

## Journal of Industrial Strategic Management

### The Impact of Outsourcing the Government Agencies Activities on the Organizational Structure

Hossein Navidi <sup>\*a</sup>, Mehraban Hadi Paykani <sup>b</sup>

*a PhD student in public administration, Islamic Azad University, Isfahan, Iran.*

*b Assistant Professor, Department of Public Administration, Islamic Azad University, Isfahan, Iran.*

#### CHRONICLE

**Article history:**  
*Received: 19/02/2018*  
*Received in revised:*  
*05/03/2019*  
*Accepted:08/04/2019*

#### Keywords:

*\* outsourcing*  
*\* organizational structure*  
*\* government agencies*  
*\* Structural Equation Modeling*

#### Abstract

The current study aimed at investigating the effect of outsourcing the activities of government agencies on organizational structure. This is a Descriptive-survey research implemented by the field method. The statistical population of the study consisted of managers of governmental organizations of Isfahan provinces. The questionnaires were distributed based on simple random method among the members of the statistical sample. Descriptive statistical methods, factor analysis technique and structural equations were used to analyze the data. Findings revealed that the amount of path coefficient between activities outsourcing and organizational structure is 0.54; this number is 0.42 for outsourcing activities and formalization, 0.41 for activities outsourcing and concentration and also, 0.42 for outsourcing activities and complexity, which indicates the high impact of the variable on the related dependent variables. According to the survey's findings, in order to realize the activities outsourcing, the organizational structure should be designed commensurate with environmental changes and also, improving the managers' knowledge should be considered as an important factor in this regard.

© All rights reserved

\* Corresponding Author. Tel: 09376978542

Email address: Navidi2013@Gmail.com

## Introduction

Nowadays, because of the incredible growth of new science and technology, organizations cannot lonely take advantage of all new opportunities and technologies, nor can they alone acquire all the existent knowledge. For this reason, most organizations choose an outsourcing strategy to compete with other organizations and not to leave behind in the competition (Inanlo et al., 2017). As one of the business strategies, outsourcing is expanding in most of the organizations. Organizations have been forced to find ways to improve business performance and gain competitive advantage, by increasing competition. Hence, organizations constantly seek to enhance their performance in different ways. As one of the most important strategies for improving organizational performance, the phenomenon of outsourcing the business process causes the organization to assign its responsibilities and tasks such as HRM, financial and information services to the service provider (McLaure et al., 2009). The dynamic and complex environment, on the one hand, has made changes in organizational structure inevitable. New organizational forms are needed to strengthen the horizontal integration created in responding and adapting to environmental needs. Providing resources from outside the organization and horizontal communications is one of the most important common features of these structures. The views of organizations and companies have changed given the recent changes and improvements in the competitive environment. These changes are fast and no organization can do everything alone; because the high cost of investment required for R & D, product design, process transfer, and replacement of new tools does not allow companies and organizations with strong public mergers, to maintain their competitive ability.

Therefore, it is better that organizations and companies use outsourcing namely to provide resources from outside the organization (Soltani et al., 2013). Today's organizations put outsourcing in their portfolio of strategies as an attractive option and a means to achieve goals; because outsourcing has the benefits that make organizations welcome it in difficult circumstances and accept its challenges and costs (Soltani et al., 2013). It seems that the organizations that have put outsourced activities on their agenda, have less internal

complexity compared to organizations that carry out activities through internal departments; however, their relationship with outside the organization is more complex and extensive.

The present study seeks to investigate the effect of activities outsourcing on the organizational structure in state organizations of Isfahan province. It is expected that the present study can provide new insights related to improve organizational performance by investigating the impact of outsourcing components (in the present study, it include aspects of the organization's ability and the share of the process in competitive advantage) and the components of organizational structure (centralization, formalism, and complexity).

## Problem Statement

Outsourcing was formerly used by organizations with poor performance in competition and production levels, as well as organizations with financial problems lacking advanced technology. Today, successful organizations also use this tool for organizational restructuring, and managers of these organizations realize that creating key capabilities is necessary to meet customer needs and we have to work in this regard. The use of outsourcing strategy for a particular process involves examining issues such as the relative ability to carry out the process, the degree to which the process is competitive and the opportunism potential of the process through outsourcing.

Outsourcing is a common view of organizations as a means of reducing costs; however, the more important advantage of outsourcing is to improve the quality of activities and products, and the greater effectiveness of the organization's employees. Outsourcing of all non-core activities of the organization will lead to a reduction in the organization's top management work activities, thus increasing the focus on management competitive advantage.

In recent years in Iran, executives have also witnessed the continuous emergence of management tools. Over the past two decades, successive initiatives such as ISO 9000, productivity improvement systems, organizational excellence models, administrative transformation programs, service compensation systems, process

reengineering, outsourcing, strategic planning, etc. have entered the organization's agenda (Akbari and Nikzad, 2011). Organizations nowadays consider outsourcing as an operational necessity, and they plan many services to be outsourced. Inefficiencies have caused weaknesses in the country's administrative system; meanwhile modern government and dynamic economics seek to compensate for such weaknesses. The work of state-owned companies and the tendency to remove the layers of the state system and move towards a reduction of ownership and privatization to increase government productivity are among these actions.

The privatization and assignment of the enterprise affairs to the private sector has been on the agenda of the country's authorities in the past decade. Considering the major public policy goals and policies and the developments facing the organizations (privatization and downsizing the public sector, the Civil Service Law, Article 44 of the Constitution, the 20-year vision of the 1404 of Islamic Republic of Iran, the fifth development plan and globalization), outsourcing processes, organization activities, and changes in this direction are in line with long-term policies, strategies, and goals of the organization. Governments are required to put in place policies to implement fundamental changes in the organizations of the public sector that are considering radical or corrective changes, or both, in organizations. These policies are labeled titles such as minimization, privatization, government reengineering and outsourcing which in turn represents a kind of change.

Organizational structure is considered as one of the important components that determines the efficiency of each organization. Using the correct organizational structure will improve the organization's performance. In the today's changing environment, managers must continually adapt their organizational structure to the environment and make the necessary adjustments. Understanding the core process and organizational structure helps to understand the larger working environment and can also prevent disturbances in the organization (Nelson & Campbell, 2008). The present research aims to investigate the impact

of outsourcing activities on the organizational structure of government agencies.

### Outsourcing

There has been a dramatic increase in the field of outsourcing in some US, European and the other countries. Other firms' experience has shown that outsourcing is a necessary action to be implemented under the current economic conditions and competitive advantage. However, the primary and traditional impression is that almost all activities can be assigned; however, any action should not be outsourced because core capabilities and activities are the secret of the organization's success and should not be outsourced. Instead, we should conduct operational feasibility studied, as well as benchmarking in order to identify executive barriers and resolve them, ad also, it is determined that what activities and when, should be outsourced and assigned (Jamali et al, 2013). Although there is not much history for the use of the word outsourcing in the field of manufacturing and the industry, it is not a new issue and has been used extensively. It seems that the transfer of tax collection activities to contractors at the time of the Romans was the first form of outsourcing. In the eighteenth and nineteenth centuries in the United Kingdom, the operation of street lights, the management of prisons and the collection of taxes for activities had been entrusted to contractors. Almost at the same time, the delivery of mail in the United States and Australia and the construction and management of railway lines and the distribution of water resources in France were among the activities that were outsourced. Therefore, it can be concluded that before and during the industrial revolution, the types of outsourcing have been implemented. The outsourcing word was first introduced in 1989 to describe Kodak's decision to assign its IT activities to one of IBM's subsidiaries as a trading strategy. But before that, many companies did not do their entire business and delegate less-competitive activities to external contractors. The idea of outsourcing was actually appeared for the first time in Adam Smith's book, entitled "The Wealth of Nations", published in 1776. In his famous statement, Adam Smith says that "this is a correct term that a wise master never tries to

build something at home that can cost him more than buying it (Vakili, 2007).

About outsourcing and its effects, Peter Drucker says: "This is actually a fundamental change in the structure of tomorrow's world organizations." This means that to become organizations with a large number of people to hire is no longer necessary for large organizations. Such organizations achieve high returns and high productivity because they focus only on the activities they have been assigned to; they do things that are exactly related to their organizational goals; they know some works well and know its details. The rest of the service activities of such organizations are delegated to external institutions. With the introduction of wise employee theory in 1956, Peter Drucker emphasized that raising awareness and knowledge of employees and individuals lead to organizational changes and working relationships. He in fact knows outsourcing as a clear example of how relations between organizations are changing (Rahanande Pournalgroudi, Rafie, 2013).

In today's organizations, outsourcing quickly finds its main place and would be utilized. From the study of theoretical foundations for outsourcing, it can be concluded that there is no unique definition of outsourcing. Experts have mentioned different definitions for outsourcing. Taiwa (2012) For example, defined outsourcing as the process of assigning operations or jobs to a third party that can do it better. Chadri (2014) considers outsourcing as provision of products and services from sources outside the organization. According to Khalili et al. (2014), outsourcing is defined as the allocation of internal recurring activities as well as the decision-making power to external contractors in the form of a contract. Outsourcing is referred to delegation of specific tasks to other organizations in a specified period of time, with specific costs and service levels (Rashid, 2012, Baltzan, 2014).

In today's world, outsourcing is considered as one of the most important tools for organizational development, creating competitive advantage and increasing productivity. Given the limited resources available to each organization, both in the public as well as private sector, processes outsourcing can be a way to increase efficiency and activity in a wider range for the organizations. Meanwhile, the organization

sometimes has to outsource some or all of its process (Lajevardi et al., 2010). In this research, this variable is measured by the McLauour outsourcing matrix (2008) including the ability of the organization (company) and the share of the process in the competitive advantage:

(A) The ability of companies and organizations: some organizations perform organizational processes in a way that is different from those of the similar organizations, which creates a competitive advantage in that process. In such a situation, we are able to perform processes. Therefore, organizations achieve sustainability in such processes, which is difficult for competitors to access this position at a specified time and cost. The organization must be aware of the processes being carried out by other organizations in order to be able to properly decide on the processes outsourcing (McLauour, 2008).

B) The process contributions in a competitive advantage: This is a very important issue in outsourcing. Processes that are critical to the organization's competitive advantage and the organization have specific capabilities in doing them, should stay within the organization and give them strategic attention to keep these positions. Such processes have a significant impact on the organization's ability to achieve competitive advantage by reducing the organization's costs or creating a distinct service or product (McLaure, 2008).

### **Organizational Structure**

The next variable that is considered in this research is the organizational structure. An organizational structure is a framework for managers to divide and coordinate the activities of its organizational members. The organizational structure refers to the overall organization scheme; a graph showing how different parts of the organization communicate with each other. It also shows the structure of the organization, how the tasks are scheduled by individuals, and how these tasks are grouped and linked to each other. A series of change-making programs used in organizational change are structural transformation technology programs that help organization leaders to study the organizational structure and technology to

improve its performance. The traditional methods of work and organization structure are incomplete with disadvantages such as waste of resources, efficiency, lack of flexibility, and high costs.

The main structural dimensions that play an important role in creating an organizational structure and effective organization management are the three elements of complexity, formalization, and centralization. The complexity is related to the number of job titles (job dispersion within the organization), the number of hierarchies and levels of management, the degree of education and the degree of geographic dispersion of the organizational units of each other (Grasio and Darzin, 2007; 418).

Horizontal, vertical, and geographical separations are three important elements in defining complexity. Horizontal separation implies the degree of separation between units based on individuals, what they do, education and training. Complexity increases and communication and coordination become difficult when the organization needs a lot of knowledge and skills. Vertical separation refers to the depth or height of an organization's structure. Increasing separations will increase the number of hierarchy levels, the gap between top and operational management, as well as the slowness and difficulty of communication and coordination. The purpose of the geographical separation is to disperse the departments and staff of the organization in geographical areas. Geographic resolution also increases the horizontal and vertical segregation (Robbins, 2011).

The responsibility of managers in ensuring of conducting the scattered and segregated activities within the organization in a consistent and coordinated manner to achieve goals increases with the increasing complexity and it requires a considerable amount of attention to issues of communication, coordination and control. The dimension of formalism is the extent to which an organization relies on rules, regulations, and procedures to direct the behavior of its employees (Robbins, 2011; 23). The degree of formalization of the organization can be determined by observing the occupations that are being carried out under specific rules and

regulations and the degree of freedom to act in violation of these regulations and guidelines. The more formal the organization is, the more elasticity of its jobs and the lower the freedom to disregard the regulations (Morhed and Griffin, 2005; 351).

The third indicator of organizational structure is concentration. Most theorists agree that concentration refers to the amount to which a decision (financial, human resources, program, and exceptional organizational cases) are concentrated on a point. In addition, it affects decision-making activities (Cheld, 2008; 28).

In a comprehensive and complete definition, Robbins (2011) defines the concentration as follows: "The extent to which individuals, units, or organizational levels have formal authority to choose their decision-making procedures, and thus, employees have at least voting power". The degree of concentration is defined by the number of members in the organization and the type and extent of their participation in the strategy decisions. Some of the decision-making sub-groups that can form a centralized area include designing programs, allocating facilities, attracting resources, awarding bonuses, hiring and firing, performance evaluation, promotion, adjusting and allocating funds, accessing information and control over processes (Mir et al, 2010; 838). Three components of complexity, formalization, and concentration are related together. Evidence suggests an inverse relationship between concentration and complexity. When the structure of organizations is examined, usually high complexity is along with lack of concentration (Robbins, 2011).

In their study entitled "the effectiveness of outsourcing projects of the Islamic Azad University as a cultural institution", Hosseini Gol Afshani and Rahimi (2011), concluded that outsourcing causes the speed of work, better control of activities, increased service quality, the release of capital, lowering manpower, and saving time of university administrators. Jafar Abadi (2007) also explored the decision making model for outsourcing for the development of productivity and, consequently, profitability, and explains how to make a decision-making process for outsourcing that leads to

profitability with productivity growth. His research shows that identifying organizational strategic and non-strategic axes for outsourcing and selecting the right supplier or suppliers is considered as key factors to outsourcing (Madhoushi et al., 2012). Cruz and Ghoush (2010) examined the proportion between outsourcing and intensity of competition and the impact of outsourcing on the supply chain and performance of the company. They stated that there was a significant positive correlation between the intensity of competition and the amount of outsourcing activities; in other words, outsourcing increases with increasing the intensity of competition. In addition, outsourcing has improved the supply chain and the company's performance. The results of Soltani et al. (2013) showed that outsourcing of activities has an impact on the effectiveness of organizational dimensions and productivity. Bastinza et al. (2010) examined the relationship between outsourcing and competitive capabilities and performance in service firms. The results of this study indicated that there is a positive correlation between outsourcing and the intensity of the competition, that is, increasing the intensity of competition has led to an increase in outsourcing. There is also a positive and significant relationship between outsourcing and company performance. Lesiti et al. (2009), reviewing 191 articles on IT outsourcing, suggest that cost cutting was the most important reason for managers to outsource IT activities. In addition, focusing on core activities of the organization, access to experts, improving business performance, increasing the flexibility of information systems, using day-to-day technology, increasing competitive-responsiveness, rapid evolution, access to day-to-day innovations, and political issues, and economic reasons are among the reasons for outsourcing. According to the results of the Bello et al. (2008), the effective factors in a successful outsourcing process can be seen in the existence of a two-way relationship based on the partnership between the receiver and assignor organization so that a win-win relationship can be established among them. Participation along with development research will provide access to new scientific resources, continuous scientific innovation, knowledge creation, and lower costs for the organization. Luo and Zang (2006) have

examined the outsourcing in China and its effects on productivity criteria, with outlining outsourcing shortcomings in China. Their research shows that the environmental factors such as development of information technology and the ability of suppliers can affect the outsourcing of organizations in China.

### Research Method

The present study is an applied research in terms of the purpose and a descriptive-survey in terms of the method of collecting data. The research population consists of managers of state organizations in Isfahan province, including 97 people. The sample size is estimated to be 79 with the help of the Cochran formula. The questionnaires were distributed randomly among the members of the sample. Accordingly, a total of 79 questionnaires distributed among the statistical population, among them 71 questionnaires were returned. In the research field method, data is collected through a questionnaire to confirm or reject the research hypotheses. The data gathering tool consists of two questionnaires: 1) the standard of activity outsourcing questionnaire (Rahnavard, 2008) which was adapted to McLauour outsourcing matrix (2008) in which, Questions 1-11 are related to the organization's ability component and Questions 12-22 are related to the component of the competitiveness process. 2) Robbins Organizational Structure Standard Questionnaire. Based on the questionnaire questions, managers of government agencies are asked to determine descriptive terms to the extent that they apply in their organization, over a 5-point Likert scale (very high = 5, high = 4, somewhat = 3, low = 2 and very low = 1). In order to determine the validity of the questionnaire for the mentioned society, the questionnaires were provided to several management professors. The validity of the questionnaires was confirmed and Cronbach's alpha coefficient was used to determine the reliability of the questionnaires. The reliability of the questionnaires was estimated to be .83 and .79, respectively.

Before factor analysis, the Kaiser-Meyer-Olkin (KMO) and the Bartlett Test of Sphericity were used. The KMO coefficient was obtained .89, which is a good indication of the correlation between the items. Bartlett's



test was also reported statistically significant ( $X^2 = 1346.75$ , Sig; 0.000). Therefore, the use of factor analysis is possible due to the appropriate values calculated.

**Structural Equation Modeling**

The relevant indicators were used in order to presents the degree of model fit. The non-fit index are  $\chi^2/df$  and RMSEA that the less they are, the better the fit. The limit of the root mean square error of the model (REMSA)

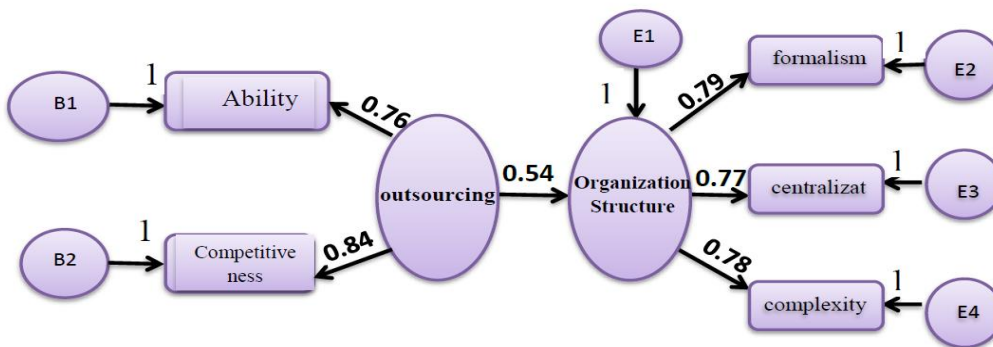
is .08 and the limit allowed of  $\chi^2/df$  is 3. In order to examine the fit of the model, fitness and not-fitness indicators should be considered together. The Chi square index is 2.67, for the structural equation model whose ratio to the degrees of freedom is less than 3, and the root mean square error of the estimation is less than .08 and acceptable. Meanwhile, the fitting indices of the hypothesis path analysis model also represent the acceptable fit of the model:

**Table 1: Fitness Indices of Research Structural Equation Model**

Benchmark (Fit Index)	Accepted Range	Achieved Score
Chi-2 to degree of freedom ratio $\chi^2/df$	3>	2.67
Root mean square error (RMSA)	<0.08	0.076
Modified Fit Index (MFI)	>0.9	0.91
Adaptive Fit Index (AFI)	>0.9	0.94
Incremental fit index (IFI)	>0.9	0.95
Goodness of fit index (GFI)	>0.9	0.94
Non-Normed Fit Index	>0.9	0.92

The value of the indicators in the table above and their acceptable limit, indicates the fit of the model for the variables or data collected.

Therefore, the research model has the necessary fit and its generality is confirmed.



**Figure 1: Research Structural Equation Model with Standard Values**

Figure 1 shows the structural equations model in the standard estimation mode. The values of the standardized path coefficients indicate the effect of each variable on the other, and the values of the statistical test of significance greater than 1.96 or less than -1.96 indicate the significance of the direct positive effect and the direct negative effect, respectively.

Based on the software output, the outsourcing activity variable affects the organizational structure of the studied sample with a coefficient of .55. Therefore, the

research hypothesis based on the impact of outsourcing of government agencies' activities on the structure of the organization is confirmed. Regarding the regression weight of activities outsourcing and factor loadings of meaningful components, the impact of outsourcing on each component of the organization's structure can be calculated as follows:

**Table 2: The Impact of Outsourcing on Each Component of the Organization's Structure**

Row	Path	Regression Coefficient
1	The Impact of outsourcing on formalism by mediating role of the organization's structure	0.42
2	The Impact of outsourcing on concentration by mediating role of the organization's structure	0.41
3	The Impact of outsourcing on complexity by mediating role of the organizational	0.421

## Conclusion

Investigating the impact of outsourcing of government agencies activities on organizational structure in government departments of Isfahan, as the main objective of the research, was realized in the form of structural equations model with standardized regression weight of .54. Therefore, the research hypothesis was confirmed. Also, the amount of path coefficient between outsourcing and formalization with the mediating role of organizational structure, outsourcing and concentration with the mediating role of organizational structure, and outsourcing and complexity with the mediating role of organizational structure are 0.42, 0.41, 0.421, respectively which indicates the high impact of the independent variable on related dependent variables and this means that managers must be concerned about damage or harm to structural foundations when outsourcing. For example, outsourcing improves employee relationships and balances these ratios. On the other hand, outsourcing transfers part of the organizational tasks out of the organization and the number of employees is reduced. Outsourcing is not directly related to the effectiveness of organizational structure and productivity according to previous research or such research has not been conducted yet. Therefore, it is not possible to completely compare the results of the current study with similar researches.

It seems that, given the speed of outsourcing in different countries and its relative benefits, there is a platform for its rational use and development in the country, governmental and nongovernmental organizations. It's worth noting that outsourcing alone is not a successful strategy or program, and there are some backgrounds and implications that, without paying attention, observing and

anticipating them, the possibility to realize outsourcing is lowered or it faces serious challenges. Based on the outsourcing research and results, you can reach the outcomes and expectations of Article 44 of the Constitution and the Comprehensive National Services Management Act, which means that, provided that outsourcing is fully investigated and different organizations, depending on various issues, including the structure of their organization, decide to follow a specific pattern or outsourcing model, and correctly identify the activity to be outsourced and solve the problems, outsourcing can have effective results.

## References

1. Akbari, H, Nikzad, S (2010), "Applied Management Tools in Iranian Organizations", *Tadbir Monthly*, 217, 24-28
2. Baltzan, P. (2014). *Business Driven Information Systems*. McGraw-Hill/Irwin.
3. Bustinza, O.F., Arias-Aranda, D, & Gutierrez-Gutierrez, L, (2010). «Outsourcing, competitive capabilities and performance: an empirical study in service firms», *Intl. J. Production Economics*, VOL.126, PP.276–288.
4. Child, J. (2008). Organization structure, environment, and performance: the role of strategic choice. *Sociology*, 6: 1-22.
5. Choudhry, A, Z. (2014). Application Outsourcing Governance Model. *Master's Thesis in information*, Linnaeus University.
6. Elmuti, Dean, (2003) "The Perceived Impact of Outsourcing on Organizational Performance", *American Journal of Business*, Vol. 18 Iss: 2, pp.33 – 42.
7. Fritsch, Marku & Wullenweber, Kim. (2006) The Impact Of Business Process Outsourcing On Firm Performance and The Influence Of Governance, A Long Term Study In The German Banking Industry,



- ARTICLE in SSRN ELECTRONIC JOURNAL.
8. Hosseini Gol Afshani, A., Rahimi, A. (2011), "the Effectiveness of Outsourcing Plans of Islamic Azad University as a Cultural Institution (Case Study: Islamic Azad University, Tehran South Branch)", *Journal of Cultural Management*, Volume 15 (11), p. 34- 43
  9. Inanlou, H, Shafaqat, M, Goldost, M., (2017), "Outsourcing of the organization's activities and the optimal use of organizations from it", National Conference on Engineering Science, Knowledge Development Farzanegan Co.
  10. Jamali, A., Seifollahi, A., Mansouri Kia, M. (2013), Outsourcing feasibility study at the General Office of Renovation, Development and Equipment of Lorestan Schools using the TELOS Technique, Second National Conference on Accounting, Financial Management and Investment, Gorgan, Academic and Professional Association of Golestan Directors and Accountants.
  11. Kroes, J.R, & Ghosh, S, (2010). «Outsourcing congruence with competitive priorities: Impact on supply chain and firm performance», *Intl. J. Operations Management*, VOL.28, PP.124–143.
  12. Khalili, k. Azizzadeh, F and Adhami, A. (2014). Investigating the relationship between outsourcing and performance based on Balanced Score Card (Case study: Ilam Post Office), *Journal of Data Envelopment Analysis and Decision Science*, 1-11
  13. Lacity, M. C., Khan Shaji, A., & Willcocks, L. P. (2009), « A review of the IT outsourcing literature: Insights for practice», *Journal of Strategic Information Systems*, 18(3), 130–146.
  14. Lajevardi, J. and Boulahari, A. (2010), "A Model for Identifying Outsourcing Candidate Processes in Organizations Based on Balanced Scorecard Approach and Outsourcing Strategies Matrix", *Journal of Public Administration*, Faculty of Management, University of Tehran, Volume 2, Issue 5, pp. 143- 158.
  15. Lau, Kwok Hung & Zhang, Jianmei (2006), Drivers and Obstacles of Outsourcing Practices in China, *International Journal of Physical Distribution & Logistics Management*, Vol. 36 Iss: 10, pp.776 - 792.
  16. McIvor R (2008). What is the right outsourcing strategy for your process?, *European Management Journal* 20, 24– 34.
  17. McIvor R., Humphreys P. K., Wall A.P., Mckittrick A.( 2009); A study of performance measurement in the outsourcing decision ; Science Direct e-book, CIMA Publishin.
  18. Meng, H. (2005). A decision Framework for Product Global outsourcing in small and medium-sized companies, *MS Dissertation*, University of Windsor(Canada).
  19. Mihm, J. L.; Christoph, H.; Wilkinson, D. & Huberman, B. A. (2010). Hierarchical structure and search in complex organizations. *Management Science*, 56: 831-848.
  20. Nelson, D. L. & Campbell, Q. J. (2008). *Organization Behavior*. 5<sup>th</sup> ed. Thomson: South Western.
  21. Peter & Jha,S. & Awazu Y.(2008)« Building strategic partnerships for managing innovation outsourcing», *International Journal of Strategic outsourcing*,Vol.1,No.2 p:100-121.
  22. Porkiani, M, Mirkamali, K, Shafiee, Z (2011), "The Effect of Outsourcing Implementation on the Performance of Employees of the National Iranian Gas Company", *Quarterly Journal of Resalat-e-Modiriati Dolati*, Second Year, No. 3.
  23. Rahanande Poulangeroudi, R (2011), Outsourcing Strategy, Faculty of Management and Accounting, Allameh Tabatabaei University
  24. Rashid, A. (2012). Offshore outsourcing of IT services as new service development. *Journal of Organizational Change Management*, 25(3), 445 – 461.
  25. Robbins, A, P (2011) *Organizational Theory (Organizational Structure and Design)*, Translation by Mehdi Alwani, Hassan Danaeefard, Tehran: Saffar Publication.
  26. Soltani,Iraj. Esmaeely,Ayaz (2013), A Survey on Impact of Outsourcing on Effectiveness of Structural Dimensions of Organization and Productivity, (A Case Study of Esfahan Mobarakeh Steel Company),*International Journal of Academic Research in Business and Social Sciences*, Vol. 3, No. 12.
  27. Tjader, Y., May, J.H., Shang, J., Vargas, L.G., & Gao. N. (2014). Firm-level outsourcing decision making: A Balanced Scorecard-Based Analytic Network Process Model. *Journal of Production Economics*, 147, 614-623.
  28. Tayauova, G. (2012). Advantages and disadvantages of outsourcing: analysis of outsourcing practices of Kazakhstan banks.

*Social and Behavioral Sciences*, 41, 188-197.