Factors Impacting Strategic Planning of Information Technology and Management Information Systems, and Its Relationship to Entrepreneurship

(Special Economic Zone, Port of Imam Khomeini ‘gbuh’)

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ABSTRACT

Information technology and systems have given rise to numerous changes and transformations in all social activities including entrepreneurship and has been considered as the most significant instrument in modern job creation. The government ought to develop the grounds for entrepreneurship in the field of information technology which is the same as communication and information networks, and make these networks easily accessible for everyone creating and expanding the culture of their use, while compiling and implementing the related laws and regulations. From the objective standpoint, the method of the present research is of applied and correlative type. The statistical population in this research include 80 managers of the Special Economic Zone in Imam Khomeini Port. Findings of this research demonstrated that human, environmental and structural factors as well as transformation and planning capacities: all impact the strategic planning of information management systems and technology, and has relationship with entrepreneurship within the organization.

KEYWORDS: Information Technology, Information Management Systems, Entrepreneurship.
Introduction

Strategic use of information technology has been turned into a key element for organizations to attain competition advantage and align their information technology strategies with organizational objectives. A pivotal element in this area is strategic planning.

Nowadays, strategic planning in information technology is considered as one of the most fundamental components in strategic integration and alignment of business and information technology. The importance of an organization’s alignment of its information technology and business has been recognized and analyzed from 1970's by individuals and organizations such as Mac Lean & Sudden (1977), IBM (1981), Milles (1986), Parker & Beeson (1988), Branco & Derb (1987), Dixon & Little (1989), Niederman (1991), Chan & Huff (1993), Henderson Venkatraman (1996), Luftman & Brier (1999). During these years, alignment was always the business and IT managers’ most significant concerns within organizations and presently still remains the most important worry amongst organizations’ managers. It is evident that in view of the increased dynamism of commercial strategies and the fast growth of information technologies, the significance of this concept will gather speed amongst various organizations. Under the circumstances, preserving an organization’s strategic alignment of business with information technology, would need complicated and effective managerial processes. Concurrent with efforts by today's organizations to increase the integrity of business and information technology, the importance of strategic alignment gathers speed. This may well be due to the fact that alignment covers both effectiveness and efficiency (Manian et al 2008, pp. 83-85).

The objective behind the present research is to study the factors which impact the strategic planning of information systems management and technology and their relationship with entrepreneurship in the Special Economic Zone of Imam Khomeini Port.

Body of Research

Sleezer, Wentling and Cude (2002) have stated that the work domain and speedy growth of Information technology (IT) is evidence of its high importance, although other researchers and theorists believe that recent economic developments demonstrate that a favorable future is awaiting the information technology. Some other scientists maintain that while developing countries expand their economies, investments in IT will also increase. Chapman and Webster (2003), have reviewed the use of IT in recruiting and selecting workers to show that which technologies are employed in human resources, what objectives are pursued by human resources managers, to what extent these objectives are materialized and finally what organizational elements are behind the use of these technologies. Gueutal and Stone (2005), have addressed the effects of IT human resources management's preliminary activities such as recruitment, selection, learning of gaps, atonement of services and methods of rendering service.

Russell (2003), believed that the frameworks of job creation, give rise to mechanisms which depends upon variables such as strategies of entrepreneurship, organizational culture, organizational structure, accessible resources, commendation and bonus systems and management's support. Generally, culture in an organization has two fundamental functions namely, uniting or integrating of members in a way that they know how to behave towards, and communicate with, one another and help the organization in question to adapt itself with factors of outside environment. The internal unity or integrity in an organization means that members (workers) have a common identity and learn the method of effective cooperation (Daft 2006). In a research conducted by Chen et al (2005) in 75 public institutions in China, came to the conclusion that factors such as organizational culture, flexible organizational strategies, management's support for workers and finally active participation of workers in organizational decision-making; all have a major role in developing organizational entrepreneurship. In a research
carried out by, *Furst (2005)*, it was shown that organizational elements including organizational strategies, the spirit of innovation within the organization, organizational resources and culture, are all effective in developing organizational entrepreneurship. *Wong (2005)*, in a study he conducted in China's public organizations demonstrated that there is a positive relationship between organizational communications and development of entrepreneurship. In a research carried out by *Hill (2003)* in 8 organizations in South Africa, concluded that factors which effect organizational entrepreneurship are organizational structure, organization’s system of commendation and bonus, management and organizational culture (*Alambeygi et al 2009: 24)*

*Johansen et. al. (2001)*, in a study they conducted in Norway to explain organizational factors management's support, workers' independence, social capital in the organization, human capital (workers who are qualified to carry out functions), organizational concepts, available time and organizational culture.

*Demirbag et. al. (2006)*, maintained that management's supports for workers in an organization is an essential element in developing organizational entrepreneurship in public organizations. They believe that the ease in communication between management and workers in an organization plays an important role in that regard. *Raynor (2008)*, showed in a research that an organization’s entrepreneurship strategies especially in the field of gaining clients' satisfaction and developing human resources, all have a positive relationship with organizational entrepreneurship. The results of *Alambeygi et al (2009)* demonstrated that there is a positive and significant relationship, to 1% level, between development of organizational entrepreneurship and variables related to organizational factors. The results of multi-variable regression also showed that the four variables including leadership method, organizational strategy, organizational control system and organizational culture play the biggest role respectively in predicting the variable of organizational development of entrepreneurship. Results obtained from the research indicate that suitable organizational factors have a great role in developing entrepreneurship in an organization. A study by *Farahani et. al, (2011)* revealed that there is a direct and significant relationship between the organizational entrepreneurship and the four key psychological empowerment elements namely; the senses of meaningfulness, self-determination, effectiveness and trust. But there is no significant relationship between the sense of merit and organizational entrepreneurship. *Reza Zadeh et al, (2004)* showed that there is a significant relationship between suggestions system and organizational job creation and in justifying it. They claim that innovation is the essential core of entrepreneurship and that innovation in organizations is a bottom-to-top process. They also maintain that organizational job creation takes place only when innovation is prevalent among an organization’s lower levels, while organizational entrepreneurship can only last long when workers are encouraged and given the necessary authority. In view of the fact that the method of suggestions system is often a bottom-to-top process they are thus the most important instruments in facilitating the organizational entrepreneurship process. *Ashena (2005)*, demonstrated that any improvement in social capital and related elements will result in improved organizational entrepreneurship. Adversely, any reduction in social capital and related elements will lead to a decrease in organizational entrepreneurship. Therefore, in order to improve social capital, a set of solutions ought to be presented. The results drawn from a study conducted by *Forughipur (2005)*, led to identifying seven major job creation fields in sport, which include entrepreneurship in the fields of propaganda, sport management and planning, education and research in sport, general sport issues, heroic sport, manufacturing sports equipment, sport services and sports cultural issues. Each of fields all have their sub-sections. *Falahati (2006)* reached the conclusion that there is a significant relationship between the consultants’ psychological factors of empowerment and organizational entrepreneurship. In most researched conducted about entrepreneurship, there has been less focus on information technology and planning of information management systems. In the present study, this element has been fully addressed.

**Research Method**

From the viewpoint of objective, the present research is of applied type, and from the angle of collecting data is descriptive-analytical with correlative tendency. Since in descriptive researches, the features of the
population under-study can be assessed by survey, therefore the present research is of survey and applied type. Also, in view of the contents of the subject matter, this research can also be considered a field study. The statistical population included all the managers of Special Economic Zone of Imam Khomeini Port amounting to 80 individuals. The method of ‘Total Counting’ was used.

The tools of collecting data include two questionnaires. One contained the factor effecting the establishment, application and validity of information management system with 62 questions. Its reliability was assessed to be 0.91. The other questionnaire relates to organizational entrepreneurship containing 25 questions with its estimated reliability at 0.89.

**Research Findings**

**First Theory:** Human factors impact the success of strategic planning of information technology and information systems.

<table>
<thead>
<tr>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>T Value</th>
<th>Level of Freedom</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>2.7273</td>
<td>0.89496</td>
<td>-3.782</td>
<td>79</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 1 shows that the theory is confirmed by (p<0.05), (t=-3.782) and mean= 2.727. Therefore, human factors positively impact the success of strategic planning of information technology and information systems.

**Second Theory:** Structural factors positively impact the success of strategic planning of information technology and information systems.

<table>
<thead>
<tr>
<th>Number</th>
<th>Mean</th>
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<th>T Value</th>
<th>Level of Freedom</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>2.5714</td>
<td>0.78263</td>
<td>-6.796</td>
<td>79</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 2 shows that with level of significance at (p<0.05), (t=-6.796) and mean= 2.5714, the theory is confirmed. Therefore, structural factors positively impact the success of strategic planning of information technology and information systems.

**Third Theory:** Environmental factors positively impact the success of strategic planning of information technology and information systems.

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<thead>
<tr>
<th>Number</th>
<th>Mean</th>
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<th>T Value</th>
<th>Level of Freedom</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>80</td>
<td>2.6169</td>
<td>0.90169</td>
<td>-5.273</td>
<td>79</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 3 shows that with level of significance at (p<0.05), (t=-5.273) and mean= 2.61, the theory is confirmed. Therefore, environmental factors positively impact the success of strategic planning of information technology and information systems.
Fourth Theory: Planning capacity positively impacts the success of strategic planning of information technology and information systems.

Table 3; Results summary of one sample ‘t’ test of the fourth theory

<table>
<thead>
<tr>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>T Value</th>
<th>Level of Freedom</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>2.5649</td>
<td>.76633</td>
<td>-7.045</td>
<td>79</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4 shows that with level of significance at (p<0.05), (t=-7.045) and mean= 2.56, the theory is confirmed. Therefore, planning capacity positively impacts the success of strategic planning of information technology and information systems.

Fifth Theory: Change capacity positively impacts the success of strategic planning of information technology and information systems.

Table 5; Results summary of one sample ‘t’ test of the fifth theory

<table>
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<tr>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>T Value</th>
<th>Level of Freedom</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>2.5714</td>
<td>.84681</td>
<td>-6.281</td>
<td>79</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 5 shows that with level of significance at (p<0.05), (t=-6.281) and mean= 2.57, the theory is confirmed. Therefore, change capacity positively impacts the success of strategic planning of information technology and information systems.

Table 6; the correlation coefficient between factors contributing to the success of information Management and entrepreneurship systems

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>Entrepreneurship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Factors</td>
<td>80 0.000 .546</td>
</tr>
<tr>
<td>Structural Factors</td>
<td>80 0.000 .53</td>
</tr>
<tr>
<td>Environmental Factors</td>
<td>80 0.000 .48</td>
</tr>
<tr>
<td>Planning Capacity</td>
<td>80 0.000 .55</td>
</tr>
<tr>
<td>Change Capacity</td>
<td>80 0.000 .43</td>
</tr>
</tbody>
</table>

Results obtained from Table 6 show that statistical hypothesis for the significance level of this research has been rejected while research hypothesis on the basis of relationship between human, structural and environmental factors, as well as planning and entrepreneurship capacities is significance at the following levels of correlation coefficients; (p≤0.05, r=.546, .53, .48, .55, .43) respectively, therefore, there is a positive and significant relationship between human, structural and environmental factors, as well as change and entrepreneurship capacities.
Conclusion

A pathology of the country’s administrative system demonstrates that this bureaucratic system is suffering from undesirable symptoms such as the absence of participation tendency, persistent centralization and inflexibility and the slow process and complexity of performance which are together the causes behind the current spirit of indifference towards the outcome, as well as an atmosphere of irresponsibility, negligence, low productivity and inefficiency Haqshenas et. al (2006 :32).

A programme for a comprehensive information system is necessary and vital for successful development and use of information systems in various organizations. Strategic and macro technological planning prevents the wastage of continuous investments in information technology, inevitably made during long years, deploying such investments in the organization’s strategic and macro programmers. In order to achieve this goal, the process of information system planning should be a complete part of general organizational planning efforts.

But, to increase organizational entrepreneurship one needs to use mechanisms such as enhanced focus on the organization’s research and development department, forming a new sub-directorate charged with producing new products and services, training individuals interested in entrepreneurship, focusing on self-contained work groups in order to pursue new ideas and so on. The results of this research are also theoretically provable because the indicators of suitable grounds for developing organizational entrepreneurship are leadership method, team work, managers’ adequate support for creative and innovative individuals, and a suitable encouragement and bonus system for innovative workers. Pincot (2000) in expounding upon the current differences between traditional managers and organizational entrepreneurs, considers the traditional managers as those who favor decision-making and power circles, in line with top directors' demands. While he sees organizational entrepreneurs as those who, in decision-making, are inclined to cooperate and compromise with others Pincot et. al. (2000:18) quoted by Yadollahi Farsi et. al 2008:182.

Therefore, on the basis of results obtained from the theories of this research, it may be noted that entrepreneurship can be provoked and encouraged through collaborative method of decision-making.

Entrepreneurship, as the active engine of development, plays a key role in developing of societies, while in an era which is named the age of entrepreneurship revolution, planners and policy-makers strive to reinforce their socio-economic infra-structures by taking advantage of mental balance and creativity of human beings. On this basis, the development of entrepreneurship is being pursued at individual, organizational, national and even international levels. What is certain is that like other scientific fields, entrepreneurship is also in need of suitable grounds to develop and flourish.

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