Original Article

The Study of Effect of Entrepreneurship Aspects on SMEs Performance

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Received: 24 August 2015, Revised: 30 September 2015, Accepted: 20 October 2015

ABSTRACT

In this research, we meant to study the effects of entrepreneurship aspects on performance. Entrepreneurship aspects such as risk-taking, being active, progressive and innovative, and their effects one performance of small enterprises are studied. Risk-taking activities of entrepreneurs are consisted of tendency to use indicator factors for utilizing the opportunities and/or using strategies do not have certain consequences in business. The activities of entrepreneurs are related to their tendency for overcoming their rivals by means of two factors: progression and bold actions. Research methodology is Structural Equation Modeling (SEM), the statistical population includes all small and medium enterprises (SMEs) in Arak, industrial city and by means of random sampling method, and 100 people were chosen as the sample. Questionnaire was used as data collection tool. From the amount and type of effects of independent variables on dependent variable i.e. enterprises' performance, utilizing the information was the most effective variable on the enterprises' performance. Then, entrepreneurship aspects and information acquisition were respectively other variables that have more influence on dependent variable i.e. enterprises' performance.

Keywords: Entrepreneurship, Entrepreneurship Aspects, Being Active and Progressive, Innovation, Performance, SMEs.

Introduction

Changes in modern society are so fast that have deep effects on success or failure of many of the organizations. Today, there are some organizations that will bankrupt soon and they won't exist anymore. These days, organizations and governments have noticed that organizational and private entrepreneurs are so effective on increasing the competitive power in organizational and national level. Due to

this, they are called the most important competitive advantages. Governments have concluded that they have urgent need to entrepreneurship development achieving economical success in international and national arena for providing services and manufacturing products in organizations and enterprises. The entrepreneurs are called as driving development engine for economical

because of their role in employment, innovation and simplification of changes, innovative solving of problems and settling the economical and industrial obstacles. Due to this, it is necessary to educate the entrepreneurs and also investigate how they play their role. Entrepreneurs are those whom are able to apply modern ideas with the least capital, and make them profitable. On the other hand, these people able to start up a business. are divided into two Entrepreneurs categories, organizational and private. Private entrepreneurs are people whom invest in a business and generate profits by providing employment. Organizational entrepreneurs, whom this research is done about, are those people that start up new businesses in an organization and are able to affect the capital of the organization and increase its employment capacity. The aspects of entrepreneurship are features such as risk-taking, motivation for success, and active progressive innovation. Totally, entrepreneurs are recognized with these characteristics. Several researches have shown that entrepreneurship aspects (if they exist), can be influential on the performance of organizations especially small enterprises.

Problem Statement

In this research, entrepreneurship aspects risk-taking, being progressive and innovative and their effect on the performance of small enterprises, are studied and analyzed. Risk-taking activities of entrepreneurs are consisted of tendency to use indicator factors for utilizing the opportunities and/or using strategies do have certain not consequences in business. The activities of entrepreneurs are related to their tendency for overcoming their rivals by means of two factors: progression and bold actions. The researcher wants to

show how these features have positive effect on the performance of small enterprises. This effect is in this way that enterprises with high standards of entrepreneurship aspects tend to search finding the opportunities reinforcing the competitive situations all the time with their direct and operating environment. As a part of environmental exploration activities, the enterprises are interested in information that helps them better recognition of customers' needs and management of risky situations for better competition with their rivals. The aim of research is to know entrepreneurship aspects are effective on collection and profitability of activities and also efficiency of small and medium enterprises, what is the role of collection and utilization data relationship between entrepreneurship aspects and efficiency of small enterprises and how more data collection and utilization lead us to higher efficiency levels of small enterprises.

Research Background

In literature related to entrepreneurship, it determined that entrepreneurship aspects (risk-taking, being progressive and innovative) are positively effective on performance of organization. As an example, Kevin and Slowin have concluded this matter in their research which was done in 1991. Also, Kevin and Mielz (1999)understood that organizations with high levels of entrepreneurship aspects analyze and supervise their direct environment to explore new opportunities from the environment and increase their competitive abilities. As a part of analysis and supervision system, organizations look for information that improve their performance in fields such as dealing with costumers, risk management and also the

way of competing with their rivals. While, larger organizations, do these tasks by official systems but, in small organizations this is the characteristics of individuals that is related to this feature. Due to this, entrepreneurship aspects (including risktaking, being active and progressive, and innovation) have also positive effect on acquisition of information from direct environment by entrepreneurs. entrepreneurship aspects are influential on utilizing the information acquired from the environment by entrepreneurs. On the other hand, according to researches (Kevin & Mielz, 1999) it is determined that acquisition and utilization of information (environmental research) are effective on the performance of organization. Sundbo (1999) studied the relationship between empowerment of employers and organizational entrepreneurship in Danish enterprises research in a named ((balancing the strategic resource of empowerment on the basis of innovative organizational activities model in service enterprises with low level of technology)). He stated in his research that enterprises probably cause innovative organizational activities by means of two systems. One of them is expert system and research and development sections and the other one is empowering system. In a research, Donissi (2003) studied the consequences related to effect of entrepreneurship, flexibility and tendency to market and satisfaction. One of results of this research was the presence of significant relationship between confidence level and organizational entrepreneurship. High levels of confidence among members of an organization have a positive effect on innovation by means of information exchange. Due to this, confidence spread in the organization when informational paths are open and corrections are commonly shared. Lao et al. (2003) showed that there

is a significant and negative relationship of individuals between age organizational entrepreneurship, in a research names ((tendency to costumer, organizational entrepreneurship, tendency to learning in organizations)). This finding shows that young people are more in searching talented about requirements of market to develop the entrepreneurship effectiveness. In a research. Brizek (2003) studied the relationship between organizational entrepreneurship and the performance of management. Sample of this research included 120 people from managers of sections, middle- level managers and upper management teams in restaurants. In this research, it is shown that there is a significant relationship between performance of management and organizational entrepreneurship which means that, the more management of an organization uses the participation of its personnel, the organization will have more progress toward organizational entrepreneurship. In a research, Eybal and Kark (2004) studied the relationship between various styles of management different strategies and entrepreneurship in private schools. This research was done on a sample of 1395 teachers whom were working under supervision of headmasters from 140 schools. Thev built conceptual a framework for understanding of various strategies related to organizational entrepreneurship. Due to their research, transformational leadership can motivate an ((active entrepreneurship strategy)) which helps to cause a fundamental change. While, control leadership can only promote some limited changes by means ((considered entrepreneurship of strategy)). As the final result of this research. although transformational leadership provides most of the compatible management conditions for organizational entrepreneurship, but this relationship is complicated.

Theoretical Framework of Research

In literature related to entrepreneurship, it determined that entrepreneurship positively effective aspects are performance of organization. As example, Kevin and Slowin have concluded this matter in their research which was done in 1991. Also, Kevin and Mielz (1999) understood that organizations with high levels of entrepreneurship aspects analyze and supervise their direct environment. As a part of analysis and supervision system, organizations look for information that improve their performance in fields such dealing with costumers. management and also the wav competing with their rivals. While, larger organizations, do these tasks by official systems but, in small organizations this is the characteristics of individuals that is related to this feature. Due to this. entrepreneurship aspects (including risktaking, being active and progressive, and innovation) have also positive effect on acquisition of information from direct environment by entrepreneurs. Also, entrepreneurship aspects are influential on utilizing the information acquired from the environment by entrepreneurs. On the other hand, according to researches (Kevin & Mielz, 1999) it is determined that acquisition and utilization of information (environmental research) are effective on the performance of organization. It is said that in this era of intensive changes, those organizations are more successful that can obtain environmental information timely from environment and apply them in practice. Due to this, they are called the most important competitive advantages. Theoretical framework aim at small enterprises because in large organizations

there are some organizational and official sections that acquisition and application of information is their duty and personnel are less involved in this process; however, in small enterprises role of each personnel is important because there is no special section for acquisition and application of information and they basically cannot afford it. So, due to these reasons, the presence of entrepreneurs with their special characteristics will be effective in success of the enterprise.

Analytic Model of Research

Enterprises with high standards entrepreneurship aspects tend to search the opportunities finding reinforcing the competitive situations all the time with their direct and operating The entrepreneurship environment. aspects are risk-taking, doing progressive activities and innovation and the same term is given in the theory. Although, large enterprises usually have some resources for conducting researched about main financial markets in order to collect such information but it is not obvious that how much small and medium enterprises utilize this information and how much such activities affect the efficiency of the enterprise. It is given in entrepreneurship researches and also in marketing studies that the information about customers and rivals has important influence marketing designing. Collecting information about customers' needs and rivals' capabilities continuously is as important as manufacturing the best products that customers like in order to provide high quality services and products all the time. Although, previous researches are about evaluating the effects marketing information, marketing limited because of lack of various and deep studies. When the information is obtained. small and medium enterprises use this information for their advantage. This information does have any sensible benefit unless it is used. Unfortunately, except for some of them, most of the researchers of small and medium enterprises, do not notice to utilization of this information. Researches done, do not show that how enterprises use this marketing information for increasing their efficiency. Also it is not clear how entrepreneurship aspects form efficiency and utilization of information. These issues are the research vacancy in entrepreneurship aspects and small and medium enterprises. This research studies these points (Ken et al. 2007). Since Miller and Frizen (1982)stated entrepreneurship aspects for the first time, more than 20 years ago, it became an acceptable criterion for explanation of enterprises' efficiency. Entrepreneurship aspects are considered as levels, tasks and

primary activities that end to a new beginning and have 3 main aspects of risk-taking, doing progressive activities and innovative operations. Lumbkin and Dess (1996) have stated that from a multi-dimensional view to efficiency of an enterprise, it is possible that entrepreneurship aspects have positive effect on one aspect. Due to this, theoretical model of research is explained in Figure 1-1.

Due to this research, data collection and utilization are considered as intermediate variables for building a relationship between entrepreneurship aspects and efficiency of the enterprise. Eventually, the structural model between variables should be evaluated in order to determine how much our conceptual model is applicable and valid in research population.

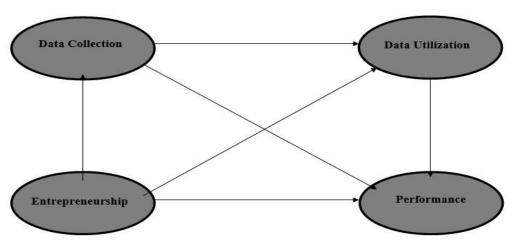


Figure 1. Conceptual model of research

According to theoretical model of research, hypotheses of this research will be explained like this:

Entrepreneurship aspects have significant and positive relationship with performance of enterprises.

Entrepreneurship aspects have significant and positive relationship with information acquisition.

Entrepreneurship aspects have significant and positive relationship with information utilization.

Information acquisition has significant and positive relationship with performance of enterprises.

Information acquisition has significant and positive relationship with information utilization.

Information utilization have significant and positive relationship with performance of enterprises.

Research Aims

The main objective of this research is analyzing the effects of entrepreneurship aspects on efficiency of small and medium enterprises.

Other aims of research are:

Knowledge development about entrepreneurs, small and medium enterprises, and also the role of entrepreneurs in small and medium enterprises.

Spread of entrepreneurship researches due to the requirement of country to these types of researches.

The study of relationship between entrepreneurship aspects and information acquisition.

The study of relationship between information acquisition and the improvement of performance in small and medium enterprises.

The Importance of Research

This research is important from several aspects. First, entrepreneurship will be resulted by entrepreneurs' explanation in the organization and due to this; they understand the necessity of utilizing entrepreneurs and reveal it for others. Due to this, we should be hopeful that the rate of growth and economical development will increase. The purpose of this research is to show how entrepreneurship aspects affect small enterprises. This research wants to document the manner of this effectiveness. Also, as our country is in growth and economical development level, entrepreneur managers needs increasing the rate of its growth and development. Additionally, the role of medium enterprises small and in

economical development is considered so vital because they can get started and be profitable with low capital. Since, entrepreneurs are considered as inventors of small and medium enterprises; so, doing such researches provide the possibility of more appropriate development of such organizations in this country by better explanation of entrepreneurs' role in these organizations.

Research Methodology

This research, due to its aim, is an applicable one and according to the method of data collection (research method) is of descriptive methods and more accurately the correlation method is structural equation modeling. Researches that aim to examine special modeling relationship between of variables use analysis of structural equation modeling.

Statistical Population

Statistical population of this research includes all small and medium enterprises in Arak, industrial city. Also, small and medium enterprises (SMEs) are companies that have 200 employers.

Sample and Determination of Sample Size

According to suggestion of James Stevens (1996), considering 15 items for each variable is appropriate in multiple regression analysis with the least standard squares. As structural equation modeling is completely related to multi-variable regression, considering 15 items for each variable in not irrational in structural equation modeling. Therefore,

(Number of samples) N= number of variables \times 15 = 6 \times 15=90

So, in first level, 10 enterprises were chosen as the sample by systematic

sampling method. For the second level, 100 people were chosen as the sample by random sampling method. The reason why 100 people are selected is to prevent having wrong or lost data in the sample of research because it is favorable that all respondents answer the questions in structural equation modeling and as it is probable that this ideal matter does not take place, so 10 samples were chosen more that the primary size of sample.

Data collection Tool

Data collection tool in this research is questionnaire which is the most common tool for collection data in field researches. In this study, there are 4 types of questionnaires used for collection data. Questionnaire of entrepreneurship aspects:

For evaluating this variable, 10 questions that were designed by Kevin and Slowin (1989), Miler and Frizen (1982) are used. Also, the measuring scale in this questionnaire is 5-point Likert scale in never (1) to always (5) domain.

Questionnaire of information acquisition: For evaluating this variable, 6 questions that were designed by Deshpande and Zaltman (1982), Mourman (1995), Dayman Topoplous et al. (1999) are used. Also, the measuring scale in this questionnaire is Likert scale.

Questionnaire of information utilization: For evaluating this variable, 12 questions that were designed by Deshpande and Zaltman (1982), Mourman (1995), Dayman Topoplous et al. (1999) are used.

Also, the measuring scale in this questionnaire is 5-point Likert scale in strongly disagree (1) to strongly agree (5) domain.

Questionnaire of performance:

For evaluating this variable, 7 questions that were designed by Morphi, Trailer and Hayl (1996), Wilkland (1999), Butler, Keh and Chavmom (2000), Morphi and Callvi (2004), Morphi, Trailer and Hayl (1996), Gapta and Gouyandarjan (1984) are used. Also, the measuring scale in this questionnaire is 5-point Likert scale in so low (1) to so high (5) domain.

Data Analysis

In this research, information obtained by means of descriptive and inferential statistics, will be analyzed. So, in descriptive analysis, frequency distribution tables, central indexes, distribution and diagrams bv **SPSS** statistical software are used. In inferential analysis, techniques of structural equation modeling (confirmatory path analysis) and confirmatory factor analysis by LISREL software are used i.e. first of all according to collected data, research model is built by means of LISEL software and then this software is used to calculate covariance matrixes, measurement equations, fitness indexes and so on.

Descriptive Indexes of Variables

Description of sample is given in tables below due to demographic features such as age, experience and education.

Table 1. Frequency distribution of respondents according to age variable

Age Range	Frequency	Percentage of Frequency
18-25	14	14
26-32	46	46
33-40	28	28
Older than 40	12	12
Total	100	100

Table 2. Frequency distribution of respondents according to experience variable

Experience	Frequency	Percentage of Frequency
1-5 years	24	24
6-10 years	49	49
11-15years	17	17
More than 16 years	10	10
Total	100	100

Table 3. Frequency distribution of respondents according to education variable

Education	Frequency	Percentage of Frequency
Foundation Degree	33	33
Bachelor	54	54
Master of Degree and higher	13	13
Total	100	100

Table 4. The study of descriptive indexes of research variables in this model

Variable	Mean	Standard Deviation	Frequency	Maximum	Minimum
Entrepreneurship	32	3.961	100	10	50
Information	21.89	2.068	100	6	30
Acquisition					
Information	35.18	2.256	100	12	60
Utilization					
Performance	22.59	1.246	100	7	35

Table 5. Structural model fitting (confirmatory path analysis)

Index	Calculation
The ration of Chi-Squared per Degree of Freedom	P
Comparative Fit Index (CFI)	0.98
Normed Fit Index (NFI)	0.97
The Root Mean Square Error of	0.046
Approximation(RMSEA)	
Goodness of Fit Index (GFI)	0.85
Adjusted Goodness of Fit Index (AGFI)	0.83

Structural Modeling Fitting

In order to fit the model, fit indexes are used. Totally, among various fit indexes, these are used in this research:

X²/df, CFI⁵, NFI⁶, RMSEA, GFI and AGFI In structural model of this research, CFI, NFI, RMSEA, GFI, AGFI values are respectively 0.98, 0.97.0.046, 0.85 and 0.83 which indicate that according to RMSEA index, there is minor error in measurement and due to CFI, NFI, GFI and AGFI indexes the structural model fits the data.

Conclusion

The results of studying the relationship between research variables show that in first hypothesis.

Entrepreneurship aspects have positive and significant relationship with

performance of enterprises i.e. entrepreneurship aspects have positive and significant relationship with performance of enterprises.

Also in second hypothesis, entrepreneurship aspects have positive and significant relationship with acquisition information i.e. entrepreneurship aspects have positive significant relationship and with information acquisition.

In third hypothesis, entrepreneurship aspects have positive and significant relationship with information utilization i.e. Entrepreneurship aspects have positive and significant relationship with information utilization.

For fourth hypothesis it can be concluded that, information acquisition has positive and significant relationship with performance of enterprises i.e. information acquisition has positive and significant relationship with performance of enterprises.

Also for fifth hypothesis, information acquisition has positive and significant relationship with information utilization i.e. information acquisition has positive and significant relationship with information utilization.

And eventually for sixth hypothesis it can be stated that, information utilization has positive and significant relationship with performance of enterprises i.e. information utilization has positive and significant relationship with performance of enterprises.

In conclusion of the hypothesis related to this research it can be stated that in structural model of this research, CFI, NFI, RMSEA, GFI, AGFI values are respectively 0.98, 0.97.0.046, 0.85 and 0.83 which indicate that according to RMSEA index, there is minor error in measurement and due to CFI, NFI, GFI and AGFI indexes the structural model fits the data. The result is

in the same direction with results of Kevin and Slowin (1991), Brockman and Morgan (2003), Miler and Frizan (1982). Also, in field of amount and type of effects of independent variables on dependent variable i.e. enterprises' performance, utilizing the information (1.05) was the most effective variable on the enterprises' performance. Then, entrepreneurship aspects (0.20) and information acquisition (0.02) were respectively other variables that have more influence on dependent variable i.e. enterprises' performance.

Suggestions

Suggestions to officials and owners of small and medium industries

As information utilization has the most effect on performance variable, owners of enterprises should not collect and utilize the information in any pathway. They should use it huts for increasing the performance of organization.

Officials can employ, educate and use entrepreneurs in the organization in order to acquire and utilize the information correctly and better and as a result cause an increase in performance of that organization.

Due to the effect of information acquisition on performance, owners of enterprises should collect, categorize and summarize the information correctly and use accurate informational systems to increase the performance of the enterprise.

Suggestions about hypotheses

Due to the influence of entrepreneurship on information acquisition, it is better to use entrepreneurs in plans of collecting information in order to elicit and collect the information accurately, comprehensively and less expensive.

Due to the influence of entrepreneurship on information utilization, it is desirable to use comments of entrepreneurs and their solutions in improving the performance of organization.

Due to the influence of information acquisition on information utilization, the information should be collected and acquired due to considered criteria in order to collect constructive and useful information that is applicable in performance.

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How to cite this article: Mohammad Reza Mohammadi, The Study of Effect of Entrepreneurship Aspects on SMEs Performance. *International Journal of Advanced Studies in Humanities and Social Science*, 2015, 4(4), 255-265. http://www.ijashssjournal.com/article_83726.html