Examination effect of strategic leadership on Facilitate innovation (case study: production industries Ilam)

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Abstract
This study was conducted to examination effect of strategic leadership on Facilitate innovation. The method of the study was descriptive-survey, and the participants were the workers of Abadan Refinery which were 1870 people, 358 using the Cochran formula the sample size was. The data was collected through a questionnaire, and to analyze the collected data descriptive statistics (mean, standard deviation, etc.) and inferential statistics (t-test, correlation coefficient, regression analysis and Friedman test) were used. The results revealed that there is a significant relationship between Strategic leadership and facilitating innovations. Also, the components of the Strategic leadership have a significant effect on facilitating innovation. Friedman test results showed that the ranking of the dimensions of Strategic leadership that were significant was individual consideration, organizational capabilities, Individual capabilities, Environmental features, respectively.

Keywords: Strategic leadership, organizational capabilities, Individual capabilities, Environmental features, production industries Ilam.
Introduction

Leadership is an important aspect of society that has defined civilization values and goals through time (Young, 2004). Moreover, leadership has evolved into a strategic activity that includes communicating a vision, developing organizational structures and processes, managing change initiatives, and creating capabilities (Selznick, 1984; Hitt, 2002). Northouse (2010) describes leadership as “a process whereby an individual influences a group of individuals to achieve a common goal” (p. 3). people must be innovated to innovate. Goulet, Jefferson and Szwed (2012) define leadership as “a process that involves the interactions and relationships between the leader and others. This view of leadership enables anyone to develop as a leader. Leaders recognize creativity and value innovation. Innovators create in the context of interactions and relationships. (Goulet, Jefferson, & Szwed, 2012) Since this time in the 1970s when Burns wrote about transformational leadership, and with the advent of the knowledge age, it can be argued that the world has become more complex; as a result, it can be argued that strategic leadership as transformational leadership is also a story of the past. In terms of ‘getting things done’, one criterion upon which strategic leaders are often judged is their talent for ‘strategic resourcing’ (Robinson 2007).

Innovation is a skill which is accompanied with much other collaboration. Innovation is defined as major changes in the field of technological advancements or presenting the latest management concepts and methods of production. Innovation is a phenomenon truly remarkable and scarce. Innovation is generally a rare phenomenon that only certain people can be traced back to it. Hult (2004) used the innovation in a broad sense as a phenomenon which use knowledge of information related to making or presenting new and beneficial things. Varkyng also explains that innovation has been redefined to be designed and truthful and give the organizations a strong leverage against the competitors and facilitate a long-term superiority in competition. In other words, innovation is something which follows a certain goal and achieves it. Thus, in a general sense, innovation can be defined as any new ideas about an organization, industry, nation, or world (Khodadad Hosseini, 1998: 48).

In an early work on strategic leadership, Hosmer (1982) noted that contingency theories of leadership did not account for an organization’s competitive position in the industry. Hosmer proposed that the task of the leader was different from that of a manager because a leader must constantly consider the organizational strategy in relation to the external environment. In this way, leadership represents a higher order of capability that involves both developing strategy and influencing others to follow it. Hambrick and Mason (1984) built on this idea and proposed what was then known as upper echelon theory. This theory was adapted and expanded by subsequent authors, and eventually came to be known as strategic leadership theory (Finkelstein & Hambrick, 1996). A fundamental premise of strategic leadership theory is that a leader’s field of vision and interpretation of information is influenced by that leader’s values, cognitions, and personality (Cannella & Monroe, 1997). Ireland and Hitt (1999) proposed six components of effective strategic leadership: determining the organization’s purpose or vision; exploiting and maintaining core competencies; developing human capital; sustaining an effective organizational culture; emphasizing ethical practices; and establishing balanced organizational controls. When these elements are in place, they argue, the firm’s strategic leadership becomes a source of competitive advantage for an organization. Strategic leadership used to be defined as
determining where an organisation was heading and how to get there. It was mainly about leaders engaging in strategic and ‘long-range’ planning, and was seen as a process that belonged to upper management alone, often taking place behind closed doors (Cheng 2000: 17). Strategic leaders force themselves to look beyond the present and into an uncertain future. It is about strategic intent, which is a powerful concept used to describe how a school can take a strategic perspective into a rapidly changing and turbulent environment (Davies & Ellison, 2003: 54). Strategic intent is when ‘we know what major change we want but we do not yet know how to achieve it’. Strategic leaders know the importance of basing their strategic intent, change and action one evidence-based and research-led practice (Groundwater-Smith 2000). The field of strategic leadership focuses on the way top-level leaders (i.e., executives) have an impact on organizational performance through their leadership. One of these main works in strategic leadership illustrates the importance of strategic leadership by asserting that organizations are a reflection of their top leader (Hambrick & Mason, 1984). Subsequent research has found strategic leadership associated with numerous positive organizational outcomes. Boal and colleagues’ framework of strategic leadership acknowledges the importance of innovation to strategic leadership. The first way strategic leaders affect organizations, according to Boal and Hooijberg (2000), is by playing a crucial role in increasing the learning capacity of their organizations. Strategic leaders encourage organizational learning to explore both knowable and unknown futures (Boal, 2007). Boal and Schultz (2007) believe strategic Leaders play a central role in fostering organizational learning and adaptation through the use of dialogue and storytelling. Boal and Hooijberg (2000) proposed strategic leaders influence organizational outcomes are through the exercise of managerial wisdom. Managerial wisdom is the ability to take the right action at a critical moment based on an understanding of the environment and the actors within it (Hunt, 2004). provide the mechanisms by which organizations encourage, support, and sustain innovation and knowledge creation (B.R.).” Additionally, Boal (2004, p. 1504) emphasizes that “strategic leaders provide a vision and road map that allows an organization to evolve and innovate.” In advancing a vision, strategic leaders promote organizational learning and innovation as they instill meaning in followers for the roles they play in fulfilling that vision and encourage a motivated response to new situations and challenges (Boal and Schultz, 2007, p. 412).” Strategic leaders with more varied sets of expertise and knowledge are more likely to identify environmental changes quickly and/or changes within the organization that require a new strategic direction (Bantel & Jackson, 1989; Finkelstein & Hambrick, 1996; Wiersema & Bantel, 1992). Managerial wisdom implies an ability to solve problems or reframe problems using different and possibly contradictory information and scenarios. Integrating these capabilities among lower level managers and other members of the organization provides for substantial strategic flexibility and hence another source of competitive advantage (Hoskisson & Hitt, 1994; Kerr & Jackofsky, 1989).” Specific expressions of this underlying premise continue to be studied today. For example, Papenhausen (2006) recently found dispositional optimism in top level leaders to be correlated with their problem definition and problem solving activity. As the theory was refined by subsequent authors, strategic leadership theory grew to address the larger question of how a top-level leader contributes to organizational performance. Relying on the constructivist development theory of Kegan (1982), Lewis and Jacobs (1992) argued that a leader’s capacity to construct
meaning of the organizational environment was more important than other factors such as values or leadership style. This theory was later linked with Jaques and Clement’s (1991) stratified systems theory, which asserted that the complexity of the leadership task escalates as one moves up the hierarchy. Taken together, these theories assert that in order to be effective, the developmental capacity of a strategic leader must be well matched to the complexity of the work (Lewis & Jacobs, 1992). More recently, authors in strategic leadership have described strategic leadership in broader terms. The same can be said for Shin and McClomb (1998), who examined the relationship between executive leadership style and organizational innovation in nonprofit human service organizations. While a focus on vision was found to be correlated with the frequency of organizational innovation, those findings were not connected to the then emerging field of strategic leadership Elenkov and Manev (2005) found that socio cultural context is not only an antecedent to strategic leadership but moderates the relationship between leadership and organizational innovation in private firms. Similarly, the recent work of Sarros, Cooper, and Santora (2008) supports the contention that organizational culture plays a moderating role in the relationship between leadership and organizational innovation.

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Light (1998) posited that nonprofit leadership must prepare the organization to innovate in order for innovation to become a natural practice. Kanter and Summers (1987) maintained that an organization’s ability to innovate would determine its potential to meet future demands, take advantage of opportunities and resources in the environment, and use resources to generate new products and services. Most research on the effect of strategic leadership and organizational innovation has been in for-profit organizations. Strategic leadership can have a strong influence on organizational innovation (Elenkov, Judge, & Wright, 2005; Elenkov & Manev 2005; Jansen, Vera, & Crossan, 2009). Survey by Hashyl et al (2013) examination Effect of multi-stage model of innovation on organizations performance in Western Europe and Central Europe show The findings suggest that with increasing innovation inputs, the outputs of productivity increases. Therefore, organizations especially big organizations decided to invest greatly on innovation, but with increasing investment the productivity decreased considerably. And at the end, different behaviors was observed in the two countries.

Innovation is a skill which is accompanied with much other collaboration. Innovation is defined as major changes in the field of technological advancements or presenting the latest management concepts and methods of production. Innovation is a phenomenon truly remarkable and scarce. Innovation is generally a rare phenomenon that only certain people can be traced back to it. Hult (2004) used the innovation in a broad sense as a phenomenon which use knowledge of information related to making or presenting new and beneficial things. Varkyng also explains that innovation has been redefined to be designed and truthful and give the organizations a strong leverage against the competitors and facilitate a long-term superiority in competition. In other words, innovation is something which follows a certain goal and achieves it. Thus, in a general sense, innovation can be defined as any new ideas about an organization, industry, nation, or world (Khodadad Hosseini, 1998: 48).
The results of this research, the effect of strategic leadership and facilitating innovation in production industries will describe the birth of Ilam.

Method
Regarding the goal of the study had an applied method. The participants were the staff of the Abadan Oil Refinery, which consisted of 1870 employees. The sample size was calculated by the Cochran sampling and was 358. The instrument to collect data was a questionnaire whose validity was confirmed by the experts in the field and its reliability was .80. Analyzing the normalcy of the data was done by Kolmogorov-Smirnov test. Spearman correlation test was used to assess the relationship, and ranking the independent variable was done in SPSS software environment by the Friedman test. To investigate the relationship between strategic leadership and facilitating innovations the following dimensions were selected:

A) Thematic area: Topics are related to strategic leadership and facilitate innovation.
B) Spatial domains: spatial domain of the study was production industries Ilam.
C) Time domain: the data of this study was collected in the year 2015.

Sample included male and female. 56.7% of the total of 358 participants (203 cases) were male and 43.3% (155 cases) were female, and 30.9% (64 women) were 20 to 30 year old, 61.4% (127 cases) were 30 to 40 year old, 6.3% (13 cases) were between 40 and 50 year old, 1.4% (3 cases) over 50 years, 9.8% (35 cases) had diploma, 11.5% (41 cases) had associate diploma, 53.1 percent (190 cases ) had BA, 22.9 percent (82 cases) had MS2.8 percent (10 cases) had Ph.D., and 36.9 percent (123 cases) had working experience less than 5 years, 52.5% (188 cases) between 6 and 10 years, 6.7 percent (24 cases) between 11 and 15 years, 0.2% (7 cases) between 16 to 20 years and 1.1% (4 cases), had 20 years work experience. To measure variables, Bass and Ovalio’s strategic leadership questionnaire with the alpha coefficient of .81 was used and to assess facilitate innovation, a self-developed questionnaire with the alpha coefficient of the .88 was developed. Also, face validity was used to assess the validity of the questionnaire. To test the face validity, experts and university professors were consulted. At the end, the questionnaire was developed in the form of five-likert scale items with 5 as strongly agree and 1 as completely disagrees.

5. Analysis of the data
Data normality
To check the normality of the distribution of variables, Kolmogorov-Smirnov've was used. The null hypothesis in this test was the normal distribution of the variable. If the Z-statistic is smaller than the normal distribution table that is 1.96 at the level of 5% error, it is assumed that H₀ is confirmed and the distribution is normal; in other words, if the value of sig> %5, the H₀ is not rejected.
H₀: the distribution of data for each variable is normal.
H₁: the distribution of data for each variable is not normal.
Table 2: Data normality test

<table>
<thead>
<tr>
<th>Factors</th>
<th>Sig.</th>
<th>Error</th>
<th>Confirmed hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>organizational capabilities</td>
<td>.002</td>
<td>1.871</td>
<td>H₁</td>
<td>Not normally distributed</td>
</tr>
<tr>
<td>Individual capabilities</td>
<td>.001</td>
<td>1.974</td>
<td>H₁</td>
<td>Not normally distributed</td>
</tr>
<tr>
<td>Environmental features</td>
<td>.000</td>
<td>2.149</td>
<td>H₁</td>
<td>Not normally distributed</td>
</tr>
<tr>
<td>facilitate innovation</td>
<td>.000</td>
<td>2.560</td>
<td>H₁</td>
<td>Not normally distributed</td>
</tr>
</tbody>
</table>

As the results of the above table shows, the significance level of the variables of the study is less than .005, so they are not normally distributed, thus the Spearman correlation coefficient was used.

Table 3: Test of correlation

<table>
<thead>
<tr>
<th></th>
<th>organizational capabilities</th>
<th>Individual capabilities</th>
<th>Environmental features</th>
<th>strategic leadership</th>
<th>Facilitate innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman test</td>
<td>Correlation Coefficient</td>
<td>Correlation Coefficient</td>
<td>Correlation Coefficient</td>
<td>Correlation Coefficient</td>
<td>Correlation Coefficient</td>
</tr>
<tr>
<td></td>
<td>Sig N</td>
<td>Sig N</td>
<td>Sig N</td>
<td>Sig N</td>
<td>Sig N</td>
</tr>
<tr>
<td></td>
<td>1 0/000 358</td>
<td>0/510 0/000 358</td>
<td>0/497 0/000 358</td>
<td>0/401 0/000 358</td>
<td>0/489 0/000 358</td>
</tr>
<tr>
<td></td>
<td>0/000 358</td>
<td>1 0/000 358</td>
<td>0/640 0/000 358</td>
<td>0/426 0/000 358</td>
<td>0/489 0/000 358</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results of the analysis shows that there is a positive relationship between the strategic leadership and its components, facilitate innovation, strategic leadership, organizational capabilities, Individual capabilities, Environmental features. And because there is a significant relationship between the variants, the effect of the variants will be analyzed in the following section.

Table 4: the effect of the components of the strategic leadership on the facilitating innovation

<table>
<thead>
<tr>
<th>variant</th>
<th>The correlation coefficient</th>
<th>The coefficient of determination</th>
<th>Adjusted coefficient of determination</th>
<th>Standard deviation of error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>strategic leadership</td>
<td>0/448</td>
<td>0/216</td>
<td>0/213</td>
<td>0/612</td>
<td>0/000</td>
</tr>
<tr>
<td>organizational</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>capabilities</td>
<td>0/199</td>
<td>0/053</td>
<td>0/051</td>
<td>0/672</td>
<td>0/000</td>
</tr>
<tr>
<td>Individual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>capabilities</td>
<td>0/341</td>
<td>0/126</td>
<td>0/124</td>
<td>0/646</td>
<td>0/000</td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>features</td>
<td>0/248</td>
<td>0/061</td>
<td>0/058</td>
<td>0/669</td>
<td>0/000</td>
</tr>
</tbody>
</table>

The results of the hypotheses is presented in Table 5.

<table>
<thead>
<tr>
<th>Hypothesis number</th>
<th>Hypothesis of the study</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main hypothesis</td>
<td>There is significant relationship between strategic leadership and facilitating innovation</td>
<td>confirmed</td>
</tr>
<tr>
<td>sub-h</td>
<td>There is significant relationship between</td>
<td>confirmed</td>
</tr>
</tbody>
</table>
hypothesis organizational capabilities and facilitating innovation

sub-h hypothesis There is significant relationship between Individual capabilities and facilitating innovation confirmed

sub-h hypothesis There is significant relationship between Environmental features and facilitating innovation confirmed

### Ranking the dimensions of the questionnaire

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Mean of the rank</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental features</td>
<td>2/67</td>
<td>1</td>
</tr>
<tr>
<td>organizational capabilities</td>
<td>2/45</td>
<td>3</td>
</tr>
<tr>
<td>Individual capabilities</td>
<td>2/33</td>
<td>4</td>
</tr>
</tbody>
</table>

Considering the results of the Friedman test, the questioner dimensions are ranked individual consideration Environmental features, organizational capabilities, and Individual capabilities.

**Conclusions and recommendations**

Considering the aim of the study which was to examination effect of strategic leadership on Facilitate innovation, the results revealed that there is a significant relationship in the level of 1 percent error for the main hypothesis, which means there is a positive and strong relationship between strategic leadership and facilitating innovation. The results of the sub-hypothesis of the study showed there is a significant and positive relationship between Environmental features, organizational capabilities and Individual capabilities and this components affect the facilitate innovation. The ranking of the dimensions of the questionnaire shows that Environmental features had the most influence and Individual capabilities had the least influence on the facilitating innovation. The obtained results are in line with the results of the Khan et al. (2009) and Hashyl et al. (2013). Accordingly, the following recommendations can be made:

- Emphasizing on research in the field of strategic leadership.
- Strategic leadership can have an impact on the staff and develop a newer working process to improve efficiency. It also can create new responsibilities and it can lead to increase in the creativity and innovation.
- The managers of production industries can build pride in cooperating and participation to improve and build Individual capabilities.
- Paying attention to the individual needs of the staff and creating opportunities for prosperity and promoting a higher level of personality development.
- Promoting the employees who have a capacity for creativity and innovation.
- Offering rewards to individuals for being flexible, risk-takers and new innovations.
References

1. Aragón-Correa et al.’s (2007) research shows the importance of leadership to firm innovation, specifically because of leaders’ ability to, “introduce new ideas into an organization, set specific goals, and encourage innovation initiatives from subordinates.”


