

An Examination on the Effect of the Performance Audit Implementation on the Improvement of the Productivity of Public Sector Management Systems in Iran (A Case Study in Supreme Audit Court)

Sirous Fattahi¹, Dr. Seyed Ali Vaez², Dr. Ali Hossein Hosseinzadeh³

¹Persian Gulf International Educational Branch-Islamic Azad University- Khorramshahr-Iran

²Assistant Professor of Accounting, Persian Gulf International Educational Branch -Shahid Chamran

³Assistant Professor of Accounting, Persian Gulf International Educational Branch -Shahid Chamran University.Ahvaz. Iran

Email address : alihossien@yahoo.com

Abstract: This study examines the impact of performance audit implementation on the improvement of efficiency of the publish sector management systems. In terms of research plan, it is a survey and survey tools in this study are two five-choice (Likert) researcher-made questionnaires which are identified to audit performance and productivity, both with high reliability and validity. Regarding the temporal scope, the research was conducted in the summer of 2012, and the spatial scope of the study is the Supreme Audit Court of Iran in all the provinces. The required sample size (357) was determined using Cochran's formula (which represents the population as much as possible). The t-student test and SPSS software were used to test research's three hypotheses. Given that the data obtained by questionnaires is qualitative information, non-parametric tests (Pearson correlation coefficient) are also used and to test the research hypotheses, multiple regression and binomial test are used. Thus, to prove the hypotheses, the options including "very high", "high" and "somewhat" are used as criterion. All other statistics used in this research include Z-test; statistics (T), (F) and (R), regression and path analysis equations. The results showed that: 1) performance audit may cause to improve management systems, 2) improvement of management systems enhances the productivity and, finally 3) the performance audit will enhance management systems productivity.

[Sirous Fattahi, Seyed Ali Vaez, Ali Hossein Hosseinzadeh. **An Examination on the Effect of the Performance Audit Implementation on the Improvement of the Productivity of Public Sector Management Systems in Iran(A Case Study in Supreme Audit Court)** *Life Sci J* 2012;9(4):1708-1724] (ISSN:1097-8135). <http://www.lifesciencesite.com>. 262

Keywords: Performance Audit, Management Systems Productivity, Supreme Audit Court, Economic Advantage, Efficiency, Effectiveness.

Introduction

Today, due to the decreasing resources and increasing population and needs, productivity has attracted the attention of scientists, as an effective leverage in management and leadership of the community. Meanwhile, Islam, as the last divine religion which claims to offer a full and comprehensive plan required by contemporary human has presented exquisite and unique tips to Muslims through Holy Quran verses and infallible Imams' biography about the productivity of proper implementation of the right thing i.e. a combination of efficiency (output-input ratio) and effectiveness (comparing results with goals) with a cultural viewpoint, based on the comprehensive productivity system with an emphasis on the central role of human at both individual and social levels, so that they would think about it firstly and in the next step, would apply the lessons of productivity (Ahmadzadeh, 2010). The importance of the concept of productivity in our country have been neglected for various reasons including lack of a proper culture and attitude towards productivity in the society, and despite some measures taken such as establishment of National Iranian

Productivity Organization as well as some emphasis on productivity improvement in the Third Development Plan, there is still too much to get into a favorable situation, and essential and effective steps should be taken in this respect (Etemadi et al., 2009). Our country is no exception, in the development of which the concept of productivity has the greatest role.

On the other hand, with the economic globalization and evolution of various industries, managers have been engaged in achieving higher efficiency, so that they require some data beyond historical financial data for their organization to survive. Therefore, assessment of the current conditions through controlling and considering the approaches to achieve the goals of the organization and to be in harmony with the environment via innovation, identifying the improvement opportunities and remove the shortcomings of the internal control system to use the advancement opportunities based on the criteria including effectiveness, efficiency and economic advantage for managers are the basic need and a key to the organization's survival (Samsami, 2007). The organizations need a continuous improvement of their performance to survive and

develop in today's competitive world. In this regard, it is useful to use management control systems and latest technologies which help its development. The fundamental prerequisite to establish performance audit system in the organization is the need for this type of audit; actually admitting that all the problems of the organization cannot be solved altogether by the establishment of performance auditing unit in management control system (as an arm of management information), but it requires spending much more time and costs (Absalan, 2007).

Thus, this paper is trying to discuss various approaches and strategies to increase such productivity through implementing performance audit while referring the main concepts of management systems productivity. Now, the following question is raised: "Is the performance audit implementation effective on productivity indices and improvement of productivity of public sector management systems?"

To answer this question and considering the importance of the subject and given that no comprehensive research has been conducted in this regard in the country, this study aims to examine the effect of performance audit implementation on the improvement of productivity of public sector management systems.

1 - Introduction and Statement of the Problem (Subject)

1-1 - Concepts and principles of Efficient Management Systems

Many senior and middle managers believe that it is so hard to find any employee or worker who is able to do everything! Managers always argue that employees are lazy and expect the highest salary for their minimal amount of work. The number of organizations that have a low level of productivity is not very low and the impact of this harsh reality affects directly the net production of a country. The employees in such an organization believe that organizational loyalty between them is not very high; disregarding its origination, this is one of the most important factors in reducing productivity in any organization (Karegar and Faraj Poor, 2009).

However, contrary to what many managers and supervisors believe, the workers should not be blamed with such haste. Although manpower plays a major role in increasing or decreasing the productivity of any organization, it is not the only factor affecting the productivity. It seems like you consider your weakness and lethargy as an indicative of your cold. Low productivity of manpower suggests to the existence of inefficient management systems. For example, if a shoemaking machine has a poor design; it will produce low-quality shoes, even if skilled workers and good leather are used. The use of poor leather in a good machine will also lead to the production of low-

quality shoes. Thus, it should be noted that manpower is not the only factor affecting the productivity. In this particular example, the proper management can help improving the productivity. If we generalize this example to the organizations, we will see that the manpower plays the role of an input into a production system that can turn into good employees under the leadership of managers. Edward Deming, the renowned professor of quality management, believes that 85 percent of problems in any organization refer to its management levels and the staff is responsible only for the rest 15% of problems. Although there may be some debates and controversies in these figures, it is evident that the most issues and problems of the organizations are related to the shortcomings of the systems which, in most cases, decline due to administrative reasons (Howardell, 2003).

The analysis of productivity improvement can be performed at micro activity and levels or in macro structure and levels of the organization; in brief, it can be said that to improve the efficiency at micro levels, working methods should be defined and improved considering the inputs, output goals, nature and philosophy of work as well as remarkable cultural tips. In the structural analysis, the optimal accessible points should be focused based on the macro goals and objectives of the organization. Inputs such as business strategy of the organization, management philosophy and the organizational culture are all among the factors determining and affecting the productivity of the organization which cannot be easily measured. Thus, different schools are developed in management science which are all trying to improve the productivity of the organization including methods such as Management by Objectives (MBO), Total Quality Management (TQM), Business Process Reengineering (BPR), Activity-based Management (ABM), Management by Project (MBP), Team-based Management (TBM), etc. Unfortunately, there is no universally accepted model for improving the productivity of the organization and the discussions presented are the only guidelines, the effective implementation of which is strongly influenced by inherent nature of the organizations and the individuals' commitment to preserve and apply them (Howardell, 2003).

1-2 - Concepts, Definitions and Principles of Performance Audit

In today's world, leading managers always try to gain the required confidence through close monitoring and objective evaluation of their own and others' tasks in order to be strong and dominant against the incoming problems, and to do their own works properly and timely. Thus, they should never hesitate to use services of experts and the specialists from outside their organization to identify problems and

provide solutions to achieve more increasing successes using such services. The Performance audit and its related services are among tools that are developed aiming to help managers for better guidance and leadership of economic units and to run enterprises through evaluating the effectiveness, efficiency and economic advantage in the enterprises and presenting practical suggestions, and it includes qualitative assessment of the tools possessed by the management (Hosseinzadeh, 2008).

In recent decades, evaluation and auditing systems in public and private sectors in most industrialized countries have been referred to as Operational Auditing, Performance Audit, Management Audit, Program Audit or Comprehensive Audit. These audits in the public sector in the past have focused on the achievement of objectives, law enforcement, implementation of regulations, policies, procedures as well as receiving and consuming budget. While, in recent years, improvement of management performance, increase of productivity in this sector and reduction of the costs of the lost opportunities is emphasized. It should be noted that the term 'performance audit' is used in public sector. This term is always used in the Government Auditing Standards and its use in Iran has been approved by steering committee of performance audit of Supreme Audit Court (Rahimian, 2011).

In case we consider the auditing as a systematic process in impartial collection and evaluation of the evidence and documents related to financial events and activities to determine their degree of compliance with predetermined criteria and to report the results to the stakeholders, Supreme Audit Institutions can play an effective role in promoting transparency and accountability level. Government auditing in Iran is performed by independent auditors of Supreme Audit Court with specified jurisdictions and authorities. Supreme Audit Court of Iran, as a supreme institution of financial supervision in the country in a very high position, resulting from the principles 54 and 55 of the constitution, monitors continuously how to use credit and the related results across the country. The Supreme Audit Court is a guarantor for the accountability of different managers to the rules and regulations via public prosecutor office, and in this regard, the triple powers¹ and all the governmental organizations, which somehow use the national budget, are obligated to be accountable to it. In addition, the results obtained from investigations of the auditors of Supreme Audit Court are annually prepared in the form of clear budget settlement

reports, and are presented to Islamic Parliament and are published to notify the public. The Supreme Audit Court plays its role through continuous presence in executive agencies including public companies and the assessment of their activities and plans in form of performance audit; so that it would play its role in applying internal controls and improving their operations by monitoring the establishment and implementation of the systems used by the executive agencies and leads economic system of the country at micro levels and the organization itself by presenting their viewpoints to the respective agencies.

1-3- The Necessity to Implement Performance Audit for Improving the Management Systems Productivity

Management is defined as the knowledge of using resources effectively and efficiently to achieve organizational goals and such resources usually include capital, manpower and all other resources provided to the organization. A manager should plan, organize and control the organization's operation to achieve maximum benefits. In today's world, responsible and leading managers are always trying to ensure accurate supervision and objective evaluation of their own tasks in order to stay strong and dominant against the incoming issues and to do properly and timely their works. Therefore, they should never hesitate to use services provided by the experts and specialists from outside their organization to identify problems and provide solutions to achieve an increasing successes using these services (Auditor Management Journal, 2009). Reduction of resource, increased operating costs, the growing organizational size and complexities are among challenges that the organizations are facing in recent decades that made managers to evaluate and improve the efficiency and effectiveness of organizations. One of the ways to improve effectiveness and efficiency is the performance audit implementation (Drucker, 1975; Henke, 1972).

The increasing development of human and the changes thereto have led to a significant growth in all areas for which audit profession is no exception and has been always developed as influenced by human societies. On the other hand, the importance of the agencies and organizations has challenged audit profession greatly and this major challenge has led to fundamental changes in the audit profession in the world to meet the needs of managers, politicians and representatives of people. This major challenge and subsequently, the need to overcome it, have resulted in an emergence of a new type of audit called performance audit. This type of audit has considered all financial and operational aspects and improves the productivity of resources management.

¹ The Legislative, the Executive and the Judiciary

The Performance Audit is a tool provided to managers for identifying problems and removing straits with no censorious and critical view and it is not aimed to criticize the current operation, but is going to review the operation through cooperating with management and staff and to develop a plan for improving the operation. Thus, the performance audit should be considered as a review plan to make the operations economic and efficient in order to have increasing results (Reid, 2005). Operational audit is one of the techniques that could help managers by evaluating the effectiveness, efficiency and economic advantage of operations of the organization or the company and offering suggestions to improve operations in today's variable business environment.

In recent years, the focus and scope of many audits in public and private sectors has undergone changes and since financial statements alone cannot meet the informational needs of management, the managers in these two sectors are looking for collecting more information in order to assess and judge the quality of operations and operational improvements. As a result of creation of such backgrounds, the need for performance auditing techniques to assess the effectiveness, efficiency and economy of operations has increased dramatically. Investigating the reasons for increasing demand to receive performance auditing services shows that two following subjects have provided a proper ground to implement such audit:

- Leading the managers to pay more attention to the observance of economic advantage, efficiency and effectiveness in economic units;

- Promoting the independent auditors' experience in identifying and finding the existing realities in financial auditing, management consulting and providing necessary guidelines to the managers (Nokhbe Fallah, 2005). The study will attempt to measure the productivity of management resources in public sectors, while measuring the impact of performance audit on its improvement in order to provide required grounds for further implementation of audits and to improve productivity of management resources and consequently, the country's economic growth and prosperity.

1-4- The Indicators of Efficient Management Systems

The establishment of productivity improvement management cycle causes the productivity to improve as a continuous process and the productivity path to be specified and necessary preparations to be conducted. Productivity movement is the prerequisite to the organization development and will result in institutionalization of the improvement in different organizational systems (Soltani, 2011). Trust building in the work place and human relationship between the

manager and employees by providing detailed information about the organizational operations to the staff, reviewing personnel problems, holding friendly meetings and providing the proper organizational atmosphere along with supporting the staff while respecting the dignity and status of the management, helps the manager achieve productivity and fulfill the organizational goals (Wikipedia Encyclopedia²).

Hersey and Blanchard (1988) argue that the task of manager or leader of the organization is important, because it is interacted with its all surrounding environmental variables. The managers should have outstanding features and apply appropriate procedures according to the situation of the organization by relying on the results and the conducted studies on management issues, and also provide the ground to achieve the organizational goals by creating a favorable organizational environment. French (1986) considers the organizational survival and achievement to be dependent on the managers' attention to the factors of external environment, internal environment (organizational) and outputs (results). These factors affect each other. For example, the organization management (the internal factor) affects the legal principles of employment (an external factor) through strengthening and supporting educational programs. Now, the most important indicators of efficient management systems are presented in this study as follows:

1-4-1- Implementation of Performance Management System and Outcome-based Salary Payment

Manny (2002) believes that review and analysis of information emphasize that performance evaluation systems motivate employees' management to improve productivity. Meanwhile, merit-based payment increases the effect of employees' motivation. The other alternatives of motivators also affect the employees' occupational performance. Through improving the organizational atmosphere and creating empathy between employees and alignment between goals of the employees and the organization, performance management strives to increase the productivity of manpower and subsequently, the productivity of the entire organization by leading the employee in achieving the organizational goals by strengthening the optimal performance and eliminating poor performance using incentive payment methods (Karegar, 2010). With a comprehensive viewpoint to the organization's productivity performance, the performance management always presents a clear view of the productivity of the

² <http://fa.wikipedia.ir>

organization. When process and performance of the organization are managed, its productivity and optimization will be ensured. In general, the establishment of performance management in the following aspects will help to improve the productivity management cycle (Soltani, 2011): Provides reform and improvement in the manpower; - Unifies personal goals and the organizational productivity objectives; - Provides the ground for the structure reform in productivity; - The process of proper problem finding in productivity dominates the organizations; - Creates motivation through distinguishing inefficient people from efficient people; - Create synergy in the organizational productivity; - Presents new beliefs about the organizational productivity.

1-4-2- Establishment of a System of Suggestions

The suggestions system consists of two words of system meaning a set of interconnected components which have interactive impression and effect and strive for a common goal and the concept of suggestion which is any new thought and idea which can create a positive change, improve a method, increase quality, reduce costs and enhance the staff morale. Suggestion system is a technique applying which, the staff's thought and idea can be used to identify problems and resolve them so that the employees at all levels would be involved in management. Improvement of mental health, flexibility, risk-taking and effectiveness against the demands of intra-organizational and extra-organizational customers, creativity and practicing the staff's internal talents, process improvement through suggestion system, improvement of work environment conditions, increase of customer satisfaction, increase of the organizational belonging sense, aligning individual goals with organizational goals, developing and strengthening the relationship between employees and management, informing the organization's senior manager of the employees' capabilities and optimal use of it, improving the information circulation and information systems, strengthening organizational commitment and ultimately increase of productivity. The main aim of implementing this system is to improve workflow and value human personality and dignity of staff and ultimately, increase productivity in the organization. In most industrialized countries, suggestion system has been implemented for more than six decades to improve the quality, reduce waste and increased the productivity. Using creativity of employees and their reasoning and mental involvement and participation in solving problems in work place and the organization through suggestion system, some innovations can be achieved in the organization and the continuous improvement which is another principle presented in productivity can be

obtained and new ways will be constantly obtained to increase productivity through innovating (Saleh Olia and Dehestani, Bitia).

1-4-2-1- Establishment of an Idea-creating Suggestion System

This indicator reflects the ideas and suggestions that help the employees' mental talents to improve the organizational productivity.

1-4-2-2- Establishment of an Entrepreneurial Suggestion System

Entrepreneurial suggestions are how to perform issues by receiving constructive suggestions to improve the task productivity. These suggestions are somehow effective and show how to perform tasks through innovating. It also includes creation of new jobs, according to the assigned tasks and authorities.

1-4-3- Implementation of Total Quality Management "Tqm" (Collective participation of the organization to achieve goals)

Participatory management is the dominant paradigm of modern management that is based on the cooperation of staff and the manager to achieve the organizational goals in a friendly environment full of understanding. The staff's views and plans lead to the greater efficiency of the organizational operations through savings, innovation in the issues and management improvement (Karegar and Faraj Poor, 2009). The system (tqm) is an efficient structure, and that is because in total quality management, it is the responsibility of senior managers of the organization to improve quality and productivity rather than only a specific unit of the organization. TQM does not only refer to the product and has a comprehensive view towards the organization and product and includes all activities, processes and detailed work (Soltani, 2011).

In change process, the active involvement of all employees to create a favorable atmosphere and attitudes to work is important to improve productivity. Participation not only helps an organization to change; but also it has a deep educational impact. Rad et al. (2003) claim that participation in works is the key factor in productivity. Also, cooperation theory is to describe the relationship between participation, and improvement of performance and productivity. In addition, Brown (1999) states that participation increases the employees' productivity when it is used as a factor for motivating employees and they can also monitor the colleagues' work, which is a type of management. He also notes that all group incentive plans indicate the participation of staff in management and control. Several studies and experiments demonstrate that the quality and style of leadership have a great effect on production rate, efficiency, and satisfaction and morale of the employees. Meanwhile, one of the principles that are directly related to manpower development, as mentioned above, is to

make employees participate in affairs by the managers (Nasrallah Pour, 2005).

Applying participation generally brings enormous benefits for the organization, which is entirely to increase productivity; these benefits briefly include (Karegar and Faraj Poor, 2009): - Participation will lead to more effective decisions in the environment; - It challenges ingenuity and creativity of all the employees; - Strengths human respect, social dignity and status, motivation and common mutual interests between management and personnel; - Stimulates and encourages the employees to take responsibility; - Improves people's morale and teamwork; - Prepares people to easily accept the changes that should be made in the organization, if necessary, and not to allow any problem to occur in such cases.

1-4-4- Establishment of Management Governance System and Control of Management over the Issues, etc.

This index is a manifestation of management systems that affects productivity, so that the more consistent is the governance system of an organization, subsequently, the better and more efficient and effective control it will have over the affairs. However, it should not be forgotten that the purpose is not lack of organizational participation and doing all issues and focusing on all of them in the management department, but it is to establish a suitable systems for management controls in the organization.

1-4-5- Implementation and Deployment of Successful Planning-Based Management System

An effective and efficient management always uses the application of strategic planning system in conducting affairs so that the process of conducting affairs would be specified in accordance with the predetermined plan and goals would be manifested and the path to achieve the objectives would be clarified. Therefore, this indicator plays an essential role in the effectiveness and efficiency.

1-4-6- Establishment of Planning Stability

Although a coherent planning system is essential to improve the organizational productivity, the organization will not have the required productivity as long as these planning have not been actualized. This indicator is complementary to the previous indicator, so that by implementing and stabilizing planning, productivity management will improve in long time.

1-4-7- Establishment of Effective and Efficient Management Information Systems

Information systems include systems that facilitate the organizational management decisions and accelerate their process. These systems must have the necessary efficiency and effectiveness as well as comprehensiveness to show all aspects of an

organization. Such efficient and effective systems help managers achieve goals more immediately and enhance the organizational productivity.

2- Review of the Literature

2-1- Efficient Management Systems

Ross (1977) considers the organizational productivity as a of resources, management of subordinates and management tasks and believes that leading staff to use their talents and abilities more and more results in a higher level of the organizational productivity and thus, job satisfaction. In addition, human resources management and management actions regarding job design, enrichment and prosperity, job rotation and change affects the productivity level of employees.

In their research, Ellis and Dick (2003) concluded that in organizations that in the organizations that work as groups and their managers employ participatory leadership method, productivity will be improved. Orin's research (1991) on service industries of America Colorado also shows that productivity level and job satisfaction of the industry staff will increase by implementing participatory decision making techniques (Habibi, 2004).

In a cross-sectional study conducted in the first half of 2009, Mostafa Allah Verdi et al. (2009) showed that observing the factors related to the management style and method with the average score (4.41), is found to be the most important factor affecting manpower productivity. The factors related to the individual, culture, organizational structure, reward systems, training courses, and factors related to the physical environment of the organization were at the next levels of importance.

In the successful implementation of a program to improve the productivity of the manpower in the health sector, the role of management and its style in the administration of affairs should not be ignored. Similar to the results in this study, Tavari et al. (2008) showed in their study that managerial factors were at first priority in influencing the productivity of the workforce.

In the comprehensive model of management, the factors affecting the productivity of manpower designed by Alvani and Ahmadi (2002), leadership style was one of the eight factors which were essential in improving the productivity of manpower. In his study, Abili (2009) distinguished the factors related to the leadership type and management attitude from the organizational factors related to the productivity of middle managers.

Soltani (2011) have claimed that establishment of a productivity improvement management cycle requires serious intent and operational mechanisms should be designed and used in this regard. Before designing these mechanisms, pathology of the

organizational productivity status causes the operational mechanisms to be designed in accordance with the organizational requirements and experienced practical solutions such as can institutionalization of productivity in thought, institutionalization of savings, designing efficient structures, manpower development, designing productivity research system and deployment of performance management can be used for improving productivity in the organizations.

Another study is also conducted on the organizational productivity and its influencing factors and it has been concluded that factors such as continuous professional education of managers and employees, improving motivation among employees to work better and more, developing appropriate areas for innovation and creativity of managers and employees, establishing a proper performance-based payment system and establishing a system of punishment and reward and conscience work and social discipline, development of activity methods and systems that have a critical role are among the factors affecting the organizational productivity (Mirkamali and Mirsanaei, 2001).

Saleh Olia and Dehestani (Bita) concluded that productivity improvement is possible through suggestion system by providing infrastructure principles of productivity topic, which is the clever use of resources and continuous improvement. In this regard, an example one of the suggestions presented in suggestion system of Yazd Gas Company was investigated and the role of suggestion system was shown in total quality management (TQM) with the effect of this system on all principles, which is customer orientation of collective participation and continuous improvement.

Vaziri et al. (2009) conducted a study titled as "identifying and prioritizing the factors affecting the manpower productivity (Case Study: Employees of Hormozgan Department of Education) using ranking techniques (MADM) through descriptive-survey methodology and library-field data collection tool. The results obtained from applying the (MADM) techniques such as TOPSIS and AHP suggests that among the mentioned factors, the structural/managerial factors (non-discrimination and observance of the organizational justice, participatory management and establishment of appropriate suggestion system and proper performance-based payment system) are respectively the most effective components in increasing manpower productivity among employees of Hormozgan Department of Education.

Dr. Hasan Asadi et al. (2004) showed that there is a significant relationship between creativity, risk-taking, leadership, support, integrity and solidarity, control, identity and reward system and productivity

of managers of Physical Education and Department of Education throughout the country. The study results showed that there is a significant relationship between organizational culture and productivity of managers and confidence level (99%).

Dr. Davoud Soleimani (2004) argued that low performance and productivity of some organizations is due to the organizational managers and leaders' lack of understanding of the cultural context of the existing society and the dominant organizational culture and not to meet the needs of employees and lack of the organizational democracy and collective participation as well as the organizational leadership which is influenced by self-fascination and mania.

The only way to eliminate redundancies for having an efficient and high quality system in production is continuous improvement though participation of all employees in the implementation of. This fact is clearly revealed in the descriptions of Robinson and Schroeder (2004) (Batman Ghelich, 2009).

The study of Habibi (2004) showed that there is a significant positive relationship between suggestion system, job satisfaction as well as staff motivation in the staff field of the organization of inspection and supervision of prices and goods distribution and services.

Nasrallah Pour (2005) claims that participation in works is the key factor in productivity. Cooperation theory also shows the relationship between participation and productivity.

The results of the study conducted by Taheri (1999) show that professional education, motivation improvement, creating appropriate context for initiative and creativity, establishment of proper performance-based payment system and system of punishment and reward, conscience work and social discipline, evolution of systems and methods and strengthening governance and domination of the organization's policies on issues are among the factors affecting man power productivity.

In his study, Yousefi (1387) states that one of the factors which has a significant effect on improving manpower productivity is the improvement of the dominant relationships between management and employees and using proper and scientific leadership style as well as the manager's attention to the employees' problems and life are among the components affecting the increase of productivity.

In their research, Ellis and Dick (2003) concluded that applying participatory leadership style for teamwork will improve productivity.

Reviewing the conducted studies, Becker and Gerhart (1996) claim that the decisions associated with the human resources management, such as autonomous work teams, job rotation, quality control

circles, suggestion systems, system of managing complaints by improving the efficiency of the organization resulting in reduction of costs or increase of revenues of the organization, will enhance the organizational performance.

Lock (1999) showed that there is a positive relationship between management practices, productivity, job satisfaction and organizational commitment of employees and the managers' behavior is the key to productivity. The results of another study suggest that leadership and management methods have a significant effect on the manpower productivity. (Bain, 1988)

Results of the study of Wright (1990) and Pastore et al. (1995) suggest that support and establishment of a constructive relationship between managers and subordinates have the greatest impact on increasing the employees' productivity. Roger (1996) also conducted another study in this field. The results suggest that leadership, teamwork, participation and the correlation among the team members and managers, will significantly improve productivity.

Kudyba (2003) has also conducted a research on the factors affecting the improvement of productivity of the studied staff. The results of this study show that the employees' skills can be improved with proper training, guidance and involving, and will lead to the increase of the organizational efficiency.

According to the research conducted by Kunar Lee (1996) on 20 managers and 97 employees at a hospital in America, the statistics show that there is a positive relationship between management practices and productivity, job satisfaction and the organizational commitment of staff. These studies also showed that there is a significant relationship between the managers' behavior as the key to productivity and the employees' satisfaction with the organizational commitment (Lock et al, 1999).

2-2- Performance Audit

In his MS thesis (Industrial Engineering, Islamic Azad University, Najaf Abad), Ahmad Dehghan Nayeri (2005) examined the interaction of value engineering and performance audit in productivity of constructional projects. In this study, the effect of value engineering implementation was examined in facilitating the implementation of performance audit and reversely as guarantor of the implementation of value engineering suggestions and the opinions of advisors, contractors, and experts etc. were collected while preparing hypotheses and questionnaire and after approving the hypotheses (the interaction of value engineering and performance audit in productivity of constructional projects), eventually presented solutions for better value management and cost reduction.

In another study conducted by Mohsen Jafari (2002-2003) titled as "examination of the implementing barriers of operational audit in the insurance industry (property insurance) the results revealed that non-documented nature of management control system and lack of appropriate experimental models in the field of operational audit at confidence level of 95% were identified as the implementing barriers of operational audit.

In his MS thesis, Mansoor Shah Mohammadi (1998) has reviewed "the barriers and problems on the implementation of operational audit in Iran". In this study, the researcher has examined the barriers and problems from two different aspects. The first hypothesis has examined the executives' lack of awareness of the benefits of operational audit and the second hypothesis has reviewed unfamiliarity of college graduates with operational audit. In the end, it has been concluded that operational audit is not well known in Iran and there is no adequate training in this area.

In his MS thesis (Tehran University, School of Management), Alireza KhodaKarami (2001) has examined the role of performance audit in motivating managers. In addition, since performance audit is a process consisted of components, indicators, benchmarks and etc., there are principally other purposes for this research, including the examination of whether each of components and benefits of performance auditing such as presenting suggestions to improve the operations and identifying opportunities, capabilities and improvement strategies can be involved in motivating managers or not, which were confirmed by hypotheses testing.

Palyt (2003) examined operational auditing procedures in five top audit institutions in Finland, France, Netherlands, Switzerland and the United Kingdom. The purpose of this study was to describe the strategic and important choices of five top institutions. This researcher focused on the applied methods, practical standards, operational auditor's skills, and operational auditing reporting. He found that the operational auditor's role is not only beyond observance of internal and external laws and regulations, but it often has aspects of management consulting for progress of issues (Dahanayaki, 2007).

A research was conducted by Jooypa (2010) titled as "pathology of performance audit implementation by the Supreme Audit Court and presenting suggestions to improve it. He considers the following factors to be barriers to performance audit implementation by the Supreme Audit Court in order of importance. These factors include lack of adequate and necessary training and skills for Supreme Audit Court auditors, inadequate budgeting system, lack of appropriate indicators for evaluating the performance

of executive agencies, non-clarification of executives in responding to Supreme Audit Court auditors, inadequate system for collecting and maintaining financial and operational statistics and data and lack of legal authority (in the law of the Supreme Audit Court) to implement performance audit.

3 - Research Hypotheses

According to the history and exploratory studies, the main questions of this research can be outlined as follows:

- ❖ Performance audit leads to economical, efficient and effective use of management systems.
- ❖ The economical, efficient and effective use of management systems will enhance productivity.
- ❖ Performance audit will enhance productivity of management systems.

4- Research Methodology

The subject of this study has been selected titled as “the examination of the impact of performance audit implementation on improving the productivity of public sector management systems. This research intends to partly present theoretical foundations related to the performance audit and productivity of management systems and then to discuss the factors that can improve productivity of public sector management systems through proper implementation of performance audit. In this study, in order to understand the views of experts, questionnaires have been used as data collection tool.

4-1- Data Collection Method

This study is descriptive-analytical in terms of deduction and is survey in terms of research plan. Survey tool in this study is questionnaire. In addition, the study is deductive-inductive in terms of methodology. In other words, research hypotheses are formed based on inductive reasoning and data is collected deductively. To confirm or reject the hypotheses, the data is collected from the selected samples using questionnaires and then, rejection or confirmation of hypotheses will be tested after analyzing the obtained data.

On the other hand, the study is correlational. This method tries to review the amount of changes made by one or more factors in one or more other factors (Khalatbari, 2008). In this study, the researcher has selected some of the predictor variables without manipulating variables, and has investigated their relationship with the criterion variable and has tried to determine what relationship these predictor variables have with the criterion variable. Therefore, in this study where the researcher has examined the relationship between performance audit components and management systems productivity, the selected method is suitable.

This research is applied in terms of purpose, and is case-study in terms of the type of examination. In

data collection for theoretical studies and research background, library method has been used through articles, books, magazines and valid websites. To collect data related to confirmation or rejection of hypothesis testing, field method using the researcher-made five-option questionnaire (Likert) was applied. After distributing the five-option questionnaire among members of the population and getting answers from the subjects, the obtained data was classified, summarized and their validity was analyzed. Then, these data were analyzed analytically and the results were compared with results from previous studies.

4-2- Scope of Research

- ❖ Temporally, the scope of research is related to the time of obtaining and collecting data (summer 2012).
- ❖ Spatially, the scope of research is Supreme Audit Court of Iran in capitals and the provinces.
- ❖ Thematically, the scope of study is to examine the impact of performance audit implementation on improving the productivity of public sector management systems.

5- Population and Statistical Samples

5-1- The statistical population of the study:

The study population includes all managers, assistants, auditors, experts at the Supreme Audit Court of (31) provinces and headquarters of Supreme Audit Court equal to (2000) subjects which will be sampled by the intended number through the method that will be explained. The population consisted of the individuals whose profession is audit, inspection and supervision and their academic disciplines are accounting, economics, law, construction, engineering (IT), etc. and are constantly in contact with laws and regulations, governmental financial reporting, and professional standards and criteria etc. Also, Supreme Audit Court has been selected as the population for the following reasons:

- As the regulatory arm of the Islamic Parliament, Supreme Audit Court directly deals with financial and operational affairs of public sectors and is ware of condition of executive agencies.
- Performance audit was first implemented by Supreme Audit Court as one of the new audits and has become more practical day by day, so that now, most of the performance audit reports during the last years have been implemented or are being implemented. Thus, it has more familiarity and expertise in state auditing issues (especially performance audit) compared to other organs.
- Research topics are developing in the Supreme Audit Court under the supervision of Department of Education more easily and specialized and approved by the Committee of Standards and Guidelines. Therefore, technical and scientific

capability of research scientific-research level of such studies is highly potential.

- The vast majority of scientific studies and research in Supreme Audit Court are conducted nationally which is due to the organization's supports at macro level and distributing the required information and in some cases, even presenting it to the intended scholar. However, this is possible only for auditors and other stakeholders of this Court.

5-2- Research Samples

5-2-1- Sampling method and sample size determination: in this study, multi-stage cluster sampling and random sampling have been used and to collect data from the study population, the sampling is performed using Cochran formula (Ventling Team, 1997). In this study, different subsections have been

specified and in each stage, the intended sample was selected using Morgan-Krjsy table. Obviously, at each section, the number of people was determined in proportion to the number of employees. Also, to determine sample size, since the analysis of small sample groups may result in unstable values and is likely to give misleading results, sample size was determined relatively large to be 357 subjects through regular random sampling. Therefore, to calculate the number of samples required which also represent the population as much as possible, the Cochran formula (equation 1) was used as follows:

Equation (1)-Cochran Formula

Confidence level

$$N = \frac{Nt^2pq}{D^2(n-1)} \quad d = \text{Significant error } 5\% \\ t = 1 / 96 \text{ Confidence level of } 95\%$$

N=Population, N= Sample size, p= trait, q- Statistics of lack of trait

5-2-2 - Descriptive specifications of sample: 329 out of 357 selected subjects were auditors and 28 subjects were experts etc., (310) of whom were males and 47 were females. 10 subjects had associate degree, (251) subjects had a bachelor's degree, 91 subjects had master's degree, and (5) subjects had a PhD degree. Their average work experience was (15) years and they were in the range of (1) to (30) years of work experience.

6- Data Collection and Measurement Tools, Validity and Reliability of Tools

The data collection tools in this study was the researcher-made closed questionnaire to prepare which authentic standard questionnaires are used whose questions and options have been used according to the research hypotheses and objectives. In this research, to investigate and analyze the study variables which were discussed in the literature review and ultimately to measure components and indicators of performance audit and management systems productivity, two questionnaires were prepared one of which was related to performance audit and the other one was related to productivity of public sector management resources. A total of 357 questionnaires were distributed among auditors of Supreme Audit Court. After approval of reliability and validity of the questionnaire, it was provided to the samples. Likert scale has been used to measure data (Ganji, 2001). That is, qualitative traits will be converted into quantitative traits so that statistical analysis would be conducted based on the quantitative traits. To convert qualitative traits into quantitative traits, first, numerical values as shown in (table 1) are applied for each of the options of the questionnaire. After collecting the questionnaires, scores of each questionnaire will be calculated. Then, statistical analysis will be conducted and research results will be obtained.

Table (1): the Numerical Value of Questionnaire Options

Questionnaire Name	Question No.	Very Low	Low	Somewhat	High	Very High
The effect of performance audit on improving management systems (B-1)	19 to 26	1	2	3	4	5
The impact management systems improvement on total productivity (B-2)	19 to 26	1	2	3	4	5

7. Data Analysis

After data collection, data were analyzed using SPSS software version. 18. That is, the data were initially coded and inserted into the software. Then, they were analyzed in three parts of data using descriptive and inferential statistical methods. That is, initially, in the first and second parts, tables of frequency distribution and percentage frequency, and mean and variance were used to describe the samples' views about questions. This was performed in two significance levels of (sig=0 to sig =.05) of p-value. Then, in the third part, the research hypotheses were tested

based on the results of reviewing questions using heuristic statistics and ANOVA as well as multiple-regression and path analysis. Excel software was also used for drawing graphs.

7-1 - Descriptive Data Analysis

To investigate the research questions, descriptive statistics is used to design statistical frequency distribution tables (tables and charts showing the distribution frequency in the intended population) and to estimate central indices, arithmetic mean, measures of dispersion, standard deviation (SD) etc. Descriptive statistics, including mean, median, maximum, minimum and standard deviation of the data are calculated and presented in table (2). These values present only an overall schematic view of the distribution of research data. Descriptive indicators represent mean, variance and standard deviation of age and work experience and frequency and percentage frequency of male and female and their educational levels as well as frequency and percentage frequency of the options of each question that people have answered. This section has described demographic characteristics using tables. Tables are considered the most important tools to assess and measure data of a human-social study. The ultimate goal of the tables is to make the studied fact quantitative and measurable, and to provide an accurate picture of it as much as possible.

Table 2: Frequency Distribution of Respondents in Terms of Central Indices

Central Index	Gender	Age	Marital	Literacy	Side	History	Employment
N Valid	349	352	342	354	329	347	344
Missing	8	5	15	3	28	10	13
Median	1.00	2.00	2.00	3.00	3.00	3.00	4.00
Mode	1	2	2	3	3	3	4

7-2- Heuristic Data Analysis

7-2-1- Research Hypotheses Testing

7-2-1-1- Hypothesis (1)

There is a significant relationship between performance audit implementation and the improvement and development of public sector management systems.

The independent variable of performance audit implementation at a planned distance and the dependent variable of efficient management systems of public sectors are measured at the distance. Thus, Pearson statistical technique has been used to test this hypothesis. Statistical hypotheses are written as follows: the null hypothesis $H_0: P=0$ and hypothesis one $H_1: P>0$

In the null hypothesis, we assume that there is no relationship between performance audit implementation and efficient management systems of public sectors, and the opposite hypothesis suggests a relationship.

Table (3): Testing Hypothesis One (1)

Significance Level	Pearson coefficient	Standard deviation	Mean	Variable
0.000	0.61	0.655	3.69	Performance Audit Implementation
		0.666	3.91	Management Systems Improvement

Table (3-1): Descriptive Statistics

	Mean	Std. Deviation	N
Performance Audit	3.69	0.655	357
Management systems	3.91	0.666	357

Table (3-2): Correlations

Variables	Correlation	Performance Audit	Management systems
Performance Audit	Pearson Correlation	1	0.610 **
	Sig. (2-tailed)		0.000
	N	357	357
Management systems	Pearson Correlation	0.610 **	1

	Sig. (2-tailed)	0.000	
	N	357	357

Table (3-3): Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.901 ^a	0.813	0.812	0.307

Table (3-4): ANOVA^b

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	144.627	1	144.627	1538.761	.000 ^A
Residual	33.366	355	0.094		
Total	177.993	356			

Table (3-5): Coefficients^a

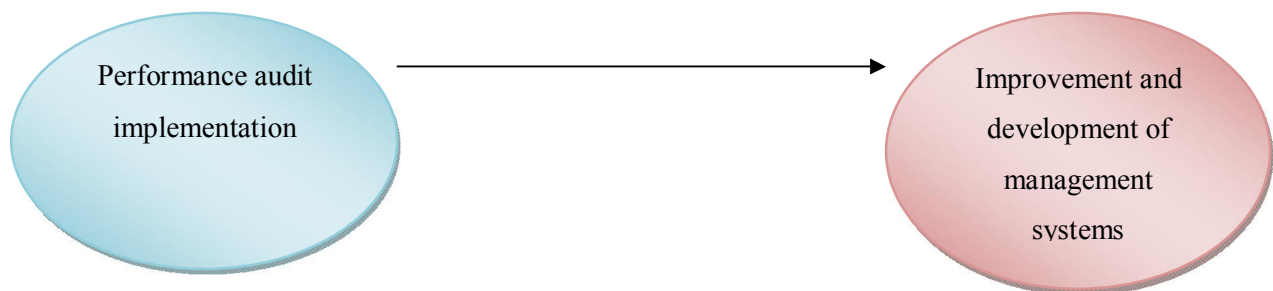
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.129	0.093		1.393	0.165
	Performance Audit	0.972	0.025	0.901	39.227	0.000

In the above tables, Pearson statistical technique is used for testing the significance of the relationship between performance audit implementation and the improvement of public sector management systems. As shown in the table results, the average rate of the performance audit implementation is (3.69) and the average improvement of public sector management systems is (3.91). Pearson coefficient has become ($r = 0.61$), which shows the high correlation between the two variables. The coefficient is positive and directly correlated; it means that the improvement of public sector management systems increases by increasing the performance audit implementation. Given that significance level ($\text{sig} = 0.000$) is smaller than 0.05, this relationship will be confirmed with 99% confidence. Thus, null hypothesis will not be confirmed. In addition, according to the tables (3 and 3-1 to 5), the path equation to confirm this hypothesis is as follows:

Equation (2:) Testing Hypothesis (1)

$$\alpha 3V3 (\text{Index of management systems improvement}) = .129 + .972 \times (\text{Performance Audit}) + .118$$

Figure 1: Path Analysis Testing of Hypothesis (1):



7-2-1-1- Hypothesis (2)

There is a significant relationship between improvement, deployment, design and development of efficient management systems and the productivity of public sectors.

The independent variable of improvement, development, design and deployment of efficient management systems at a planned distance and the dependent variable of productivity of public sectors are measured at the distance. Thus, Pearson statistical technique has been used to test this hypothesis. Statistical hypotheses are written as follows: the null hypothesis $H_0: P = 0$ and hypothesis one $H_1: P > 0$

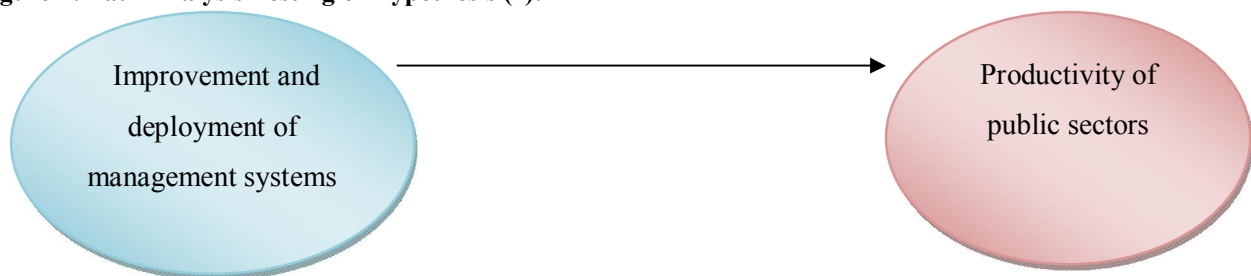
In the null hypothesis, we assume that there is no relationship between the improvement, development, design and deployment of efficient management systems and productivity of public sectors, and the opposite hypothesis suggests a relationship.

Table (4): Testing Hypothesis (2)

Variable	Mean	Standard Deviation	Pearson Coefficient	Correlation	Significance Level
Improvement, development, design and implementation of management systems	3.71	0.707	0.61		0.000
Productivity of public sectors	3.9	0.567			

According to the above tables, Pearson statistical technique is used for testing the significance of the relationship between improvement, deployment, design and development of efficient management systems and the productivity of public sectors. As shown in the table results, the average rate of improvement, deployment, design and development of efficient management systems is (3.71) and the average productivity of public sectors is (3.9). Pearson coefficient has become ($r = 0.61$), which shows the high correlation between the two variables. The coefficient is positive and directly correlated; it means that the productivity of public sectors increases by increasing the rate of improvement, deployment, design and development of efficient management systems. Given that significance level ($\text{sig} = 0.000$) is smaller than 0.05, this relationship will be confirmed with 99% confidence. Thus, null hypothesis will not be confirmed.

Figure 2: Path Analysis Testing of Hypothesis (2):



7-2-1-3 - Hypothesis (3) - Research Subject

There is a significant relationship between performance audit implementation and the improvement of the productivity of public sector management systems.

The independent variable of performance audit at a planned distance and the dependent variable of productivity of public sector management systems are measured at the distance. Thus, path analysis technique has been used as described in the following table:

Table (5) Path Analysis of Hypothesis (3):

Variable name	Direct Effect	Indirect Effect	Total Effect
The Performance audit implementation- productivity of management systems	---	0.17 * 0.901	0.1531

Figure 3: Path Analysis Testing of Hypothesis (3):



According to the data in table (5), after estimating direct and indirect effects of independent variables on productivity of management systems, according to all direct and indirect causal paths, the variable of performance audit implementation had an increasing impact on the productivity of public sector management systems. It means that wherever performance audit implementation has improved, the productivity of public sector management systems has also increased.

8- Conclusion

According to the results of the hypotheses 1 to 3, the following items are applicable: 1) Performance audit implementation improves public sector management systems. 2) Improvement and development of management systems improves productivity of the public sectors. 3) Performance audit implementation improves productivity of the public sector management systems.

9- Recommendations

According to the results of this study, the following recommendations are presented:

1. Great efforts should be put by supervisory agencies, particularly Supreme Audit Court, to show the results of the performance audit implementation to public sector managers.
2. It is recommended that the indicators, variables and the results of this study should be presented to the performance auditors and the government practitioners as a general model so that the ground would be provided for further improvements of productivity using these results.

10 – Research Limitations

In the implementation of research, considering its national aspect and extension across the country, the following items are the limitations which can be presented:

1. In the implementation of research, considering the lack of global standard questionnaire in both field of productivity and performance auditing, great time and effort were spent in identifying especially the indicators of productivity that led the research to be performed slowly.
2. Given that this research was conducted at the national level, the process of collection of questionnaires was slow and difficult and resulted in high costs.

11 - Future Researches

1. It is recommended that in the future researches, ranking of the effect of implementing various audits (financial, compliance, performance, or operational) on productivity should be considered.
2. It is recommended that in the future researches, the quality of performance audit and its relationship with auditor's specifications should be considered by researchers.
3. It is recommended that in the future research, the effect of performance audit implementation on the improvement of responsiveness of the public sectors should be considered.

Persian Resources

1. Ahmad Zadeh, Mustafa. (2010). "Asr Sura; Charter of Quran productivity." *Journal of Qur'anic Studies*, 16th Year, No. 62-63, Summer and Fall 2010, pp.: 315-343.
2. Asad, Mohammad Reza; Hamidi, Mehrzad and Asadi, Hasan. (2002), "The relationship between (TQM) and its effectiveness in the headquarters of the country's sports organizations." *Journal of Physical Education (Journal of Motion)*, No. 14, winter 2002. pp.: 151-166.

3. Assadi, Hasan. & Rahavi, Roza. (2004). "The relationship between organizational culture and productivity of physical education managers of Departments of education across the country." *Journal of motion* No. 20, pp.: 23-34.
4. Etemadi, Hossein & Mehrabi koushki, Ali. & Ganji, Hamid Reza. (2009). "Examination of the relationship between the manpower productivity and stock returns of companies in Tehran Stock Exchange." *Management Landscape*, No. 33, winter 2009, pp.: 85-103.
5. Absalan, Leila. (2007). "Examination of the obstacles to the process of performance audit implementation in public state agencies." MS Thesis, Islamic Azad University, Arak.
6. Jafari, Mohsen. (2003). "Examination of the performance audit administrative barriers in the insurance industry (property insurance)." Islamic Azad University, Tehran.
7. Joopya, Hasan. (2010). "pathology of performance audit implementation by the Supreme Audit Court and presenting suggestions to improve it." *Journal of Auditing Knowledge*, New Edition, 10th Year, No. 2, Fall 2010, pp.: 109-128.
8. Habibi, Lily. (2004). "review and analysis of the relationship between participatory management

- system (with emphasis on suggestion system) and the effectiveness of the inspection and supervision organization staff." MS thesis, Faculty of Management, Tehran University.
9. Hosseinzadeh, Molouk. (2008). "Performance Audit" Tadbir Monthly, 19th Year, No. 194.
 10. KhodaKarami, Alireza. (2001). "Study of the role of performance audit on managers' motivation".
 11. Khalatbari, Javad. (2008); "research statistics and methodology". Tehran, Pardazesh Publications.
 12. Dehghan Nayeri, Ahmad. (2005). "Examination of the interaction of value engineering and performance audit in productivity of constructional projects"
 13. Rahimian, Nezamedin. (2011); "Operational Auditing or performance audit." Auditing Organization, Auditor quarterly, 13th Year, No. 52, pp.: 68-69.
 14. Soltani, Iraj. (2011); "Process and solutions to use productivity management cycle in the organization." Molding Magazine, No. 64, pp.: 32-36.
 15. Soleimani, Davoud. (2004). "Quality of working life and its relationship with performance and productivity of organizations." Journal of Management Knowledge. No. 61.
 16. Shah Mohammadi, Mansour. (1998). "Examination of the barriers and problems on the implementation of operational audit in Iran." MS thesis, University of Allameh Tabatabai.
 17. Saleh Olia, Mohamed and Dehestani, Fahimeh. (Bita). "Review of the role of suggestion system in total quality management and its impact on the efficiency of the organization." Journal of Ravesh, 19th Year, No. 124.
 18. Samsami, Khodadad, Ehsan. (2007). "Examination of the barriers to performance audit implementation for management of the country's ministries." Master Thesis, Islamic Azad University of Qazvin.
 19. Taheri, Shahnam. (1999). "Productivity and its Analysis in the Organizations." Tehran, Hestan Publications.
 20. Karegar, Gholamrza, and Faraj Poor, Batoul. (2009), How to increase productivity in an organization. Bimonthly of Police Human Development, 6th Year, No. 23, June and July 2009. pp.: 45-78.
 21. Karegar, Gholamrza, and Faraj Poor, Batoul. (2009), How to increase productivity in an organization. Bimonthly of Police Human Development, 6th Year, No. 23, June and July 2009. pp.: 45-78.
 22. Karegar, Gholamrza, (2010). "Manpower optimization, a strategy for sustainable development of the organization: an analytical study of the causes and solutions." Police Human Development Bimonthly, 6th Year, No. 27, February and March 2009, pp.: 67-85.
 23. Ganji, Hamzeh. (2001); "Social psychology". Savalanfasl Publications, Iran (translated).
 24. Audit Encyclopedia Management. (2009); "Performance and operational auditing." Auditor Journal, No. 4, summer 1996, pp.: 31-59.
 25. Nokhbe Fallah, Afshin. (2005). "Performance and operational auditing." Tadbir Magazine, No. 165.
 26. Nasrallah Pour, Mojtaba. (2005). "Examination of the factors affecting the manpower productivity." Tadbir Magazine, No. 157.
 27. Vaziri, Soror Azam, and Mansouri, Hussein and Adiban Ahmed. (2009). "Identification and prioritization of the factors affecting the manpower productivity using MADM techniques (Case Study: employees of Hormozgan Department of Education)." Education Journal, No. 100. pp.: 135-159.
 28. Ventling Team. (Bita). "Planning for Effective Teaching." Translated by Chizari Muhammad. (1997). Tehran, Tarbiat Modarres University Press.
 29. Allahverdi, Mostafi and Farah Abadi, Mohammad Ehsan and Sajjad, Hanieh Sadat. (2009). "Prioritizing the factors affecting the manpower productivity from the viewpoint of middle managers of Isfahan University of Medical Sciences." Hospital Quarterly, 9th Year, No. 3 and 4, fall and winter 2010, No. 35, pp.: 75-85.
 30. Yousefi, Reza. (2008). "Growth of productivity in Pars Switch Company and its comparison with the fourth Development Plan." Seventh International Conference on Quality and Productivity in the Power Industry, Tehran, 19 June.
 31. -----, (-). "The first step to achieve excellence in quality and productivity." Translated by Isar Batman Ghelich, Asre-Keifiat Quarterly; No. 15, winter 2009. pp.: 65-72.

Latin Resources:

32. Abili KH, Jahed H. "Determining Related Organizational Factors to Productivity of Middle Managers". Journal of Psychology & Training Sciences: Vol. 1, No. 39, 2009.
33. Alvani M, Ahmadi P. Design of Total Pattern of Affecting Factors on the Manpower Productivity. Journal of Modares, Vol. 5 No. 1, 2002.

34. Bain/ D. (1988). *The Productivity Precipitation/* New York/ Me Graw- Hill Book Company.
35. Becker, B., Gerhart, B., "The Impact of Human Resource Management on the Organizational Performance: "Progress and Prospects", *Academy of Management Journal*, Vol. 39, No. 4, 1996, PP. 779–801.
36. Dahanayake, Sunil J. (2007). "Value for Money Audit Function: The Conceptual Framework and Past Research Review". *The Chartered Accountant, the Institute of Chartered Accountant of Sri Lanka*.
37. Drucker, M. (1975). *The Importance of Internal Auditing for Higher Educational Administration. The Internal Auditor*, 32(4), pp. 57-63.
38. Ellis/ S./ Dick/ P. (2003). *Introduction to Organizational Behavior*. Mc- Graw Hill.
39. French, W. L. (1986). *Human resources management*, Houghton –Mifflin Company.
40. Henke, E.O. (1972). *Performance Evaluation for Non-profit Organizations. The Journal of Accountancy*, 133(6), pp. 51-2.
41. Hersey,P, & Blanchard,K. (1988).*Management of organizational behavior*, PHI.
42. Howardell, Doug (2003), "How to improve productivity-seven skills of a highly productive workforce", teacagroup.com.
43. Kudyba/ Stephan. (2003). *Knowledge management: The art of enhancing productivity and innovation by the manpower in your organization*. Published in *DM Review/ April*.
44. Lock, J.C. (1999). *Leadership Behaviors*. <http://media.wiley.com>
45. Lock, Jennifer and foong, chiok (1999). *Leadership Behaviors*, http://media.wiley.com/assets/462/98/bus_lc_ib_foong.pdf
46. Mirkamali, M., & Mirsanaye, Zh. (2001). *Investigating productivity and providing model to estimate it in training organizations, Management of Education and training*, No, 28 (In Persian).
47. Pastore/ D.Inglis/ S & Danychuk/ K. (1995). *Understanding retention factors in coaching and athletic management: differences by gender/ positions geographic location. Journal of Sport Management/ Vol. 20/ No. 4/ PP: 427-441*.
48. Reid, Milke , 2005, *Performance auditing of integrated Marketing Communication (IMC), actions and Outcomes , Journal of Advertising , 34.4*
49. Roger/ M. (1996). *Pulling Through with Productivity/ Transportation and Distribution/ 36/ 9. Seonghee / C. / Harton. (2006). Measuring the impact of human resource management practices on hospitality firm's Performance. International Hospitality Management/ Elsevier Ltd*.
50. Ross, Joel. E. *Managing Productivity*. Reston publishing Company, 1977.
51. Tavari M, Sokhakeian M, Mirnejad SA. *Identification & Prioritize the Factors Affecting the Productivity of the Manpower with MADM Technique. Journal of Industry Management, Vol.1, No. 1, 2008*.
52. Wright. P. M. (1990). *Operationalization of Goal difficulty as a moderator of goal difficulty: Performance Relationship. Journal of Applied Psychology/ 75/ PP: 227-234*.

10/15/2012