Investigating the Relationship between innovation strategy and business Competitive advantages
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Abstract
The goal of this paper is investigating the relationship between innovation strategy and business competitive advantages in Iran especially in the oil industry. Companies today operate in a very dynamic, uncertain and competitive environment. Companies are trying to achieve competitive advantage in order to help them obtain a better and a stable position in the marketplace. The best way for companies to achieve a competitive advantage is through innovation. Innovation Strategy is a process of exploring your emerging future, understanding the changing needs of your customers, and using the insights gained in those explorations to identify new business opportunities for company. The structural equation modeling (SEM) used to develop a model in Iran. For the data processing, we used the Structural equation modeling. The population of this study are managers of the upstream sector of the oil Ministry, which is about 4,000, according to Morgan, questionnaires among 351 managers and experts who are familiar with innovation and business advantages(n=351), which ultimately distributed 247 questionnaires have been answered. The findings were obtained in two parts: descriptive and inferential. The results showed that there is a direct and significant relationship between innovation strategy and business Competitive in Iran.

Keywords: Innovation, Innovation strategy, Business competitive, Structural equation modeling.

Introduction
All enterprises face competition which is getting more and more intelligent. Competition today it isn’t about big things, elements that are very easily seen but it is about small things that anybody else haven’t seen them. This is why almost all enterprises are in a search of creating competitive advantage against its competitors. In doing so each of these enterprises is in a search of some kind of innovation, in doing something different from the others or doing the same thing but in a different way. Understanding the real meaning, importance, types and their influence on enterprises profitability it is of a crucial importance for enterprises in order to use them in gaining the desired competitive advantage. Having an innovation doesn’t mean that enterprises have sustainable competitive advantage. In order the innovation to be used in gaining competitive advantage enterprises need to have appropriate strategies in order to use these innovations in a proper way (Shiqipe, 2013).

In recent times researchers have focused on innovation as a key contributor to competitive advantage and survival of firms (e.g., Kim, Song, & Lee, 1993; Zenger & Lazzarini, 2004; Freel, 2005; Radas & Bozic, 2009). The influx of research in recent years notwithstanding, notable gaps in the innovation literature exist. For example, Ireland, Covin, and Kuratko (2009) argued that firms require not only strategy, resources, and skills to successfully exploit entrepreneurial spirit to improve innovation performance in firms. In response, several studies have been carried out to understand the dynamics and processes of innovation in firms, including the influence of antecedents such as top management support and rewards on innovation performance (Morris, Kuratko, & Covin, 2008; Goodale, Kuratko, Hornsby, & Covin, 2011).

Firms need innovation strategies to achieve successful innovation outcomes. For example, Nortel Networks’ failure to recover after the 2000 crisis was ascribed to the company’s lack of direction and innovation strategy (Cooper & Edgett, 2010). The choice and implementation of the innovation strategy depends on the situation of the innovation potential, while its development can occur at the expense of components and elements of the internal environment of the company. The strategy of the innovation position of the company is determined through a combined analysis of the internal and external environment, namely, of the innovative potential and innovation climate. (Rolik, 2013).

Literature Review
Innovation
Innovation is the next level of creativity and is the successful use of an idea that adds value to the customer and commercial return for the creator” (Day and Wensley, 1983). New things are always related with innovation. Today’s innovation in some way differ from innovation in past, where innovation were related with radical changes mostly related with new radical technology or new hardware, but today innovation are related with new software, program methods, techniques, approaches etc. In economics the change must increase value, which can be customer value, or producer value. The reason that influence the decision to buy most of the products or services today, differ from the reasons based in the past. Today people buy cell phones even though the cell phones that they possess still work perfectly, we by computers almost every year even though the old ones are almost new, etc. We are not buying products so that they could accomplish their main goal for existing (almost no one buys cell phone only for talking, because the old one still can perform that activity), but for the additional new possibilities that that product can offer. Innovation influenced the consumers buying habits (Bodo et al., 2003).

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Components of the Innovation Strategy of a Company

**Innovative potential:** The Concept of innovative potential. Development of the innovative potential matches the path of development of the company and its structural units, as well as of all elements of the production-economic system. Furthermore, a company’s development is perceived as a response to change in the external environment and hence has a strategic nature. The choice and implementation of the innovation strategy depends on the condition of the innovative potential, and therefore its assessment is a necessary managerial operation.

**Innovation climate:** Innovation climate is the condition of the internal environment of an industrial company, contributing to or preventing from the achievement of the innovative aim. Innovation climate is manifested through influence on innovative potential.

**Innovation position of the Company:** The strategic innovation position of a company is determined by jointly considering the internal and external environment, namely, the innovative potential and innovation climate.

**Business competitive advantages**

According to conventional logic, firms should closely monitor actions and reactions of competitors, continuously compare their strengths and weaknesses with those of their competitors and focus on building competitive advantages (Kim and Mauborgne, 1999a, 1999b). When asked to build competitive advantage, managers typically assess what competitors do and then strive to outperform them (Kim and Mauborgne, 1999b). However, significant shifts in market share usually occur not because companies try to play the game better than the competition, but because they reconceive the industry model and change the rules of the game (Markides, 1997).

Two major disadvantages of strategy driven by competition can be identified: First, strategies tend to converge along the same basic dimensions of competition (Kim and Mauborgne, 1999a; 1999b). Second, competition-based strategy tends to lead to reactive, incremental, and often imitative moves. In the process, resources are absorbed in responding to daily competitive moves, rather than being used in creating growth opportunities (Hamel, 1998a; Kim and Mauborgne, 1999b; Seurat, 1999).

Business competitive advantage include the following components: Market Leadership, Business partnerships, Strong brand portfolio, Channel Marketing, Client Value Management, Managerial expertise, Sustainable Development (Kim and Mauborgne, 1999). Strategically innovative firms break the conventional logic of striving to outperform competitors: competition is monitored but not used as benchmark (Kim and Mauborgne, 1997a). Strategically innovative firms do not focus on matching or beating competitors, they can distinguish the factors that deliver superior value from all other factors the industry competes on. Thus strategic innovators do not follow a certain strategy just because that is what their rivals are doing (Geroski, 1998). Instead, they set out to make competition irrelevant (Bodo, 2003).

### Conceptual Framework

According to the research conducted by Kim and Mauborgne, 1999; Markides, 1997; Seurat, 1999 (for Business Competitive advantages section) & Markides, 1997 and Hittmár et al., 2014 (for innovation strategy section), The conceptual framework for the empirical study is depicted in Figure 1.

![Conceptual Framework Diagram](image)

According to this model, the following hypotheses are proposed:

- Innovation strategy impact on Market Leadership dimension for Business Competitive advantages
- Innovation strategy impact on Business partnerships dimension for Business Competitive advantages
- Innovation strategy impact on Strong brand portfolio dimension for Business Competitive advantages
- Innovation strategy impact on Channel Marketing dimension for Business Competitive advantages
- Innovation strategy impact on Client Value Management dimension for Business Competitive advantages
- Innovation strategy impact on Managerial expertise dimension for Business Competitive advantages
- Innovation strategy impact on Sustainable Development dimension for Business Competitive advantages

### Methodology

Structural equation modelling (SEM) is a statistical technique for testing and estimating causal relations using a combination of statistical data and qualitative causal assumptions. Structural equation models (SEM) allow both confirmatory and exploratory modeling, meaning they are suited to both theory testing and theory development. Confirmatory modeling usually starts out with a hypothesis that gets represented in a causal model.

Among the strengths of SEM is the ability to construct latent variables: variables that are not measured directly, but are estimated in the model from several measured variables, each of which is predicted to ‘tap into’ the latent variables. This allows the modeler to explicitly capture the unreliability of measurement in the model, which in theory allows the structural relations between latent variables to be accurately estimated.

The purpose of this study which was applied and its data were collected, is descriptive correlation. The population of this study are managers of the upstream sector of the oil Ministry, which is about 4,000, according to Morgan table, questionnaires aired among 351 (n=351) managers and experts who are familiar with innovation and business advantages, which ultimately distributed 247 questionnaires have been answered. The main instrument for data collection is questionnaire. Cronbach’s alpha that was calculated for all structures in the study was higher than 7, Therefore it is an appropriate measure of reliability. To assess the validity of this research, two methods have been used: construct validity and content validity.

When SEM is used as a confirmatory technique, the model must be specified correctly based on the type of analysis that the researcher is attempting to confirm. Variables specifications, Shown on the previous pages.

In order to perform Theoretical Framework; we need following steps: (i) first, through an exploratory factor analysis, a conceptual model of causal relationships was created between the variables of interest, at this stage the statistical software SPSS 16.0 was used; (ii) then, after underlying the latent
structure, a confirmatory factor analysis (CFA) was performed, at that time the hypothesized structure was tested statistically using LISREL software.

**Research findings**

Table 1 and Fig 2 show the results of factor analysis. Fitting parameters are used. Chi-square degrees of freedom of the model is 2.19 which is smaller than 3. RMSEA model fit index is 0.067, which is smaller than 0.08. As it is shown in Table 1, the most notable and high coefficients are standardized factor loadings. Structural equation model based on technological entrepreneurship, directly impact on economic development and it is in the level of 0.91.

### Table 1. Results of confirmatory factor analysis

<table>
<thead>
<tr>
<th>Dimensions Model</th>
<th>Name</th>
<th>Standardized factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation strategy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation climate</td>
<td>Inno.cli</td>
<td>0.87</td>
</tr>
<tr>
<td>Innovation position</td>
<td>Inno.pos</td>
<td>0.81</td>
</tr>
<tr>
<td>Innovation potential</td>
<td>Inno.pot</td>
<td>0.76</td>
</tr>
<tr>
<td>Business competitive advantages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Leadership</td>
<td>M.L</td>
<td>0.89</td>
</tr>
<tr>
<td>Managerial expertise</td>
<td>M.E</td>
<td>0.82</td>
</tr>
<tr>
<td>Channel Marketing</td>
<td>C.M</td>
<td>0.79</td>
</tr>
<tr>
<td>Strong brand portfolio</td>
<td>S.B.P</td>
<td>0.78</td>
</tr>
<tr>
<td>Client value Management</td>
<td>C.V.M</td>
<td>0.76</td>
</tr>
<tr>
<td>Business partnerships</td>
<td>B.P</td>
<td>0.72</td>
</tr>
<tr>
<td>Sustainable Development</td>
<td>S.D</td>
<td>0.69</td>
</tr>
</tbody>
</table>

Table 2 shows a summary of which of the variables and the relationship was significant and which of the relationships in the model are not significant.

### Table 2: Standardized coefficients and significant numbers of model results

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Standardized coefficients</th>
<th>Significant numbers</th>
<th>Result (Approve or reject the hypothesis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inno.cli &amp; IS</td>
<td>0.7</td>
<td>0.87</td>
<td>Approve</td>
</tr>
<tr>
<td>Inno.pos &amp; IS</td>
<td>0.39</td>
<td>0.76</td>
<td>Approve</td>
</tr>
<tr>
<td>Inno.pot &amp; IS</td>
<td>0.41</td>
<td>0.81</td>
<td>Approve</td>
</tr>
<tr>
<td>M.L &amp; BCA</td>
<td>0.25</td>
<td>0.82</td>
<td>Approve</td>
</tr>
<tr>
<td>M.E &amp; BCA</td>
<td>0.60</td>
<td>0.79</td>
<td>Approve</td>
</tr>
<tr>
<td>C.M &amp; BCA</td>
<td>0.47</td>
<td>0.78</td>
<td>Approve</td>
</tr>
<tr>
<td>S.B.P &amp; BCA</td>
<td>0.56</td>
<td>0.79</td>
<td>Approve</td>
</tr>
<tr>
<td>C.V.M &amp; BCA</td>
<td>0.39</td>
<td>0.76</td>
<td>Approve</td>
</tr>
<tr>
<td>B.P &amp; BCA</td>
<td>0.62</td>
<td>0.82</td>
<td>Approve</td>
</tr>
<tr>
<td>S.D &amp; BCA</td>
<td>0.44</td>
<td>0.69</td>
<td>Approve</td>
</tr>
</tbody>
</table>

Findings of the study, indicted that innovation strategy functions have a direct effect on increasing business competitive advantages. Among the functions of the innovation strategy, Innovation climate with factor loading of 0.81 and among the functions of the business competitive advantages, Market Leadership with factor loading of 0.89, has been the most important.

### Summary and Conclusion

Innovations represent an activity of creating a new product or service, new technologic process, new organization, or enhancement of existing product or service, existing technologic process and existing organization. According to the given definition, if we analyze its separate elements, we can say that we classify: innovations in production – development or enhancement of a specific product; innovations in services – offering new or enhancing of existing services; innovations in process – finding of new ways of organizing and combining inputs in the process of production of specific products or services; and innovations in management – creating new ways of organizing business resources. This study reviews the innovation strategy and tests the impact of this topic on business competitive advantages. Based on the above analysis, the following conclusions and discussions are offered. Findings support, probably for the first time, the existence of a sequential relationship between innovation strategy and business competitive advantages.

All over this study, the authors contented that for Iranian enterprises, creating a sustainable technology-based competitive advantage at home as well as abroad, will depend on the extent to which they will be able to identify and exploit technological opportunities in order to create new or significantly improved
products and successfully commercialize them, referred as innovation strategy.

The developed framework has the potential to give more comprehensive explications of the phenomena under scrutiny, but at the same time cannot explain in details all the possible relationships between its components as a number of separate studies on a single component. To overcome these limitations, two different directions are being pursued.

This opens a number of opportunities of further research questions and directions emerged during its realization such as:
(1) Studying how the internal and external components interact among them in influencing business competitive advantages
(2) Reviewing the influence of other factors on innovation strategy and business competitive advantages.
(3) Developing sub-models aimed at studying the relationships and influence of more specific components.

References
Hittmár, S., Varmus, M and Lendel, V(2014), Proposal of model for effective implementation of innovation strategy to business, Procedia - Social and Behavioral Sciences 109, 1194 – 1198