ACQUIRING TOP MANAGEMENT TEAM, CORE COMPETENCE THROUGH ABSORPTIVE CAPACITY AND ENTREPRENEURIAL ORIENTATION

Anh Tuan Bui, Foreign Trade University
Yingkai Liao, Nanhua University
Phuoc Thien Nguyen, Nanhua University
Ching Feng Chang, National Cheng Kung University

ABSTRACT

Ever since Hambrick and Mason proposed upper echelon theory in 1984, Top Management Team (TMT) issues have been received tremendous attentions from academician and practitioners. Especially in the dynamic, fast-moving, and global world, the importance of TMT has become inevitably important nowadays. TMT is the soul of organization in that they make strategic decisions which effect firm's future. Furthermore, splendid performance stems from the firm's learning ability, the attitude toward entrepreneurial activities, and the emphasis of core competence, all of these issues which are affected by TMT characteristics. Hence, this study attempts to integrate relevant literature to develop a comprehensive research model, as well as to investigate the interrelationships among TMT characteristics, absorptive capacity, core competence, entrepreneurial orientation and managerial performance.

Through a series of questionnaire survey, the results of this study indicate that TMT functional background diversity and educational background have significant influences on a firm's absorptive capacity and entrepreneurial orientation, which further impact on its core competence. Furthermore, firms characterized by higher entrepreneurial orientation, absorptive capacity and core competence are more likely to gain excellent performance. The Result of this study can provide important references for academic to conduct further validation and also valuable for professional to recruit TMT members.

Keywords: Top Management Team, Core Competence, Entrepreneurial Orientation, Quality, Absorptive Capacity, Management Performance.

INTRODUCTION

In the dynamic environment, Top Management Team (TMT) plays a pivotal role to the success to the present and to the future of the firm. Ever since Hambrick and Mason (1984) proposed the upper echelon theory did we realize that the importance of TMT decision-making would strongly influence the organizational outcomes. Smith and Tushman (2005) integrated the role of the TMT on business operation. From then on, issues of how TMT affect business decision making and strategic planning has been highly recognized. Past researches have showed that TMT have an important impact on shaping the organizational culture. Organizational culture follows the corporate belief, core value and further affects organization decision-makings. However, each firm forms different culture types for having different top management team traits, vision and facing external environment. Thus, the roles of TMT are various, but the major

role is to be the decision-maker (Hamrbick & Mason, 1984) and to create the vision, the belief of the firm. TMT are also sensitive to environmental scanning for which they decide the interior strategy, effective strategic planning, control to face the uncertainty and the change under the dynamic, fast moving environment. Therefore, TMT need to foresight, lead the organization to learn at any time, to enhance the organization core competence in order to compete with rivals and maximize the management performance.

Since Hambrick and Mason (1984) propose upper echelons theory that the upper echelons of an organization plays more decisive roles in the business operations process and management performance, most of previous studies of TMT are basically focused how TMT demographic characteristics or individuals' personalities, cognitive preference and risk-taking or risk-avoidance effect performance (e.g., Hambrick & Mason, 1984; Bantel & Jackson, 1989; Murry, 1989; Iaquinto & Fredickson, 1997; Pegels et al., 2003). Thus, the research of process from TMT toward performance is still vague and there are little studies examining the interrelationships among demographic characteristics, entrepreneurial orientation, absorptive capacity and core competence as an integrated framework.

For example, demographic characteristic among TMT members have played a significant role on a firm's decision choice. Age heterogeneity as well as tenure heterogeneity is likely to differ in their attitudes, values and perspective which could result in conflict of opinions so that it would hinder the cohesiveness among TMT members (Pfeffer, 1983). On the other hand, TMT diversity, the dissimilar opinions could accelerate effective group discussion and lead to high quality decision (Bantel and Jackson, 1989; Bose, 2015). Waller et al. (1995) propose that there is an association between functional background of TMT members and organization effectiveness. Tihany et al. (2000) argued that high educated members in TMT will search more eagerly for information thus can generate better strategies.

Furthermore, firms with better learning abilities tend to more actively gain knowledge and this knowledge could be very important to support a firm's outcomes. Covin and Slevin (1989) stated that management performance will relate to the tendency of a firm toward entrepreneurial process such as the methods, practices and decision-making styles that managers can act entrepreneurially. Core competence is uniqueness to a firm, and can provide better suggestion to key decision and thus create better outcomes (Petts, 1997; Yang, 2015). Chanvarausth and Ravichandran (2003) noted that a firm processing better learning ability would create better profit. Hence, we can know that learning ability, the attitude toward entrepreneurial activities, and the competences would determine the firm's performance.

From the above, TMT will have influence on absorptive capacity, entrepreneurial orientation, and core competence. Kisfalvi and Pitcher (2003) state that such as age, educational background, tenure and demographic variables of upper echelon examine the relationships between strategic variables such as innovation, diversification and so on, but find that demographic proxies for team diversity do not have consistency. Learning and absorptive capacity and attitude toward entrepreneurial activities will result in better competence and firm performance.

As a result, we would like to re-examine the relationships between TMT demographic, absorptive capacity, entrepreneurial orientation, core competence, and management performance. The research objectives of this study are as follows:

1. To develop a comprehensive research framework to integrate the interrelationships between top management team characteristics, absorptive capacity, entrepreneurial orientation and management performance.

2. To identify the influence of top management team demographic heterogeneity and top management team culture on absorptive capacity, entrepreneurial orientation and core competence.
3. To investigate the interrelationships between absorptive capacity, entrepreneurial orientation, core competence and management performance.

LITERATURE REVIEW

Top Management Team Organizational Culture

Organizational culture can be considered as a pattern of shared belief and values that facilitate its members perceive structure functioning and provides them norms for behavior with the organization (Dwyer et al., 2003). Culture provides only partial explanation for the influence of level institutions on decision making (Crossland and Hambrick, 2011). Organizational culture has been discussed within the academic field for a long time since Pettigrew (1979) proposed this idea in Administrative Science Quarterly in 1979. Hereafter, extensive researches have been developed on the topic. Hofstede et al. (1990) stated organizational culture acquires a status that similar to structure, strategy and control. Hodgetts and Luthans (2000) considered corporate culture as the standard, language, core value and philosophy of organizational behavior. Robbins (1990) and Martinez et al. (2015) refered organizational culture as a system of shared meaning. In each organizational culture there are patterns of beliefs, symbols, rituals, myths, and practices that have evolved over time which successively, produce common understandings among members as what the organization is and the way its members ought to behave. Hogan & Coote (2013) suggested an organizational culture involves three elements: (1) a set of shared values or dominant beliefs that define organizational priorities, (2) a set of norms of behavior, (3) symbols and symbolic activities used to develop and nurture those shared values and norms. There is no exact consensus about organizational culture's definition, according to Hofstede et al. (1990), but they can be attributed to some characteristics: (1) holistic, (2) historically determined, (3) related to anthropological concepts, (4) socially constructed, (5) soft and (6) difficult to change.

Due to the fact that organizational culture will follow the corporate beliefs, core values and further affect organization decision-makings, each firm will form different culture types with different top management team traits, vision and face external environment there are many different types of organizational culture.

As the fact that organizational culture is profoundly affected by TMT members' behaviors, tendency, beliefs and values so this study examines TMT and organizational culture by adopting organizational culture. The research uses two continua, based upon Trompenaars and Woolliams (2002), one distinguishes between equity and hierarchy and the other examines orientation to the person and the task and which form four types of organizational cultures. The following will have brief introduction to the four types of cultures.

Incubator: This culture is like a leaderless team. This person-orientated culture is characterized by a low degree of both centralization and formalization. In this culture, individualization is one of the most important features. The organization exists only to serve the needs of its member. Responsibilities and tasks within this type of organization are assigned primarily according to the member's own preferences and needs. Structure is loose and flexible and control takes place through persuasion and mutual concern for the needs and values of other members. The main characteristics are concluded as follow: (1) person oriented, (2) power of the individual, (3) self-realization, (4) commitment to oneself, and (5) professional recognition.

Guided missile: This culture strong emphasizes on equality in the workplace and orientation to the task. The task-oriented culture has a low degree of centralization and high degree of formalization. According to Trompenaars and Woolliam (2002): "*Achievement and effectiveness are weighed above the demands of authority, procedures or people*". The management of the organization is predominantly seen as a continuous process of solving problems successfully. The manger is a team leader, whose hands command absolute authority. This culture is designed for a rapid reaction to extreme changes. The main characteristics are as follow: (1) task orientation, (2) power of knowledge/expertise, (3) commitment to tasks, (4) management by objectives, and (5) pay for performance.

Family: This culture is characterized by a high degree of centralization and a low degree of formalization. It generally reflects a highly personalized organization and is predominantly power oriented. Employee in this culture seems to interact around the centralized power of father or mother. The power of the organization is based on an autocratic leader who directs the organization. The climate inside the organization is highly manipulative and full of intrigues. The main characteristics are as follow: (1) power orientation, (2) personal relationships, (3) entrepreneurial, (4) affinity/trust, and (5) power of person.

The Eiffel tower: This role-oriented culture is characterized by a high degree of formalization together with a high degree of centralization. Control is executed through systems of rules, legalistic procedures, assigned rights and responsibilities. Bureaucracy and the high degree of formalization make this organization inflexible. Respect for authority is based on the respect for functional position and status. Employees are very precise and meticulous. Order and predictability are highly valued in the process of managing the organization and duty is an important concept that one feels within himself rather than an obligation one feels towards a concrete individual. In this culture, organization is slow to adapt to change. The main characteristics are as follow: (1) role orientation, (2) power of position/role, (3) job description/evaluation, (4) rules and procedures, and (5) order and predictability.

Interrelationships between Top Management Team Demography, Absorptive Capacity, Core Competence, and Entrepreneurial Orientation

Top management team demography is a vital determinant of organizational processes, including strategic decision making, which, in turn, affects structure performance. Kor (2003) mentioned managerial experiences enable to achieve entrepreneurial growth. Managerial experiences come from the tenure, age, personal characteristics. Pleffer (1983) identified demography refers to "*The composition, in terms of basic attributes such as age, sex, educational level, length of service or residence, race, and so forth of the social entity under study*". Simons et al. (1999) found a demographic diversity of TMT would provide a pool of skills, information, and contain creative decision making. TMT diversity, the reconciliation to dissimilar solutions accelerates effective group discussion preventing "*group thinking*" and leads to high quality decision (Bantel and Jackson, 1989). Furthermore, Carpenter (2002) and Homberg & Bui proposed (2013) TMT diversity would provide TMT with grater breadth of information sources, and skill sets than other teams that are more homogenous. According the research above, TMT heterogeneity provides better information to compete in the chosen market niches.

Tenure: Age and organizational tenure are two of the most important varibles in empirically research, yet it is very different to separate these two effects due to the explanations

differing may different in whether or not organizational learning, core competence and process of entrepreneurship.

More tenured manager may have more psychological commitment to the organization status and to organization value (Schmidt & Posner, 1983; Zoogah et al., 2011) and change or innovate could be resisted. According to Keck (1997), tenure is positively related to stability efficiency, but may effect on the stance to innovation. Thus, tenure would relate to the ability to absorb knowledge, to act entrepreneurially and the elements of the core competences.

Age: Bantel and Jackson (1989) expressed that age heterogeneity may facilitate group creativity and may lead to more tolerance for uncertainty or risk-taking. Hambrick and Mason (1984) noted TMT members of a similar age would possess similar value orientation. Younger managers are better learning, reasoning and memorizing and are more willing to accept new challenges. Thus, the divergence of tenure and age of TMT demography would have differences among absorptive capacity, core competence and entrepreneurial orientation.

Functional background: Wiserma and Bantel (1992) mentioned the professional education of TMT members helps uplift the flexibility of decision-making and communication ability. Holland (1976) suggested major in school would be greatly related to the personalities, and attitudes and cognitive styles. Teams composed of dissimilar types of curricula benefit from the diversity of perspective and create better solution. Also Anderson (2003) stated the idea that TMT members whose background are in production, process engineering and accounting focus on automation, plant and backward integration, whereas those, whose background are marketing and sales, a product research are tend to emphasize on new opportunities research. Meanwhile, Goll et al. (2001) proposed TMT with higher level of business degree are expected to generate a wider range of creative solutions. Waller (1995) proposed that there is an association between functional background and organization effectiveness. From above, the more minglement of TMT composition, it could create more widely opinions to decision-making, management process and the position of the firms. Specifically, functional education gets high diversity benefit the absorptive capacity, core competence and entrepreneurially orientation.

Educational background: Bantel and Jackson (1989) stated that higher levels of education should facilitate to a team to generate and implement creative solutions to complex problem and this could explain why people who are more educated have more receptive attitudes toward innovation and are willing to accept new challenge and learning new things. According to Hamrick and Mason (1984), Bantel and Jackson (1989), and Hitt and Tyler (1991), the amount of formal education that TMT have is positively associated with innovation and strategic chance. Tihany et al. (2000) suggested that the higher educated members in TMT, the higher diversification their firm would be. So these findings reveal that high educated TMT will search more eagerly for information thus can generate better strategies.

H1-1: TMT demography in terms of tenure and age divergence will result in differences among absorptive capacity, core competence, and entrepreneurial orientation.

H1-2: TMT demography in terms of functional background diversity and educational background has positive relationship to absorptive capacity.

H1-3: TMT demography in terms of functional background diversity and educational background has positive relationship to core competence.

H1-4: TMT demography in terms of functional background diversity and educational background has positive relationship to entrepreneurial orientation.

Interrelationships between Top Management Team Culture, Absorptive Capacity, Core Competence, and Entrepreneurial Orientation

Organizational culture is the key element of that organization functions. Previous studies suggest that the standard, language, core value and philosophy of organizational behavior are profoundly influenced by TMT characteristics. Hence, different organizational cultures lead to different decision modes and stances to learning, to new business, to risk, and to core competences. Daft (2004) argued that the organizational culture plays a dominant role in creating organizational learning. Especially, firms with a participant culture should create an atmosphere for sharing, and for learning. As a result, we infer that TMT culture should influence a firm's, absorptive capacity, core competences and entrepreneurial orientation.

H1-5: Different TMT organizational cultures are likely to have differences among absorptive capacity, core competence and entrepreneurial orientation.

Interrelationships between Absorptive Capacity, Entrepreneurial Orientation and Core Competence

Zahra and George (2002) proposed that assimilative capability pertains to information creation and utilization that enhances a firm's ability to attain and sustain a competitive advantage. Prahalad and Hamel (1990) mentioned core competences as the collective learning which is determinant to coordinate diverse production skill and how to integrate multiple streams of technologies. Absorptive Capacity also could lead to sustain a competitive advantage in combination with a firm's other complementary assets and resource. Matusik and Hill (1998) stated that firms with more flexibility will provide better opportunities and which will help to firms sustain superior performance through customer responsiveness. Firm with higher absorptive capacity are likely to have a competitive advantage over firms with low absorptive capacity in quickly transferring external resources (Chanvarasuth & Ravichandran, 2003). From above, firms with better learning ability would create better sustainable core competence. Hence, we hypothesis as follow:

H2-1: Firms exhibiting better absorptive capacity are likely to enhance core competence.

In addition, entrepreneurial orientation is the strategy-making processes and styles of firms that engage in entrepreneurial activities. In order to involve in this new activities, firms needs to acquire and absorb new knowledge. Nevertheless, absorptive capacity is defined as a firm's ability "*To evaluate new, external knowledge, assimilate it, and apply it to commercial ends*" (Cohen & Levinthal, 1990). Firms with higher entrepreneurial orientation are apt to learn vigorously. For example, they may take more expenditure on R&D in the field that they are competing or they would learn from others.

Besides, an effective entrepreneurial orientation would be an example of good strategic management (Lumpkin & Dess, 1996). Since entrepreneurial orientation is the reflection of organizational processes and decision-making of a firm, it is the important factor of firms' competitive advantages (Lumpkin & Dess, 1996). Core competences strengthen competitive advantages throughout being competitively unique and entrepreneurial orientation represents the process aspect of entrepreneurship. Hence, as a result, we could infer that firms with higher entrepreneurial orientation would create better learning ability. Second, firms with entrepreneurial orientation would enhance competitive advantages to strength core competences.

H2-2: Firms exhibiting higher entrepreneurial orientation are likely to have better absorptive capacity.

H2-3: Firms with entrepreneurial orientation are likely to have a significant influence on core competence.

Interrelationships between Absorptive Capacity, Core Competence, Entrepreneurial Orientation and Management Performance

In the fast-moving and competitive environment, the more competitive advantages a firm gains, the more value a firm creates. Prior researches have suggested an entrepreneurial orientation is a key for organizational success (Lumpkin & Dess, 1996). Covin and Slevin (1989) found that new entry with stronger entrepreneurial orientation lead to high performance. Covin and Slevin (1989) stated management performance will relate to mindset of a firm toward entrepreneurial process such as the methods, practices and decision-making styles that mangers can act entrepreneurially. In other words, entrepreneurial orientation plays an important role in organizational success and hence, produces better performance to the firms.

Based upon the discussion above, we would expect that a firm with entrepreneurial orientation will exhibit higher performance. Hence, the hypothesis in this study is below:

H3-1: Firms with entrepreneurial orientation are likely to have a significant influence on management performance.

Furthermore, scholars propose that organizational learning enhances firms' innovation and helps to adopt exterior change (Mullen & Lyles, 1993) in that learning ability of organization member's aid to recognize, apply, and assimilate the value of new, external information (Cohen & Levinthal, 1990). Chanvarausth and Ravichandran (2003) noted that a firm processing with absorptive capacity comparing to other alliances participants will create better profit. Zott (2003) suggest that the timing of capability deployment will sustain performance difference across firms. As a result, according to the discussion above, we believe that firms with better absorptive capacity will create better business outcomes.

H3-2: Firms exhibiting higher absorptive capacity will create better management performance.

Moreover, core competence is the uniqueness to one's firm. Petts (1997) stated core competence as an engine of growth since core competence can provide firms better suggestion to key decisions. Every firm according to their own need and the industry environment would need different core competences. Hence, firms acquire and punctuate in renewing knowledge and skill to compete in changing market will bring more opportunities and sustain competitive advantages than others and further, to create the better performance. Markides (1994) noted that core competences have play a critical role to play in the process of corporate performance. Raff (2000) stated firms that are flexible in using their resource bases to capitalize upon emerging strategic opportunities. Matusik and Hill (1998) also argued firms with more flexibility would provide better opportunities and further increase the firm's outcomes. These opportunities help firms sustain superior performance because of first mover advantages (Ferrier et al., 1999), customer responsiveness (Matusik & Hill, 1998). With respect to the inferred above, we can state that the core competence would highly relate to a firm's businesses performance.

H3-3: Firms exhibiting higher core competence are likely to create better management performance.

RESEARCH DESIGN AND METHODOLOGY

The Conceptual Model and Construct Measurement

In this research, we aim to investigate the interrelationships between Top management team characteristics, absorptive capacity, entrepreneurial orientation, core competences and management performance. For the purpose of this study, we developed the following conceptual model, as shown in Figure 1.

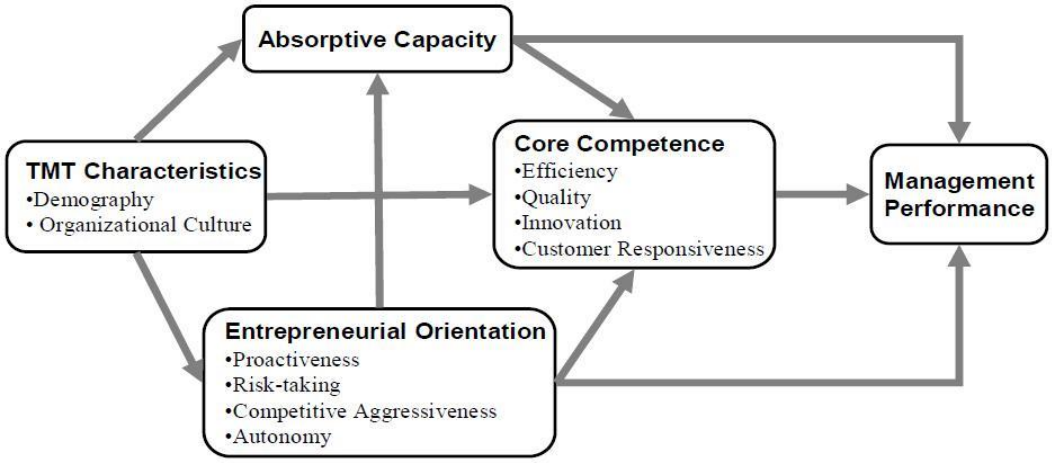

FIGURE 1
THE RESEARCH MODEL OF THIS RESEARCH

For the purposes of this study, the following five major constructs are operationalized in this study: (1) Top management team Characteristics, (2) Absorptive Capacity, (3) Entrepreneurial Orientation, (4) Core Competence, and (5) Management Performance.

Questionnaire Design

A 53-item survey questionnaire and one figure were developed to obtain the responses from Top management team members about their opinions on various research variables. The questionnaire of this study is consisted of five constructs: "*Top management team characteristics (5 items, one figure),"* "*Absorptive capacity (9 items)*," "*Entrepreneurial orientation (12 items),"* "*Core competence (18 items),"* and "*Management performance (9 items)".*

A preliminary version of this questionnaire was designed by the author and discussed with the thesis advisor. The questionnaire was pre-tested through a pilot study by the EMBA students of a prestigious university in Taiwan. Questionnaire items were revised based upon the results of the pilot study before being put into the final form.

Sampling Plan

A sampling plan was developed to ensure that certain types of respondents were included in this study. This study selected the top management team members in high-tech and

manufacturer industries in Taiwan as our sample. The sample frame is mainly obtained from The Top 1000 firms in Taiwan (2005) by common wealth magazine.

RESULTS AND DISCUSSION

Descriptive Analysis

Preliminary analyses were conducted in this section to provide information about the characteristics of respondents and the results of relevant research variables. The data were gathered over three months including one pilot test and one final survey. For the final survey, a total of 500 survey questionnaires were mailed to the sample firms. Out of 500 sample firms, a total of 114 questionnaires were usable, producing a response of between 22.8% percent. The response rate for manufacturing firms is 27.33% and that for hi-tech manufacturing firms is 16.00%.

Table 1 show the basic attributes of the respondents, including eight major items in this study: (1) industry, (2) history, (3) capital, (4) number of employees, (5) education, It is shown that more than 71% of sample firms belong to manufacturer sector. More than 52% of the sample firms operate less than 20 years. More than 77% of the sample firms, their capital are less than 1 billion NT dollars. More than 76% of the sample firms, their total numbers of employees are less than 500 persons.

Table 1
CHARACTERISTICS OF THE RESPONDENTS (n=114)

Question	Frequency	Percentage (%)
Industry		
Hi-tech	32	28.07
Manufacturer	82	71.92
History		
Less than 5 years	13	11.40
6 to 10 Years	16	11.40
11 to 15 Years	18	14.04
16 to 20 Years	23	15.79
21 to 30 Years	13	20.18
More than 30 Years	31	27.19
Capital		
Less than 50 millions	37	32
Over 50 millions to 150 millions	19	17
Over 150 millions to 500 millions	21	18
Over 500 millions to 1 billions	11	10
Over 1 billions to 50 billions	13	11
More than 50 billions	13	11
Number of Employees		
Less than 100 persons	53	46
101 to 500 persons	34	30
501 to 1000 persons	6	5
1001 to 5000 persons	11	10
More than 5000 persons	10	9

Table 2 shows the characteristics of TMT, the mean number of TMT is approach 10 persons where female members are around 2-3 persons and males still are the majorities, about 7-8 persons. The average between TMT members are around 43-44 years old and the average eldest age is around 54 years old and the average youngest member age is around 36 years old.

To the functional background, the very majorities of TMT members are specialized in business which is 43% and science major is only about 7%. Most of the TMT members in their firm tenured averagely 13-14 years, the average longest is 19 years and the shortest is 7 years. Furthermore, the educational background of TMT is in order from 26.52 %, 49.32%, 19.94% and 4.21% that we can tell most of the TMT members have university degrees but only few percent of them get doctor degree.

Table 2
CHARACTERISTICS OF TMT

Question	Mean	Std. Dev.
Number	9.95	9.44
Male	7.50	7.12
Female	2.88	6.27
Average Age	43.67	8.29
Oldest Age	54.11	9.70
Youngest Age	35.95	8.21
Functional background	40.56	26.70
Business College	43.97	27.87
Science College	7.50	7.12
Average Tenure	13.54	7.33
Longest Tenure	19.40	9.76
Shortest Tenure	7.73	6.76
Education Background	24.99	27.01
High School Degree	26.52	32.88
University Degree	49.32	30.96
Master Degree	19.94	22.67
Doctor	4.21	10.42

Comparisons of Research Constructs under Different Level of TMT Characteristics and Different Types of TMT Organizational Culture

One of the purposes of this study is to verify the differences of the research constructs under disparities of TMT characteristics and TMT organizational culture. T-test is used to examine the high difference group and low difference group of Top management team member's tenure and age. ANOVA were used to examine the differences of research constructs under different types of TMT organizational culture.

The tenure is measured by means of the longest tenure of TMT member in their firm minus the shortest tenure of TMT member and age is measured as well. K-means method (nonhierarchical cluster analysis) was adopted to divide TMT tenure into two groups and so does TMT member's age. Table 3 shows the result that there is no significant difference in the research constructs.

Finkelstein and Hambrick (1990) found out the longer tenure the firm is, the higher risk avoidance orientation TMT would be. Senior TMT members tend to be more imitative but young TMT members tend to be more innovation on decision-making process (Vroom & Pahl, 1971). Wierseman and Batel (1992) pointed out the tenure heterogeneity may lower the informality and interaction (O'Rielly et al., 1991) between TMT members. However, in this study there is no significant difference between low divergence and high divergence tenure group. So it is not appropriative to adopt tenure as a grouping variable in the research constructs.

Table 3
T-TEST OF HIGH AND LOW DIFFERENCE GROUP OF TMT MEMBER'S TENURE

Dependent Variable	TMT Tenure					
	1 Low tenure divergence (n=73)		2 High tenure divergence (n=41)			
	Mean	SD	Mean	SD	T Value	P Value
Absorptive Capacity	4.890	1.161	5.171	1.243	1.206	0.230
Core competence						
Efficiency	4.445	1.249	4.317	1.691	-0.462	0.645
Quality	4.370	1.181	4.138	1.418	-0.934	0.352
Innovation	4.740	1.167	4.585	1.449	-0.620	0.536
Customer Responsiveness	4.890	1.197	4.683	1.331	-0.853	0.396
Entrepreneurial Orientation						
Pro-activeness	4.671	0.944	4.951	1.413	1.265	0.208
Risk-Taking	5.205	1.067	5.268	1.265	0.282	0.779
Competitive aggressiveness	4.822	1.110	4.634	1.655	-0.723	0.471
Autonomy	5.342	1.304	5.341	1.667	-0.004	0.997

We then use K-mean method (nonhierarchical cluster analysis) to divide age divergence into two groups. The two groups, one is that age divergence tends to be high and the other tends to be low; thus, we name the two groups as the high age divergence and the low age divergence. Table 4 shows the result. High age divergence of TMT has significant difference in risk-taking (t=1.738, p=0.085) and autonomy (t=1.796, p=0.075), and competitive aggressiveness (t=2.041, p=0.044), which belong to the dimension of entrepreneurial orientation. Hence, the high age divergence of TMT group has a tendency to take bold actions in new entry such as venturing a new business or unknown market than the low divergence of TMT age group. The high age divergence of TMT also tends to let an individual or team aim at bringing forth a business concept or vision and carrying it to complete the mission independently than the low age divergence of TMT does. Furthermore, according to the result, we can tell the high age divergence of TMT in response to threat tends to higher than the low divergence of TMT age group. As a result, *Hypothesis1-1* is partial supported.

Table 4
T-TEST OF HIGH AND LOW DIVERGENCE GROUPS OF TMT MEMBER'S AGE

Dependent	TMT Age					
	(1) Low age divergence (n=37)		(2) High age divergence (n=77)			
	Mean	Sd	Mean	Sd	T Value	P
Absorptive Capacity	4.779	1.004	4.944	1.276	0.688	0.493
Core Competence						
Efficiency	4.616	1.178	4.922	1.049	-1.344	0.184
Quality	4.980	1.161	5.221	1.087	-1.059	0.293
Innovation	4.622	1.409	4.855	1.206	-0.865	0.390
Customer	5.135	1.287	5.420	1.397	-1.075	0.286
Entrepreneurial Orientation						
Proactiveness	4.095	1.490	4.545	1.367	1.601	0.112
Risk-Taking	3.991	1.206	4.429	1.283	1.738	0.085
Competitive	4.108	1.094	4.604	1.268	2.041	0.044
Autonomy	4.486	1.226	4.935	1.259	1.796	0.075

We adopt two-stage cluster analysis involving hierarchy cluster analysis and K-means method (nonhierarchical cluster analysis) to divide TMT organizational culture into four groups. The result of the cluster analysis is shown in Table 5. According to Table 5, it shows that group one has significant higher scores than those of group two, those of group three, and then those of group four. Therefore, we name group one as high Incubator group (n=32), group two as high Guided Missile group (n=24), group three as high Eiffel Tower group (n=30) and group four as high family (n=38). The p-values of all four cultures are extremely significant.

Table 5
CLUSTER ANALYSIS OF TMT ORGANIZATIONAL CULTURE

Name of factor	(1) High Incubator	(2) Hligh Guided Missile	(3) High Eiffel Tower	(4) High Family	F-value	P-value	Duncan
	(n=32)	(n=24)	(n=30)	(n=38)			
Incubator	35.125	14.375	13.750	15.789	42.887	0.000	324.1
Guided Missile	24.813	52.917	20.500	17.895	89.779	0.000	43.312
Family	20.219	17.917	16.250	48.026	88.057	0.000	321.4
Eiffel Tower	19.844	14.792	49.500	18.289	77.413	0.000	24.413

The MANOVA test results are shown in Table 6. High Incubator culture tends to be more risk-taking (F=2.274, P=0.084) and more antonymous (F=3.658, P=0.015) in entrepreneurial orientation dimension than the other three cultures. This means that when TMT organizational culture is characterized by high Incubator, firm shows more risk-taking under uncertainty and more antonymous that firm would tend to delegate to individuals to achieve the mission. Besides, high Eiffel Tower culture tends to be more competitive aggressiveness (P=2.502, F=0.063) in entrepreneurial orientation dimension than the other three. This implies that when TMT organizational culture is characterized by high Eiffel Tower, firm shows more competitive aggressiveness to outperform its rival and perform a combative posture and a forceful response to rivals' actions. Moreover, high Incubator culture tends to more emphasize on efficiency (F=2.325, P=0.079) in core competence dimension than the other three. This means when TMT organizational culture tends to be high Incubator, firm emphasizes greatly on efficiency. Hence, *Hypothesis 1-5* is partial supported. In sum, only entrepreneurial orientation would show the difference in the constructs of organizational, age and tenure. The low sample response rate may be the arch-criminal. Low sample response rate would cause the unbalance of culture evaluation to our research constructs.

Table 6
COMPARISONS AMONG RESPONDENTS WITH DIFFERENT LEVELS OF TMT ORGANIZATIONAL CULTURE

Name of factor	(1) High Incubator (n=32)	(2) High Guided Missile (n=24)	(3) High Eiffel Tower (n=30)	(4) High Family (n=38)	F-value	P-value	Duncan
Absorptive	5.146	5.049	4.492	4.785	1.494	0.22	3.421
Core Competence							
Efficiency	5 169	4.967	4.64	4.537	2.325	0.079	4.321
Quality	5.383	5.396	4.928	4.863	1.85	0.142	3.412
Innovation	4..994	4.842	4.74	4.579	0.635	0.594	4.321

Table 6 COMPARISONS AMONG RESPONDENTS WITH DIFFERENT LEVELS OF TMT ORGANIZATIONAL CULTURE							
Entrepreneurial Orientation							
Proactiveness	4.781	4.417	4.375	4.079	1.441	0.235	3.421
Risk-Taking	4.656	4.292	4.433	3.895	2.274	0.084	4.23231
Competitive Aggressiveness	4.719	4.479	4.75	4.026	2.502	0.063	42.213
Autonomy	5.323	4.903	4.383	4.482	3.658	0.015	3.42421

Structural Equation Model (SEM)

To test research hypothesis, Structural Equation Model (SEM) was applied using likelihood estimation method. The purpose of this study is to find out the relationships among TMT management team characteristics, and absorptive capacity, core competence, entrepreneurial orientation and management performance and to investigate the viability of the research hypothesis. For such an objective, structure equation model is employed to test the interrelationships of all the variables in the entire model. The proposed structural equation model is shown in Figure 2.

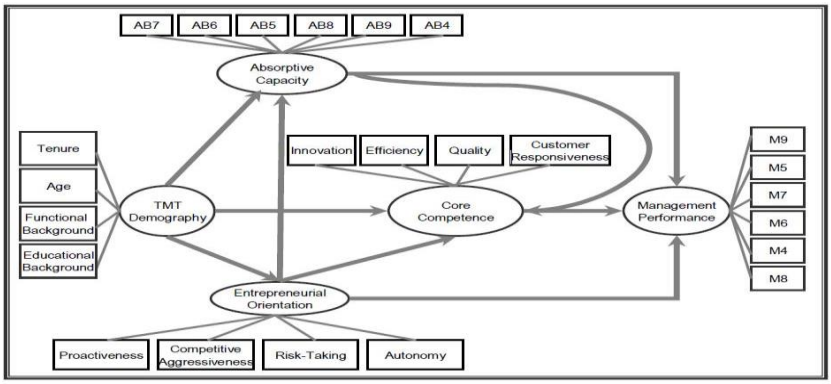

FIGURE 2
STRUCTURAL EQUATION MODEL OF THIS STUDY

Before evaluating the structural or measurement models, the overall fit of the model should be evaluated ensure that the model should be evaluated. In this study, five indices were used to test the fit of the model. The first one was the chi-square test, the essential for the nested model comparison. The chi-square value of 78.363 with 77 degrees of freedom isn't statistically significant at the 0.435 significance level. Thus, the research has consistency with the design model (Figure 2) and the actual model. However, we must also note that the chi-square test becomes more sensitive as the number of indicators rise. With this in mind, other measures were also examined.

The rest of the fit indices adopted in this study were the Root Mean Square Residual (RMSR), the Goodness of Fit Index (GFI), and the Adjusted Goodness of Fit Index (AGFI). The smaller the RMR is, the better the fit of the model. A value of 0.05 is suggested as a close fit (Arbuckle & Wothke, 1999). GFI and AGFI will not be influenced by the sample size explicitly and they were adopted to test how much better the model fits than no model at all. A very good fit of research model would require GFI and AGFI to be higher than 0.9 (Arbuckle & Wothke,

1999). According to the criterion above, the best model is tested in this study. Displays the fit indices of the model. It shows significant GFI is 0.918, AGFI is 0.872 with quite high chi-square number (78.363), the GFI and AGFI indices indicate moderate fit of this model. As the overall goodness of fit is promising, it is encouraged to further identify the magnitudes and significance of the path structural coefficients of the model.

A further evaluation of the model indicates that entrepreneurial orientation has a significant influence on absorptive capacity (β=0.595) which is consistent with *Hypothesis 2-2*. Furthermore, entrepreneurial orientation and absorptive capacity both have a significant impact on core competence (β=0.333, β=0.609) which are consistent with *Hypotheses 2-1* and *2-3*. Finally, entrepreneurial orientation and core competence both have a significant influence on management performance (β=0.358, β =0.367) which are consistent with *Hypotheses 3*-1 and *3-3*.

These results seem to indicate that the interrelationships among top management team demography, absorptive capacity, entrepreneurial orientation, core competence and management performance are significant specifically. Absorptive capacity is significantly influenced by entrepreneurial orientation. Entrepreneurial orientation is significantly influenced by TMT demography. Besides, core competence is significantly influenced by absorptive capacity and entrepreneurial orientation. Finally, management performance is significantly influenced by core competence and entrepreneurial orientation. The result shows that entrepreneurial orientation is affected by TMT functional background diversity and educational background level. What types of entrepreneurial orientation is significant affected by firms' TMT educational and functional background divergence. Besides, organizational absorption is related to entrepreneurial orientation. What to absorb or how to absorb the knowledge depends on the different types of entrepreneurial orientation in the firms.

With an acceptable goodness of fit of the model, it seems to suggest that, to enhance management performance, firms should keep core competence especially on innovation, efficiency, and quality and keep bright attitude toward entrepreneurial orientation especially on autonomy, risk-taking, and competitive aggressiveness while facing new challenge.

CONCLUSIONS AND SUGGESTIONS

Research Conclusions and Implications

The major objectives of this study are to identify the interrelationships among absorptive capacity, core competence, entrepreneurial orientation and management performance. Several conclusions could be draw from the results of this study. The first conclusion is that there are significant relationships among TMT characteristics, absorptive capacity, entrepreneurial orientation and core competence. The results indicate that TMT age divergence has significantly differences in entrepreneurial orientation. Besides, the results also show that TMT functional background divergence and educational background level would highly significant influence on entrepreneurial orientation. Furthermore, the results also provide TMT functional background divergence and educational background level are highly positive association with core competence. Finally, TMT educational background level has also highly significant impact on absorptive capacity. In sum, those two demographic traits would show significances on entrepreneurial orientation, absorptive capacity and core competence.

The above conclusion may have the following managerial implications. First, as the literature review, people in different cohort groups have different organizational experiences and thus are likely to be heterogeneous with respect to attitudes and values (Pfeffer, 1983). The results in the study have shown that the distribution of TMT composition would profoundly affect the organizational absorptive capacity, core competence and entrepreneurial orientation. TMT members play a critical role in organization manipulation. They create organization's belief, vision, and handle the directions of strategic planning. Hence, their decisions are highly related to the next step of their organization, and strongly induce organizational learning absorption in a way. Likewise, the decisions are highly associated with the forceful attitude toward the new entry whether or not a new market or a new business. Second, TMT functional background and educational background should be gained more emphasis since the more diversity of TMT functional background inspires the better creativities. This is also in line with Bantel (1989) that TMT members composed of dissimilar types of curricula benefit to bring to the problem-solving task and groups will be more effective when TMT individuals have variety of skills, knowledge, ability and perspectives (Wanous & Youtz, 1986). By the same token, higher levels of education of TMT members are associated with a team's ability to generate and implement creative solutions to complex problem and to innovate, and to learn (Bantel, 1989).

The second conclusion is TMT organizational culture would have differences in entrepreneurial orientation in terms of risk-taking, autonomy under high Incubator culture. In addition, high Eiffel Tower culture would have significant differences in competitive aggressiveness. The above conclusion may have the following managerial implications. First, the result of the study indicates that when TMT organizational culture is characterized by high Incubator, their attitudes toward entrepreneurial orientation are likely to be more risk-taking and autonomy. These are compliance with the previous research of Trompenaars and Woolliams (2002) that incubator-type organizational typically is entrepreneurial and flexible control. Second, when a TMT organization culture is characterized by high Eiffel Tower, their attitudes toward entrepreneurial orientation are likely to be more competitive aggressiveness.

The firm would seek for the face-to-face competition in order to achieve the goal. Trompenaars and Wolliams (2002) note that Eiffel Tower is highly task orientation. In such traits, when individuals face to a new task, they only seek how to complete the task and accumulate skills. Third, Hodgetts et al. (2000) note that corporate culture is the standard, language core value and philosophy of organizational behavior. TMT members' manner would have great influence on shaping organizational culture. The association between TMT's manner and organizational culture decides the attitudes toward learning absorption, the tendency to entrepreneurial orientation and what core competence of the firm would be. When TMT form the organizational culture, they need to create a learning organizational atmosphere so that throughout sharing, the organization can act the belief top-down thoroughly and further lead organization to be more competitive.

The third conclusion is that there are significant relationships between absorptive capacity, entrepreneurial orientation, core competence and management performance. It indicates that there is a strong positive relationship between absorptive capacity and management performance. In addition, there is partial positive relationship between entrepreneurial orientation in terms of proactiveness, risk-taking, competitive aggressiveness, and autonomy and management performance. Competitive aggressiveness and autonomy of entrepreneurial orientation show the positive effect to management performance but the other factors of

proactiveness and risk-taking don't have significance relationships to management performance. Besides, there are also positive relationships between core competence in terms of efficiency and innovation though there don't have significance between the other two factors, quality and customer responsiveness of core competence.

There have several managerial implications from above results. First, absorptive capacity represents a firm not only to assimilate new external knowledge but also the ability to apply it to a commercial ends and thus create profits. Hence, in the finding of the study, we find that the better the absorptive capacity is the better the management performance is. This finding is also compliance with Tsai (2001) that an organizational unit's absorptive capacity is positively related to its business performance. Besides, Cohen and Levinthal (1990) propose that a unit with high absorptive capacity is likely to successfully commercialize its new products and thus applies new knowledge to improve its business operations. Zahra and George (2002) also investigate there is a positive relationship between absorptive capacity and corporate outcomes. The increments to an organizational knowledge base would lift its business outputs. Furthermore, firms must highlight the importance of sharing whether or not firm-specific or firm-required knowledge within themselves. Second, when firms tend to be more competitive aggressiveness and autonomy they would gain better performance. This copes with prior researches that have suggested an EO is a key for organizational success (Lumpkin & Dess, 1996). Covin and Slevin (1989) also find a positive relationship between a strong entrepreneurial orientation and higher performance. However, the constructs of entrepreneurial orientation vary and prior research suggest that entrepreneurs simply don't see the risks that other see, or alternatively, they see non-entrepreneurial behavior as for more risky so it may the main reason that risk-taking in the study doesn't significant. Although researches show a firm would exhibit both competitive aggressiveness and proactiveness but Dess and Lumpkin (2005) suggest these two dimensions may vary independently of each other in a given context and relate to performance. This finding implies that when firms tend to be more active to competition and willing to delegate to individuals the firm perform better performance and an effective entrepreneurial orientation would be a good example to implement strategic management or planning. Third, core competence has direct influenced on management performance which is in line with Markides (1994) that core competences have a pivotal role to play in the process of corporate performance. In our research, efficiency and innovation seem to receive more concern by the sampling firms, but quality and customer responsiveness do not. The rationale behind the results likes in the industry of the sample firms. Most of our sampling firms are hi-tech and traditional manufacture industries, which may treat efficiency and innovation as more important factors. In contrast, service industries incline to be more careful with customer interaction, responsiveness and the quality. Each firm has focused on different core competences according to the interior needs and exterior environment. When firms develop their own core competence it would not only lower the new cost but accelerate the long-term competitive advantages and create maxima value to the firm.

The fourth conclusion can be drawn from this study is that there are significant relationships among entrepreneurial orientation, core competence and absorptive capacity. The result of the study indicates a positive relationship between entrepreneurial orientation and absorptive capacity. Besides, there is an interesting phenomena that competitive aggressiveness and autonomy shows a significant relationship on core competence, but competitive aggressiveness doesn't' show t significance on absorptive capacity. Instead, proactiveness and

autonomy show a significant relationship on absorptive capacity but proactiveness doesn't show a significant relationship on competitive aggressiveness.

Several managerial implications can be inferred from this result. Entrepreneurial orientation has been used to refer to the firm's strategy-making processes and styles in entrepreneurial activities (Lumpkin & Dess, 1996). First, firms engage in pursuing new activities, it requires more knowledge to prepare, to evaluate and to implement so that it can lower the risk and failure. Second, there is also a positive relationship between entrepreneurial orientation and core competence. This indicates that entrepreneurial orientation would increase core competence of its firm. The importance of entrepreneurial orientation is that entrepreneurship is the major accelerator of a firm's growth. A firm should cultivate entrepreneurial orientation because the higher entrepreneurial orientation the better awareness of environmental change and this leads to enhance a firm's core value and sustain their competitive advantages. Third, according to the result of the study, it is found that there is a positive relationship between absorptive capacity and core competence. This result shows that the better absorptive capacity creates the firmer core competence. This is also copes with Zahra & George (2002) that absorptive capacity enables the firms to reconfigure its resource base and achieve the competences. Core competence provides also the unique competitive advantage of a firm; hence, firms need to acquire and punctuate in renewing knowledge and skill to compete in changing markets so that it can bring more opportunities and sustain competitive advantages than others. Fourth, according to Dess and Lumpkin (2005), they categorize proactiveness as the response to opportunity and competitive aggressiveness as the response to threat. When TMT members face threats, they are apt to react through enhancing the core competence within the firm but when they face new opportunities, instead, they are likely to react through enhancing absorptive capacity. This shows that, when TMT encounter a new opportunity, they would absorb new knowledge such as resources, skills and information first. On the contrary, TMT enhance their own core competences such as efficiency, quality, innovation and customer responsiveness when they face the threats first.

In summary, the conceptual models as developed by this study has served as a useful framework for academicians and practitioners to evaluate the interrelationships among absorptive capacity, entrepreneurial orientation, core competence and management performance. The hypotheses as inferred and test in the study do confirm the interrelationship among the above research constructs.

Research Limitation and Suggestion for Future Research

Although the result of this study is fruitful and these results may contribute to the existing literature for further validation, several suggestions could be made for academicians and business practitioners. First, this study adopted the cross-sectional research to empirically test the underlying relationships and hypotheses. The cross-sectional is superior in capturing statistically significant findings and exploring the difference between several groups. Second, this study adopted a survey methodology by mailing the questionnaire that is hi-tech or traditional manufacturing industries. Future research can take other industries into account.

Third, the applications of the idea of entrepreneurial orientation inhere in core competence is a new concept. Although, a plenty of studies that have been empirically tested for absorptive capacity, there still have a lot to be investigated. Further studies can include potential absorptive capacity (PACAP) and realized absorptive capacity (RACAP) into the research framework to elaborate the phenomena. Fourth, empirical validation for the integrated

framework is not well established. Even though most of the framework and the relationships between variables have been proved to be significant the comprehensive model using LISREL test seems to indicate that there are still plenty of rooms to revise and modify results of this analysis and further validation may be required.

Finally, further research could extend the industries category to study that different industries could contribute different entrepreneurial orientation especially in proacitveness and competitive aggressiveness.

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REFERENCES

Anderson, S.E. (2003). The school district role in educational change: A review of the literature. *International Centre for Educational Change*.

Arbuckle, J.L., & Wothke, W. (1999). *Amos 4.0 user's guide*. Chicago, IL: SmallWaters Corporation.

Bantel, K.A., & Jackson S.E. (1989). Top management and innovations in banking: Does the demography of the top team make a difference? *Strategic Management Journal Summer Special Issue*, *10*(S1),107-124

Bose, U. (2015). Design and evaluation of a group support system supported process to resolve cognitive conflicts. *Computers in Human Behavior*, *49*, 303–312

Carpenter, M.A. (2002). The implications of strategy and social context for the relationship between top management team heterogeneity and firm performance. *Strategic Management Journal*, *23*(3), 275-284.

Carpenter, M.A., & Sanders, WM., & Gerard, A. (2002). Top management team compensation: The missing link between CEO pay and firm performance. *Strategic Management Journal*, *23*(4), 367-375.

Chanvarasuth, A., Pisit, S., & Ravichandran, T. (2003). Absorptive capacity and strategic alliances in the supply chain context. *Institute of Electrical and Electronics Engineering*, 340-344.

Cohen, W.M., & Levinthal, D.A. (1989). Innovation and learning: Two faces of R&D. *Economic Journal*, *99*(397), 569-596.

Cohen, W.M., & Levinthal, D.A., (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, *35*(1), 128-152.

Covin, J.G., & Slevin, D.P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journals*, *10*(1)75-87.

Crossland, C., & Hambrick, D.C. (2011). Differences in managerial discretion across countries: How nation-level institutions affect the degree to which CEOs matter. *Strategic Management Journal*, *32*(8), 797-819.

Daft, R.L. (2004). *Organization theory and design*, (8th edn.) Thomson South-western: Mason.

Dess, G.G., & Lumpkin, G.T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *The Academy of Management Executive*, *19*(1), 147-156.

Dwyer, S., Richard, O.C., & Chadwick, K. (2003). Gender diversity in management and firm performance: The influence of growth orientation and organizational culture. *Journal of Business Research*, *56*(12), 1009-1019.

Ferrier, W.J., Smith, K.G., & Grimm, C.M. (1999). The role of competitive action in market share erosion and industry dethronement: A study of industry leaders and challengers. *Academy of Management Journal*, *42*(4), 372-388.

Finkelstein, S., & Hambrick, D.C. (1990). Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, *35*(3), 484-503.

Goll, I.S., Rakesh, B., & Tucci, L.A. (2001). Top management team composition, corporate ideology, and firm performance. *Management International Review*, *41*(2), 109-128.

Hambrick, D.C., & Mason, P.A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, *9*(2), 193-206.

Hitt, M.A., & Tyler, B.B. (1991). Strategic decision models: Integrating different perspectives. *Strategic Management Journal*, *12*(5), 327-351.

Hodgetts, Richard, M., & Luthans, F. (2002). *International management culture, strategy and behavior*. Ohio: Irwin McGraw-Hill.

Hofstede, G., Neuijen, B., Ohayv, D.D., & Sanders, G. (1990). Measuring organizational cultures: A qualitative and quantitative study across twenty cases. *Administrative Science Quarterly*, *35*(2), 286-316.

Hogan, S.J., & Coote, L.V. (2013). Organizational culture, innovation, and performance: A test of Schein's model. *Journal of Business Research, 67*(2014), 1609–1621.

Holland, J.L. (1976). Vocational preferences. *Handbook of Industrial and Organizational Psychology*, 521-570.

Homberg, F., & Bui, H.T.M. (2013). *Top management team diversity: A systematic*. *Group & Organization Management, 38*(4), 455-479

Iaquinto, A.L., & Fredrickson, J.W. (1997). Top management team agreement about the strategic decision process: A test of some of its determinants and consequences. *Strategic Management Journal*, *18*(1), 63-75.

Keck, S.L. (1997). Top management team structure: Differential effects by environmental context. *Organization Science*, *8*(2), 143-156.

Kisfalvi, V., & Pitcher, P. (2003). Doing what feels right: The influence of CEO character and emotions on top management team dynamics. *Journal of Management Inquiry*, *12*(1), 42-66.

Kor, Y.Y. (2003). Experience-based top management team competence and sustained growth. *Organization Science*, *14*(6), 707-719.

Lumpkin, G.T., & Dess, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, *21*(1), 135-172.

Markides, C.C. (1994). Related diversification, core competences and corporate performance. *Strategic Management Journal*, *15*(Special Issue), 149-165

Martinez, E.A. (2015). Organizational Culture and Performance. *American Economic Review: Papers & Proceedings, 105*(5), 331–335.

Matusik, S.F., & Hill, C.W. (1998). The utilization of contingent work, knowledge creation, and competitive advantage. *Academy of Management Review*, *23*(4), 680-697.

Mullen, T.P., & Lyles, M.A. (1993). Toward improving management development's contribution to organizational learning. *People and Strategy*, *16*(2), 35-49.

Murry, A.I. (1989). Top management group heterogeneity and firm performance. *Strategic Management Journal Summer Special Issue*, *10*(Special Issue), 125-141.

O'Rielly, C.A., Chatman, J., & Caldwell, D.F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, *34*(3), 487–516.

Pegels, C.C., Song, Y.I., & Yang, B. (2003). Management heterogeneity, competitive interaction groups, and firm performance. *Strategic Management Journal, 21*(9), 911-923.

Pettigrew, A.M. (1979). On studying organizational cultures. *Administrative Science Quarterly*, *24*(4), 270-581.

Petts, N. (1997). Building growth on core competences a practical approach. *Long Range Planning*, *30*(4), 551-561.

Pfeffer, J. (1983). Organizational demography. In Staw B, Cummings LL (eds.), *Research in organizational behavior* (pp.299-357). Geenwich, CT.

Prahalad, C., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, *68*(3), 79-91.

Raff, D.M.G. (2000). Superstores and the evolution of firm capabilities in American bookselling. *Strategic Management Journal*, *21*(10/11), 1043-1059.

Robbins, S.P. (1990). *Organization theory: Structure, design and applications*. New Jersey, Prentice Hall.

Schmidt, W.H., & Posner, B.Z. (1983). *Managerial values in perspective*. AMA Membership Publications Division, American Management Associations.

Simons, T., Pelled, L.H., & Smith, K.A. (1999). Making use of difference: Diversity, debate, and decision comprehensiveness in top management teams. *Academy of Management Journal*, *42*(6), 662-673.

Smith, W.K., & Tushman, M.L. (2005). Managing strategic contradictions: A top management model for managing innovation streams. *Organization Science*, *16*(5), 522-536.

Tihanyi, L., Ellstrand, A.E., Daily, C.M., & Dalton, D.R. (2000). Composition of the top management team and firm international diversification. *Journal of Management, 26*(6), 1157-1177.

Trompenaars, F., & Woolliams, P. (2002). A new framework for managing change across cultures. *Journal of Change Management, 3*(4), 361-375.

Tsai, W. (2001). Knowledge transfer in intraorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of Management Journal*, *44*(5), 996-1004.

Vroom, V., & Pahl, B. (1971). Relationships between age and risk-taking among managers. *Journal of Applied Psychology*, *55*(5), 399-405.

Waller, M.J., Huber, G.P., & Glick, W.H. (1995). Functional background as a determinant of executives' selective perception. *Academy of Management Journal*, *38*(4), 943-974.

Wanous, J.P., & Youtz, M.A. (1986). Solution diversity and the quality of groups decisions. *Academy of Management Journal*, *29*(1), 149-159.

Wiersema, M.F., & Bantel, K.A. (1992). Top management team demography and corporate strategic change. *Academy of Management Journal*, *35*(1), 91-121.

Yang, C.C. (2015). The integrated model of core competency and core capabilities. *Total Quality Management & Business Excellence*, *26*(1/2), 173-189.

Zahra, S.A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review*, *27*(2), 185-20

Zoogah, D.B., Vorab, D., Richardc, O., & Pengc, M.W. (2011). Strategic alliance team diversity, coordination, and effectiveness. *The International Journal of Human Resource Management*, *22*(3), 510–529.

Zott, C. (2003). Dynamic capabilities and the emergence of intraindustry differential firm performance: Insights from a simulation study. *Strategic Management Journal*, *24*(2), 97-125.