of social interaction all fit the regulation so we reserve six items ($\alpha=0.945$). We run inter-correlation and the figures are in Table 2.

Table 2. INTER-CORELATION (n=159)

	Mean	S.D.	CD	TR	SI	TV	EI	ER
1.CompetenceDiversity	5.23	0.87	1					
2. Trust	5.85	0.82	0.584**	1				
3. social interaction	5.74	0.99	0.487**	0.755**	1			
4. Team vision	5.51	0.92	0.408**	0.497**	0.449**	1		
5. Exploitation	5.01	1.09	0.339**	0.341**	0.263**	0.424**	1	
6. Exploration	4.07	1.44	0.077	-0.038	-0.051	0.015	0.266**	1

Note: * P<0.05, **P<0.01, *** P<0.001; S.E: Standard error

4.4 Confirmatory Factor Analysis

This research adopts the CFA to examine the constructs of validity, reliability, and the goodness-of-fit of the structure model. We eliminate CD11, TR1, TR5, TR6, , SI4, SI5, SI6, and TV4. The result represents items' factor loading values are between 0.608 and 0.969. All items are higher than 0.5 and t values are significant. CR values are among 0.796 and 0.941. AVE values among 0.567 and 0.843.The results represent in Table 3.

Table 3. ANALYTICAL RESULTS OF CFA

Construct	Items	Factor Loading	S.E.	T value	C.R.	AVE
Competence Diversity (BCD)	CD 8	0.708	-----	-----	0.796	0.567
	CD 9	0.815	0.135	8.069		
	CD 10	0.731	0.132	7.701		
Trust	TR 2	0.841	0.080	11.873	0.888	0.726
	TR 3	0.903	0.077	13.036		
	TR 4	0.809	-----	-----		
Social Interaction	SI 1	0.868	-----	-----	0.917	0.786
	SI 2	0.873	0.071	14.583		
	SI 3	0.918	0.071	15.779		
Team Vision	TV 1	0.844	0.187	7.787	0.796	0.570
	TV 2	0.793	0.155	6.90		
	TV 3	0.608	-----	-----		
Exploitation Innovation	EI 1	0.754	-----	-----	0.830	0.619
	EI 2	0.844	0.120	9.253		
	EI 3	0.760	0.112	8.612		
Exploration innovation	ER 1	0.818	-----	-----	0.941	0.843
	ER2	0.960	0.074	15.999		
	ER 3	0.969	0.072	16.112		

The two following criteria: (a) composite reliability should be higher than 0.6 and (b) average variance extracted should be higher than 0.5 are the measurements to examine a good convergent validity of construct (Fornell, 1981).

According to the results listed on Table 3, the values of convergent validity are between 0.796, 0.888, 0.917, 0.796, 0.830, and 0.941. All the values are higher than 0.6. The values of AVE are 0.567, 0.726, 0.786, 0.570, 0.619, and 0.843. The values fit the requirement of average variance extracted, higher than 0.5, listed on Table 3.

Hair (1998) described the judgment criteria that the square root of AVE should be higher than all co-variances or correlation coefficients between the constructs, or higher than 75% of total constructs.

The diagonal values are between 0.75, 0.85, 0.88, 0.75, 0.78 and 0.91 listed on Table 4. The values are higher than the co-variances coefficients. Owing to the criterion of Hair (1998), the constructs of this study fits the requirement of the discriminant validity.

Table 4. TEST OF DISCRIMINANT VALIDITY

	CD	TV	COM3	SELF	EI5	ER
1. CD (BCD)	(0.75)					
2. Trust	0.61	(0.85)				
3. Social Interaction	0.41	0.66	(0.88)			
4. Team Vision	0.48	0.67	0.61	(0.75)		
5. Exploitative Innovation	0.39	0.35	0.29	0.41	(0.78)	
6. Exploration Innovation	0.03	-0.10	-0.03	-0.11	0.31	(0.91)

4.5 Model fit of CFA

In order to examine the model fit of this research, there are several criteria required such as Chi-square/df, goodness of fit index (GFI), normed fit index(NFI), Tacker-Lewis Index (TLI), incremental fit index (IFI), comparative fit index (CFI), and root mean square error of approximation (RMSEA).

Chi-square examines the parameters of the hypothesis model to verify the fitness of structure model by using sample data and the value needs to be no higher than 3. GFI value is calculated the by the improvement level between hypothesis model and independent model and the value should be above 0.9. AGFI value is calculated by GFI referencing the sum of estimated parameters. NFI value is calculated by independent model dividing hypothesis model and the value should be above 0.9. IFI, reducing the average value of NFI to the dependence of sample size, is a correction for NFI and the goodness of fit should be higher than 0.9. TLI correct the influence of degree of freedom toward NFI and the value should be higher than 0.9. CFI adopts the method by comparing hypothesis model and independent model to examine the goodness of fit and the value should be higher than 0.9. RMSEA value was estimated by the difference between F value and $df/(n-1)$ and the acceptable value should less than 0.08 [12]. The values of research model are as following: $\chi^2/df=1.323$, GFI=0.90, NFI=0.92, IFI=0.97, TFI=0.97, CFI=0.97, and RMSEA=0.045. It presents that the model fit of CFA is acceptable.

4.6 Results of the Research Model

In order to measure ambidexterity innovation, exploitive and exploration innovation, this study averaged the items in exploitative and exploration innovation and acquired the figures of means. Based on Jansen et al. (2009) and Lubatkin et al., (2006), the measurement of ambidexterity has Adding, subtracting, and multiplying methods. After testing three regression equations with team vision and the results indicate that the subtracting method is better than others (Jansen, 2009; Lubatkin, 2006) (see table 5).

Table 5 The Measurement of Ambidexterity

Method	Standardized coefficient	T value	Sig.	Adjusted R Square
Subtracting	0.267	3.468	0.001	0.065
Adding	0.248	3.212	0.002	0.056
Multiplying	0.212	2.716	0.007	0.039

After using subtracting method for ambidexterity innovation, the model fit of this research are as following: $\chi^2/df = 1.198$, GFI=0.93, AGFI=0.90, NFI=0.94, IFI=0.99, TFI=0.98, CFI=0.98, and RMSEA=0.03(see table 6). It presents that the model fit of SEM is acceptable.

Table 6. Goodness fit of research model

	X ²	df	X ² /df	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
SEM	71.889	60	1.198	0.93	0.90	0.94	0.99	0.98	0.98	0.035

Behavioral competence diversity has positively significant influence on trust and the path coefficient is 0.415. Therefore, hypothesis H1 is supported. Behavioral competence diversity has positively significant influence on social interaction and the path coefficient is 0.420. Therefore, hypothesis H2 is supported. Social interaction has positively significant influence on trust and the path coefficient is 0.492. Therefore, hypothesis H3 is supported. Trust has positively significant influence on team vision and the path coefficient is 0.509. Therefore, hypothesis H4 is supported. Social interaction has positively significant influence on team vision and the path coefficient is 0.278. Therefore, hypothesis H5 is supported. Team vision has positively significant influence on ambidexterity and the path coefficient is 0.360. Therefore, hypothesis H6 is supported (see figure2).

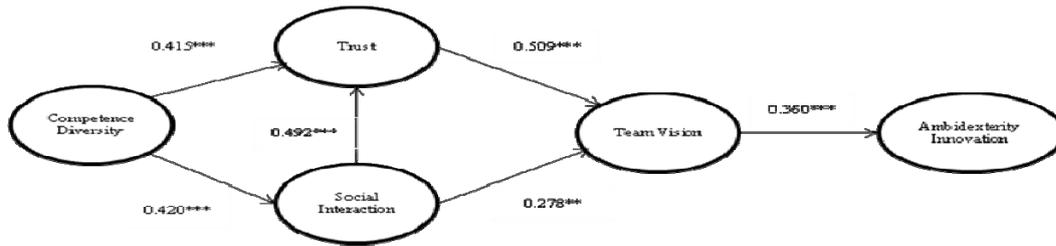


Figure2. The Relationship of This Research Framework

Finally, we conclude that competence diversity positively influencing on trust and social interaction is supported. Social interaction positively influencing on trust is supported. Trust positively influencing on team vision is supported. Social interaction positively influencing on team vision is supported. Team vision positively influencing on ambidexterity is supported. The six hypotheses are listed in Table 7.

Table 7. THE RESULTS OF THE HYPOTHESES

	Hypothesis	Results
H1	Competence diversity positively influences trust in cross-field student teams.	Support
H2	Competence diversity positively influences social interaction in cross-field student teams.	support
H3	Social interaction positively influences trust in cross-field student teams.	support
H4	Trust positively influences team vision in cross-field student teams.	support
H5	Social interaction positively influences team vision in cross-field student teams.	support
H6	Team vision positively influences ambidexterity in cross-field student teams.	support

5. Discussion and Conclusion

The more sophisticated enterprises are, the more we rely on cooperation with other people. In order to approach ambidexterity in cross-field student contests, behavioral competence diversity definitely is a proper way to win the trust of team members and increase social interactions among teammates for reaching an agreement for team vision.

This study indicates that different behavioral competences provide teammates with heterogeneity such as the ability about communication, negotiation, interaction, collaboration, and inter-personal networks. Those skills not only win trust among teammates in business arena, but also increase social interactions in cross-field teams. Besides, constantly social

interactions with team members make them felt secure and win their trust. Based on the conditions of winning trust and increasing social interactions, we will reach a consensus agreement in team vision. With team vision, teammates cooperate seamless to acquire the ability of ambidexterity. First, we find behavioral competence diversity positively significant influences trust, H1, and social interaction, H2, in this study. According to respondents' comments, teammates are not acquaintance at beginning so they protect themselves from being hurt; however, with good skills of communication, negotiation, and inter-personal interaction do build a platform of trust and positive social interaction among teammates on cross-field teams. Constantly social interaction links teammates and improve their relationship. The more teammates know about their partners, the higher degree of trust and positive social interaction will be built up between team members.

By using different skills in communication, interaction, negotiation, and collaboration, conflicts with team members will decrease and more and more positive interactions occurred among teams. Therefore, behavioral competence diversity can build up both trust and positively social interactions among people. Second, trust can reduce the conflicts and save unnecessary cost. Social interactions will make people to know their personalities, specialties, and even mutual learning. This study discovers that trust and social interaction have been proven positively influencing on team vision.

We also acknowledge the results from respondents' comments which a sound platform of trust and social interaction makes team members believe partners' specialties either in behavioral or functional competence and reach team vision easily without any conflicts when forming cross-field teams. Team vision is like light house guiding teammates finding the direction to work on and complete the prototype as the final goal in cross-field teams. We find that team vision positively influences on ambidexterity. Owing to respondents' comments, when teams reach a consensus vision, project directors will spent less time on trivial communication and interaction but more time on resource allocation, increasing self-efficacy and completing prototypes to acquire ambidexterity innovation. Hence, we can conclude behavioral competence diversity do positive influence trust and social interaction. Social interaction positively influences trust. Trust and social interaction also positively influence on team vision. Finally, team vision does positively influence ambidexterity.

5.1 Research limitation and Future Research

The size of samples is the limitation of this study. Based on the 159 samples, we can only verify relationship about this study; however with the larger samples, more accuracy and powerful hard evidence can predict and analyze this research model.

Besides limitation, there are two suggestions for future study. First, the research only proves

the relationship of behavioral competence diversity, trust, social interaction, team vision, and ambidexterity innovation, but there are other constructs like communication and commitment relatively important and wait to be verified. Second, interpreting interviews we find out a possible relationship that reward and self-efficacy may lead to ambidexterity after forming team visions on cross-field teams.

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