Relationship between environmental factors and contextual factors with environmental management control systems (case study: Rasht’s Saderat bank staffs)

Mirza Hasan Hosseini*, Seyed Abbas Rahbarynia

Department of management, Tehran branch, Payame Noor University, Tehran, Iran.

*Corresponding Author

Abstract: The essence of strategic control is derived to external environment change. There are much changes at economic, political, social and technological environmental firm. External environment is so dynamic. So, strategy implementation based on predicted goal is the most important challenge for organizations. This article seek to an investigation the Relationship between environmental factors and contextual factors with environmental management control systems. Social statistics is Saderat bank’s staffs at Rasht. Sample was estimated by Cochran formula which is 169 people. Data was gathered by questioner and analyzes by PLS. all hypostatizes were accepted.

Keywords: external factors, contextual factors, control system and Saderat bank.

INTRODUCTION

External and internal organizational changes need to trace constantly and evaluate organizational strategic direction. So, if strategic control is a process for determination and evaluation of goals, there is not any plan for midterm and long term planning at strategic control based human (Norman et al, 2016).

Strategic control and evaluation is important because firms face to dynamic environment and among which the main factors of internal and external environment change quickly and strongly. Today successes doesn’t guarantee future successes because strategic evaluation is difficult and economic crises are unpredictable (Ebrahimi et al., 2019c). There are different attitude to management theory (Boyson, 2014).

The aim of this article is an investigation the Relationship between environmental factors and contextual factors with environmental management control systems. At the next part, we have literature review. Then research method and research result are follow.

Literature review:

Strategic control is an element of management strategic that consist of series actions that need to help top managers and guide organizational strategy. There are many definition for strategic control: Harvey define strategic control as a management action that match organizational real action to organizational planed actions (Huikk et al, 2018). Roush and Ball said: strategic control is a reporting system
that relate to successful implantation of strategic decisions at top management. From the top manager view, strategic control system is system that help managers to evaluate organizational strategy and support some parts which need more attentions (Ellanna, 2016). Strategic control is steering control and apply before and after controlling. In other word, control before actions based on strategic control. It is effort for beyond facts that represent firm’s short term health. So, it is effort to evaluate some factors which guarantee huge success. There are some suggested strategy as follow:

- Strategic pattern based on process control
- Strategic pattern based on product control (Lee et al, 2014).

There are many different environmental management control that some factors had an effect. According to Pondeville et al (2013) and Mensika and Mortona (2017), environmental management control systems can exist formal and informal that their factors divided on two parts: environmental factors and contextual factors. Environmental factors are shareholder pressure and environmental uncertainty (Mensika and Mortona, 2017). And contextual factors consist of firm’s environmental activity. Conceptual research model is presented as follow:

**Figure 1:** research conceptual model (Globocnik et al, 2019)

Research hypostatize are:
1. Environmental factors effect on environmental management control system.
   1-1. Shareholders pressure effect on environmental formal factors.
   1-2. Shareholders pressure effect on environmental informal factors.
   1-3. Environmental uncertainty effect on environmental formal factors.
   1-4. Environmental uncertainty effect on environmental informal factors.

2. Conceptual factors effect on firm’s environmental management control system.
   2-1. Environmental factors effect on firm’s environmental formal factors.
   2-2. Environmental factors effect on firm’s environmental informal factors.
3. Environmental factors effect on conceptual factors.

**Research Methods:**

This article is applicable in terms of process and descriptive survey in terms of method. Social statistics are Saderat bank at Rasht. The bank has 300 people staffs. Data was gathered by Pondeville et al (2013) ’s questioner. Data's chorenbach index are as follow:

<table>
<thead>
<tr>
<th>sample</th>
<th>alpha</th>
<th>Sub-criteria</th>
<th>criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>0/836</td>
<td>formal</td>
<td>Environmental management control systems</td>
</tr>
<tr>
<td>30</td>
<td>0/858</td>
<td>informal</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>0/750</td>
<td>Shareholder pressure</td>
<td>Environmental factors</td>
</tr>
<tr>
<td>30</td>
<td>0/887</td>
<td>Environmental uncertainty</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>0/893</td>
<td>Firm's environmental actions</td>
<td>Conceptual factors</td>
</tr>
<tr>
<td>30</td>
<td>0/908</td>
<td>-</td>
<td>total</td>
</tr>
</tbody>
</table>

Data analyzed by PLS.

**Result and Conclusion:**

Research model was evaluated.
Figure 2: research model test (standard mood)

Figure 3: research model test (significant mood)

Following table represented hypostatizes test:

<table>
<thead>
<tr>
<th>Hypostatize</th>
<th>effect</th>
<th>t-test</th>
<th>Accept / fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental factors effect on environmental management control system.</td>
<td>0/24</td>
<td>2/85</td>
<td>accept</td>
</tr>
<tr>
<td>Shareholders pressure effect on environmental formal factors.</td>
<td>-0/33</td>
<td>3/93</td>
<td>accept</td>
</tr>
<tr>
<td>Shareholders pressure effect on environmental informal factors.</td>
<td>-0/57</td>
<td>-6/73</td>
<td>accept</td>
</tr>
<tr>
<td>Environmental uncertainty effect on environmental formal factors.</td>
<td>-0/32</td>
<td>-6/73</td>
<td>accept</td>
</tr>
<tr>
<td>Environmental uncertainty effect on environmental informal factors.</td>
<td>-0/32</td>
<td>-5/68</td>
<td>accept</td>
</tr>
<tr>
<td>Conceptual factors effect on firm’s environmental management control system.</td>
<td>0/71</td>
<td>8/03</td>
<td>accept</td>
</tr>
<tr>
<td>Environmental factors effect on firm’s environmental formal factors.</td>
<td>0/42</td>
<td>4/51</td>
<td>accept</td>
</tr>
<tr>
<td>Environmental factors effect on firm’s environmental informal factors.</td>
<td>0/41</td>
<td>5/50</td>
<td>accept</td>
</tr>
</tbody>
</table>

SEM approach use to test hypothesis (Ebrahimi et al., 2016; Arbarani et al., 2019; Ebrahimi et al., 2019a, Ebrahimi et al., 2019b; Khajeheian and Ebrahimi, 2019). Firstly measurement models have been confirmed with convergent validity and discriminant validity. Outer loadings greater 0.4 showed us convergent validity.
Finally structural model calculated. According to results, all hypotheses are accepted. It means that environmental and conceptual factors at Saderat bank had significant effect on environmental management informal and formal control systems. Shareholder pressure had positive effect on formal control and negative effect on informal control of bank. Environmental uncertainty had negative effect on conceptual factors of bank. Finally, conceptual factors had positive effect on formal and informal control.

The result indicated the effect of conceptual and environmental factors on environmental management system. There is no clear idea about formal and informal control. Factors have different effect on informal and formal controls.

Small statistical society is limitation research. When statistical society are large, managers can make better decisions. It is suggested that large companies were evaluated.

Reference


