INVESTIGATING THE EFFECT OF STRATEGIC LEADERSHIP ON COMPETITIVE ADVANTAGE WITH THE MEDIATING ROLE OF INNOVATION AMBIDEXTERTY

Abstract:
Gaining and sustaining the competitive advantage in today turbulent environment is an obsession of corporate managers. Manufacturing firms while investing in R & D, worry about the innovations driven from these researchers and their effect on the firm’s position in market. In other words, balance between innovation exploration and innovation exploitation (innovation ambidexterity) and its effect on firm’s competitive advantage is an important question of such firms. What is missed in many researches is the effect of strategic leadership on the relationship between innovation ambidexterity and competitive advantage that this research tries to fill this gap. This paper investigates the effect of strategic leadership (transformational and transactional leadership) on innovation ambidexterity capability (innovation exploration and innovation exploitation) and effect of this capability on competitive advantages (price advantage, service differentiation advantage and customer concentration advantage) of manufacturing firms in Kerman. The results show transactional leadership has an impact on innovation exploration, both transactional and transformational leadership has an impact on innovation exploitation. Both innovation exploitation and exploration have an impact on service differentiation advantage but innovation exploitation has an impact on price and customer concentration advantage.

Keywords:
Strategic Leadership in Manufacturing Firms/ Innovation Ambidexterity/ Competitive Advantage of Manufacturing Firms
Introduction

With the intensification of competition, market conditions have changed from simple, static and friendly to complicated, dynamic and hostile. In response to the changing market conditions, many manufacturing companies have focused on customers to produce and present products which are more consistent with customer preferences. Moreover, companies have added more distinguished services to final products to make more sales and benefits. On the other hand, many of such companies have decreased their expenditures in reaction to these environmental changes. They have also tried to attract customers by supplying less expensive products.

Different researchers have various views on how to create such competitive advantages. The resource-based view (RBV) is one of the prevalent views, according to which competitive advantage is rooted in the unique resources and assets of an organization. These resources and assets should lead to capabilities resulting in customer values, based on which sustainable competitive advantage can be created.

Innovation is one of the capabilities having a great impact on the creation of competitive advantages. It can help a corporation provide products and services which are more customer-based at lower prices. It can also help provide customers with distinguished services besides physical products. Innovation is investigated in organizations from two perspectives: the discovery or creation of innovation and the exploitation of innovation. The organizations having these two capabilities simultaneously are called ambidextrous organizations which both create innovation and exploit available innovations. Since ambidexterity can exist in different organizational phenomena, each of them can be referred to as a separate name such as innovation ambidexterity and agility ambidexterity.

The question asked by many researchers and organizational executives is how an organization can achieve ambidexterity. Researchers believe that ambidexterity is rooted in the leadership styles of organizational senior executives. There should be a style which considers the future orientations of an organization along with daily activities. This style should pay attention to activities based on predetermined plans. It should also pay attention to exceptions. Such a style encourages employees to have a creative spirit and use available innovations. This style is named the strategic leadership style.

The aim of this paper is to investigate the impact of strategic leadership style on innovation ambidexterity and the impact of this capability on the achievement of competitive advantages in manufacturing companies in Kerman. Therefore, the research background is investigated after reviewing the literature. Then the proposed method and data analysis are presented. The final section deals with conclusion, suggestions and research constraints.
1. **Research Literature**

1.1. **Competitive Advantage**

In recent years, competitive advantage has been the main topic of discussions about competitive strategies. Nevertheless, it is difficult to present an accurate definition of competitive advantage. On the one hand, competitive advantage is regarded as maximum efficiency. On the other hand, it is related to the capital market performance and expectations. However, Porter believes that competitive advantage is central to the performance of a competitive corporation. According to Porter, competitive advantage includes the values which a corporation can provide for customers in a way that the created values are higher than customer expenditures. Hay and Williamson (1991) regarded competitive advantage as the identification of capacities and market situation resulting in the superiority of a corporation over its competitors. In other words, competitive advantage is a unique position of an organization towards its rivals which can be expanded through the resource development model. In this framework, competitive advantage includes the actions which a corporation can take, whereas other corporations cannot, something which results in more demands or lower expenditures. Petrov (1993) defined competitive advantage as maintaining incomes higher than the normal range. Kay (1993) believe that the competitive advantage of an organization includes its outstanding and dedicated capacities resulting from the behaviors which other corporations lack. Beskano *et al.* (2000) believe that if a corporation achieves a higher rate in the same market as the average economic rate, it has competitive advantage. Saloner *et al.* (2001) believe that more competitive advantages mean that a corporation can provide services or products which can be regarded as more valuable than the services and products of other rivals by customers. On the other hand, Barny (2002) believes that a corporation experiences competitive advantage when it can create economic values through activities in industry or market, and few other corporations can have similar activities. According to Barny, competitive advantage is related to the corporation performance; therefore, a corporation experiences an above normal performance when it creates more values than the expected values of available resources. However, the most common definition of competitive advantage in competition strategy and value creation framework is whatever causes income to increase more than expenditures.

Competitive advantage is the output of the strategies employed by a corporation. It shows the superiority of a company over its rivals in the market. It can be regarded as a combination of product differentiation, price, distribution, promotion, communications, and service differentiation. Finally, it leads to the high performance of a company in a competitive industry. Regarding competitive advantage, the important point is that it can last when rivals are not able to eliminate it and copy the benefits of the strategies employed by a corporation.

Manufacturing companies are directing their efforts to focus on customers more and to provide services instead of the mere supply of products. Instead of providing physical products, these companies try hard to distinguish themselves from rivals in terms of
different services. In fact, companies seek to create a package of competitive advantages, based on which they can survive the highly competitive and changing market.

Different classifications have been presented regarding competitive advantages. They are all similar in the superiority of price, distinguished services and more focus on customers.

Many researchers are working on how competitive advantages are created and what they are rooted in. There are different views on how to create competitive advantages. Each view considers the causes of competitive advantages differently. RBV is one of the prevalent approaches which regards each organization as a group of resources and capabilities providing the foundations to codify organizational strategies. According to RBV, different competitive powers of corporations are due to their unique resources and assets extracted from their capabilities. In fact, this approach creates competitive advantages in a way that organizational assets and resources result in valuableness, scarcity, non-copyableness, irreplaceableness, and organization of capabilities by having special features.

1.2. Innovation Ambidexterity

In innovation literature, various definitions have been provided for innovation ambidexterity. The culture and platform of innovation refer to the ability to do an innovative action resulting in the creation of a new product or service. This ability may stem from the intelligence and talent of people, or it may be created by training. Xang (2008) defined innovation as leaving old models and as the most important capability for the growth and expansion of the organization. Canter (2007) believe that innovation is the process of collecting every new and useful idea to solve a problem. According to Dracker (1991), innovation is a purposive and organized search for change. St. Ford (1998) regards it as the development and implementation of new ideas by individuals who are mutually related in an institutional area. Considering all of these definitions, it can be concluded that innovation is the application of a new idea or behavior, and every new idea or behavior can be regarded as an innovation. However, it should always be noted that a new idea may look new to the individuals involved with it, although it may have been used somewhere else.

Innovation is one of the main capabilities to create competitive advantage because it is regarded as one of the principle competences of companies in achieving good performance in addition to helping them meet the needs of today and tomorrow’s customers. The success of innovation is rooted in the beginning of its process where corporations look into their internal and external affairs to ascertain in which areas they should provide innovation. In fact, the main core of innovation is the knowledge or idea resulting in new products or services. Companies should also both create such new ideas and exploit the available ideas. In other words, exploitation and exploration are two different activities, and an organization should divide attention and resources
between these two activities in order to balance the relationship between exploration and exploitation. The problem how organizations can create innovation and exploit available innovations simultaneously is a contrast referred to as innovation ambidexterity.

1.3. Strategic Leadership

In the decades of 1970s and 1980s, many studies dealt with leadership and its impacts on performance. Child (1972), Dee and Lord (1988), and Thomas (1988) conducted some studies to prove that leaders would have significant impacts on organizational performance. Nevertheless, leadership critics such as Mindell et al. (1985) reasoned that the impact of leadership on performance was not simple, and other factors were also effective. In response to such doubts, Hambrick (1984) studied leadership and researched into strategic leadership in strategic management literature to support the impact of leadership on performance. In 1988, Hambrick concluded that leadership would sometimes influence performance, whereas it would not have any impacts on it some other times, and only strategic actions would indicate effectiveness. These studies drew more attention to strategic leadership and the relevant behavior.

Strategic leadership is a leadership style which explains the behaviors of senior executives. It includes the combination of strategic mindset with strategic action to transfer this achievement on a strategic path and make some strategic changes. Hambrick (1989) believes that strategic leadership is the focus on features and tasks. It also includes how individuals do their jobs to take the general responsibility of an organization and deal with internal and external affairs as well as the ambiguities of complications and management. In fact, strategic leadership is a process of making impacts on the desirable success of organizational outlook used by leaders. It is accompanied by impacts on organizational culture, resources allocation, and direction by making policies and agreeing on the complicated global, vague, uncertain, and fugacious global environment characterized by opportunities and threats. Strategic leadership consists of transactional and transformational aspects. It refers to the support of a leader for the future orientations of the organization while paying attention to the daily activities of the organization, making moves according to organizational plans while paying attention to individual exceptions and differences, and supporting creative employees while encouraging employees to exploit available innovations by using tools such as organizational structure, culture and learning.

2. Research Background

Different studies have been conducted on the relationships of research variables including strategic leadership, innovation ambidexterity, and competitive advantage. The most relevant studies are meant to be mentioned here.
Jalilian et al. reviewed previous studies to point out that transformational leaders were one of the factors influencing and underlying the creativity of employees and organizations. Transformational leaders can increase employee innovation by improving internal motivation, intellectual stimulation, psychological empowerment, supporting innovation and relative freedom, creating an outlook, and encouraging to dare challenges.

Organizational ambidexterity is a relatively new topic on which many studies are being conducted. These studies include organizational learning, technological innovation, strategic management, and organizational design. Kantarlo et al. reported a list of different studies conducted on organizational ambidexterity. Some instances are the studies carried out by Hay and Wong (2004), Johnson et al. (2008), Li et al. (2008), Andrewpolos and Louis (2009), Johnson et al. (2009), Duvoicer et al. (2009), and Andrewpolos and Louis (2010).

Yadollahi Farsi et al. (2012) investigated the impacts of ambidexterity components on the performance of commercialization of collegiate studies. Managerial ambidexterity, structural ambidexterity and underlying ambidexterity are the components, the impacts of which were investigated on the commercialization of collegiate studies from the perspectives of 81 experts. It was concluded that ambidexterity components influenced the performance of commercialization of collegiate studies.

Rezvani and Toghray (2011) carried out a study on the knowledge-based companies of University of Tehran Science and Technology Park. They indicated that social capital influenced organizational tendency towards innovation.

Jang et al. (2003) indicated that strategic leaders would relate the individual demands and benefits of employees to organizational outlook. The most important characteristics of strategic leaders at small and medium companies in England include having a bright outlook, selecting key employees, motivating employees, effective relationships, and directing the organization. Moreover, the most important characteristics of strategic leaders influencing the performance of high-technology corporations can be regarded as determining strategic paths, discovering and preserving principle and unique competencies, developing human capital, preserving effective organizational culture, emphasizing moral behaviors, and establishing organizational controls balanced by strategic leaders.

Studies conducted by Navara indicate that competitive advantages such as production, distribution, promotion and communications, human resources, and expenditures influenced the performances of corporations in international markets.

Kalka investigated what impacts capabilities, information, making relationships with customers, product development, making relationships with supplier (and resources), experience, scales of operations, financial resources, and physical resources had on competitive advantage. They regarded the superiorities of prices, products, and services as competitive advantages. Their research results showed that capabilities and resources influenced competitive advantages.
Grant and Haze et al. showed that strategic leadership created the main capabilities and competences of an organization which led to competitive advantages, too.

3. Theoretical Framework

According to the research literature and background, the research model is like Figure (1), although each of variables their relationships were studied before.

![Theoretical Framework Diagram]

**Figure 1. Theoretical Framework**

According to Figure (1), the research hypotheses are as follows:

- **H1**: transactional leadership has an impact on innovation discovery.
- **H2**: transactional leadership has an impact on the exploitation of innovation.
- **H3**: transformational leadership has an impact on innovation discovery.
- **H4**: transformational leadership has an impact on the exploitation of innovation.
- **H5**: the exploitation of innovation has an impact on price advantage.
- **H6**: the exploitation of innovation has an impact on focus on customers.
- **H7**: the exploitation of innovation has an impact on distinguished services.
- **H8**: innovation discovery has an impact on price advantage.
- **H9**: innovation discovery has an impact on focus on customers.
- **H10**: innovation discovery has an impact on distinguished services.
4. Methodology

This is an applied-descriptive survey. It is also a retrospective cohort study because it is intended to find out the probable cause by taking the effect into account. The aim of this study is to investigate competitive advantages (dependent variable) to identify its causes in innovation ambidexterity (mediating variable) and strategic leadership (dependent variable). Moreover, this is a quantitative survey.

4.1. Information Collection Tools

The desk method was used to collect information on the research literature and background. A questionnaire was designed to identify the strategic leadership, innovation ambidexterity, and competitive advantages at the manufacturing companies in Kerman. This questionnaire includes an introduction and two general sections, the first of which consists of the demographics of respondents. The second section includes 31 items. The five-point Likert’s Scale was used to evaluate the answers. The following table shows the method of distributing questions, their references, and the reliability of each construct.

Table 1. The Structure of Research Questionnaire

<table>
<thead>
<tr>
<th>Construct</th>
<th>Number of Items</th>
<th>Item Numbers</th>
<th>Cronbach’s Alpha</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactional Leadership</td>
<td>3</td>
<td>1-3</td>
<td>0.814</td>
<td>Elenkov et al. (2005)</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>4</td>
<td>4-7</td>
<td>0.861</td>
<td>Elenkov et al. (2005)</td>
</tr>
<tr>
<td>Innovation Discovery</td>
<td>4</td>
<td>8-11</td>
<td>0.720</td>
<td>Johnson et al. (2009)</td>
</tr>
<tr>
<td>Exploitation of Innovation</td>
<td>4</td>
<td>12-15</td>
<td>0.879</td>
<td>Johnson et al. (2009)</td>
</tr>
<tr>
<td>Price Advantage</td>
<td>3</td>
<td>16-18</td>
<td>0.769</td>
<td>Kalka (2002)</td>
</tr>
<tr>
<td>Focus on Customer</td>
<td>4</td>
<td>19-22</td>
<td>0.704</td>
<td>Gbaro et al. (2011)</td>
</tr>
<tr>
<td>Distinguished Services</td>
<td>3</td>
<td>23-31</td>
<td>0.835</td>
<td>Gbari et al. (2001)</td>
</tr>
</tbody>
</table>

4.2. Statistical Population

The statistical population included 80 manufacturing companies in Kerman Industrial Estates. These companies existed in three industrial estates in Kerman. The statistical information was obtained Kerman Industrial Estates Company.

4.3. Statistical Sample

The simple random stratified sampling method was used in this study.
4.4. The Validity and Reliability of Questionnaire

The content validity analysis was used to determine the validity of questionnaire. In other words, the experts of strategic management and organizational behavior were asked to give their opinions on constructs and scales discussed in the questionnaire. Then their modifications were applied.

4.5. Reliability

Cronbach’s alpha was used to evaluate the reliability of this study. It was calculated 0.911 for the whole questionnaire. Table 1 shows different values of this coefficient for the variables of research advantages separately. According to this table, the values of Cronbach’s alpha are above 0.7 for all the research variables and the entire questionnaire; therefore, it is concluded that the questionnaire is reliable enough.

It should also be noted that 30 questionnaires were distributed for a pretest before distributing questionnaires in large numbers. The values of Cronbach’s alpha were above 0.7 for all constructs except transactional leadership. The scale decreasing the alpha of this construct was deleted by analyzing the questionnaire, then the it was distributed in large numbers.

5. Data Analysis

5.1. Descriptive Analysis and Demographics of the Statistical Population

The companies were divided into three groups including 10-50 workforces (64%), 50-100 workforces (32%), and more than 100 workforces (4%). All of them were manufacturing companies which were classified as single-product (27%), 2-5 products (25%), 6-10 products (22%), and more than 10 products (1%). Regarding the market, the companies were divided into three classes including provincial market (67%), national market (31%), and international market (2%). Kaiser-Meyer-Elkin’s data sufficiency was 0.854 which was calculated at a P>0.000 significance level, something which shows the sufficiency and appropriateness of sample.

5.2. Investigating and Testing Hypotheses

Before testing the hypotheses, the first-order factor analysis was used. The results of factor analysis indicated that all the scales showed appropriate factor weight except the exploitation of innovation (above 0.4); therefore, it was deleted from the calculations.

Then structural equation modelling technique was used in Visual PLS 1.4 for testing hypotheses. Figure (2) shows the fitted research model.
According to Figure (2), there are positive relationships among different research constructs. These relationships were stated by the research hypotheses. The path analysis test as used for the significance test of relationships between research constructs. The results can be seen in Table (3). Accordingly, the causal relationships assumed between latent variables were significant on all the paths, the $t$ values of which were above 1.96 (at a 95% reliance level).

### Table 3. Path Analysis of Research Constructs

<table>
<thead>
<tr>
<th>Path</th>
<th>Estimation of Total Samples</th>
<th>Mean of Sub Samples</th>
<th>Standard Deviation</th>
<th>$t$ Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership &gt; Exploitation of Innovation</td>
<td>0.2640</td>
<td>0.2642</td>
<td>0.0724</td>
<td>3.3031</td>
</tr>
<tr>
<td>Transformational Leadership &gt; Innovation Discovery</td>
<td>0.2300</td>
<td>0.2297</td>
<td>0.0767</td>
<td>3.6329</td>
</tr>
<tr>
<td>Transactional Leadership &gt; Exploitation of Innovation</td>
<td>0.4330</td>
<td>0.4327</td>
<td>0.0805</td>
<td>5.9703</td>
</tr>
<tr>
<td>Transactional Leadership &gt; Innovation Discovery</td>
<td>0.4330</td>
<td>0.4453</td>
<td>0.1068</td>
<td>3.3864</td>
</tr>
<tr>
<td>Exploitation of Innovation &gt; Price Advantage</td>
<td>0.6390</td>
<td>0.6395</td>
<td>0.0737</td>
<td>7.5735</td>
</tr>
<tr>
<td>Exploitation of Innovation &gt; Focus on Customers</td>
<td>0.5750</td>
<td>0.5756</td>
<td>0.0799</td>
<td>3.1376</td>
</tr>
<tr>
<td>Exploitation of Innovation &gt; Distinguished Services</td>
<td>0.2670</td>
<td>0.2670</td>
<td>0.0806</td>
<td>3.3864</td>
</tr>
<tr>
<td>Innovation Discovery &gt; Price Advantage</td>
<td>0.0810</td>
<td>0.0806</td>
<td>0.0668</td>
<td>0.2075</td>
</tr>
<tr>
<td>Innovation Discovery &gt; Focus on Customers</td>
<td>0.0760</td>
<td>0.0757</td>
<td>0.667</td>
<td>1.8987</td>
</tr>
<tr>
<td>Innovation Discovery &gt; Distinguished Services</td>
<td>0.2370</td>
<td>0.2374</td>
<td>0.0897</td>
<td>1.8898</td>
</tr>
</tbody>
</table>
According to this Table (3) and the results of path analysis between latent variables, it can be stated at a 95% reliance that:

A) The following hypotheses cannot be rejected:
   • Transactional leadership has an impact on innovation discovery.
   • Transactional leadership has an impact on the exploitation of innovation.
   • Transformational leadership has an impact on the exploitation of innovation.
   • The exploitation of innovation has an impact on price advantage.
   • The exploitation of innovation has an impact on focus on customers.
   • The exploitation of innovation has an impact on distinguished services.

B) The following hypotheses can be rejected:
   • Innovation discovery has an impact on price advantage.
   • Innovation discovery has an impact on focus on customers.
   • Innovation discovery has an impact on distinguished services.

Conclusion and Considerations

This paper investigated the impacts of strategic leadership components on innovation ambidexterity components as well as the impacts of innovation ambidexterity components on competitive advantages components at manufacturing companies in Kerman. After reviewing the research literature and background, the research hypotheses were explained. Moreover, a questionnaire was used to collect field data. After conducting a pretest, a research scale reducing the reliability was deleted. Then a hybrid sampling method (stratified and simple random) were used to collect data. After data collection, the first-order factor analysis was conducted for all the latent variables to make sure of the appropriateness of the designed scales and constructs. The research hypotheses were analyzed after determining the appropriateness of the model for all scales except for one with a factor weight above 0.4:

• Transactional leadership influenced innovation discovery and the exploitation of innovation.
• Transformational leadership has an impact on the exploitation of innovation. Competitive advantages (price advantage, focus on customer, and distinguished services) were not directly influenced by innovation discoveries.
• The exploitation of innovation improved all the components of competitive advantage including price advantage, focus on customers, and distinguished services.
• Moreover, the determination coefficient of innovation exploitation was 0.228, something which indicated nearly 23% of the changes in this variable were based on
the changes in independent variables (transactional leadership and transformational leadership). Moreover, the determination coefficient of innovation discovery was 0.281, a value which indicated that nearly 28% of changes in innovation discovery came from transactional leadership and transformational leadership. The rest of changes in this variable were influenced by other latent factors. According to the results, changes in innovation discovery and the exploitation of innovation showed 44.7% of changes in price advantage, 36% of changes in focus on customers, and nearly 71% of changes in distinguished services.

The results of this study are not consistent with the results of investigations conducted by Grant and Haze et al. and the studies carried by Parhalard and Hammel. However, they are consistent with the investigations conducted by Kalka and Justin et al. and the studies carried out by Johnson et al.

**Suggestions**

Given the fact that strategic leaderships is a factor influencing innovation ambidexterity, and regarding an outlook as one of scales of strategic leadership, it is suggested that companies codify and design their own outlooks to achieve higher level of innovation and performance.

Considering the impact of transformational and transactional leaderships on the exploitation of innovation, it is suggested that the executives of manufacturing companies in Kerman use these leadership styles and their executive methods including paying attention to every individual and the special features of each person.

Given the impact of innovation ambidexterity on competitive advantage, it is suggested that companies regard innovation as capital, not as an expense. They are also advised to deal with the discovery and exploitation of innovation at the same time. Since the transactional leadership style and transformational leadership style are not balanced in these corporations, it is suggested that the executives of these companies amplify the balance between these two leadership styles. Moreover, it is recommended to strike a better balance between innovation discovery and the exploitation of innovation because they are imbalanced. Therefore, they both can have more impacts on the competitive advantages of these corporations together.

Other researchers are recommended to investigate other factors influencing innovation ambidexterity at manufacturing corporations in Kerman. They are also advised not to forget to study the impacts of competitive advantages on the performances of these corporations.
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