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# Outsourcing to the private sector in terms of productivity IRIB South Khorasan with a focus on Agile Manufacturing

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## Abstract

Organizations are always solutions and new strategies to develop and increase their competitive advantage they seek. Outsourcing (Outsourcing) is one of the strategies to reduce and control operating costs leveraging the expertise of specialists from outside the organization, the organization's focus on core competencies, improve the quality of goods and services, organizational agility, productivity, etc. More competition leads. This study is a descriptive survey research was conducted. The population of the research staff of Broadcasting in South Khorasan province, which has been randomly selected. The results associated with the outsourcing of organizational agility and efficiency not proven.

**Keywords:** Outsourcing - efficiency - effectiveness – productivity- IRIB

## Introduction:

The increasing speed of technological change, on the one hand, and the nature of customer demand and intensifying competition between organizations, on the other hand, has led the organization strongly seeking new competitive advantages superior to the competition and better meet customer needs be . In this case, it seems to move toward organizations that speed and flexibility in response to changing environments, unstable and unpredictable new solution are critical. To achieve these goals thanks to a new concept called " organizational agility " is obtained. In the complex world of enterprise, factors and elements of clear organization and doing something about it served . What is problematic for industry organizations invisible factors that affect the productivity of the organization . If managers and practitioners to remedy to the throat and on the go, the result can be achieved. Many times we hear it all

the way and place: the raw material is not enough , technology is good, but do not pre- determined schedule . At such times we must ask themselves whether the combination of the factors mentioned is good? Are there problems ? The organization can bring everything under the rule of law and uniform mechanical, because human creativity is power over all organizational factors and influences, in particular organizational efficiency Making outsourcing or internal security activity is one of the most complex organizational decisions is . Decision, as the first part of the process of outsourcing , it is necessary to identify all the factors involved . Outsourcing benefits and barriers on the one hand and on the other hand comprehensive and accurate study of the decision is inevitable.

## Theoretical basis of research:

It is a new paradigm for competitive agility Engineering firms ( material and Sarkis, 1999) . The need for this new paradigm , based on the increasing rate of change in the institutions to respond to action (PROACTIVE) to change. markets and consumers want cheap products , tailored to their individual preferences, and access to it ( and Najl Goldman , 1993).

Dynamic agility, embrace the receiver changes, aggressive and Rshdgrast. Agility followed by successes in profits , market share, and to gain customers in competitive markets where many companies because these markets are entering the centers Turbulent markets are fearful Agility is not supposed to end , and there is no point in a company or a person traveling to agility is completed .Agility permanently staff performance and the value of products and services, and a permanent change in the opportunities of attracting customer attention and requires a constant readiness to face a surface and the fundamental changes learn anything companies always the new increase in profitability from taking advantage of new opportunities, you are ready. Given the share transfer to agility profitable markets with products and services tailored to the needs of our customers fully moderated and shape is determined . Viability of these products based on marketing strategy and pricing , which is based on the value received from the customer .Therefore, successful agile competitors , not only markets , product lines , competencies and our existing customers know very well , but should also recognize potential future customers and markets . This recognition to the strategic plans for to get new efficiencies , new product lines , and capture new markets leads. Competitive agility competition implications related to areas within a company specifically act. Agile companies aggressively encounter with change . Change and uncertainty of resource recovery opportunities for nimble competitors successful methods is permanent. So, to deal with the changes without history, agility relies on innovation, skills, human knowledge , and access to information. An agile organization with administrative procedures and an organizational structure that is able to quickly and smoothly transfer the client's business initiatives and create opportunities for profit and growth as an aggressive. Agile competitors accelerate change and create new markets and clients outside of their understanding of the way in which markets and customer needs appear .Although the company's agility allows react much faster , but the strength of agile competitors to predict the operation needs of customers and leadership in creating new markets through innovation is permanent. Agility is a comprehensive response to the new competitive environment by reducing the forces that dominate the mass production system have been formed (Goldman et al. , 1995; Ganskaran 28 , 2011). Agility is the ability to successfully manufacture and sell a wide range of products with low cost , high quality, short delay times

, and notes that a variety of categories based on the requirements of mass production for multiple customers and customer specified by the value ( Live and Wong , 205 , 2001).As Olson said , the ability to respond effectively to a rapidly changing and unexpected events , and according to " The Kid " and " Dow " includes two basic concepts ( Sharifi and Zhang , 2000). Response to changes ( expected and unexpected ) and appropriate methods at the right time ; The operation of the business benefits of change and change as opportunities. Agility is indeed a fundamental capabilities requires that changes in the business environment of the company , to feel , to receive, consider , analyze and predict . Manufacturer agile organization that is making a broad perspective on the business world and the new world order with few skills and capabilities to deal with the turmoil deals and updates to take advantage of it. argues that Agility is the ability of a firm to survive and thrive in a competitive environment where change is constant and unpredictable and rapid response to fast-changing markets due to customer value on the products and services (Richards, 1996) And where other means capable of reshaping operations, processes, and business relationships effectively, while at the same time successfully operates in an environment of constant change. Business agility is a large potential organizational structures, information systems, operations support, and especially the collection of thoughts, etc. (Hormozi, 2001).

The literal definition of the word translated term productivity Latin word (PRODUCTIVITY) Fertility and profitability and potential means of production. The first time this term in the article (QUESNAY) in 1766, was used in about 240 years ago, and 70 years later, in 1833 AD, a man named liter (LITTRE) productivity, defined as output power. In other words, the efficiency of power production, fertility and productive being. Application Definition: In the early twentieth century was a more appropriate definition of the word:

Efficiency is the ratio of output to one of the factors of production. Early in 1900, a person called the relationship between efficiency and productivity as the means used for production efficiency. 1950 Organization for Economic Cooperation OEEC European or fuller definition of productivity is presented as follows:

Productivity quotient returns to one of the factors of production. Thus it is the productivity of capital, productivity, investment, productivity, raw materials, depending on the return on capital investment and raw materials, and so named for its consideration. changes in the level of resources used to create the product. Always the ratio between output and input efficiency. efficiency ratio of tangible to intangible factors Productivity Agency

Productivity is defined as:

1. Productivity of the effective use of each of the factors of production.
2. Productivity is primarily an intellectual point of view is always trying to improve what already exists.

Productivity is based on the idea that people can work and tasks every day better and better results by getting more done in the day. Productivity word translation of the word Productivity means productivity, fertility and being productive. The root of this word is the verb Produire in French or in English Produce is productivity. Unfortunately, words that seem deceptively simple, is often misunderstood. In this context suggests that productivity is an issue that is intertwined with uncertain. The accepted definition of consensus, for which there is no (Stephen, 2002). Some important definitions of productivity are (Taheri, 2005), the overall efficiency of the ratio of tangible outputs (efficiency) to tangible inputs, the productivity of America (1981), productivity is with the adjustment of profits, and Lewis Cass (1993), Productivity is defined as the quality or how to fruition, production or mass production, etc. to create

impressive results. Productivity is one of the main topics at various levels and in various activities, drive a few hundred years. Especially in the final decades of the century, its importance to economic activity, social and industrial severely stressed .

Lack of sufficient awareness of the current situation and the neglect of priorities can reverse effects on the productivity created. Therefore, before any action on increased productivity, sufficient awareness of the current situation and prioritize the correct guidelines is emphasized (Asadi, 2008).

In today's competitive world, as a philosophy-based productivity improvement strategies, The main goal of any organizational forms, and can function as a chain of all sectors of the population (Taheri, 1999). The main goal of each mission management and optimal organization and effective use of resources such as labor, capital, materials, energy and information is (Vaziri, 2010).

In all countries this has led to better productivity and correct use production factors (including goods and services) to become a national priority and all communities to believe that the life of any society, regardless of subject interest productivity is not possible.

Our country is no exception to this rule and considering the issue of productivity in its development is an important role. In this regard, the growth of labor productivity in the Fourth Development Plan is about 3.5% respectively, in order to achieve that, it is necessary to identify appropriate solutions. Since the factors of production, in contrast to the human resources, organizational resources as invaluable intelligence and coordinating other known factors (Khalilian, 2008). As well as the main lever to increase and decrease plant efficiency so that the special status and special attention should be paid to it. Obviously to me, more important role in service organizations is because of the work and the field of services is the sole driver. However, if the person is motivated and capable and productive resources can be used efficiently and optimally and fulfill a variety of productivity .Finally, the organization's productivity and otherwise stagnation and backwardness of human resources is a passive and unmotivated. The issue of productivity and improvement in the health sector due to its unique properties, which includes severe limitations of resources, the need for all people to health services, lack of economic thinking and human thought service, expensive equipment and will increase the importance of this (Soltani, 2005).

But how labor productivity, or increase his productivity?

A question that the answer to the institutions and organizations to fit their mission and needs of different employees. Although these requirements and factors are similar but it sure is not the same intensity and priority of their impact on employee productivity. In general, it should be acknowledged that the activities of any organization affected by a series of factors that can help identify and assess the factors affecting the activities organizational goals. Regarding the fact that productivity is a function of many different factors, the factors affecting mission, activities, operations and other factors vary from organization to organization As well as the importance and impact of these factors on the productivity of different organizations are not the same, so it is not possible for organizations in all fields and aspects influencing enter. Essentially, it is necessary to achieve the highest productivity at the scientific criteria for the identification and prioritization of these factors are important, then, to improve productivity, operational programs and projects need to be developed. Goodwin believes that the most important asset of a company is its human resources, therefore they are considered a major factor in motivating forces for the success of the organization. The effect of individual factors in the improvement of labor productivity achieved in previous studies. As a result, the second person of the same factors affecting the productivity

of labor was introduced. Colors in your model such as physical and mental health, demographic characteristics, history and experience and the spirit of competitiveness among the individual knows that the effective utilization of human resources ( Alvani et al., 2002). Factors affecting the efficiency of external and internal divide into two categories: External factors Including: (1) cultural factors, (2) and (3) socio-economic factors. Internal factors: Including: 1.space, 2.salary, 3.leadership, 4 and 5. The procedure manpower (Keikha, 1999).

Although the use of the word outsourcing in the field of manufacturing history, but it is not new and has been used frequently Moore. Looks transfer tax collection contractors operate in Roman times was the first form of outsourcing.

In the eighteenth and nineteenth century British street lights maintenance operations, prison administration and tax collection activities have been assigned to contractors. At about this time in America and Australia, postal delivery and distribution in France Railway Construction and management of water resources is outsourcing.

Therefore it can be concluded before and during the Industrial Revolution, a variety of outsourcing is executed (Mortazavi, 2005). Although the word outsourcing for the first time in 1989, to explain the company's decision to transfer Kodak IT activities to a subsidiary company IBM as a business strategy was used (Lance Dunn, 2000).

In today's competitive world, organizations of all sizes one or two activities that you enjoy the feature in trade And thereby creating value for our customers than competitors for its own reserves and the rest from other businesses that do not feature activities, and outsourcing by buying services they do (Alvani and Afsharzadeh 2002 ). In such a structure, compiled a set of businesses, each with their key known as a win-win relationship together and placed in a network of activities and, ultimately, consumers (and not all groups interest), the synergies that are created these networks interact with each other, the more they benefit (Bahrami, 2009).

In many cases, companies and government agencies on the impact of outsourcing human resources, processes, methods and tools in a word structures and their behavior, as they do not consider the action to outsource their activities (boubou et 2008). As they do not consider their actions to outsource their activities (boubou et al., 2008). The outsourcing without analyzing the above-mentioned issues, operational risk project outsourcing increases and in some cases may become a major disaster To avoid side effects and problems that have arisen even need to go back to the past and a way to compensate for the losses incurred and the cost of many companies impose . An important factor in a successful outsourcing can include:

relationship based on partnership between the recipient and outsourcing so that a win-win relationship is created between them. R & D partnerships with leading access to new scientific resources, continuous scientific innovation, knowledge creation and reducing internal costs will be (boubou et al., 2008).

Ensure compliance with professional ethics and maintain information security and IT outsourcing is essential is assigned to the received (Blkvrt, 2006). organizational culture outsourcing outsourcing organization so that acceptance amongst staff and staff in place and the organization's own interests and in this regard the cooperation necessary for the implementation of outsourcing they do.

Learn the success of outsourcing , political relations and friendly cooperation between the two countries is essential ( Bertrand et al., 2003).

The prevailing view outsourcing as a means for organizations to reduce costs , but important advantage of outsourcing , improve the quality of activities and products and is more effective organization
Outsourcing all non- core activities leads to reduced work activities of the senior management and competitive advantage by focusing on increasing management ( Drucker , 2002)
HR activities your organization to reduce costs , reduce the volume of activities and the elimination of bureaucracy and administrative regulations are complex and time-consuming outsourcing . But the problem of outsourcing HR activities lose control of the organization's most important asset . The organization must evaluate the advantages and disadvantages of outsourcing human resources make a choice Although outsourcing in the short -term to long-term unemployment employees of creativity, technological advances and the development of a skilled and trained workforce will lead to the emergence of new industries and products. The advantages of outsourcing can include:
Increase the effectiveness of focusing on core activities that the organization has the expertise to do it. Improve customer service Improved risk management through partner with one another in an uncertain business environment .Reduce and control operating costs due to the acquisition of suppliers with better performance and lower cost .Manage tasks difficult or uncontrollable. Benefit from the expertise and manpower of the suppliers ( Alvani and Afshar -Zadeh , 2002).

## Research Background

Agility as a production philosophy (next generation production systems) to companies that compete in all sectors of the economy, welcomed as "Joseph" in agility only 92 represented by integration into a customer's hierarchy of needs within the internal and external environment of the organization is. This is because they have a holistic view of an organization with advanced manufacturing technology and processing capabilities through the use of their domestic technology / information systems is achieved (Hooper et al., 2001). Goldman also defines it as follows: Comprehensive strategic response to major changes and is impossible to ignore the ruling of the competitive system (main) trade in the world economy occurs (Sharpe et al., 1999), and finally Joseph and his colleagues have defined it as follows: Find succeed in a competitive basis (speed, flexibility, creativity in the operation, quality, profitability) through integration of resources that are reshaping capabilities and best practice in a specialized environment for the provision of services and products based on customer and market demands in an environment of rapid change is happening (Joseph et al,1999).

| | | |
|---|---|---|
| (Porter, 1980)<br>(Van Weele, 2001)<br>(Best, 2001) | Deregulation<br>Political pressure, legal<br>Growing need for financial transparency. | Commercial network |
| (Porter, 1980)<br>(Sharifi and Zhang, 1999)<br>(Swafford, 2003)<br>(Volberda, 1998) | Integrated competitors in the market<br>Competitors control Alliances<br>in commercial network Cooperation<br>and partnership between competitors | Competitive environment |

| | | |
|---|---|---|
| (Goldman et al., 1995) | | |
| (Goldman et al., 1995)<br>(Sharifi and Zhang, 1999)<br>(Da Silveira et al., 2001)<br>(Swafford, 2003)<br>(Maskell, 2001) | The need for customized products and services<br>The need to deliver faster<br>Expectations of quality<br>Sudden changes in specifications and quantity of order fundamental changes in consumer tastes | Customer requirements |
| (Swafford, 2003)<br>(Gartner Research, 2003)<br>(Vervest and Dunn, 2000) | The introduction of new business models for wireless connections<br>Emerging technologies for easy communication with information system partners Increased viruses and computer crime | Technology |
| (Gartner Research, 2003)<br>(Simon, 2000) | Restructuring IT and internal systems<br>Support mergers and acquisitions | Internal events |

## Research methodology

Whereas the results of this research can be used Broadcasting province , so as to target research , applied research , and given that the staff of the provincial radio and television and information from within the organization by means of questionnaires received from experts, Therefore, as a survey of the field . Also according to the research result is Broadcasting province , the study is a case study . Random sampling was done in the organization and validity was confirmed by experts . Determining the sample size is determined by Cochran . Its reliability has been proven in previous research.

## The Analysis of Data

We have used Descriptive statistics and inferential statistics such as Pearson correlation and single variable t-test for analyzing data.

## Research Findings

| Positon | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Experts | 2 | 6.7 | 6.7 | 6.7 |
| | Supervisor | 12 | 40.0 | 40.0 | 46.7 |
| | Director | 10 | 33.3 | 33.3 | 80.0 |
| | Vice | 6 | 20.0 | 20.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| Education | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | kardani | 9 | 30.0 | 30.0 | 30.0 |
| | karshenasi | 10 | 33.3 | 33.3 | 63.3 |
| | arshad | 11 | 36.7 | 36.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| job experience | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | <5 | 4 | 13.3 | 13.3 | 13.3 |
| | 5-10 | 11 | 36.7 | 36.7 | 50.0 |
| | 10-15 | 12 | 40.0 | 40.0 | 90.0 |
| | >15 | 3 | 10.0 | 10.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| Age | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | <30 | 2 | 6.7 | 6.7 | 6.7 |
| | 30-35 | 8 | 26.7 | 26.7 | 33.3 |
| | 35-40 | 7 | 23.3 | 23.3 | 56.7 |
| | >40 | 13 | 43.3 | 43.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| Sex | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Male | 14 | 46.7 | 46.7 | 46.7 |
| | Female | 16 | 53.3 | 53.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

**Correlation organizational efficiency and outsourcing**

Given the correlation between the dimensions of outsourcing and labor productivity taken following results were obtained . If there is a significant level of less than 0.05 , the correlation is proved . Since the relationship between outsourcing and the significant level of efficiency is more than five hundredths of a lack of communication between these dimensions is proved.

Correlation test efficiency and outsourcing

| | | outsourcing |
|---|---|---|
| Ability | Pearson Correlation | .237 |
| | Sig. (2-tailed) | .207 |
| | N | 30 |
| Understanding | Pearson Correlation | -.090 |
| | Sig. (2-tailed) | .638 |
| | N | 30 |
| Support | Pearson Correlation | -.072 |
| | Sig. (2-tailed) | .704 |
| | N | 30 |
| Motivation | Pearson Correlation | .063 |
| | Sig. (2-tailed) | .740 |
| | N | 30 |
| Feedback | Pearson Correlation | .108 |
| | Sig. (2-tailed) | .570 |
| | N | 30 |
| Credibility | Pearson Correlation | .102 |
| | Sig. (2-tailed) | .591 |
| | N | 30 |
| Compatibility | Pearson Correlation | .284 |
| | Sig. (2-tailed) | .128 |
| | N | 30 |
| | | |

**Correlation organizational agility and outsourcing**

Given the correlation between the dimensions of outsourcing and labor productivity taken following results were obtained . If there is a significant level of less than 0.05 , the correlation is proved . Since the relationship between organizational agility and significant level of outsourcing is higher than five hundredths of a lack of communication between these dimensions is proved.

Results correlation organizational agility and outsourcing

| | | Accountability | Competence | flexibility | Speed |
|---|---|---|---|---|---|
| outsourcing | Pearson Correlation | -.053 | .281 | .247 | -.197 |
| | Sig. (2-tailed) | .780 | .132 | .189 | .298 |
| | N | 30 | 30 | 30 | 30 |
| | | | | | |

**Correlation organizational agility and organizational efficiency**

Given the correlation between the dimensions of outsourcing and labor productivity taken following results were obtained . If there is a significant level of less than 0.05 , the correlation is proved . Since the relationship between organizational agility and significant level of outsourcing is higher than five hundredths of a lack of communication between these dimensions is proved.

Results correlation organizational agility and organizational efficiency

| | | efficiency |
|---|---|---|
| Accountability | Pearson Correlation | -.194 |
| | Sig. (2-tailed) | .305 |
| | N | 30 |
| Competence | Pearson Correlation | .134 |
| | Sig. (2-tailed) | .482 |
| | N | 30 |
| flexibility | Pearson Correlation | -.306 |
| | Sig. (2-tailed) | .100 |
| | N | 30 |
| Speed | Pearson Correlation | .367* |
| | Sig. (2-tailed) | .046 |
| | N | 30 |
| | | |

## Conclusion:

In recent years, environmental issues such as accelerating change , uncertainty about the future , rising costs , immensely large organizations as well as legal restrictions have caused organizations to rethink their thought patterns.

They have to achieve a competitive advantage in today's world on their new business strategies . The rapid growth of technology , increasing the speed of changes in the market , competitors and expand market boundaries has led to the organization Reporters Without Borders, Organizations with a flexible structure and extensive supply network , organizations are able to align himself with the changing environment and this requires the ability to quickly and easily access the required resources , such as skilled manpower, know-how and technology outside the organization. In this paper were analyzed to examine the relationship outsourcing organization with efficiency and agility . The results did not prove the relationship between these three variables.

## References:

Alvani M, Ahmadi P. Design of Total Pattern of Affecting Factors on Human Resource Productivity. Journal of Modares, Vol 5 No 1, 2002.

Alvani M., & Ashrafzade A., (2002),"outsourcing, a guide for manager decision making in services outsourcing" Tehran, Ghasidesara publication (In Persian)

Asadi , Ali and Chvbchyan , SH (2008 ) , and improvement of its efficiency , the strategy of despair , Number 20 , Pages 179-161

Bahrami, B., (2009), "A look at outsourcing offshore", International Business Journal of Competiveness review, Vol.19, No.3, 212-223.

Baloh,Peter & Jha,S. & Awazu Y.(2008),Building strategic partnerships for managing innovation outsourcing, International Journal of Strategic outsourcing, Vol.1, No.2, 100-121.

Belcourt, M., (2006)"Outsourcing- the benefits and the risks". Human Resource Management Review, 16,269-279.

Bertrand, Q., & Francois D., (2003)"Bringing together Strategic outsourcing and corporate strategy: Outsourcing motives and risks". European management journal, vol.21, No.5, 647-

Elango,B., (2008) "Using Outsourcing for Strategic Competitiveness in small and medium-sized firms", International Business Journal of Competitiveness review,Vol.18, No.4, 322-332.

Gupta, B.; Dasgupta, S. & Gupta, A. (2008). Adoption of ICT in a Government Organization in a Developing Country: An Empirical Study. Journal of Strategic Information Systems, 17, 140-154.

Hong, S.J.; Thong, J.Y.L. & Tam, K.Y. (2006). Understanding Continued Information Technology Usage Behavior: A Comparison of Three Models in the Context of Mobile Internet, Decision Support Systems, 42, 1819-1834.

Kang, Y.S.; Hong, S. & Lee, H. (2009). Exploring Continued Online Service Usage Behavior: The Roles of Self-Image Congruity and Regret. Computers in Human Behavior, 25,111-122.

Khalilian S, Rahmani F. Survey on Affecting factor on agronomy Human Resource of Iran. Journal of Sciences &Industris of Agronomy, Vol 22, No 1, 2008.

Lonsdale, C., Cox, A. (2000)"The historical development of outsourcing: the latest fad?" Industrial management &data systems, Vol.100, No.9.

Soltani E. Productivity of Human Resource , Arkan Publication, Isfahan, 1st Edition,2005.

Stefan, Tangen(2002), "Understanding the Concept of Productivity", Asia Pacific Industrial Engineering and Management Systems Conference.

Taheri , Shahnam . (2005 ) , productivity and analyze it in the organization ( management efficiency inclusive). Twelfth edition , Tehran : publishing ontologies

Taheri sh. Productivity & analysis on organizations (Total Productivity Management),Tehran,1st Edition, 1999.

Teo, S.H.; Lin, S. & Lai, K.H. (2008). Adopters and Non-Adopters of EProcurement in Singapore: An Empirical study. Retrieved from Omega, doi: 10.1016/j.omega.

Vaziri S, Mansouri H, Adiban A. Identification & Prioritize the Factors Affecting the Productivity of Human Resources With MADM Technique. journal of Civility & Training. No 100.2010
661.