Evaluation of the Effects of Outsourcing Services on Productivity (Case Study: Administrative Site of Pars Jonubi Special Economic/Energy Zone)

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ABSTRACT
After the end of vertical integration in which the organizations implemented their supply chain activities (of distribution layer and products delivery and customer services), now outsourcing era of organizational activities is emerged. Today, one of the concerns of managers is evaluation and control of outsourced activities and this issue is changed by the views of experts based on human reasoning and judgment and above all the uncertainty conditions of evaluation indices and this issue endangers the continuance of outsourcing activities. Based on the significance of study, the present study aimed to evaluate the effects of outsourcing of services on productivity in Pars Jonubi Special Economic/energy zone. The study population is all the managers and employees of administrative site of Pars Jonubi Special Economic/energy zone (Pars Jonubi Special Economic/energy zone. The study population is all the managers and employees of administrative site of Pars Jonubi Special Economic/energy zone (Pars 1) Asaluye as involved in outsourcing process. Then, based on purposeful (judgment) sampling, the people present before and after outsourcing implementation (196 people) are selected for statistical sample. A questionnaire is used and its reliability is 0.875 by Cronbach’s alpha. To evaluate productivity, six dimensions (strategic management, human resources, costs, speed of services presentation, quality of presenting services and customers’ satisfaction) are applied. The study findings show that organization productivity after outsourcing services in strategic management and human resources dimension has suitable condition and organization productivity after outsourcing services in costs, speed of services presentation, quality of services and customers satisfaction dimensions has not good condition.

INTRODUCTION

One of the special features of third millennium and “information age” is the increasing speed of environmental changes and this increasing movement is effective on current business world and traditional paradigms and business are changed considerably. These dynamic issues require that current organizations are changed considerably in terms of structures and strategies compared to the past [4]. Globalization, Decentralization, quality management, concurrent engineering, mergers and etc are some examples of management issues changing management plans considerably. Reasoning application of available resources of managers including equipment, land, building and other resources are important economic issues of countries and reasoning application is maximum use of resources based on existing conditions [15].

The development of communicative tools in recent years has caused that the global organizations and companies develop all their markets in all over the world. Thus, the past local markets are replaced with fully global competitive markets. Thus, the organizations to continue successful presence should focus on increasing the share of their market and the top decision makers of organizations are intended to outsource their non-main activities to the external service providing resources [8].

New management forms based on quality, speed and collaboration promises have caused that the organizations choose development plans from their current activities. Decentralization, globalization, quality management, mergers, important capabilities, labor force management, environmental, studies and communicative regulations are new management forms changing organizational plans and good pro viding of the above items requires that the organizations focus on the activities with much value –added for them and delegate their non-main activities to external providing units. Using advanced technology in industrialization of a country
is the final solution and it is an unavoidable condition to eliminate the problems of all or most of developing countries. However, this doesn’t mean that we consider any design for the economy of a society useful, even if we achieve a part of required goals as predicted, indeed one of the main principles of controlling development plans is their usefulness from various economic and social aspects on scientific basis. To fulfill this issue, optimal use of sources and facilities is one of the main factors [5]. Today, to keep their competitive advantage in global markets, most organizations follow outsourcing organizational activities. After the end of vertical integration age in which the organizations implement supply chain activities (from supply layer to distribution and delivery of products and services to customer), now outsourcing age of organizational activities is emerged [1].

Today, most companies consider foreign supply and outsourcing enables the organizations to use the facilities of other firms and reduce their manufacturing costs. Outsourcing also provides development opportunities of many organizations. In other words, if outsourcing is used accurately, it is a strong tool leading to the organization success in increasing commercial competition [4]. Today, outsourcing in foreign multi-national firms is investigated as direct investment [2]. Globalization entered many challenges to current business. Most commercial companies choose outsourcing to reduce their costs. Thus, outsourcing is “achieving some products and services of a business or organization under a contract with foreign external organization supplier “(Dictionary and Merriam Webster Dictionary). Each of production processes, product design, receiving raw materials, keeping customer and etc. can be outsourced [23]. Outsourcing of activities or services to external organizations is not a new phenomenon and the organizations decide outsourcing regarding the purchase or production of products. As many researchers and authorities have different discussions about IT outsourcing activities, a few articles expressed these complex issues form wide vision. In outsourcing decision, the vital role of information in organization is considered and if a part of organization is outsourced, the current and future needs of organization should be considered [12].

Outsourcing as one of the development tools of organizations and improving productivity to reduce sizes has received much attention from managers and authorities of organizations and is implemented by various forms but the term outsourcing namely in affiliated organizations and companies of national oil company is presented as general and not comprehensive model is evaluated to investigate its effectiveness and efficiency.

Statement of problem:

Today, some issues as increasing competitive pressures, difficulty of business, limitation of resources, technological complexities and specialized works, speed of environmental changes, uncertainty of future, increasing costs, increasing of some organizations (namely public sector) and legal limitations have caused that the organizations revise their management models and choose new strategies to achieve competitive advantages in present business world. One of the strategies is focusing on main qualifications and delegating many activities of external organization sources (outsourcing) [4].

The preparation to present rapid reaction to use less stable and early opportunities is one of the basic challenges of organizations and enterprises in present age. Indeed, current organizations are obliged to create flexible structure and use extended external organizational facilities to use these opportunities. The movement from traditional society to information community, from national economy to global economy, from centralization to decentralization and finally from hierarchy structure to a network system are vivid signs of basic changes in current environment and responding them requires new solutions and strategies. We live in information outsourcing age. It seems that enterprises by concluding some contracts with foreign suppliers try to develop delegating a set of activities including product design or assembly, marketing research and development, distribution and after sale services. Most companies tend to cyber space and delegating most non-main activities to foreign suppliers. Today, vertical collapse namely in international commerce is observed [7]. The outsourcing trading emphasizes on costs saving. Recently, some researchers believe that the aim of outsourcing of services is transferred from costs reduction to value creation. This value added is expressed recently by researchers and include : Improvement of speed or services quality, achieving external talents of organization, new behaviors and innovations and creating strategic unities. However, its main focus in main missions and creating much flexibility [23]. Following these studies, Gartner group estimate that outsourced markets all over the world growth in 2008 about 1.8%. Based on the importance of outsourcing in economic development trend of country and its need to systematic thought and correct management of privatization process with human resources development to increased productivity is of great importance for this issue that what is the impact of outsourcing on organization efficiency and effectiveness ? [6].

Outsourcing services and activities is increased each day and it has received much attention not only from governments but also from private companies. This prepares to achieve productivity by organization. As productivity is composed of two parts as efficiency and effectiveness, the researcher attempts to investigate the effects of outsourced activities of organization from two mentioned dimensions. Thus, based on important priorities of organization to achieve productivity of dimensions focusing on main activities (strategic management), efficient use of internal and external specializations in organization (human resources), reduction of operational costs of organization (costs) and improving speed of presenting services (speed), improving quality
of services (quality), increasing customers satisfaction (satisfaction) can be considered by organization. Indeed, organization and the researcher attempt to use existing information and statistics and data collection measures (questionnaire) and data analysis and answer this question: Is productivity of Pars Jonubi Special Economic/energy zone improved after services outsourcing?

**Significance of study:**

Today, previous though regarding the ownership of production factors to guarantee competitive advantages is abolished. Now, the important issue is how the organization can achieve sources and knowledge outside organization, instead of being the owners of resources. Thus, no organization is self-sufficient and due to lost opportunity cost, self-sufficiency is not scientific from economic aspects. In addition, it is sometimes possible the sources provided from external groups have high quality compared to the domestic production [21].

Today, rapid technology growth, increasing changes in products market, competitors and development of market borders of firms are directed to the organizations beyond border. Organizations with flexible structures and wide supply networks, the organizations that can adapt themselves with the environment changes and this requires easy and rapid access of organization to required sources as specialized human resources, technological and technical knowledge outside organization. Thus, to achieve their benefits, organizations need advanced and coherent planning [22]. Peter Drucker states regarding outsourcing and its effects regarding business processes as: “Such issue is fundamental change in the structure of future world organizations. It means that it is not required big commercial firms, state offices, hospitals and big universities are turned into the formations in which many people work. These institutions are turned into the formations achieving excellent incomes and reliable results as they focus only on the activities for their mission, they perform the tasks as associated exactly to their organizational goals. They pay those performing the tasks well as they are familiar with the details based on their value and delegate the rest of service works of these organizations to external institutions [16]. Thus, after the end of vertical integration age in which the organizations implement supply chain activities from the beginning to the end (from distribution layer and delivery of products and customer services), now outsourcing age of organizational activities is emerged [14]. Based on the study of Fortune journal, commercial organizations use foreign service providers and in Europe market in 2001, it is estimated that the value of presented services is 27 billion dollars as increasing annually [17]. Also, Anand and Aron refer to foreign studies regarding business outsourcing and outsourcing processes of existing industry and they believed that outsourcing in industry sector is increased of 123.6 billion dollars in 2001 to more than 230 billion dollars in 2015 [23].

Our country as encountered with development path is exposed to great changes namely in economic, commercial and industrial fields and new conditions as necessity of strategic reduction of costs, efficiency improvement, responding and development of interactions with international economy, attitudes of experts and macro directions can guide the country to economic liberalization, state organizations with reasonable size, development of small and average companies in private sector and movement in network-based organizations. This shows the increasing development of outsourcing in our country to achieve new economic and industry civilization [13].

Although great oil firms outsource great part of their main activities to focus on operational nuclear activities to external organizations, in Iran oil industry, services outsourcing is restricted only to few parts of support activities. Despite the few parts of service activities as outsourced, due to the lack of balance between “delegated authorities to contractor” and their responsibilities”, outsourcing leads to reduction of tenure activities of oil industry and the weakness of contractors can challenge organization performance in effectiveness and efficiency to delegated responsibilities. The results of this research work can lead to the improvement of services productivity in national distribution and Refinery Company of oil products in Iran. Study theoretical framework Theoretical framework is the basis by which a researcher theorizes regarding the relations between factors as important in creating statement. Generally, theoretical framework is a basis on which the entire study relies [11].

To investigate the effects of outsourcing the services on productivity of Pars Jonubi Special Economic/energy zone with the collaboration of organization and the basic need of organization to evaluate the effects of outsourcing in production sectors, distribution of services on organization productivity and following the correspondent and importance of outsourcing in services sector, we attempted to investigate the effects of outsourcing from services and its effect on organization productivity new. After considerable studies regarding the discussed indices and consistency of organization needs with these indices and final conclusion conducted by supervisor and advisor, we find that we can use the conceptual model of the study “investigation of the effects of services outsourcing on the performance of affiliated firms of ministry of energy in Sistan and Baluchistan” by Habibollah Salarzehi, Yaser Amiri and Mohammad Sabur Notani. The mentioned model is presented in Figure 1.
Study purpose and method:

The study method depends upon the study purpose, study nature, executive facilities and formulated hypotheses. The purpose of study method is to define which method is used to help us to achieve response or responses for study questions as exactly, easier and cheaply [10].

The researchers divide the researches based on purpose to basic and applied. The main purpose of the basic studies of hypothesis test is determining the relations between phenomena and adding information and findings to the existing knowledge in a specific field [19]. Applied study is the one its findings are used to solve the social problems [9].

Thus, the present study is applied in terms of purpose. This study collects data to answer the study questions and attempts to evaluate the impact of outsourcing strategy on productivity from effectiveness and efficiency aspects (it is divided into other components and it is defined in theoretical model) and the present study is descriptive and as a survey is performed of respondents, the study is survey and due to non-experimental nature and its execution in real conditions, it is a field study.

Study method:

The study is applied based on purpose and field-survey design.

Data collection methods:

The main measure (data collection) is questionnaire including the questions of demographic features and some questions are regarding the effects of outsourcing effects of services on productivity and they are extracted from the articles of review of literature and by the consulting with advisors and supervisors. The researcher studies the latest scientific achievements regarding the topic and performs interviews with top managers and organization elites to recognize most factors in this land.

Sampling method and sample size:

The sampling is selecting adequate number among study population as by study of sample and understanding the features with subjects’ features of sample group, we can generalize this feature to the study population members [20]. As the study regarding all members of population is time consuming and is not cost saving, the researcher is obliged to start sampling and the sample should be selected as showing the entire population.

In this study, the researcher attempts to achieve the result and selects some members of study population and they attended two different courses in terms of execution of outsourcing strategy (the course in which outsourcing strategy is not used and the period in which outsourcing strategy is used). Thus, all managers and employees of Pars Jonubi Special Economic/energy zone involved in outsourcing process are selected as study population. The judgment sampling is used when a limited number of members have the information. Based on interview with the units involved in outsourcing namely in services sector, the study population is 400 and based on the scientific formula, the study sample is 196 and all people are selected as sample. The questionnaire is distributed among people and 168 questionnaires are collected and analyzed. In this study, most of outsourced activities in services are identified and evaluated in self, service, guarding and green space sectors.

Data analysis methods and hypotheses test:

Descriptive statistics and SPSS software are used for collected data analysis.
Study population:
The study population is a set of people or units with at least one common attribute. In each study, the study population is the one the researcher studies about attribute [19]. The study population is people, objects or events at least with one common attribute or feature. The study population is including all employed managers and employees of Pars Jonubi Special Economic/energy zone.

Conclusion:
The results of the study help us to have correct understanding of outsourcing and reduce the limitations of using this strategy. The study is composed of six hypotheses and each six hypotheses are evaluated from various dimensions. The results of hypotheses are expressed separately. The results are as follows:

The results of first hypothesis and recommendations:
First hypothesis is “Is productivity of Pars Jonubi Special Economic/energy zone improved after implementing outsourcing strategy of services in strategic management dimension. To evaluate the productivity of Pars Jonubi Special Economic/energy zone, one-sample t-test is used after outsourcing. Based on the results of this statistical test as mentioned in details in fourth chapter and based on the results of Table 4-9 in fourth chapter, null hypothesis is rejected in strategic management dimension and H1 is supported and at confidence interval 95%, productivity of Pars Jonubi Special Economic/energy zone is improved after outsourcing the services in strategic management dimensions.

Table 1: Ranking strategic management indices based on the impact on outsourcing.

<table>
<thead>
<tr>
<th>No</th>
<th>Strategic management indices</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Considering fundamental design and engineering</td>
<td>4.479</td>
</tr>
<tr>
<td>2</td>
<td>Focusing on main functions</td>
<td>4.470</td>
</tr>
<tr>
<td>3</td>
<td>Considering strategic priorities</td>
<td>4.293</td>
</tr>
<tr>
<td>4</td>
<td>Focusing on main activities</td>
<td>4.280</td>
</tr>
<tr>
<td>5</td>
<td>The ground and conditions of investment absorption</td>
<td>4.193</td>
</tr>
</tbody>
</table>

The recommendations of first hypothesis:
Based on the evaluation of the results of questionnaires and interviews analysis with the managers and authorities by researcher and the familiarity with the existing condition of implementing outsourcing in Pars Jonubi Special Economic/energy zone and observation of some problems and using guidance of advisor and supervisor and experts, to improve the problems and optimal and efficient use of outsourcing strategy and much influence of its implementation on existing indices in each aspect and improving organization productivity, some recommendations are developed for managers and organization authorities and some of problems are eliminated and they can helps us to achieve much productivity in strategic management.

a. For its survival in varied and dynamic environment, the organization dedicates its activities to meritocracy and its own main activities and non-main activities are outsourced.
b. As the country moves to decentralization and low tenure of government in recent years, the structure revision in Pars Jonubi Special Economic/energy zone is one of the major structures. To achieve the determined goals, we can establish coordination between technology, strategy and coordination structure. Based on using new technology and changing nature of company from state bureaucratic to profitability, it needs new organizational structures and one of the most important features of this structure is funding from outside the organization (outsourcing).
c. The identification of important qualifications of company and the attempts to focus on these activities as by focusing on these activities, the company can achieve competitive advantage compared to other existing competitors in market.
d. As outsourcing is highly applied as simple executive and economical tool, the managers of Pars Jonubi Special Economic/energy zone apply outsourcing strategies, thus, they attempt to have strategic planning of outsourcing in Pars Jonubi Special Economic/energy zone.

The results of second hypothesis and recommendations:
The second hypothesis of study is: Productivity of Pars Jonubi Special Economic/energy zone is improved after implementation of services outsourcing strategy in human resources dimension. To evaluate the
productivity condition of Pars Jonubi Special Economic/energy zone after outsourcing. One-sample t-test is used. Based on the results of this statistical test as mentioned in details in fourth chapter and based on the results of Table 4-9 in fourth chapter, null hypothesis is rejected in human resources dimension and H1 is supported and at confidence interval 95%, productivity of Pars Jonubi Special Economic/energy zone is improved after outsourcing the services in human resources dimensions.

Table 5-2 shows human resources indices based on outsourcing effect priority on them. Based on this table, implementing outsourcing strategy has highest effect on achieving new skills and talents index. Also, it has the least effect on transparency of duties and responsibilities of employees in this aspect. We can also mention some reasons as the efforts of organization to specializations outside organization, using skillful human resources with high work experience in work processes and using modern technologies as the result of creativity people mind and scientists.

### Table 2: Ranking human resources indices based on the impact on outsourcing .

<table>
<thead>
<tr>
<th>No.</th>
<th>Human resources indices</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Achieving new skills and talents</td>
<td>3.488</td>
</tr>
<tr>
<td>2</td>
<td>Using specializations outside organization</td>
<td>3.530</td>
</tr>
<tr>
<td>3</td>
<td>Commitment of efficiency of employees and job dependence of employees</td>
<td>3.443</td>
</tr>
<tr>
<td>4</td>
<td>Skills and empowerment of employees</td>
<td>3.440</td>
</tr>
<tr>
<td>5</td>
<td>Transparency of duties and responsibilities of employees</td>
<td>3.327</td>
</tr>
</tbody>
</table>

**Recommendations of second hypothesis:**

a. To develop human resources and reduction of outsourcing effects and improving industrial relations in organization, at first we should prepare people to accept the structure and we can provide pamphlets, brochures, statements, direct discussion and various conferences to present information and by various conferences, we can present exact and transparent information. Instead of win-lose strategy, we can take win-win strategy.

b. The exit of extra forces at the same time due to the lack of market elasticity has some problems and we should return them for political reasons. Thus, the plan should be implemented in various levels as long-term.

c. The company managers should consider that if a part of organization activities is minimized due to some reasons as skill and specialization of current and future employees or least progress is made, the required activity can be outsourced to the supplier with specialization in the activity and the modern procedures and trained employees in operation can be used.

d. Based on the consideration of managers to the reduction of personnel quantitative growth and the consideration to more human resources as one of the most important production factors, the development of improvement and empowerment plan of human resources to provide the effective use of modern technologies in the world and preparation for collaboration of Iranian companies with international competitors can be effective.

**The results of third hypothesis and presentation of recommendations:**

The third hypothesis of study is: Productivity of Pars Jonubi Special Economic/energy zone is improved after implementation of services outsourcing strategy in cost dimension. To evaluate the productivity condition of Pars Jonubi Special Economic/energy zone after outsourcing, One-sample t-test is used. Based on the results of this statistical test as mentioned in details in fourth chapter and based on the results of Table 4-9 in fourth chapter, null hypothesis is supported and at confidence interval 95%, productivity of Pars Jonubi Special Economic/energy zone is not improved after outsourcing the services in cost dimensions.

Table 5-3 shows human resources indices based on outsourcing effect priority on them. Based on this table, implementing outsourcing strategy has highest effect on reduction of costs of depreciation of fixed assets index. Also, it has the least effect on reduction of wage costs in this aspect. We can also mention some reasons as the efforts of employees for rapid performance of tasks and reduction of delay in work procedures for the success of outsourcing process in organization.

### Table 3: Ranking cost indices based on the impact on outsourcing.

<table>
<thead>
<tr>
<th>No.</th>
<th>Cost indices</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reduction of depreciation cost of fixed assets</td>
<td>4.532</td>
</tr>
<tr>
<td>2</td>
<td>Reduction of administrative cost</td>
<td>4.491</td>
</tr>
<tr>
<td>3</td>
<td>Transparency and accuracy in financial sources</td>
<td>4.429</td>
</tr>
<tr>
<td>4</td>
<td>Reduction of services cost</td>
<td>4.345</td>
</tr>
<tr>
<td>5</td>
<td>Reduction of wage costs</td>
<td>4.072</td>
</tr>
</tbody>
</table>

**Recommendations of third hypothesis:**

a. Eliminating investment in the outsourced activities: During the investigations in organization, it is defined that despite activities outsourcing, the organization invest in some outsourced activities and this increases rework and operation costs.
b. Costs management and elimination of unnecessary operations that managers and authorities by identification of non-necessary operation and the incomplete activities and processes leading to the increase of re-working in organization help the costs management.

c. For financial success, the organization should divide the organization sections to costs centers and profit centers and delegate the activities in the center of costs as not as the main duties of organization in a contract to other people or organizations.

d. As many companies and organizations are sure outsourcing reduces costs, we should say it is not the only way to reduce costs and formation of outsourcing committee composed of executive deputies and managers in various work fields is necessary for initial evaluation of any outsourcing.

The results of fourth hypothesis and presentation of recommendations:

The fourth hypothesis of study is: Productivity of Pars Jonubi Special Economic/energy zone is improved after implementation of services outsourcing strategy in services presentation speed dimension. To evaluate the productivity condition of Pars Jonubi Special Economic/energy zone after outsourcing, One-sample t-test is used. Based on the results of this statistical test as mentioned in details in fourth chapter and based on the results of Table 4-9 in fourth chapter, null hypothesis is supported and at confidence interval 95%, productivity of Pars Jonubi Special Economic/energy zone is not improved after outsourcing the services in services presentation speed dimensions.

Table 5-4 shows services presentation speed indices based on outsourcing effect priority on them. Based on this table, implementing outsourcing strategy has highest effect on easy works index. Also, it has the least effect on delay in work and administrative procedures in this aspect.

Table 4: Ranking services presentation speed indices based on the impact on outsourcing.

<table>
<thead>
<tr>
<th>No.</th>
<th>services presentation speed indices</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Easy works</td>
<td>3.440</td>
</tr>
<tr>
<td>2</td>
<td>services presentation speed</td>
<td>3.351</td>
</tr>
<tr>
<td>3</td>
<td>Administrative automation</td>
<td>3.269</td>
</tr>
<tr>
<td>4</td>
<td>Administrative extra stages</td>
<td>3.257</td>
</tr>
<tr>
<td>5</td>
<td>The delay in work and administrative procedures</td>
<td>3.167</td>
</tr>
</tbody>
</table>

Recommendations of fourth hypothesis:

a. The formulation of macro policies to facilitate outsourcing of a part of activities of domestic manufacturing companies to successful foreign funding companies to facilitate the works.

b. Providing modern software of management information system to facilitate the current affairs of organization and facilitating the current stages in organization.

c. Performing required trainings to employees and learners employed recently in organization. To facilitate the works and reduction of confusion of employees as avoiding the time wasting and doing extra administrative stages.

d. The efforts to delegate non-main affairs of organization to qualified contractors to do the organization affairs better and this facilitates the presentation of services and reduces the delay in work and administrative procedures.

The results of fifth hypothesis and presenting the recommendations:

The fifth hypothesis of study is: Productivity of Pars Jonubi Special Economic/energy zone is improved after implementation of services outsourcing strategy in services quality dimension. To evaluate the productivity condition of Pars Jonubi Special Economic/energy zone after outsourcing, One-sample t-test is used. Based on the results of this statistical test as mentioned in details in fourth chapter and based on the results of Table 4-9 in fourth chapter, null hypothesis is supported and at confidence interval 95%, productivity of Pars Jonubi Special Economic/energy zone is not improved after outsourcing the services in services quality dimensions.

Table 5-5 shows services quality indices based on outsourcing effect priority on them. Based on this table, implementing outsourcing strategy has highest effect on services quality improvement index. Also, it has the least effect on continuous improvement in work processes in this aspect.

Table 5: Ranking services quality indices based on the impact on outsourcing.

<table>
<thead>
<tr>
<th>No.</th>
<th>services quality indices</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>services quality improvement</td>
<td>4.744</td>
</tr>
<tr>
<td>2</td>
<td>Quality of doing the affairs and duties</td>
<td>4.246</td>
</tr>
<tr>
<td>3</td>
<td>Reduction of errors and problems in works</td>
<td>4.205</td>
</tr>
<tr>
<td>4</td>
<td>Using innovative methods in works</td>
<td>4.198</td>
</tr>
<tr>
<td>5</td>
<td>Continuous improvement in work processes</td>
<td>4.162</td>
</tr>
</tbody>
</table>
**Recommendations of fifth hypothesis:**

a. Based on the identification of activities for outsourcing and prioritization of activities, to determine work capacity and correct determination of services or work assessment, using the experienced counselors’ services is necessary.

b. Production of goods and qualitative services in organization require integration in activities and work processes of organization and in industrial and manufacturing organizations, part of activities is delegated to contractor and it is suitable and we should be careful regarding the elimination of integration of organization activities.

c. Regulation of employees’ performance regarding the encountering of service with some mechanisms as reward, bonus, promotion and classification of organization in some sectors in terms of quality of service encountering based on the type of their perception can lead to customer-orientation via targeting the various sectors.

d. Achieving best quality requires as the organization besides considering varied market conditions considers some feedbacks in production lines as evaluating the products quality as in stages and avoids the production of low quality products and services.

**The results of sixth hypothesis and presenting the recommendations:**

The sixth hypothesis of study is: Productivity of Pars Jonubi Special Economic/energy zone is improved after implementation of services outsourcing strategy in customers satisfaction dimension. To evaluate the productivity condition of Pars Jonubi Special Economic/energy zone after outsourcing, One-sample t-test is used. Based on the results of this statistical test as mentioned in details in fourth chapter and based on the results of Table 4-9 in fourth chapter, null hypothesis is supported in customers’ satisfaction and at confidence interval 95%, productivity of Pars Jonubi Special Economic/energy zone is not improved after outsourcing the services in customers’ satisfaction dimension.

Table 5-6 shows customers satisfaction indices based on outsourcing effect priority on them. Based on this table, implementing outsourcing strategy has highest effect on service presentation quality to customers’ index. Also, it has the least effect on quantitative level of presenting services to customers in this aspect.

**Table 6: Ranking customers satisfaction indices based on the impact on outsourcing.**

<table>
<thead>
<tr>
<th>No.</th>
<th>customers satisfaction indices</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Qualitative level of presenting services to customers</td>
<td>3.303</td>
</tr>
<tr>
<td>2</td>
<td>Responsiveness</td>
<td>3.275</td>
</tr>
<tr>
<td>3</td>
<td>Customers satisfaction</td>
<td>3.238</td>
</tr>
<tr>
<td>4</td>
<td>Improving good behavior of employees with clients</td>
<td>3.238</td>
</tr>
<tr>
<td>5</td>
<td>Quantitative level of presenting services to customers</td>
<td>3.221</td>
</tr>
</tbody>
</table>

**Recommendations of sixth hypothesis:**

a. Special group composed of various members of presenting services to customers can have continuous supervision on services and evaluation of customer perception. Thus, organization flexibility is guaranteed in responding the customer’s needs and the suitable plans can be designed and performed.

b. In conditions in which the customer needs are changing continuously, the organization requiring outsourcing should search for flexibility to provide accepting responsibility as cheap and efficient. Here, there is a need to find smaller entrepreneur partners as they proceed with high quality in work processes in the tasks they accept.

c. Based on the type and effects (positive or negative), delegating the activities on human resources morale and motivation should be planned as the those working in these activities have no fear or defeat feeling and we should find the methods as participation of employees in work, reduction of human resources in a definite period and in case of re-purchase, attracting the satisfaction of these people or dispatching the employees to contractor firms can be suitable way of outsourcing. On the other hand, for those employees remaining in organization we can enrich the jobs and training them and all these factors lead to exact performance of work and high satisfaction of customers.

d. Using modern and flexible technologies as the products and services can be produced with customers’ needs.

As first and second hypotheses are supported, outsourcing the services is supported in terms of strategic management and human resources and the remaining four sub-hypotheses are rejected and the results of this study are observed in the following schematic view as comprehensive.

**Based on the above figure, we can say:**

At confidence interval 95%, productivity of Pars Jonubi Special Economic/energy zone is improved after outsourcing services at strategic management and human resources dimension.
At confidence interval 95%, productivity of *Pars Jonubi* Special Economic/energy zone is not improved after services outsourcing in terms of cost, speed of presenting services, quality of presenting services and customers’ satisfaction.

In the above figure, strategic management and human resources are supported in the study and are indicated by bright color and the dimensions including costs, services presentation speed, quality of presenting services and customers’ satisfaction have no good condition and are indicated by dark color.

**Fig. 5-7:** The final model of services outsourcing based on supporting and rejecting hypotheses.

**REFERENCES**


[8] Hashemi Qorbanloo, Mehdi, Designing decision making support system, DSS for outsourcing management. MA thesis of Tehran University.


