The study of organizational innovation and its relevance to the implementation re-engineering in health insurance of Sistan and Baluchestan Province

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Abstract

The current era's organizations confront with numerous issues and challenges such as quick, instantaneous and unpredictable changes, special orders and different tastes of customers. Therefore, organizations have taken different forms and will embark on the changes to survive and preserve their positions. Literature of reengineering, organizational innovation, explanation of the relation between organizing and reengineering of organizational innovation approach will be tackled. In addition, auxiliary targets such as explanation of the relation between the fivefold dimensions of reengineering of organizational innovation improvement and their relation with the threefold dimensions of organizational innovation will be examined in this study. The method of the research is descriptive and of correlation type. The statistical society of the research is all the staff of Health insurance organization. In order to determine the sample volume, Morgan table was used. Collected data are analyzed using the standard questionnaires of reengineering and organizational innovation, statistical test and SPSS software. Validity of the questionnaires was confirmed by professors and experts and their reliability was confirmed through Cronbach's alpha. The results obtained from the tests and research tool indicate a meaningful relation between the two variables. The main hypothesis stating that implementation of reengineering approach and organizational innovation improvement has a meaningful relation with each other was confirmed with a correlation coefficient of 0.961 and an error of less than 0.05 together with auxiliary hypotheses.

Keywords: Reengineering, Organizational Innovation, health insurance, Sistan and Baluchestan.
Introduction

Undoubtedly, today's transformation cycle hasn't had any records in the past. Nowadays transformation is quicker, more unusual and more radical than any other time in the past. Technological collisions and competition and cultural pressures have created a whirlpool that can immerse any organizations. Today's transformation has got features such as turbulence in markets, attempt of various organizations and businesses to redefine themselves, re-determination of activities, new organizational forms and abolition of traditional management thinking. An organization is necessarily needed to change and transform itself in order to be able to live and survive the above mentioned situation. However, transform in an organization doesn’t happen unless hundreds or thousands of people in the organization are willing to cooperate and help the transformation process as much as possible. The staff, especially those who are dissatisfied with the current conditions of their organization, will not be willing to cooperate and sacrifice themselves unless they have come to the conclusion that the changes are useful. It is never possible to conquer the heart of mass of the staff without reasonable, acceptable and with great reputation relations. Taking into consideration human resource issues, this issue clarifies more the necessity of transformation of an organization's processes (Jafari, Akhavan and Rezaei Noor, 2009:25).

Therefore considering the challenges facing such an organization in the internal and external area and the necessity of transition from duty orientation to process orientation, the role of reengineering of processes and innovation in promotion and excellence of the organization will be so effective. In spite of this, it seems that the amount of implementation of reengineering approach and application of organizational innovation is negative due to the bureaucratic and hierarchical structure and domination of rigid and non flexible rules in the organization. Therefore in this stage the researcher himself went to one of the Health insurance organization in the Sistan and baluchestan using the method of exploration interviews with the managers and staff and observation of their behavior in the workplace concluded that the organization is organized bureaucratically, which is not of significant place today and the amount of implementation of reengineering approach and using organizational innovation by the organization managers is not so significant.

Every organization or company is a social institution, based on a target, and having active and coordinated systems communicate with the external environment. In the past when the environment was relatively stable, most of the organizations assumed that gradual and little changes would suffice to exploit the opportunities. However organizations around the world have realized over time that gradual changes alone is not the solution to their current difficulties and it is sometimes necessary that changes are implemented radically and basically in the organization to keep the organization. Nowadays these revolutionary changes are known as reengineering around the world. Reengineering (Business Process Reengineering) is a procedure where current organizational duties are replaced by main processes of business and therefore the organization transits from duty oriented to process
oriented state. This issue causes to accelerate the business process and reduce the costs and as a result makes the organization more competitive.

Now, here we are looking for the answer to the following question:
Does the implementation of reengineering approach have a relation with the organizational innovation in the Health insurance organization or not? Is there any relationship between various dimensions of reengineering and organizational innovation or not?

The research literature

Organizational innovation:
Amabill defines the organizational innovation as the successful implementation and execution of creative ideas in an organization.

According to Arembrokito et al (2008) organizational innovation includes changes in the structure and processes of an organization to use new management, job and operational concepts like application of groups in production, supply chain management and quality management systems. Therefore according to the findings of Baker et al (2005), organizational innovation is to use ideas which are useful for the company, no matter the innovation appears in the products, processes, management systems or marketing activities.

According to Draker, from management point of view innovation is a type of change that creates a new dimension of performance and from organizational point of view it is exploitation of new ideas (Draker, 1999:37) (Heselbin, 2002, 47). In fact the process of creation, development and execution of a new idea or behavior is called innovation. It should be known that innovation can be considered as an organizational change to respond to the external environment or to influence on it (Anderson et al, 2004:158).

Organizational innovation is a new invention of science or development of new information such as a concept, theory or hypothesis; In other words, organizational innovation means a new thing to be used. Organizational innovation necessitates transforming ideas to the usable organizational forms and the idea used for the promotion of organization performance (Damanpoor et al, 2008:55).

Reengineering Approach:

Nowadays companies are active in a competitive and dynamic environment which is obliged both internally and externally to be changed and as a result of processes that are incompatible with market and operation needs, lose resources. While most of these changes must be considered continuously, there are many scattered changes which may significantly go beyond a company's capability to survive. To confront these types of changes, one of the effective solutions is to use and implement reengineering of processes.
Several definitions can be seen about reengineering in related literature. However, all these definitions are common at reorganization and rejuvenation of the organization through radical changes in business processes.

Hemer and Champi define reengineering of processes in their book namely reengineering of companies as "radical rethinking and new and root design of processes to achieve a wonderful improvement and advancement in today's sensitive criteria such as cost, quality, service and speed" (Hemer and Champi, 2001:362) (Kamalian and Rashki, 2012:284)

Reengineering means discarding the current system and setting up a new system, and it doesn’t intend to improve the current system and as a result improve the work. They insisted on four key words for their definition:

Radical: Reengineering begins with giving up Hypothesis, guesses and presumptions and questioning the foundation of business. By this approach firstly it is recognized that "What task", "How" and "Why" shall be done in a company.

Severe: Reengineering means a severe and different design; and creating the job from the very beginning. Creating shallow and compatible with the current structure changes is not sufficient.

Wonderful: Reengineering doesn’t talk about increase of profit margin or relative improvement of it. The target is to achieve a wonderful and significant jump. Most of the current management theories and programs can only save a company from a marginal difficulty. Only when an explosion and a full housecleaning are needed they must resort to reengineering.

Processes: Most of those involved in the business world haven’t been "process oriented" so far. Their attention is paid to duties, jobs and people. Undoubtedly all duties in a process are important but if all the process is not useful and its result is not delivered to the customer, those separate duties doesn’t have any value-even if they are done so well.

In this definition, reengineering doesn’t mean "shrinking the organization" or "rebuilding the software" or making the organization horizontal or decreasing the organization's level, even though each of these events may take place as a result of reengineering (Kermanshah and Sepehri, 2006:32).

Nik Abloneski has also defined reengineering as: Reengineering of organizations is a collection of works that are done by an organization to change its processing and internal control to be transformed from a traditional, vertical and hierarchical structure to a horizontal, mid-activity, group based and flat structure, in which all processes are conducted to attract satisfaction of customers (Abloneski, 2003:54).
The research hypotheses

Main hypothesis: There is a relation between implementation of reengineering and improvement of organizational innovation in the Health insurance organization.

Auxiliary hypotheses:
- There is a relation between "the same oriented leadership" and improvement of organizational innovation.
- There is a relation between "cooperative workplace" and improvement of organizational innovation.
- There is a relation between "senior management commitment" and improvement of organizational innovation.
- There is a relation between "support oriented management" and improvement of organizational innovation.
- There is a relation between "use of information technology" and improvement of organizational innovation.

The method of the research

The present research is an applied, descriptive and correlation type research in terms of the target, nature and method. The statistical society of the research includes all the staff of Health insurance organization, which is 178 people. According to Morgan table 118 people were calculated as the sample volume. In this research library studies and academic articles and journals were used to collect the theoretical bases and history and also the field method and the search in the statistical society was used to collect statistical data to test the research hypotheses. To collect information, firstly, using interviews with experts, the elite and expert professors, the reengineering and organizational innovation, a questionnaire, whose validity was confirmed by professors, was prepared. Using Cronbach's alpha test, the reliability for reengineering and organizational innovation was respectively 0.87 and 0.79 which was acceptable. In order to analyze the data, descriptive statistics like frequency percent or mean and inferential statistics like correlation coefficient was used in the research. To do the task, SPSS software, version 18 has been used.

Findings

In this section, in order to examine the hypotheses, Kolmogorov-Smirnov test was used first to show the distribution of data. In the following, taking into consideration that distribution of some variables is normal and some other is not, correlation coefficient test of Pearson or Spearman has been used to test the main and auxiliary hypotheses.
Table 1. Results of normality (Kolmogorov-Smirnov) in summary

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\alpha$ (error)</th>
<th>meaning</th>
<th>Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>the same oriented leadership</td>
<td>0/ 05</td>
<td>0.939</td>
<td>the data is normal</td>
</tr>
<tr>
<td>cooperative workplace</td>
<td>0/ 05</td>
<td>0.448</td>
<td>the data is normal</td>
</tr>
<tr>
<td>senior management commitment</td>
<td>0/ 05</td>
<td>0.142</td>
<td>the data is normal</td>
</tr>
<tr>
<td>support oriented management</td>
<td>0/ 05</td>
<td>0.487</td>
<td>the data is normal</td>
</tr>
<tr>
<td>use of information technology</td>
<td>0/ 05</td>
<td>0.085</td>
<td>the data is normal</td>
</tr>
<tr>
<td>organizational innovation</td>
<td>0/ 05</td>
<td>0.475</td>
<td>the data is normal</td>
</tr>
</tbody>
</table>

As it is seen in table 1, all variables have a normal distribution because their meaning level is above standard level that is 0.05. In this case Pearson correlation coefficient shall be used to test the hypotheses.

The first hypothesis

A- Hypothesis title: There is a relation between "the same oriented leadership" and improvement of organizational innovation.

B- Test Hypothesis

H0: There isn’t a relation between "the same oriented leadership" and improvement of organizational innovation

H1: There is a relation between "the same oriented leadership" and improvement of organizational innovation

C- The test of Hypothesis

Using Pearson correlation coefficient and SPSS software, version 18 to test the above Hypothesis, the following results were obtained:
Table 2: Results of correlation coefficient between the same oriented leadership and organizational innovation improvement factors

<table>
<thead>
<tr>
<th>Innovation</th>
<th>The same oriented leadership</th>
<th>Pearson correlation coefficient</th>
<th>the same oriented leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.811</td>
<td>1</td>
<td>sig</td>
<td>N</td>
</tr>
<tr>
<td>0.000</td>
<td>118</td>
<td>sig</td>
<td>N</td>
</tr>
<tr>
<td>1</td>
<td>0.811</td>
<td>Pearson correlation coefficient</td>
<td>Innovation</td>
</tr>
<tr>
<td>0.000</td>
<td>118</td>
<td>sig</td>
<td>N</td>
</tr>
</tbody>
</table>

D. Since according to the Pearson table the p-value at the 0.05 error level is meaningful, we conclude with a 95 percent assurance that there is a relation between the two variables. However, in order to examine the type and severity of the relation, we pay attention to the amount of Pearson correlation coefficient. Since the sign of Pearson correlation coefficient is positive, the relation between the two variables is positive and its severity is 0.811 as well, which indicates that there is a good relation between the two variables. In total we conclude that:

**There is a relation between "the same oriented leadership" and improvement of organizational innovation.**

**The second hypothesis**

A-Hypothesis title: There is a relation between "cooperative workplace" and improvement of organizational innovation.

B- Test Hypothesis

H0: There isn’t a relation between "cooperative workplace" and improvement of organizational innovation.

H1: There is a relation between "cooperative workplace" and improvement of organizational innovation.

C- The test of Hypothesis

Using Pearson correlation coefficient and SPSS software, version 18 to test the above Hypothesis, the following results were obtained:
Table 3: Results of correlation coefficient between the Cooperative Workplace and organizational innovation improvement factors

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Cooperative Workplace</th>
<th>Pearson correlation coefficient</th>
<th>Cooperative Workplace</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.746</td>
<td>1</td>
<td>0.000</td>
<td>118</td>
<td>118</td>
</tr>
<tr>
<td>0.000</td>
<td>118</td>
<td>sig</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0.746</td>
<td>Pearson correlation coefficient</td>
<td>sig</td>
<td>N</td>
</tr>
<tr>
<td>118</td>
<td>118</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D. Since according to the Pearson table the p-value at the 0.05 error level is meaningful, we conclude with a 95 percent assurance that there is a relation between the two variables. However, in order to examine the type and severity of the relation, we pay attention to the amount of Pearson correlation coefficient. Since the sign of Pearson correlation coefficient is positive, the relation between the two variables is positive and its severity is 0.746 as well, which indicates that there is a good relation between the two variables. In total we conclude that:

**There is a relation between "cooperative workplace" and improvement of organizational innovation**

The third hypothesis

A-Hypothesis title: There is a relation between "senior management commitment" and improvement of organizational innovation.

B- Test Hypothesis

H0: There isn’t a relation between "senior management commitment" and improvement of organizational innovation.

H1: There is a relation between "senior management commitment" and improvement of organizational innovation.

C- The test of Hypothesis

Using Pearson correlation coefficient and SPSS software, version 18 to test the above Hypothesis, the following results were obtained:
Table 4 Results of correlation coefficient between the Senior Management Commitment and organizational innovation improvement factors

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Senior Management Commitment</th>
<th>Pearson correlation coefficient</th>
<th>Senior Management Commitment</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.647</td>
<td>1</td>
<td>sig</td>
<td>0.647</td>
<td></td>
</tr>
<tr>
<td>0.000</td>
<td>118</td>
<td>sig</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>118</td>
<td>sig</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0.647</td>
<td>Pearson correlation coefficient</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>118</td>
<td>sig</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

D. Since according to the Pearson table the p-value at the 0.05 error level is meaningful, we conclude with a 95 percent assurance that there is a relation between the two variables. However, in order to examine the type and severity of the relation, we pay attention to the amount of Pearson correlation coefficient. Since the sign of Pearson correlation coefficient is positive, the relation between the two variables is positive and its severity is 0.647 as well, which indicates that there is a good relation between the two variables. In total we conclude that:

**There is a relation between "senior management commitment" and improvement of organizational innovation.**

**The fourth hypothesis**

A- Hypothesis title: There is a relation between "support oriented management" and improvement of organizational innovation.

B- Test Hypothesis

H0: There isn’t a relation between "support oriented management" and improvement of organizational innovation.

H1: There is a relation between "support oriented management" and improvement of organizational innovation.

C- The test of Hypothesis

Using Pearson correlation coefficient and SPSS software, version 18 to test the above Hypothesis, the following results were obtained:
Table 5 Results of correlation coefficient between the Support Oriented Management and organizational innovation improvement factors

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Support Oriented Management</th>
<th>Pearson correlation coefficient</th>
<th>Support Oriented Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.703</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.000</td>
<td>118</td>
<td>sig</td>
<td>N</td>
</tr>
</tbody>
</table>

D. Since according to the Pearson table the p-value at the 0.05 error level is meaningful, we conclude with a 95 percent assurance that there is a relation between the two variables. However, in order to examine the type and severity of the relation, we pay attention to the amount of Pearson correlation coefficient. Since the sign of Pearson correlation coefficient is positive, the relation between the two variables is positive and its severity is 0.703 as well, which indicates that there is a good relation between the two variables. In total we conclude that:

There is a relation between "support oriented management" and improvement of organizational innovation

The fifth hypothesis

A-Hypothesis title: There is a relation between "use of information technology" and improvement of organizational innovation.

B- Test Hypothesis

H0: There isn’t a relation between "use of information technology" and improvement of organizational innovation.

H1: There is a relation between "use of information technology" and improvement of organizational innovation.

C- The test of Hypothesis

Using Pearson correlation coefficient and SPSS software, version 18 to test the above Hypothesis, the following results were obtained:
D. Since according to the Pearson table the p-value at the 0.05 error level is meaningful, we conclude with a 95 percent assurance that there is a relation between the two variables. However, in order to examine the type and severity of the relation, we pay attention to the amount of Pearson correlation coefficient. Since the sign of Pearson correlation coefficient is positive, the relation between the two variables is positive and its severity is 0.781 as well, which indicates that there is a good relation between the two variables. In total we conclude that:

There is a relation between "use of information technology" and improvement of organizational innovation

The main hypothesis

A-Hypothesis title: There is a relation between implementation of reengineering and improvement of organizational innovation in the Health insurance organization.

B- Test Hypothesis

H0: There isn’t a relation between implementation of reengineering and improvement of organizational innovation in the Health insurance organization.

H1: There is a relation between implementation of reengineering and improvement of organizational innovation in the Health insurance organization.

C- The test of Hypothesis

Using Pearson correlation coefficient and SPSS software, version 18 to test the above Hypothesis, the following results were obtained:

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Information Technology</th>
<th>Pearson correlation coefficient</th>
<th>Information Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.781</td>
<td>1</td>
<td>Pearson correlation coefficient</td>
<td>Information Technology</td>
</tr>
<tr>
<td>0.000</td>
<td>sig</td>
<td></td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>118</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0.78</td>
<td>Pearson correlation coefficient</td>
<td>Innovation</td>
</tr>
<tr>
<td>0.000</td>
<td>sig</td>
<td></td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>118</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>
Table 7 Results of correlation coefficient between the Reengineering and organizational innovation improvement factors

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Reengineering</th>
<th>Pearson correlation coefficient</th>
<th>Reengineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.961</td>
<td>1</td>
<td>sig</td>
<td></td>
</tr>
<tr>
<td>0.000</td>
<td>118</td>
<td>sig</td>
<td>N</td>
</tr>
<tr>
<td>118</td>
<td>118</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0.961</td>
<td>Pearson correlation coefficient</td>
<td>Innovatio</td>
</tr>
<tr>
<td>0.000</td>
<td>118</td>
<td>sig</td>
<td></td>
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<td>118</td>
<td>118</td>
<td></td>
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</tbody>
</table>

D. Since according to the Pearson table the p-value at the 0.05 error level is meaningful, we conclude with a 95 percent assurance that there is a relation between the two variables. However, in order to examine the type and severity of the relation, we pay attention to the amount of Pearson correlation coefficient. Since the sign of Pearson correlation coefficient is positive, the relation between the two variables is positive and its severity is 0.961 as well, which indicates that there is a good relation between the two variables. In total we conclude that:

There is a relation between implementation of reengineering and improvement of organizational innovation in the Health insurance organization.

Conclusion

Process orientation is one of the fundamental needs of the current era's organizations and traditional organizations can achieve such an important goal only through implementation of reengineering. The most important stage in reengineering is the stage of design of new processes in the organization and success or failure of reengineering depends on the innovative design of processes. Innovation in the design of processes creates a competitive benefit for organizations and this innovative design is not possible without using educated staff of the organization. Therefore before reengineering, while making a creative environment, organizations can engage staff in the difficulties facing the organization and having done the primary stages of reengineering that is determination of strategies, creation of the culture of change in staff and presenting necessary trainings, involve their staff in the design of new processes using creativity techniques. This can bring about two main benefits. Firstly, it is obvious that using the staff of the organization, as the people who are most familiar with the deadlocks and difficulties facing the organization, will help the experts of the design of processes with identification of strengths and weaknesses of methods of doing tasks. Secondly, having done the reengineering, the staff cooperating in the design of
processes will necessitate themselves to implement what they themselves had designed and as a result most resistances against the change will be broken. In the process, oriented organizations as well, innovation at the flowing current of processes is quite vital because improvement of processes after the reengineering of process oriented organizations is one of inevitable tasks of organizations. Since environmental changes influence significantly on the inter organization processes and the innovation in organizations is not possible but using the staff. Keeping updated the creative staff remaining in the organization after the reengineering, process oriented organizations must prepare the background for such an innovation, otherwise the current process oriented organizations will become the traditional organizations of the upcoming decade and will be easily eliminated from the competition if they remain standstill.
References


