An Investigation of the Influence of Market Orientation on Innovation in SMEs in Service Companies

Atefeh Beig¹, Mansoureh Aligholi²

¹Department of Management, Electronic Branch, Islamic Azad University, Tehran, Iran.
²Department of Business Management, Faculty of Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran.

Received: December 9, 2014
Accepted: February 14, 2015

ABSTRACT

The present research aims to investigate the influence of market orientation on innovation in SMEs. Statistical population of the research included all SMEs which were surveyed by means of a researcher-made questionnaire. Validity of the questionnaire was verified by 5 experts and professors and Cronbach's alpha was used for verification of reliability. Cronbach's coefficient was equal to 0.78 which was an acceptable value. Independent t test was used for analysis of research hypotheses in SPSS software. The results showed that market orientation influences innovation. Furthermore, market orientation influences product, customer orientation, innovation, customer relationship, infrastructural management and financial aspects.

KEYWORDS: Market Orientation, Innovation, product, Customer orientation, Infrastructural management, financial aspects.

INTRODUCTION

In any organization, whether a production or a service one, customer is the main factor for survival such that an organization which fails to attract customers' satisfaction and loyalty will not guarantee its long-term growth and success (Vazifehdoost, Rahnama and Mousavian, 2014). For decades, a company's value was measured by means of its properties, tangible assets, factories and equipment. However, it has been concluded that the real value of a company lies somewhere beyond that, i.e. in its potential customers' minds (Heidarzadeh et al, 2011). Development of SMEs is the secret for economic development of the next decade. Investigations have shown that SMEs influence global economy via entrepreneurship, innovation, changes in industrial technologies and finally creation of job opportunities and increasing income. Moreover, development of SMEs is the secret for economic development in the next decade. Intensification of global competition, increase in uncertainty and demand for diversified products has all increased attention to these industries. Although large industries have received a lot of attention by economic policy-makers due to advantages like mass scale of production, production range, experience and organizing impact, SMEs also play important roles in economy due to advantages like transport impact, market size, effectiveness of selection and control. Innovation is a process employed by entrepreneurs to bring opportunities to markets. Innovation can influence market by developing new products, services and processes and creates competitive advantage via technological skills and creative thinking. Furthermore, innovation is also known as conversion of corporate knowledge into products or processes of considerable changes in existing processes and products in order to introduce them into market (Camison and Fore's, 2010). The present era is the age of unpredictable and rapid transformations and companies have confronted with unprecedented harsh competitive conditions as a result of factors like unclear borders between markets, fragmentation of markets, short lifecycles of products, rapid changes in customers' purchase models and awareness of customers (Tavanazadeh and Aligholi, 2014). Hence, successful managers are those who update their organizations. This is possible when employees and managers accept market orientation as a culture and insight. In market orientation, customers' satisfaction constitute the main core of corporate activities and all corporate activities must be directed at satisfaction of customers' needs. Understanding customers' needs and expectations and responding to changes created in market play important roles in successfulness of companies. Considering the aforementioned discussion, this study investigates the influence of market orientation on innovation in SMEs. In other words, the main question of this study is: what a kind of influence does market orientation have on SMEs?

Theoretical literature

Market orientation

Market orientation is a collection of organizational responsiveness activities and pioneering which are used by organizations to become customer-oriented and try their best to satisfy customers' needs by innovation in
products and processes. Narver&slater (2008) divided market orientation into three elements: customer orientation, competitor orientation and coordination, in terms of structure and concept. Customer orientation is a proper understanding of target customers for creation of supreme value and companies should understand chain value of customers properly. Competition orientation is an attempt by which companies learn about their key strengths/weak points and become aware of long-term strategies and capacities. Competitor-oriented companies evaluatethemselves against their competitors continuously and analyze their weak points/strengths and copy them. Inter-duty coordination is application of human resources and capital for creation of value for target customers. In other words, creation of value for customers is not a duty of marketing department but all departments and groups should coordinate to create value.

- Market orientation is creation of information resulted from market all over the organization about current and future needs of customers, development and transfer of this information and talent all over the organization and responding to it in all organizational levels (levinthal & Cohen, 1990).
- Market orientation has been made up of three behavioral elements: customer orientation, competitor orientation and coordination and trading information among departments by means of two kinds of decision-making, concentration on long-term prospect and profitability.
- Market orientation includes a collection of beliefs which puts customers at the core of attention in order to provide long-term profit of company. Of course, this does not mean absence of attention to other beneficiaries like owners, managers and employees.
- Market orientation involves supreme and good skills for understanding and satisfaction of customers' needs and satisfaction.

Implications of market orientation for organization
Organizations which can respond properly to their customers' needs and satisfy them better than competitors will certainly have high levels of performance. Studies conducted by Lznak Lash (1987) and Narver&Slater(1990) show that there is a positive relationship between market orientation and corporate performance. Studies conducted by Kohli&Jaworski showed that market orientation will have many social and psychological benefits for employees. Market orientation has been defined as a sense of pride in an organization in which all units and employees take steps towards satisfaction of customers' needs. In fact, satisfaction of customers' needs is the common target of all departments and they are proud of taking steps in this way. However, this approach requires employees to have a sense of belonging and commitment to their respective organization. Consequently, a higher level of market orientation in an organization can increase group work spirit and collective work and therefore increase commitment among employees (HabibiNodeh, 2014).
Organizations which are active in competitive environments are expected to become more market-oriented. Kohli&Jaworski investigated the impacts of three environmental factors on market-orientation. The first factor is complexity and disturbance of market which is defined as the rate and level of changes in the structure of customers' needs and preferences. Organizations which are active in complex markets need more products changes and conversely, companies require less changes in stable markets. The second environmental factor studied by Kohli&Jaworski to depict relationship between market orientation and commercial performance was competition intensity. As Hust (1986) and Kohli&Jaworski stated, a company or organization may have a good performance in a non-competitive environment even if it is not market-oriented because customers are used to products and services of the company. In fierce competition conditions, however, customers have different needs for satisfaction of their expectations. Therefore, companies which are not market-oriented will lose their customers rapidly in competitive environments. Therefore, market orientation in competition conditions is of great importance. The third factor which moderates relationship between market orientation and corporate performance is "technological changes" which is in fact the very technological changes occurred in a specific industry. Companies which use advanced technologies can create competitive advantage by means of technological innovation. In contracts, companies which are performing by static technologies will not have appropriate competitive positions in competitive markets and cannot use technology as a competitive advantage (Kamalian, Karim and Joudzadeh, 2014).

Innovation
Innovation is derived from the Latin word "innovate" which means "making something new". Innovation is a process in which an individual allows his or her imagination soar into skies and then brings it onto the earth and engineers it (idea engineering) such that it is converted to idea. Then, ideas are converted into practical, useful and appropriate ideas. (creativity) turns ideas into products, services and processes and finally the products and services and new processes are commercialized and the innovation process ends. In other words, creativity is a requirement for innovation but it must be noticed that there is along way from creativity to innovation and this way is facilitated by entrepreneurs (Esmaeelpour, 2013). Innovation is a managerial system which emphasizes on organizational mission, looks for exceptional opportunities and specifies whether it is appropriate to strategic organizational path or not. It also clarifies success standards and looks for new
opportunities. Drucker believes that a successful innovation process involves concentrated and purposeful hard work. Innovation is an important factor in creation of competition all over the world which results in organizational growth, includes future success and is like a motor which allows companies to have continuous efficiency in global economy. Porter & Stern (2008) stated that companies must be able to create a flux of new processes and products and use more technologies and take steps to increase their durability. Drucker emphasized that every organization requires an ability and basic skill and it is innovation. Innovation is a multifaceted concept (Haji Hoseini, 2014). Maravelakis (2009) investigated organizational innovations based on products, process ad executive innovations. Researchers found that most studies conducted on innovation emphasize highly on innovation of products in production companies. From an organizational viewpoint, real success of innovation takes place in the market. Strategic innovation is a key factor for successfulness of many marketing managers. Moreover, companies should try to create appropriate structures, culture, stimulants, systems and processes. It must be said that innovation does not necessarily result in more sales (Brunsicker and Hutschek, 2010).

Principles of innovation
Some of the main principles of innovation include:
1. All ideas are subtle and valuable. Therefore, it is worth preparing an environment in which all ideas are actualized and raised.
2. Creator of an idea requires help for promotion of the idea. In other words, an idea must be supported by a supporter.
3. Innovative products are required for organizational survival.
4. Idea creators are main sources for organizational progress.

Relationship between innovation and market orientation and competitive advantage
Salimen (2013) believed that the impacts of innovation increase on organizations have made innovation an important concept for competitive advantage. He states that innovation-based viewpoint is one of the four key viewpoints of strategic management (resource-based viewpoint, industry-based viewpoint and organization-based viewpoint). In his model, he states that there is a relationship between innovation-based viewpoint and three other viewpoints and the relationships among these four viewpoints can help organizations with increasing stable competitive advantage. Regarding the importance of market orientation in acquisition of competitive advantage, many authors believe that market orientation can affect an organization's products and services. Krane (1992) believes that marketing capability (market orientation) plays an important role in the process of acquisition of competitive advantage. Appropriate marketing capabilities can improve corporate services and products and create special capabilities for achieving superiority with respect to its competitors.

Main hypothesis of the research
Market orientation influences innovation in SMEs.

Subsidiary hypotheses
- First subsidiary hypothesis: market orientation has a positive impact on product in service SMEs.
- Second subsidiary hypothesis: market orientation has a positive impact on customer relationship in SMEs.
- Third subsidiary hypothesis: market orientation has a positive impact on infrastructure management in SMEs.
- Fourth subsidiary hypothesis: market orientation has a positive impact on financial aspects of SMEs.

Considering the targets and hypotheses of the research, research model was extracted from Sterwalder model (2010).
**Research methodology**

The present research is an applied study. In terms of data gathering, it is a descriptive study. Further, it is a correlation study in terms of data analysis. Regression analysis was used for evaluations.

**Statistical population and sample**

Statistical population of the research included all managers of SMEs in Tehran City. According to statistics disclosed by Tehran Organization of Industries and Mines, about 240 SMEs are active in Tehran in services. They constitute statistical population of the research. In order to determine sample size, Cochran’s formula was used because statistical population is limited:

In this equation, $Z_{\alpha/2}$ is critical number of normal distribution in alpha level. Considering the fact that research certainty coefficient $p=0.95$, alpha=0.05 and $\alpha/2=0.025$ and critical number is $z_{\alpha/2}=z_{0.025}=1.96$. Moreover, because $p$ is an unknown parameter, its value is assumed to be equal to 0.5. Therefore, $p^*q=p$ and $(1-p)=0.5*0.5=0.25$. $d$, which indicates precision of estimation or maximum error, was assumed to be equal to 0.08.

$$n = \frac{Z_{\alpha/2}^2(p^*q)}{d^2} = \frac{1.96^2(0.5\times0.5)}{0.08^2} = 92$$

**Data gathering instrument**

A questionnaire was used for data gathering in this study. All questions were based on five-point Likert scale. After preparation of questionnaire, 20 questionnaires were distributed among population members in Tehran.
order to test reliability of the questionnaire. Cronbach's alpha was used for investigation of reliability. The results showed that Cronbach's alpha coefficients for all questions and total questionnaire were above 0.7 (Cronbach's alpha values calculated for variables and total questionnaire and the questions have been presented in table 1). Moreover, content validity of the questionnaire was also verified by experts. Therefore, the questionnaire has enough reliability and validity for distribution among population members.

<table>
<thead>
<tr>
<th>dimensions</th>
<th>Number of questions</th>
<th>Cronbach's alpha value</th>
</tr>
</thead>
<tbody>
<tr>
<td>product</td>
<td>8</td>
<td>0.812</td>
</tr>
<tr>
<td>Customer relationship</td>
<td>3</td>
<td>0.782</td>
</tr>
<tr>
<td>Infrastructure management</td>
<td>6</td>
<td>0.804</td>
</tr>
<tr>
<td>Financial aspects</td>
<td>5</td>
<td>0.768</td>
</tr>
<tr>
<td>Market orientation</td>
<td>5</td>
<td>0.834</td>
</tr>
</tbody>
</table>

Table 2 depicts demographic information of respondents.

<table>
<thead>
<tr>
<th>variable</th>
<th>dimensions</th>
<th>frequency</th>
<th>Frequency distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>gender</td>
<td>Male</td>
<td>87</td>
<td>94 %</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>5</td>
<td>6 %</td>
</tr>
<tr>
<td>age</td>
<td>Below 25 years</td>
<td>0</td>
<td>0 %</td>
</tr>
<tr>
<td></td>
<td>25-35 years</td>
<td>16</td>
<td>17 %</td>
</tr>
<tr>
<td></td>
<td>36-45 years</td>
<td>53</td>
<td>58 %</td>
</tr>
<tr>
<td></td>
<td>46-55 years</td>
<td>23</td>
<td>25 %</td>
</tr>
<tr>
<td></td>
<td>Above 55</td>
<td>0</td>
<td>0 %</td>
</tr>
<tr>
<td>Education</td>
<td>High school and below</td>
<td>0</td>
<td>0 %</td>
</tr>
<tr>
<td></td>
<td>Associate's degree</td>
<td>14</td>
<td>15 %</td>
</tr>
<tr>
<td></td>
<td>Bachelor degree</td>
<td>45</td>
<td>49 %</td>
</tr>
<tr>
<td></td>
<td>Master degree</td>
<td>33</td>
<td>36 %</td>
</tr>
</tbody>
</table>

Data analysis and hypotheses test

Regression analysis was used for testing research hypotheses. The results of regression analysis have been mentioned in table 3.

<table>
<thead>
<tr>
<th>Model</th>
<th>Non-standard coefficients</th>
<th>Standard coefficients</th>
<th>statistic t</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>---market orientation --- product</td>
<td>.825 .027</td>
<td>.436</td>
<td>30.254</td>
<td>.000</td>
</tr>
<tr>
<td>market --- Customer relationship orientation</td>
<td>1.003 .042</td>
<td>.564</td>
<td>23.703</td>
<td>.000</td>
</tr>
<tr>
<td>---Infrastructure management market orientation</td>
<td>.754 .030</td>
<td>.523</td>
<td>25.108</td>
<td>.000</td>
</tr>
<tr>
<td>market --- Financial aspects orientation</td>
<td>.704 .024</td>
<td>.487</td>
<td>28.507</td>
<td>.000</td>
</tr>
</tbody>
</table>

Regarding the first hypothesis, the results show that there is a significant statistical relationship between dependent and independent variables in an error level smaller than 0.05. in other words, market orientation variable influences product innovation in SMEs. The impact size is equal to 0.436 (beta coefficient) which shows that one standard deviation increase in market orientation can result in an increase equal to 0.436 of standard deviation in the depend variable (product in SMEs). Therefore, it can be concluded that H0 is rejected and H1 is supported.

The second hypothesis is also supported in an error level smaller than 0.05 and in 95% certainty level. There is a significant relationship between the independent and dependent variable. In other words, market orientation influences customer relationship in SMEs. Moreover, the impact size is equal to 0.564 (beta coefficient) and this shows that one standard deviation increase in the independent variable (market orientation) increases the dependent variable (customer relationship in SMEs) as much as 0.564 standard deviation. Therefore, it can be concluded that H0 is rejected and H1 is supported.

The third hypothesis is also supported in an error level smaller than 0.05 and in 95% certainty level. There is a significant relationship between the independent and dependent variable. In other words, market orientation influences infrastructure management in SMEs. Moreover, the impact size is equal to 0.523 (beta coefficient) and this shows that one standard deviation increase in the independent variable (market orientation) increases the dependent variable (infrastructure management in SMEs) as much as 0.523 standard deviation. Therefore, it can be concluded that H0 is rejected and H1 is supported.
The fourth hypothesis is also supported in an error level smaller than 0.05 and in 95% certainty level. There is a significant relationship between the independent and dependent variable. In other words, market orientation influences financial aspects in SMEs. Moreover, the impact size is equal to 0.487 (beta coefficient) and this shows that one standard deviation increase in the independent variable (market orientation) increases the dependent variable (financial aspects in SMEs) as much as 0.487 standard deviation. Therefore, it can be concluded that H0 is rejected and H1 is supported.

Conclusions and recommendations

Rapid changes in innovation and competition in business environment and uncertainty are all features of the present world. Organizations try to acquire competitive advantages and increase their competitiveness. To this end, they use entrepreneurship and innovation. Innovation is an important factor in contemporary organizations. Innovativeness is very vital for survival and conservation in competition especially for SMEs. Innovativeness is a source for ideas which result in new services and products. Consequently, it contributes to profitability of a business and can be a resource for organizational growth. On the other hand, market orientation is an aspect of organizational culture in which employees pay attention to organizational profitability and customer satisfaction via creation of supreme value. Market orientation is a kind of behavioral norm which is developed all over an organization and responds to present and future needs of market and customers via innovation. Market orientation is an organizational culture which provides efficiency and effectiveness for creation of values for customers and consequently supreme performance for businesses. Market orientation includes three behavioral elements: customer orientation, competitor orientation and inter-department coordination. It embraces two criteria two criteria: long-term concentration decision and profitability. Market orientation provides a context for creation of ideas and innovation via gathering information and recognizing customers. In other words, market orientation results in gathering diverse data from customers and competitors. Since relationship between market orientation and innovation was verified in this research, SMEs managers are proposed to improve market orientation in their organizations using indices of definition of market orientation like analysis of final customer, analysis of distributors, analysis of competitors, environmental factors analysis and coordination between strategic activities and task units. Since relationship between market orientation and product was supported in this study, SMEs managers are recommended to pay special attention to indices of innovativeness degree in their organizations like rate of introduction of new products in comparison with competitors, the number of new products lines and changes in production line or products.

Furthermore, it is recommended that SMEs should increase their market orientation level with respect to competition intensity in the market so that an appropriate relationship with customers is established. Of course, this is true for the case of creation of a communication channel between company and customer via market orientation.

REFERENCES


Esmaeelpour, Reza; Taghizadeh, Muhammad Reza and Ibrahim Nejad, Mahdi (2013). Investigation of the influence of entrepreneurial tendency on profitability of insurance companies: the role of market orientation and innovation success (case study: insurance companies in GuilanProvinence”), national conference on entrepreneurial university (knowledge-oriented industry).


HabibiNodeh, Zahra and Mehrani, Hormoz (2014), an investigation of the impact of market orientation on innovation and financial performance in Iran Insurance Company agents in eastern Golestan province", the first national conference on R&D in the third millennium.

Kamalian, Amin Reza; Karim, MuhamamdHosein and Joudzadeh, Mahtab (2014), investigation of the impact of market orientation on innovation in SMEs (case study: Fishery industrial cluster in Chabahar), the third national annual conference on new management sciences.
