The Impact of Nature of Institute on Entrepreneurial Marketing: The Moderating Role of Organizational Structure

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Abstract

This paper investigates the effect of nature of institute on entrepreneurial marketing in higher education institutions. Nature of institute characteristics such as, age, and size are studied to find whether they affect entrepreneurial marketing or not. Organizational structure is a moderating variable in this study. This investigation has been conducted in Tehran-Iran, between higher education institutions. Data were collected with questionnaire instruments. Model was developed and tested with structural equation model using data collected from the 103 active managers of these institutions. The results show that age of institute has a positive effect on organizational structure. And organizational structure has a positive effect on entrepreneurial marketing while age of institute doesn't have any effect on entrepreneurial marketing and organizational structure.

Keywords: Entrepreneurial Marketing, Nature of Institute, Organizational Structure, Higher Education Institutions Contaminated

1. Introduction

Changes and transformations of social-economic systems in this era rooted in science and technology progress and changes. Assurance and the survival of organizations need finding solutions and new ways of dealing with problems which very dependent on innovation, invent, create products, processes, and new methods. What has become increasingly apparent to researchers is that conventional marketing practices are not always available, or appropriate, for entrepreneurial firms. When pursuing new opportunities with limited resources, the entrepreneur must use innovative approaches in the face of these uncertainties (Becherer et al., 2008). Traditional marketing may not be adequate for firms to compete in this highly dynamic business environment. Recent studies propose firms to be more entrepreneurial in their marketing when dealing with market uncertainty and ambiguity. A growing collection of evidence suggests that the more successful companies over time are those that are involved in entrepreneurial activity in the higher levels. In their study of 59 firms from Sweden and the US, Hills et al. (2008) found that firms with entrepreneurial marketing orientation exhibit a different
strategic orientation, commitment to opportunities; opportunity recognition would tend to use formal
market research while entrepreneurial marketing firms tend to rely on experience, immersion and
intuition. Further, entrepreneurial marketing firms are less constrained by budgets and have adaptive
strategies whereas non-entrepreneurial marketing firms are more oriented to using budgets and top-
down corporate planning driven by financial metrics. This study is based on Kilenthong et al. (2010)
research which examines systematic relationships between firms’ characteristics and entrepreneurial
marketing. But the contribution of our study is that we consider organizational structure as a moderator
variable which haven’t considered in previous studies. Unlike many other studies in entrepreneurial
marketing which had been done in business firms, this study has been done in higher education
institutes. Simultaneously investigating of nature of institute and entrepreneurial marketing and
creating a structural model for this relationship is another contribution of this study. The analysis,
therefore, may help to find new knowledge regarding firms’ entrepreneurial marketing practice that
was not reported by prior research. This research quantitatively examines entrepreneurial marketing
practice in order to determine if a systematic relationship exists between institutes’ characteristics (i.e.
age, size) and entrepreneurial marketing practice.

The paper proceeds as follows. First, we review the relevant literature and theoretical
framework of nature of institutes and entrepreneurial marketing. We then develop several hypotheses
to be tested and describe the empirical approach and the data collection. The last section outlines the
implications of our findings and discusses avenues for further research.

2. Literature Review
2.1. Entrepreneurial Marketing

The importance of entrepreneurs and entrepreneurship are widely recognized. The entrepreneur has
become a hero in recessionary times. And the ability to operate, and often also to grow, a business in a
challenging business environment is important for society. So there is a need for scholarly studies of
entrepreneurship and its intersections with other academic disciplines, such as marketing. The basic
idea of linking Marketing and Entrepreneurship has been discussed for many years. Early authors
linking the two fields together were, for example, Murray (1981) and Tyebjee et al. (1983). In the 90s,
both education at various university levels and published research in entrepreneurial marketing (EM)
grew significantly.

We find more courses, conferences and symposia organized than ever before (Hills and
Hultman, 2011). For many years, the American Marketing Association did not change their definition,
but revisions were made in 1935, 1982 and 2004, and the latest modification came in 2007. The
definition of marketing has evolved from being focused on performing business activities (1935) to
focus on activities, institutions and processes for value-creating offerings. At the time of the first
Marketing and Entrepreneurship Symposium in 1982, mainstream marketing, as defined by the
American Marketing Association in 1981, was very different from discussions of entrepreneurial
marketing. However, the gap has been reduced by the way the American Marketing Association
changed the definition in 2004 and in 2007(Jones and Rowley, 2011). Review of existing research
about marketing and entrepreneurship indicate that Knowledge of Marketing and Entrepreneurship has
always been two attractive research areas for many researchers. So, On the one hand, raise awareness
about the impact of entrepreneurship and innovation in Businesses and the role of marketing in
obtaining of success in the other hand led to the combination of these two disciplines and creation of
entrepreneurial marketing concept. Entrepreneurial marketing is described as the interface between
entrepreneurship and marketing. Entrepreneurial marketing is very complex and is related to the highly
competitive and dynamic environment (Hills and Hultman, 2006).

This form of marketing tends to be responsive and reactive to competition and opportunistic in
nature. Indeed, empirical evidence suggests that there exists a significant correlation between an
enterprise’s marketing and entrepreneurial orientations, both widely being responsible for corporate success (Jones and Rowley, 2011). In one of the most comprehensive discussions on entrepreneurial marketing to date, Morris et al. (2002) propose that entrepreneurial marketing is composed of a proactive organizational focus on customer satisfaction through innovative and efficient value creation throughout the value chain (Miles and Darroch, 2004).

2.2. Nature of Institute

2.2.1. Age
Entrepreneurial firms are often defined as new or young firms. New firms are at the beginning of their development stages, and are more likely to face uncertainty, ambiguity, and turbulent environment than old firms. Numerous studies find that marketing practices in new firms are different from marketing practices in established firms (Kielenthong & et al., 2010). Weinrauch et al. (1990) find that younger firms use different marketing techniques than older firms. Research has shown that entrepreneurial behavior is more common in younger firms (Gruber, 2004). Luo et al. (2005) found, for example, that younger firms are more likely to exhibit entrepreneurial strategic behaviors than older firms. Most studies obligingly include firm age in their research design to parcel out any spurious influence of age-related effects on other focal constructs.

Sorensen and Stuart (2000) find that while older firms tended to engage in more frequent innovation than younger firms, those innovations tended to be closely related to the firm's existing knowledge stock. Consequently, entrepreneurial behaviors among older firms exhibit diminishing congruence with current market expectations. Thus, while older firms may actually be more entrepreneurial in terms of quantity of behaviors, such behaviors are increasingly incongruent with the market over time, which, in turn, diminishes the ability of older firms to capture value from their entrepreneurial strategies in the form of superior growth. In conjunction with a structural advantage that enables younger firms to pursue entrepreneurial strategies with greater agility, younger firms are better positioned to capture greater value from innovative, proactive, and risk-taking strategic behaviors than their more mature peers (Anderson and Eshima, 2011).

2.2.2. Size
Anderson & Eshima, 2011 defined size as Number of full-time employees in the present. Many studies showed that there is a relationship between firm size and entrepreneurial marketing practice (Andersen et al., 2010; Prabhu et al., 2012; Kielenthong et al., 2010; Becherer et al., 2008; Jones and Rowley, 2011; Hills and Hultman, 2006).

Researchers recognize that marketing in small firms is distinct from marketing in large firms. Overall, small firms are considered more entrepreneurial than large firms because of several characteristics. First, small firms have restricted resources and capabilities. Compared to large firms, small firms have less financial and human resource. As a result, they cannot perform the same kind of marketing activities that large firms can. Second, small firms do not have formal organization structures or formal systems of communication. Their marketing planning is intuitive, loose and unconstructed. Third, small firms have a simple and ad hoc marketing decision-making process. Small firms can develop an irregular change in their decision-making pattern during their business engagement. Fourth, small firms have fewer dominating decision makers than larger firms. Marketing decisions in small firms can be linked directly to specific personal goals of owners / managers. Lastly, small firms can quickly respond to their customers because they have better organization structure than large firms. They are closer to customers and can access customer information better than large firm. These above characteristics are the evidence suggesting that entrepreneurial marketing behaviors should be more prevalent in small firms than in large firms. In other words, firm size seems to have a direct impact on entrepreneurial marketing behaviors (Kielenthong et al., 2010).
3. Research Hypotheses

Kielenthong & et al., (2010); show (1999); Anderson and Eshima, 2011; Luo et al. (2005); Gruber, 2004 in their research found that age of firms can affect entrepreneurial marketing that is younger firms use entrepreneurial marketing more than older firms. Firm's age has it benefits of a general ability for pursuit of entrepreneurial strategies. Kielenthong et al., (2010) said that smaller firms are not shown to practice more entrepreneurial marketing than larger firms in all dimensions, while younger firms are found to practice less of entrepreneurial marketing than older firms in some dimensions. Therefore, we hypothesize as follows:

H1: Organizational structure moderates the effect of institute age on entrepreneurial marketing.
H2: Institute age affects entrepreneurial marketing.

Robbins (1998) said that increase the size of an organization and their age and so their growth can affect their organizational structure. In other word, we can say that as organizations growth, naturally their formality would increase because as personnel engage in works, standardization of procedures would increasingly necessary (Hills and Hultman, 2006). Thus the following hypotheses can be proposed:

H3: Institute age affects organizational structure.

Researchers said that there is an inverse relationship between the dimensions of organizational structure and corporate entrepreneurship that is we should decrease this dimensions in organizations. Luo et al. (2005) said that having an organic organizational structure in new firms enable them to create radical innovations with great potential for growth and the ability of changing environmental needs in themselves. It is closely associated with the concept of entrepreneurial marketing that is organic structures can facilitate use of entrepreneurial marketing. Thus the following hypotheses can be proposed:

H4: Organizational structure affects entrepreneurial marketing.

Bjerke and Hultman (2002) and Coviello et al., (2000) state that marketing in small firms is distinct from marketing in large firms. Schindehutte and Morris (2001) found that small and medium size firms are more likely to use leveraging strategies. Conversely, Kielenthong et al., (2010) found that small firms don’t use entrepreneurial marketing more than older firms. Thus the following hypotheses can be proposed:

H5: Organizational structure moderates the effect of institute size on entrepreneurial marketing.
H6: size of institute affects entrepreneurial marketing.

Researchers stated that dimensions of organizational structure have a relationship with the size of organization. Robbins (1998) said that size of organization is the most important factor affecting the structure of the organization. Robbins (1998) quoting Meyer and Aldrich stated that size of organization affect organizational structure, but the reverse is not true and firms that have higher formality and complexity need to hire a large number work force than firms that are less formal and less structured. Thus the following hypotheses can be proposed:

H7: size of institute affects organizational structure

4. Research Method
4.1. Sample

The samples include active managers of higher education institutions of Tehran province in Iran. 103 questionnaires were completed and were ready for analyzing. The samples of 103 respondents were 56.3 percent male (n=58) and 43.7 percent female (n=45) and 61.2 percent were graduated (n=63) and 35 percent with MA degree (n=36) and 3.9 percent with Ph.D degree (n=4).
4.2. Measures

To measure the effects of nature of institute on entrepreneurial marketing, in the research was used the combination of 26-items questionnaire developed by Kielenthong & et al., (2010) and the 24-items questionnaire developed by Robbins (1998). Ten latent variables were measured in this study: proactiveness, opportunity focus, calculated risk taking, innovativeness, customer intensity, resource leveraging, and value creation represented the entrepreneurial marketing elements and formality, complexity, and centralization were categorized as organizational structure. Items of these ten latent variables is consist of 3 items for proactiveness, 3 items for opportunity focus, 3 items for calculated risk taking, 3 items for innovativeness, 3 items for customer intensity, 4 items for resource leveraging, and 7 items for value creation. Respondents were asked to rate their agreement on a five point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) for the items of entrepreneurial marketing dimensions. For answering Robbins questionnaire scoring scale were used. For internal reliability, Cronbach’s alpha coefficients were calculated for all items of each construct. Results indicated that all the scales were considered to be reliable (Cronbach’s alphas).

For determining reliability of the questionnaire in this research, used Cronbach’s alpha and Construct reliability. Cronbach’s alpha for constructs are: proactiveness: 0.728, opportunity focus: 0.724, calculated risk taking: 0.764, innovativeness: 0.779, customer intensity: 0.720, resource leveraging: 0.778, value creation: 0.750, formality: 0.782, complexity: 0.919, centralization: 0.899. Construct reliability for constructs are: proactiveness: 0.9, opportunity focus: 0.9, calculated risk taking: 0.7, innovativeness: 0.6, customer intensity: 0.9, resource leveraging: 0.9, value creation: 0.9, formality: 0.8, complexity: 0.7, centralization: 0.7 so the questionnaire reliability is acceptable.

For determining validity, convergent validity was assessed for all constructs and indicators. Convergent validity was assessed by examining the factor loading for statistical significance. Measures (proactiveness, opportunity focus, calculated risk taking, innovativeness, customer intensity, resource leveraging, value creation, formality, complexity, and centralization) were subjected to a confirmatory factor analysis (CFA). All factor loadings ranged from .71 to .99 and were higher than the acceptable threshold (0.5) and therefore were statistically significant.

4.2.1. Moderator Variable

Organizational structure is defined as “the set of all the ways in which the work is divided into different tasks, achieving coordination” (Mintzberg, 1983). Child (1972) defined this term as “the formal allocation of work roles and the administrative mechanisms to control and integrate work activities including those which cross formal organizational boundaries”. Chen & Huang, (2007) said that organizational structure also reflects the way in which information and knowledge is distributed within an organization, which affects the efficiency of their utilization. Consequently, it substantially influences the distribution and coordination of the company’s resources, the communication processes and the social interaction between organizational members (Martínez and Martínez, 2011). Robbins (1998) said that increase the size of an organization and their age and so their growth can affect their organizational structure.
Luo et al. (2005) said that having an organic organizational structure in new firms enable them to create radical innovations with great potential for growth and the ability of changing environmental needs in themselves. Robbins (1998) said that size of organization is the most important factor affecting the structure of the organization. In view of this, in the model used to test our hypotheses the organizational structure has a moderating role between the effect of age and size of institute on entrepreneurial marketing (see Figure 1).

5. The Results of Hypotheses Testing

The proposed hypotheses were tested using structural equation modeling (SEM) via AMOS 6.0. To determine whether the hypotheses were supported, each structural path coefficient was examined with fit indices of the proposed model. The fit indices of model are shown in table (1). Model displayed reasonably good fit to the data.

Table 1: Fit Indices of Models

<table>
<thead>
<tr>
<th>Fit Statistics</th>
<th>The Measured Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFI</td>
<td>0.93</td>
</tr>
<tr>
<td>CFI</td>
<td>0.99</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.03</td>
</tr>
<tr>
<td>x2</td>
<td>1.09</td>
</tr>
</tbody>
</table>

Figure 2: Structural Equation Modeling (SEM)

In Model, H1 is not supported as Organizational structure moderates the effect of institute age on entrepreneurial marketing. The effect of institute age on entrepreneurial marketing is not statistically significant (H2). Age of institute significantly and positively affects organizational structure (H3). Organizational structure significantly and positively affects entrepreneurial marketing (H4). H5 is not supported as organizational structure moderates the effect of institute size on entrepreneurial marketing. The effect of institute size on entrepreneurial marketing is not statistically significant (H6). Finally, the effect of institute size on organizational structure is not statistically significant (H7). Therefore, just H3 and H4 were supported in the predicted direction and other hypotheses were not supported.

Table 2: Path Estimates for Proposed Model

<table>
<thead>
<tr>
<th>Path</th>
<th>Estimate</th>
<th>S.E.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2: Age of institute - entrepreneurial marketing</td>
<td>0.329</td>
<td>0.128</td>
<td>0.010</td>
</tr>
<tr>
<td>H3: Age of institute - organizational structure</td>
<td>0.604</td>
<td>0.171</td>
<td>***</td>
</tr>
<tr>
<td>H4: Organizational structure - entrepreneurial marketing</td>
<td>0.356</td>
<td>0.081</td>
<td>***</td>
</tr>
<tr>
<td>H6: Size of institute - entrepreneurial marketing</td>
<td>0.419</td>
<td>0.161</td>
<td>0.009</td>
</tr>
<tr>
<td>H7: Size of institute - organizational structure</td>
<td>0.666</td>
<td>0.220</td>
<td>0.002</td>
</tr>
</tbody>
</table>

To test H1 and H5 we used path analysis by AMOS 6.0. Path analysis is able to show either the direct effect or the indirect effect and the total effects of each variable on dependent variables.
Table 3: Path analysis for Proposed Model

<table>
<thead>
<tr>
<th>Path</th>
<th>Direct effect</th>
<th>Indirect effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Age of institute - entrepreneurial marketing</td>
<td>0.24</td>
<td>0.15</td>
</tr>
<tr>
<td>H5: Size of institute - entrepreneurial marketing</td>
<td>0.25</td>
<td>0.14</td>
</tr>
</tbody>
</table>

6. Summary and Concluding Remarks

The objective of this study was to examine the effect of nature including age and size of institute on entrepreneurial marketing in higher education institutions. The proposed hypotheses were tested using SEM.

Kielenthong et al., (2010); show (1999); Anderson and Eshima, 2011; Luo et al. (2005); Gruber, (2004) in their research found that age of firms can affect entrepreneurial marketing that is younger firms use entrepreneurial marketing more than older firms. These researches didn’t support hypothesis H1 and H2. According to the results we can make a conclusion that there is no difference between entrepreneurial marketing practice in new institutes and older ones. Maybe it is because of their similar structure and similar entrepreneurial behaviors. Also they have the same flexibility and responsiveness.

Robbins (1998) and Hills and Hultman, (2006) said that increase the size of an organization and their age and so their growth can affect their organizational structure. These researches support hypothesis H3. So we can say increase the age of institutes would positively affect their organizational structure.

Researchers said that there is an inverse relationship between the dimensions of organizational structure and corporate entrepreneurship that is we should decrease this dimensions in organizations. Luo et al. (2005) said that having an organic organizational structure in new firms enable them to create radical innovations with great potential for growth and the ability of changing environmental needs in themselves. These researches support hypothesis H4.Organic structure has a low centralization and formality. According to entrepreneurial marketing literature we can say that necessity of using entrepreneurial marketing in organizations is that they become entrepreneurs. When we can say organization entrepreneurs that they accept risks, delegate power of decision making and authority to subordinates and let them use their personal creativity. This would happen if the level of circulars and orders decrease. In entrepreneurial organizations the level of centralization and formality is low. According to the support of H4 we can conclusion that organizational structure can affect the use of entrepreneurial marketing. So these institutes should use appropriate structures for using entrepreneurial marketing and utilize characteristics of organic structures. This would simplify the use of entrepreneurial marketing strategies.

Bjerke and Hultman (2002) and Coviello et al., (2000) state that marketing in small firms is distinct from marketing in large firms. Schindehutte and Morris (2001) found that small and medium size firms are more likely to use leveraging strategies. These researches didn’t support hypothesis H5 and H6. Conversely, Kielenthong et al., (2010) found that small firms don’t use entrepreneurial marketing more than older firms. These researches support hypothesis H5 and H6. Results show that there is no significantly relationship between size of institute and the use of entrepreneurial marketing. That is we can't say smaller institute more than larger institute use entrepreneurial marketing. Researchers recognize that marketing in small firms is distinct from marketing in large firms (Bjerke and Hultman, 2002; Coviello et al., 2000). Overall, small firms are considered more entrepreneurial than large firms because of several characteristics. First, small firms have restricted resources and capabilities. Compared to large firms, small firms have less financial and human resource. As a result, they cannot perform the same kind of marketing activities that large firms can. Second, small firms do not have formal organization structures or formal systems of communication. Their market-ing planning is intuitive, loose and unconstructed. Third, small firms have a simple and ad hoc market-ing decision-making process. Small firms can develop an irregular change in their decision-making pattern during their business engagement. Fourth, small firms have fewer dominating decision makers than
larger firms. Marketing decisions in small firms can be linked directly to specific personal goals of owners / managers. Lastly, small firms can quickly respond to their customers because they have better organization structure than large firms. They are closer to customers and can access customer information better than large firm (Kielenthong et al., 2010). Maybe lack of these characteristics in statistical society leads to no differences between the uses of entrepreneurial marketing according to the size of these institutes.

Robbins (1998) said that size of organization is the most important factor affecting the structure of the organization. Robbins (1998) quoting Meyer and Aldrich stated that size of organization affect organizational structure, but the reverse is not true and firms that have higher formality and complexity need to hire a large number work force than firms that are less formal and less structured. These researches didn’t support hypothesis H7. According to the result we can say increase or decrease of the size of institutes doesn't lead to the changes in organizational structure. Maybe this is because expand the number of employees is not reflected in the effect of the size. That is as soon as the organization grew, increasing the number of members has no significant impact on the structure. For example, an organization may decide to develop its tasks and activities, this increase involve an increase in the number of employees for added fields. So another factor is the cause of increased size of the organization.

Some limitations to this study should be noted, and efforts to resolve them would serve as avenues for future research in this field. First, the findings of the study may have limited generalizability. The sample, which seemed appropriate for this particular study, was managers from Tehran province in Iran. It would be more meaningful if the same findings hold consistent in different types of managers from other cities across the country.

Second, in the present study we examined the effect of nature of institute on entrepreneurial marketing in higher education institutions that future research could investigate among managers of other service sections and organizations, institutes and even business forms to compare the results. Another important area of future investigation is identifying the use of each dimensions of entrepreneurial marketing according to the nature of firms. Also investigating the role of entrepreneurial marketing on the performance of firms and investigating the effect of applying entrepreneurial marketing on the success of marketing activities is another area for future research.

References


