

### Research on Relationship between Competence for Entrepreneurial Teams and its Performances

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**Abstract:** By the literature review of research on competence for entrepreneurial teams, definition and structure analysis of competence for entrepreneurial teams and the relationship between competence for entrepreneurial teams and entrepreneurial performances, this paper argues on eight-dimensional structures of competence for entrepreneurial teams and the model of its relationship with entrepreneurial performances. It draws the conclusion that the eight dimensions of structures of competence for entrepreneurial teams a have a positive effect on entrepreneurial performances; and different entrepreneurial environments and organizational factors play different adjusting roles in the relationship between them; and that entrepreneurial orientation and leading behavior controlling variables have an obvious effect on entrepreneurial performances.

Keywords: competence for entrepreneurial teams; entrepreneurial environments; entrepreneurial performances

#### Introduction

The smooth carry-out of a certain kind of entrepreneurial activity mostly is based on an entrepreneurial team rather than a single entrepreneurial individual (Venture, 1989; Gartner et al., 1994). The entrepreneurial performances of a team are better than of an individual (Francis& Sandberg, 2000; Mayer et al., 1989; Picot et al., 1989; Teach et al., 1986). Kamm, Shuman, Seeger and Nurick (1990) argue that the importance of an entrepreneurial team to researchers lies on the common place of entrepreneurial teams and the effects on entrepreneurial performances in the company. Many researches indicate that entrepreneurial performances play key roles in setting up new companies. Along with the higher popularities of phenomena of teams starting up, researches on entrepreneurial teams are taking the direction to researches on entrepreneurship. In the process of teams starting up. whether entrepreneurial teams are capable of entrepreneurial tasks and achieving high performances determines the key success of entrepreneurship. However, many domestic and foreign researchers have not made the profound study on the definition of entrepreneurial team capabilities and structural dimensions and the effects on entrepreneurial performances. From the aspect of competence for entrepreneurial teams to make the research on the effect on entrepreneurial performances constructs a positive exploring problem in the research field, which falls into the problem solution in this paper.

## 1. Definition and structure of competence for entrepreneurial teams

In the relevant studies on competence, the concept of competence was formerly given by McClelland(1973). He proposed that competence referred to individual characteristics of performance levels to distinguish in given job positions and organizational environments. After that many researchers gave the definition of competence, but up to now no unified cognition has been achieved. Although no unified definition of competence, there are close relations between competence and job positions of members in the organization and between competence and organizational performances. Unified cognition has been achieved to distinguish the active from the passive in the organization in the use of competence

Before competence for entrepreneurial teams were not proposed, research on competence mainly focused on individual competence. A few relevant researches fell in the research on organization competence and entrepreneurial competence, which constructed the basis for the research on competence for entrepreneurial teams.

In the relevant researches on competence for entrepreneurial teams, some researchers have taken the lead. Charles (2001) argued that team competence was the key factor of entrepreneurial competence and organization performances and whether the entrepreneurship was successful depended on reasonable team competence. Cinthia (2003) argued that team competence mainly included necessary knowledge, principles, techniques, behaviors and concepts as well as the relative attitudes for team members to realize the specific targets. At the same time he indicated that the model of team competence



included 9 features. Ma Hongmin (2008) argued that competence for entrepreneurial teams firstly was the fundamental abilities to sustain the whole process of entrepreneurial activities; secondly was the system in which entrepreneurs, entrepreneurial resources and entrepreneurial teams were integrated organically; and lastly was the strategic vision that they expanded the competition fields and turned competition into the counterpart to the whole body of entrepreneurial teams. Thus in order to gain success, the entrepreneurial teams had to take the competitive advantages of competence resources and did well in improving entrepreneurial performances with the help of rational competence structure.

On the basis of relevant researches on competence for entrepreneurial teams, this paper proposes the concept of competence for entrepreneurial teams, combining the characteristics of entrepreneurial companies, that is, on the stage of start-up, two or more persons are cooperated to set up a team, which reveals the comprehensive competence, in the process of entrepreneurial activities of developing knowledge share and resources guarantee for the purpose of acquiring innovative achievements. It reflects the knowledge, knowledge and special features which are required in fulfilling the entrepreneurial tasks for entrepreneurial teams. On the basis of literature review, this paper probes the dimensional structures of competence for entrepreneurial team s by the analysis of exploring factors and testimony factors. We on the first stage propose the structural factors of competence for entrepreneurial teams which include ten dimensions of abilities, respectively entrepreneurial orientation, and opportunity competence, strategy competence, organizational competence, concept competence, commitment competence, learning competence, knowledge sharing, relation collaboration competence and innovation competence. But according to reliability and validity test to the above dimensions in the process of interview, the reliability coefficients of strategy competence and concept competence are low, thus they are deleted. Therefore competence for entrepreneurial teams in this paper mainly includes eight dimensions: entrepreneurial orientation, opportunity competence, and organizational competence, commitment competence, learning competence, knowledge sharing, relation collaboration competence and innovation competence. (Seen in table 1).

# 2 The relationship between competence for entrepreneurial teams and entrepreneurial performances

Based on the theoretical analysis and in-depth interview

Table 1 Structures and characteristics of competence for entrepreneurial teams

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No.	Dimensions of entrepreneurial competence	Characteristics
1	entrepreneurial orientation	In the behaviors leading to new start up, reveals the entrepreneurial attitudes and passions in the process of strategy for- mulation, new product development and mastering market opportunity
2	Opportunity competence	Seizes and breeds the ability of market opportunities by every means
3	relation collabo- ration compe- tence	The ability of interaction among individuals or between an individual and the organization, including social relations on contracts, communication ability and communication techniques to build cooperation and trust
4	organizational competence	Organizing interior and exterior re- sources( human being, assets, properties and technical resources) and constructing teams, leading, training and supervising techniques
5	commitment competence	The ability to pulse entrepreneurs for permanent management
6	learning compe- tence	The ability to learn actively and change behaviors from the key issues in his own experience as well as others
7	knowledge sharing	The ability for team members to share knowledge to gain the mutual superiorities
8	innovation competence	The ability to recreate and improve new techniques, products, services and procedures

research on relevant literatures of structural factors of competence for entrepreneurial teams, this paper proposes that the structural factors include 8 variables and there is a positive relationship between competence for entrepreneurial teams and entrepreneurial performances and the organizational factors and the entrepreneurial environments play adjusting roles in relationship between competence for entrepreneurial teams and entrepreneurial performances. Specifically speaking, competence for entrepreneurial teams includes entrepreneurial orientation, opportunity competence, and organizational competence, commitment competence, learning competence, knowledge sharing, relation collaboration competence and innovation competence, which show relevant relationship with entrepreneurial performances on different levels, as is supported by researchers like Feng Hua, Du Hong(2005), Ma Hongmin, Li Fei(2008) . Therefore this paper has a profound analysis on the respective effects of structural factors of competence for entrepreneurial teams on entrepreneurial performances, and proposes the relevant hypothesis.

Many researches have found out that external environmental features play an important role in entrepreneurial activities. Thus in this paper, we take environmental features into consideration on the adjusting role in the relationship between competence for entrepreneurial teams and entrepreneurial performances. We mainly se-



lect 3 environmental features to testify: environmental dynamics, environmental competitiveness and environmental heterogeneity. Environmental dynamic characteristics adjust the relationship between competence for entrepreneurial teams and entreprene- urial performances. Environmental heterogeneity adjusts the relationship between competence for entrepreneurial teams and entrepreneurial performances. Environmental competitiveness adjusts the relationship between competence for entrepreneurial teams and entreprene- urial performances.

The previous researches have shown that organizational factors play certain adjusting roles in the relationship between competence for entrepreneurial teams and entrepreneurial performances. The common organizational factors mainly reveals on the stages of entrepreneurship, size of the company and industry type etc. This paper also argues about their adjusting roles in relationship between competence for entrepreneurial teams and entrepreneurial performances.

Although our research focuses on the relationship between competence for entrepreneurial teams and entrepreneurial performances and adjusting variables affecting the relationship, many researchers propose many other important variables which are likely to influence entrepreneurial performances, such as entrepreneurial tactics and leading behaviors, which are mainly considered as controlling variables in this paper. The relationship between competence for entrepreneurial teams and entrepreneurial performances is shown in Figure 1.

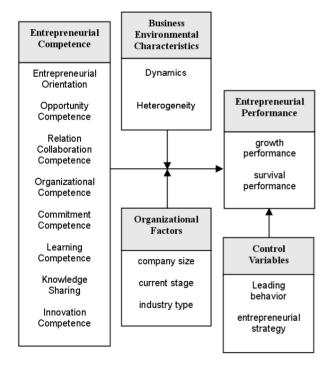


Figure 1 Model of relationship between competence for entrepreneurial teams and entrepreneurial performances

### 3 Methodology

Samples of the present study consist of starting-up companies from six cities. 400 questionnaires were distributed to 127 companies and among the 298 questionnaires returned, 222 are valid, with an effective rate of 74.49 percent. Samples involved chemical, environmental, communications, trade, manufacturing and other industries. Before filling out this questionnaire, the researchers told the subjects that the questionnaire is only for research purposes, and committed to keep the content confidential. The questionnaires are to be assessed by a 5-Likert scale.

This study adopted the method of questionnaire to measure the variables involved. Among them, the independent variable is the competence of the start-up teams, which includes eight dimensions like Entrepreneurial Orientation etc. and the dependent variable is their performance, including two parts, growth performance and survival performance. We took into consideration the modulatory effects of business environmental characteristics (dynamics, competitiveness and heterogeneity) and organizational factors (current stage, company size and industry type) on the relation between competence of start-up teams and environmental performance.

In addition, the study took other factors (like leadership behavior, entrepreneurial strategy) which may also have a direct impact on entrepreneurial performance as control variables.

The measurement of entrepreneurial competence is mainly based on Thomas et al, (2002); Tan, (1993); Zhou Bing, (1999) and Chrismna, (1998) etc., and modification was made concerning the cost research questionnaire. This study used descriptive statistical analysis, reliability analysis, exploratory factor analysis, validity analysis, confirmatory factor analysis, correlation analysis, regression analysis etc. to process data collected.

### **4 Conclusion**

- 1. Through in-depth interviews, exploratory factor analysis and confirmatory factor analysis, the present study tests and verifies that the competence of the start-up teams consists of eight dimensions —Entrepreneurial Orientation, Opportunity Competence, Relation Collaboration Competence, Organizational Competence, Commitment Competence, Learning Competence, Knowledge Sharing and Innovation Competence. Further reliability and validity analysis have shown that the reliability and validity of the above-mentioned eight dimensions have met the requirements and thus indicated the competence of the entrepreneurial teams has a fairly high fitting degree.
- 2. All dimensions of competence have positive effects on entrepreneurial performances and the impacts are, from low to high, Innovation Competence (8.9%), Knowledge Sharing (11%), Organizational Competence



(11.4%), Opportunities Competence (12.3%), Entrepreneurial Orientation (15.1%). Commitment Competence (16.9%), Learning Competence (17%) and Relation Collaboration Competence (20%). It can be seen that Relation Collaboration Competence is the most significant affecting factor not only in entrepreneurial teams but also teams in general. Findings of the present study are not consistent with earlier researches, which consider Entrepreneurial Orientation as the most obvious impact factor on entrepreneur performances. However, as is found in this paper which takes Entrepreneurial Orientation as a key dimension to study, the impact of it is not that obvious and comes after the Commitment Competence, Learning Competence and Relation Collaboration Competence. The present study can hopefully offer start-up team members a clear idea about which of the eight dimensions of competence has more important effect on entrepreneur performance so that they can, combined with their own characteristics, establish sound and effective incentive system to improve their performance

3. It is verified, through multiple regression analysis, that the entrepreneurial environments and organizational factors have modulatory effects on the relation between entrepreneurial competence and performances. Competence of start-up teams exerts significant interaction effects on entrepreneurial performances, whatever the entrepreneurial environments, the company size and the current stage, but the effect degree varies. This proves that the relationship between competence of start-up teams and entrepreneurial performances is influenced by the above three variables. Competence of start-up teams exerts different effects on entrepreneurial performances when it comes to different entrepreneurial environments, company size and current stage. The modulatory effect of industry type, however, is not found obvious, and this is probably because competence of start-up teams always influences entrepreneurial performances the same way whatever industry type. As follows:

First, dynamics, competitiveness and heterogeneity, these business environmental factors, have modulatory effects on the relation between competence of start-up teams and entrepreneurial performances.

Secondly, it is not obvious for market--demand dynamism to adjust competence for entrepreneurial teams and entrepreneurial performances in dynamic environments. Main reasons are as followed:

- a) Sample selection may result in research uncertainty, which, consequently, may influence the adjusting of market-demand dynamism on competence for entrepreneurial teams.
- b) Start-ups are bound to undergo a serious analysis of market and customers' demand, and are ready for flexible factors. Such process is revealed by competence for entrepreneurial teams, therefore decreasing the adjusting function.
  - c) When looking into performances, the author does

not refer to financial performance, however, most information in the market comes from financial index, thus the result of this research is different from those of previous studies.

Thirdly, with the development, expansion and the increasing number of payroll, competence for entre-preneurial teams degrades with regard to entrepreneurial orientation, opportunity competence, commitment competence and learning competence. This shows most start-ups are experiencing entrepreneurial depression with the expansion. Therefore, competence for entrepreneurial teams needs to be adapted to the self- development. In changing environments, businesses are required to better motivation techniques.

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