Investigating the Effectiveness of Entrepreneurial Marketing Aspects on the Success of Knowledge-Based Companies: A Case Study

Mahdi Siamak, Mohammad-Hossein Abooie, Mojtaba Qolipour, Ali Mostafaeipour
Industrial Engineering Department, Yazd University, Yazd, Iran.
mf.siamak@gmail.com, mhabooie@yazd.ac.ir, qolipourmojtaba@yahoo.com
mostafae@yazd.ac.ir

Abstract

This study was conducted to evaluate the effectiveness of entrepreneurial marketing aspects (including forecasting, opportunity-seeking, innovation, leverage resources, value creation, risk-taking and customer orientation) on the success of knowledge-based companies in the Science and Technology Park of Yazd city. Current study in terms of purpose has been applied and descriptive – survey and in terms of data collection method is a combination of library, field and survey methods. The study population included all managers of companies in the Science and Technology Park of Yazd city. The sampling method used in this study is stratified sampling. The data collection tools in this study were a questionnaire. In such a way that standard questionnaire has been used to measure entrepreneurial companies studied marketing. Correlation and regression test results obtained from the analysis of research data using SPSS software and of these seven dimensions, dimensions of innovation has more relationship with the corporate's success.

Keywords
Entrepreneurial marketing, success, forecasting, knowledge-based companies, Science and Technology Park, Yazd City.
1- Introduction

Knowledge-based businesses play an important role in the effectiveness of production, crystallization of knowledge in new products and services, promotion of economy and prosperity, wealth creation and added value in a society and move towards innovation and change in product mix and services located in the territory of a knowledge-based companies activities. In fact, knowledge-based businesses founded based publication, dissemination and use of information and their creation of knowledge. These businesses more than any other corporate has synchronized itself with the emerging changes in the business environment and trying to survive in a competitive environment (Golabi, 2010). Despite the fact that small and medium-sized businesses have high potential for creating sustainable economic growth, but their development is difficult. The most common problems of small and medium-sized businesses are:
Lack of access to market information, technology, low quality of human resources and lack of access to capital. Most small and medium businesses do not know what products the market needs and what is the extent of them? And how to deliver the goods. Small and medium-sized businesses have also weaknesses in bargaining power, especially in dealing with major buyers. Even if they know the market, sometimes encountered difficulties in the supply of raw materials, whether in terms of access and at what price (Toghraei, 2012). Given the difficulties and obstacles for small and medium businesses that is more related to lack of financial and human resources, the importance of their research to investigate the causes of these companies from the perspective of a particular type of marketing (Marketing entrepreneurship) is proportional to the Corporate, to be felt. This research is trying to reduce this gap by examining the impact on the success of knowledge-based entrepreneurial marketing.

2- Objectives and Hypotheses

The main objective of this study was to evaluate the effectiveness of entrepreneurial marketing perspective on the success of knowledge-based companies in Science and Technology Park of Yazd city. Based on this, the hypotheses are:

Main hypothesis:
The dimensions of entrepreneurial marketing have effect on the success of knowledge-based companies.

Sub-hypothesis:
1- Dimensions of opportunity-seeking of entrepreneurial marketing aspects have effect on the success of knowledge-based companies.
2- A dimension of risk seeking of entrepreneurial marketing aspects has effect on the success of knowledge-based companies.
3- Dimensions of innovation-oriented of entrepreneurial marketing aspects affecting the success of knowledge-based companies.
4- Dimensions of customer orientation of entrepreneurial marketing aspects affecting the success of knowledge-based companies.
5- Dimensions of leverage of entrepreneurial marketing aspects affecting the success of knowledge-based companies.
6- Dimensions of value creation of entrepreneurial marketing aspects affecting the success of knowledge-based companies.
7- Dimensions of before being active of entrepreneurial marketing aspects affecting the success of knowledge-based companies.

3- Theoretical and Background Research

3-1- Review and analysis of entrepreneurial marketing concept

The importance of entrepreneurship and entrepreneurship are widely known. In the present epoch is known as a hero entrepreneur has is the ability to act and often grow a business in a challenging environment; therefore needs to
scholarly studies about entrepreneurship and their interactions with other academic disciplines such as marketing. Its main idea of marketing and entrepreneurship for many years were discussed. Many authors communicate these two fields together. In the 90s the two disciplines in different universities in different levels of education and published research on entrepreneurial marketing has grown considerably (Hitt and Reed, 2000). In many cases, entrepreneurship and other disciplines overlap with each other. One of these areas, and in particular, entrepreneurial marketing is marketing that attempts to justify it here. The trend of entrepreneurial marketing applications, today there, companies need to operate in an environment with increased risk, decreased ability to predict the presence of fluid borders in the industry, management mentality and etc.; traditional management principles not forget to create a new structure that not only paved the way for change, to create new structural shape also helps. During this period, the environment, a competitive environment with four driving force, described as follows: Change, complexity, chaos (chaos) and contradiction (Hitt and Reed, 2000). These forces have an important impact on marketing. Previously, the field of affiliate marketing rules, but the content of these rules are constantly changing. However, some believe that the fundamental rules of marketing, unchanged, remaining, but the approaches to areas such as customization and one-to-one relationships, networking, strategic alliances, globalization and technology are highly recommended. Others argue that their marketing should be re-conceptualized (Sheth et al., 2000) Entrepreneurial marketing as an interface between entrepreneurship and marketing are described (Bjerke and Hultman, 2002). Entrepreneurial marketing is very complex and relates to the marketing in a highly competitive and dynamic environment (Hitt and Reed, 2000). This form of marketing, tends to be accountable and responsive to the competition and opportunism in the environment. In fact, empirical evidence shows that there is a significant correlation between marketing a corporate and its entrepreneurial orientation and both are widely responsible for the corporate's success (Gorman and McCarty, 2006). With the merger of two separate fields before the term was created to describe the entrepreneurial marketing companies and marketing process to pursue opportunities in uncertain market conditions and often under coercion resources. Caston claimed that marketing is more suitable for smaller entrepreneurial companies. Entrepreneurial marketing makes use of a great idea and approach focuses on creative approaches to innovation, risk management, pyramids resources and value creation. The concept of entrepreneurial marketing framework includes a series of marketing activities that organizations, especially in a turbulent market environment will be used. It was suggested that entrepreneurial marketing when the big environmental changes and limited resources is more effective (Carson, 2005). Morris et al. (2002), described as a tendency entrepreneurial marketing organization that has seven basic dimensions. Four of these dimensions - forecasting, opportunity-seeking, risk-oriented calculation and innovation - have been made in research that directly examines the corporate's entrepreneurial orientation. The intensity three dimensions according to the customer, pyramids and resources to create value that can be any size or smaller on a larger scale used by an organization. Entrepreneurial marketing as a response to the market and an innate ability to anticipate changes in customer demands is described. Entrepreneurial Marketing basically consists of two very distinct areas of management, marketing and entrepreneurship (Callinson and Shaw, 2001)

3-2- Review domestic and foreign research (literature)

Golabi et al (2010) in a study entitled conceptualize marketing management process in knowledge-based businesses in the Science and Technology Park of Arak city, using qualitative content analysis suggests that marketing practices in knowledge-based businesses done during the seven sequential steps that include identifying and understanding customer needs, develop products, services and processes, in order to meet the needs of customers, penetration pricing products and services in an effective manner, identify competitors, positioning in the market and create the perfect background for easy and effective access to the products and services customers, ensuring customer satisfaction during and after the exchange process and long-term relationships with customers. According to Carson (2005) informal nature of entrepreneurial decisions, case, creative, opportunistic and sometimes, reactive or hyperactive, while marketing decisions, mainly informal, continuous, systematic, orderly and structured. According to him, entrepreneurial marketing research can be in the form of a whole, classified. On the one hand the whole, the research that they are facing, entrepreneurial marketing, look; the area in which traditional marketing theories, has the ability to run small and medium companies. Research in this area suggests that entrepreneurial companies also use similar marketing thinking and this means that research conducted in the identical paradigm, but when implemented in large companies is different. With such an outlook, entrepreneurial marketing, marketing management completely according to plan, linearity and rationality, the foundation is considered to be different. In another study of Mankelow and Merrilees (2001), based on the teachings of critical and feminism theory, rising seeks to provide a model of entrepreneurial marketing for rural women. According to the authors acknowledge,
weakness that this study has, is not according to the validity and reliability of variables. More explanation is that the samples examined, exclusively devoted to startup companies. More importantly, in this study, rather than focusing on marketing perspective, the perspective of entrepreneurship, has been noted. The study also environmental factors have been neglected in the field of technology based on conventional view only small and newly established companies, were considered. The results suggest that success depends on factors such as opportunity-seeking entrepreneurial marketing, research and development, intellectual property protection and competitive appropriate space. By the view of post-modernist, Lodish et al (2001), in their article entitled "Entrepreneurial Marketing, First Strategy of Emerging Businesses", paid to change the paradigm of success of emerging corporates on the centrality of technology to focus on marketing, with entrepreneurial vision. What distinguishes its review, the emphasis on corporates is based on advanced technology. The researchers have focused attention on technological factors including Internet, e-commerce and ICT to advance the goals and success of the corporate. Conclusion of researchers indicate that the benefit of entrepreneurial marketing paradigm is superior to the use of technology in the corporate's success. A critical view, it must be admitted that in this study, we see a kind of discrimination on the basis of mere technology. Hosseini and Golabi (2012) in a study entitled "The place of religion – Muslim beliefs entrepreneurs in marketing small and medium sized entrepreneurial businesses" was carried out to identify and justified the terms of entrepreneurial marketing mix according to religion – Muslim beliefs of top entrepreneurs in small and medium businesses of Iran. The results suggest that entrepreneurial marketing mix with a focus on religious beliefs - Islamic entrepreneurs includes seven elements that are ranked in order of production, pricing, distribution, promotion and product promotion, dealing with customers and dealing with competitors and sell products.

4- Methodology

Current study in terms of purpose has been applied and descriptive – survey and in terms of data collection method is a combination of library, field and survey methods. Field methods in order to identify aspects affecting the success of knowledge-based entrepreneurial marketing are done in order to collect data on the sample survey. The study population included all managers of companies in the Science and Technology Park of Yazd city. The sampling method used in this study is stratified sampling that in this study, the population size is 130 with an error of 5%, the target sample size of 97 people determined. The data collection tools in this study were a questionnaire. In such a way that standard questionnaire Hosseini-Ezzabadi(2015) has been used in Yazd City too. 21 question of first related to entrepreneurial marketing 7 and 6 last questions, related to the corporate's success. In addition to adjustments in question were performed using the questionnaire to conform to Iranian and Islamic culture.

5- Analysis of data
5-1- Descriptive analysis of the variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Variance</th>
<th>Standard deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity-seeking</td>
<td>2.773</td>
<td>1.089</td>
<td>1.043</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Risk-taking</td>
<td>2.752</td>
<td>0.924</td>
<td>0.961</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Innovation-oriented</td>
<td>3.790</td>
<td>0.663</td>
<td>0.814</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Customer orientation</td>
<td>3.319</td>
<td>0.574</td>
<td>0.757</td>
<td>1.33</td>
<td>5</td>
</tr>
<tr>
<td>Leverage resources</td>
<td>3.463</td>
<td>0.747</td>
<td>0.864</td>
<td>1.33</td>
<td>5</td>
</tr>
<tr>
<td>Value creation</td>
<td>3.089</td>
<td>1.082</td>
<td>1.040</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Before being active</td>
<td>3.292</td>
<td>0.968</td>
<td>0.983</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Success</td>
<td>3.529</td>
<td>0.395</td>
<td>0.628</td>
<td>1.83</td>
<td>5</td>
</tr>
</tbody>
</table>

The results of the table 1 shows that the entrepreneurial marketing variables, variables, oriented innovation, leverage resources and hyperactivity have the greatest impact on the success of knowledge-based companies with an average of 3.790, 3.463, 3.292. However, the variables of risk-taking, opportunity-seeking and value with an average of 2.752, 2.773 and 3.089, have the least impact on the success of knowledge-based companies. In addition, between variables, customer-oriented, have the lowest distribution with a standard deviation of 0.757 and opportunity-seeking, the largest distribution with a standard deviation of 1.043.
5-2- K-S test of normality

The results of this test through SPSS software will be provided in the form of a table. If the significance level obtained for the structure to be greater than 0.05, it is significant that the distribution is similar to that observed with normal distribution and parametric methods can be used to test these structures. If the level of significance is less than 0.05, assuming normal distribution of observations must be rejected and nonparametric methods for analyzing these structures to be used. Hypothesis on the correlation coefficient is defined as follows:

Null hypothesis (H0): \( r = 0 \)
Alternative hypothesis (H1): \( r \neq 0 \)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Kolmogorov-Smirnov statistic</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity-seeking</td>
<td>0.844</td>
<td>0.474</td>
</tr>
<tr>
<td>Risk-taking</td>
<td>0.899</td>
<td>0.394</td>
</tr>
<tr>
<td>Innovation-oriented</td>
<td>1.151</td>
<td>0.141</td>
</tr>
<tr>
<td>Customer orientation</td>
<td>1.181</td>
<td>0.123</td>
</tr>
<tr>
<td>Leverage resources</td>
<td>1.185</td>
<td>0.120</td>
</tr>
<tr>
<td>Value creation</td>
<td>1.109</td>
<td>0.171</td>
</tr>
<tr>
<td>Before being active</td>
<td>1.034</td>
<td>0.236</td>
</tr>
<tr>
<td>Success</td>
<td>1.106</td>
<td>0.173</td>
</tr>
</tbody>
</table>

In table 2, since the level of significance for all study variables is more than acceptable error rate (0.05) cannot be reject the null hypothesis at 0.05 so it can say that study variables have the normal distribution. Given that the hypothesis 1 to 7 of current study, so we are looking at the impact of the independent variable on the dependent variable to check if the correlation test hypotheses is significant, we will use the regression. Since there are so each independent variable regression assumptions have been used.

5-3- Test hypotheses

To test the hypotheses using regression analysis, we examined the relationships between variables.

6. Discussion and Conclusion

This study was conducted to evaluate the effectiveness of entrepreneurial marketing aspects on the success of knowledge-based companies in the Science and Technology Park of Yazd city and based on this purpose, assumptions were raised. The results of the analysis indicated that the first hypothesis assumptions, there is a direct relationship between opportunity-seeking and corporate success rate and in this regard, opportunity-seeking justified about 14% of the corporate success rate. In the second hypothesis, there is a direct relationship between risk-taking and corporate success rate and risk-taking justified the 10% of the corporate success rate. In the third hypothesis, there is a significant correlation between corporate success and opportunity-seeking innovation-oriented and justified about 34% of the corporate success rate. In the fourth hypothesis, there is a direct relationship between customer orientation and customer orientation and corporate success justified about 8% of the corporate success rate. In the fifth research hypothesis, there is a significant correlation between leverage resources and corporate success. Leverage resources also justified about 12% of the corporate success rate. In the sixth hypothesis research, there is no direct relationship between value creation and corporate success. It also justified the value creation about 38% of the corporate success rate. In the seventh hypothesis, there is no direct relationship between the active and the corporate success rate. Before being active also justified about 22% of the corporate success rate. So it is generally stated that entrepreneurial marketing aspects (including Forecasting, opportunity-seeking, innovation, leverage resources, value creation, risk-taking and customer orientation) have a significant positive impact on the success of knowledge-based companies in the Science and Technology Park of Yazd city that among them, creating value and opportunity-seeking have the greatest impact respectively.
References:
Bjerke, B., Hultman, C., Entrepreneurial Marketing, the growth of small firms in the new economic era, Edward Elgar, 2002.
Carson D., Towards a research agenda- January, paper discussed at UK Academy of Marketing/ Entrepreneurship Interface SIG, Southampton, UK, January 5-7, 2005.
Toghraei, Rezvani, Mapping concept of social capital in entrepreneurial marketing activities of small companies, Quarterly of scientific – research of new marketing research, fall 2012, Tehran, Iran.

Biography

Mahdi Siamak is a graduate student at Industrial engineering Department of Yazd University, Iran.

Mohammad-Hossein Abooie is an assistant professor of Industrial Engineering at Yazd University, Iran. He was the head of Indusial Engineering Department, and had numerous positions in the past.

Ali Mostafaeipour is an assistant professor of Industrial Engineering at Yazd University, Iran. He has been teaching at Yazd University since 1989. He studied at Winona State University (University of Minnesota) in state of Minnesota, USA; University of Wisconsin at Platteville, Wisconsin, USA; Alabama A&M, Alabama, USA; and Iran University of Science and Technology, Tehran, Iran. He has served as a committee member, guest speaker, and co-chairman of 145 international conferences. He has been reviewer of 17 international journals mainly Elsevier. He has presented 78 mostly International conferences throughout the world. He has undertaken and managed 18 research projects, and holds 3 patents. He has been editorial board of several professional journals. Finally, he has published 54 journal articles mostly at Elsevier (ISI), and he authored 4 books. He holds an award for excellence from Yazd University as the year 2013 distinguished researcher, also distinguished author of “Wind Energy” book (INTech publisher, 2012, Croatia) with more than 5000 downloads in six months. His research interest lies in renewable energies, wind energy, value engineering, economic evaluation, and feasibility study of project.