



Full Length Research Paper

Re-engineering of administrative processes and their Impact on Improving Productive Efficiency "An empirical study in the production department of greater Amman Municipality"

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The purpose of the study was to recognize the role of re-engineering of administrative processes in improving production efficiency in the production department of Greater Amman Municipality. The researcher used the descriptive analytical method to analyze the data and identify the administrative reengineering and its impact on improving the production efficiency of the Greater Amman Municipality (Production Management). In order to select the hypotheses related to the study, the statistical program SPSS was used to achieve the objectives set out in this study. The arithmetic mean, Pearson correlation coefficient, and simple linear regression analysis were used to test the hypotheses of the study. The population of the study consisted of (167) of the directors and heads of the administrative departments and employees in the production department of the Greater Amman Municipality. Results of the study show that the basic requirements for the re-engineering of administrative operations in the Greater Amman Municipality / Department of Production are available at (59.50%). This shows that the Greater Amman Municipality has the minimum required to implement the re-engineering of administrative processes, which is a good result in the current economic conditions.

Keywords: Reengineering of Administrative Processes, Productive Efficiency, Production Department, Greater Amman Municipality

INTRODUCTION

In the last years of the 20th century, many development and entries approaches were introduced, aimed at achieving the competitive advantage of the organizations and increasing their competitiveness. The most important of these were the entrance to Total Quality Management (TQM), Quality Improvement, and Business Process Reengineering (Davenport, 1993).

The process reengineering approach reinforces fundamental rethinking and radical redesign of processes to achieve immediate improvements in known performance measures of cost, quality, service and speed of delivery. This approach is based on the idea of starting again and finding new ways of doing business, This requires a rethinking of the fundamentals, a radical redesign of activities, and a shift to thought-based

thinking, which involves a shift in thought and practice, resulting in revolutionary improvements that seek to revolutionize the old, Innovation for Information Technology (Salah Sheik Deeb, 2009).

The issue of process reengineering to improve productive efficiency is one of the important issues posed by the changing environment, a vital issue for its consideration of the sustainability of organizations in the market (Abdel Salam, 2001).

Reengineering process focuses on the strategic dimension of the long-term organization of the production process, because one of the biggest problems faced by local industries is the reliance on short-term measures, the confusion between the assessment of operational performance and management performance and thus the confusion of efficiency and operational efficiency measured by internal standards and organizational

efficiency and effectiveness measured by external standards and standards achieved or targeted by local competitors, and international ones imposed by competing countries. The confusion resulted in the performance of operational performance reflecting management performance, management effectiveness on short-term scales, management's neglect of future outlook, and even sacrificing strategic objectives for financial operational objectives (Ahmadi et al., 1997).

The problem of the study

Business process reengineering is one of the modern administrative approaches based on the logic of improving organizations' competitiveness and achieving sustainable value by embracing a radical and integrated strategic approach to business processes (Hammer & Champy, 1999). This is more concrete and clear after the acceleration of competition, their cost and quality basis is shifted to flexibility and responsiveness. Hence, highly competitive organizations are most adaptive and responsive to changes in their competitive environment. Thus, the problem of research was to try to diagnose and analyze causal relationships between the success factors of business process reengineering in the Greater Amman Municipality and how it contributes to improving productive efficiency.

Therefore, this study comes to know the role of re-engineering of administrative processes in improving production efficiency in the production department of the Greater Amman Municipality. The study problem can be formulated in the following main question:

What is the role of re-engineering administrative processes in improving production efficiency in the production department of the Greater Amman Municipality?

From this general question arise a number of sub-questions:

1. What are the basic requirements for the re-engineering of the administrative processes in the production department of the Greater Amman Municipality?
2. What is the impact of the re-engineering of administrative processes on improving production efficiency in the production department of the Greater Amman Municipality?

Hypotheses of the study

In light of the problem discussed in this study, the hypotheses of the study can be formulated as follows:

1. There is a statistically significant effect at the level of significance (0.05) between the implementation of the principles of re-engineering the administrative processes of the production department of the Greater Amman Municipality and improving production efficiency.
2. There was a statistically significant effect at the level of significance ($\alpha=0.05$) between the readiness for change in the production department of the Greater Amman Municipality and improving productivity efficiency.
3. There is a statistically significant effect at the level of significance ($\alpha=0.05$) between communication in the production department of Greater Amman Municipality and improving production efficiency.
4. There is a statistically significant effect at the level of significance ($\alpha=0.05$) between the strategic orientation in the production department of the Greater Amman Municipality and improving production efficiency.
5. There is a statistically significant effect at the level of significance ($\alpha=0.05$) between the commitment and conviction of the management in the production department of the Greater Amman Municipality and improving production efficiency.
6. There is a statistically significant effect at the level of significance ($\alpha=0.05$) between the empowerment of workers in the production department of the Greater Amman Municipality and improving production efficiency.
7. There is a statistically significant effect at the level of significance ($\alpha=0.05$) between information technology in the production department of the Greater Amman Municipality and improving production efficiency.

Study Variables

-Independent variables:

It represents the re-engineering of administrative processes and is measured by the following variables (Al-Otaibi, Al-Hamali, 2004):

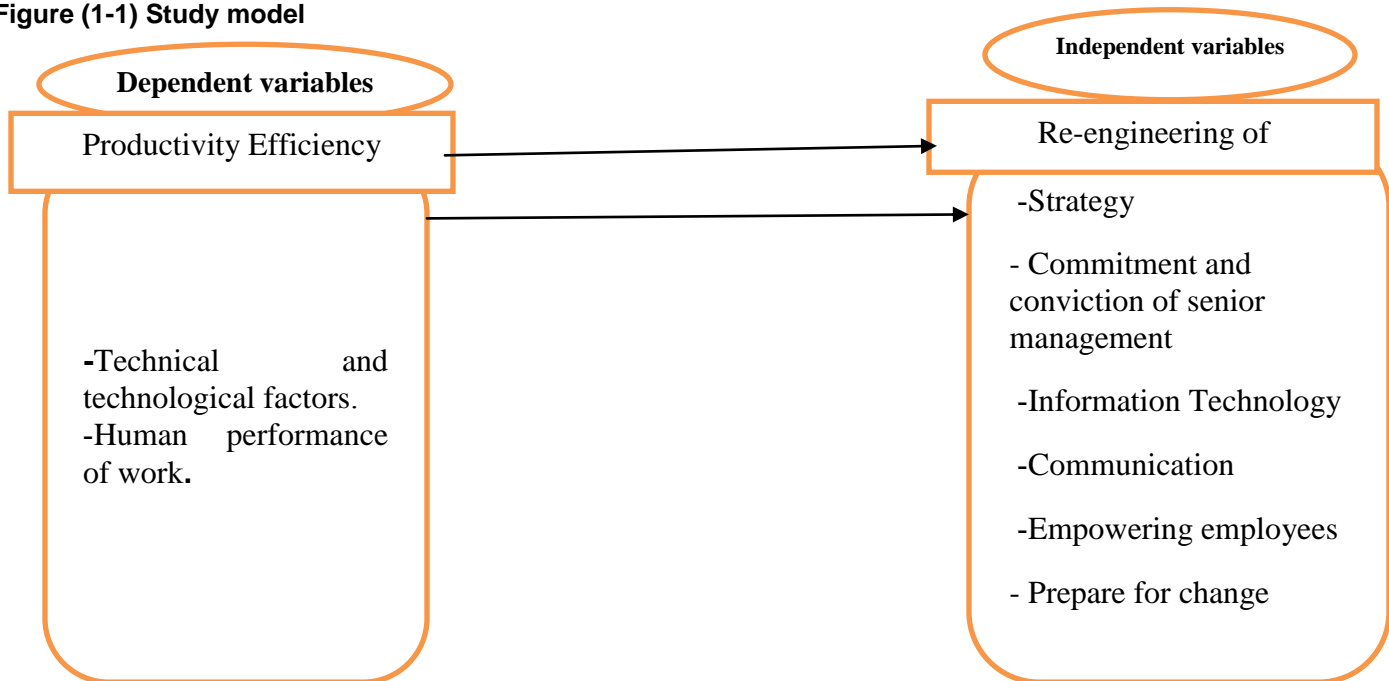
- a. Prepare for change.
- b. Communication.
- c. Strategic orientation.
- d. Empowering employees.
- e. Process technology.
- f. The commitment and conviction of the senior management.

Dependent variable

It represents productive efficiency and is measured by the following variables (Najib, ipid)

- a. Technical and technological factors.
- b. human performance of work

Figure (1-1) Study model



Objectives of the study

1. To recognize the role of re-engineering of administrative processes in improving production efficiency in the production department of Greater Amman Municipality.
2. Understand the clarity of the concepts related to the re-engineering of the administrative processes of the workers in the production department of the Greater Amman Municipality.
3. To shed light on the different aspects of the method of reengineering of administrative processes (concept) in terms of concept, mechanism of application and the advantages achieved.
4. To demonstrate the importance and need of the Greater Amman Municipality (Department of Production) to implement the process of reengineering administrative processes.
5. Presenting a proposed scenario for applying the re-engineering method as one of the entrances to improving productivity, raising its efficiency and achieving total quality.
6. To make appropriate recommendations and suggestions in the light of the results for the decision makers in the production department, this will contribute to enhancing and improving productive efficiency in the Greater Amman Municipality.

The importance of the study

The importance of the study stems from two aspects. The theoretical aspect is to shed light on the different aspects of the variables included in the study and the practical

aspect of the suggested scenario for applying the re-engineering method.

1. The study deals with one of the major departments of the Greater Amman Municipality (Production Department), which is the mission of the Greater Amman Municipality, and examines the reality of re-engineering and development of administrative processes.
2. This study draws its importance of the expected future interest, and the amount of return that can be achieved by the management of production and the reflection on the Greater Amman Municipality as a whole if the results and recommendations and applied it to other departments.
3. The study is important through the application of re-engineering processes and its impact on production efficiency in the production management of the Greater Amman Municipality, which qualifies it to apply in other departments.
4. The study presents solutions to the problems experienced by the production department in the Greater Amman Municipality and the population of the study through its practical application.

Methodology of the study

The researcher used the descriptive analytical method to analyze the data and identify the administrative reengineering and its impact on improving the production efficiency of the Greater Amman Municipality (Production Management). In order to select the hypotheses related to the study, the statistical program SPSS was used to

achieve the objectives set out in this study. The arithmetic mean, Pearson correlation coefficient, and simple linear regression analysis were used to test the hypotheses of the study.

Sources of data collection

- **Original sources:** The questionnaire was used as the main source for collecting information on administrative re-engineering in the Greater Amman Municipality and its impact on productive efficiency.
- **Secondary sources:** These sources were relied upon in the composition of the theoretical framework of books and periodicals and references, Arab and foreign, which dealt with the subject research study in addition to research and messages and previous studies related.

Terminology of study

Reengineering administrative processes: It is fundamental rethinking and radical redesign of business processes, and dramatic improvements in current and vital performance metrics such as cost, quality, service, and speed (Al-Rub, 2009).

Productivity Competence: Competence is the ability to choose the path of the best result by applying the available capabilities. In other words, efficiency means reaching the best in any goal pursued by the institution, and is also meant to achieve maximum profit against a given cost (Mintzberg, 1998).

The theoretical framework of the study

Engineering of Administrative Sciences: Background Theory:

- **The concept of re-engineering of administrative processes:** Michael Hammer and James define the process reengineering as starting again from scratch, not repairing and restoring the status quo, or making cosmetic processes that leave the infrastructure as they were, nor does trenching the holes work better, it means the total abandonment of Old-fashioned work procedures and thinking in a new and different way in product manufacturing, or providing services to satisfy customer desires (Hammer & Champy, 1990).

Raymond and Bergeon defined it as: radically changing organizational processes through the use of information technology to optimize quality, performance and productivity (Raymond & Bergeon, 1998).

Reengineering of administrative processes is defined as the simultaneous restructuring of the Organization's processes, organizational structure and information systems to achieve drastic improvements in both time and cost and all related to goods and services provided to the customer (Neill & Sohal, 1999).

The reengineering of administrative processes is defined as: fundamental rethinking and radical re-design

of operations with the aim of achieving substantial, rather than marginal, fundamental improvements in governance performance standards such as cost, quality, service and speed (Dessler, 2003).

Reengineering of administrative processes is defined as: rapid and radical redesign of valuable management and strategic processes, as well as supporting systems, policies and organizational structures, with the aim of maximizing business flows and increasing productivity (Qawi, 2007).

The re-engineering of administrative processes is also known as the innovative thinking of the organization's senior management leadership as well as their firm desire to make radical changes or impact on the operations of the organization's impact activities in order to continuously improve quality and performance, reduce costs and improve high levels of customer satisfaction (Al-Rub, 2009).

As Amer and Kandil defined it as one of the modern administrative approaches, which aims to effect radical and rapid change in organizations by redesigning strategic processes, policies, organizational structures, values, and unconventional support assumptions (Amer and Kandil, 2010).

Rock (2003) mentioned that reengineering process is a way to improve processes and thus improve the output of the organization. In general, the term BPR involves discovering how current administrative processes can be performed, how to redesign these processes to end wasted effort, improve efficiency, and how to Implementation of process changes in order to gain competitiveness.

They can also be defined as: analysis, workflow design and inter-organizational processes (Caldas, 2012).

Principles of re-engineering of administrative processes: In order to successfully re-engineering the administrative processes in any institution we must achieve many of the basic principles, and mentioned by (Aqili, 2001) as follows:

1. Reengineering Process is re-designing the whole process once again in full stages and steps, from the beginning to the end.
2. It is based on modern information technology (IT) and decentralization of process Uses.
3. Reengineering Process seeks to integrate integrated sub-tasks into a single task.
4. Delegate the employees' sufficient authority to perform their tasks efficiently after the engineering of operations.
5. Provide sufficient flexibility in the implementation of stages and steps of operations.
6. Design one process in a way that can perform more than one work.
7. Reduce the number of times of audit and review to provide speed in performance.

The benefits of applying reengineering process

In the application of reengineering work systems, there are a lot of benefits (Louzi, 2002):

1. 1 - Integrating the competent functions in one job, and here must be the collection of work of disciplines in one place, in a way that saves time, reduce costs, and coordinate and organize the work.
2. The transformation of the work from simple tasks to complex work, so that there is a joint responsibility of the members of the work team.
3. Increase the independence of individuals in the performance of tasks, where the operation of individuals who are able to initiate and establish rules of work and creativity and innovation.
4. Encouraging education in addition to training, in order to develop the skills and abilities of individuals and expand their perceptions.
5. Individuals are rewarded, and the product of their work is divided according to the final results, collectively.
6. Reengineering Process changes the prevailing organizational culture, where good performance and customer care is a priority for employees.
7. Help employees to make decisions without the monopoly of this process on managers.
8. Implementation of the steps of the work according to nature, and this leads to the completion of many steps at the same time, in addition to reducing the time between the steps of action.

Elements of re-engineering of administrative processes: The reengineering of administrative processes as a method of administrative management consists of four main elements:

1. Greater focus on the organization's clients (internal and external).
2. Significant rethinking of processes in the organization leading to improvements in productivity, and course time.
3. Structural reorganization, i.e. breaking functional hormones into teams beyond functional boundaries.
4. New information and measurement systems, using state-of-the-art technology for improved data distribution and decision making (Lonthial, 2002).

Objectives of re-engineering administrative processes: To take advantage of the pillars of re-engineering and its characteristics in the development of any organization must be clearly defined goals, and these goals have been identified as: (Khalil, 2008).

- a. Achieving a radical change in performance: This is to change the method and tools of work and results by enabling the employees to design the work and do it according to the needs of customers and the objectives of the organization.
- b. Focus on customers: directing the organization to focus on customers by identifying their needs and work to achieve their desires so that the reconstruction of operations to achieve this purpose.

c. Achieving speed: enabling the organization to carry out its work at high speed by providing the information required to make decisions and facilitate access to them

d. Achieving Quality: Improving the quality of the services and products that it provides to suit the needs and desires of customers.

e. Superiority over competitors: Helping the organization to excel at competing organizations that may not be difficult to catch up with but are hard to beat. It may not be possible to imitate or motivation for change disappear. It is therefore important to achieve a competitive advantage such as cost pressures while increasing product value through improved resource utilization availability and streamlining processes and selling on better terms.

f. Cost reduction: through the abolition of unnecessary operations and focus on operations with added value.

The concept of productive efficiency

The supporters of the scientific school are among the first advocates of productivity in the field of industry, and the scope of the appeals, such as the School of Human Relations, which included the addition of productivity, has added factors (satisfaction, motivation, performance ...) which have an effective role in achieving the increase in efficiency (Anbali, 1995). The efficiency is defined as the ability to exploit resources properly to achieve the objectives. The productivity of any production system can be measured by dividing the value of outputs (goods or services) on the value of inputs (wages, equipment costs, etc.) , (Al-Amiri& Al Ghalibi, 2008), and productivity efficiency is an expression that corresponds to actual productivity with it (Mallah,1986). The concept of efficiency is often confused with the concept of effectiveness, which means the use of the organization's resources to the extent that it achieves the objective of the organization (ie achieving the results). The concept of efficiency, however, means the proportion of the resources of the organization (Physical and human) that contribute to productivity during the manufacturing process and efficiency can be measured according to the following equation:

$$E\% = \frac{O_a}{I_a} \times 100$$

Where: - O_a = actual outputs

I_a = Actual Inputs (Najjar, 2006).

Productivity efficiency is the measure of the efficiency and the ability of the productivity factors to achieve the highest productivity, such as labor efficiency, efficiency of the site, efficiency of materials used, and efficiency of computers (Najjar, 2007).

This definition is analogous to Mintzberg's definition in his book "Administrative Behavior", where efficiency is defined as the ability to choose the path of the best result by applying the available means. In other words,

efficiency means reaching the best in any goal pursued by the institution, As well as achieving the greatest profit against a given cost (Mintzberg, 1998).

It is clear that production efficiency is a measure of the ability to convert inputs to outputs according to specific specifications and at the lowest possible cost. In order to achieve high productivity (productivity efficiency) we follow one of the following methods:

- Increase the value of the final product while keeping the value of the materials used constant.
- Increase the value of the final product with the increase of resources used with fewer ratio.
- The value of the final product remains constant and the value of the resources used decreases.
- Lower value of final product with lower value of resources used with fewer ratios.

The expression of production efficiency is used to demonstrate the success of using the combined production factors. The productivity efficiency of each of these factors can be measured separately, and the efficiency ratio between different projects in the same industry or project is measured at different periods or even among the different countries, the ability of the (organized) management to exploit available productive capacities can be judged.

The importance of productive efficiency: Productivity efficiency is an essential element of economic growth, and its effects are reflected on individual projects and on society in general. This emphasizes the importance of productive efficiency which reflects the main objective of management in modern projects that mobilize the energies of work and methods to achieve it. The importance of productive efficiency is as follows:

1. aspects of underdevelopment is due in large part to the delay in the use of modern art production and benefit from technical progress, which leads to a decrease in the productive efficiency of the work and the efficiency of production of raw materials as well as machinery and equipment and other.
2. The importance of productive efficiency in our societies due to the scarcity of some productive elements such as expertise and administrative competencies, organizations and working capital, which necessitates the good exploitation of those resources and try to maximize the return.
3. The importance of productive efficiency is demonstrated by the management's attempt to achieve consensus among all parties. The management is facing a pressing pressure on customers to continually reduce and improve quality of goods. They demand better wages, reduced working hours, improved working conditions and more capital profits. It is not possible to work to satisfy all these parties except by increasing productive efficiency, because by this means, production can be increased, costs reduced, workers' wages are

increased, commodity prices are reduced and their quality is improved.

4. Improving productivity efficiency is one of the important means that can be relied upon to achieve balance between exports and imports in countries facing the problem of trade balance deficit.
5. The importance of productive efficiency is directly related to the standard of living of the individual and the society, and its rise necessarily benefits the workers, the institution and society as a whole.
6. It also shows the importance of productive efficiency at the enterprise level, as it is an indicator of the effective use of available resources, and an important means of formulating wage policy, reducing costs and controlling production.

Methods of improving production efficiency: The researcher relied on the most effective methods:

- a. Development of technical inputs (machinery, equipment, technical systems) for access to defect-free products through increased, root and continuous improvements, and continuous disposal of waste.
- b. Collective technology by dividing and aggregating recurrent problems and working as a team with experienced staff to face problems in laboratory workshops (Nicholas, J. Aquilano, et al., 1995).
- c. Production at the specified time as a regular entry point to improve overall productivity where production is on demand and in a small productivity meal (Najm, 1995).
- d. Cost control and optimal use of available resources to avoid the production of defective goods, and therefore the Organization bears the costs of waste in re-correction, labor, raw materials used and repair costs of defective products under warranty.
- e. Material incentives for the worker, his participation in decisions, responsibility, and the role of the organization in providing direct contact with officials, thus improving the efficiency of his organization (Melhem, 2006).

Factors Affecting Improving Productivity Efficiency (Masri, 2000)

These factors can be divided into three sections:

1. Factors related to the internal environment of the organization, including individuals (level of skills and abilities, scientific and cultural level, attention to motivation, number and composition of work force and age), fixed capital, product production methods (quantity, quality and design). Organization and objectives of the organization, incentive systems and size of the organization.
2. Factors related to the external environment of the organization / economic, social and political conditions, development objectives, legislation regulating labor and production, policies of education, training and scientific research.

3. Factors related to the international and regional climate / including the terms of international trade,
- 4.
- 5.

international political relations, technology exchanges, labor migration, and figure (1) below clarify this more.

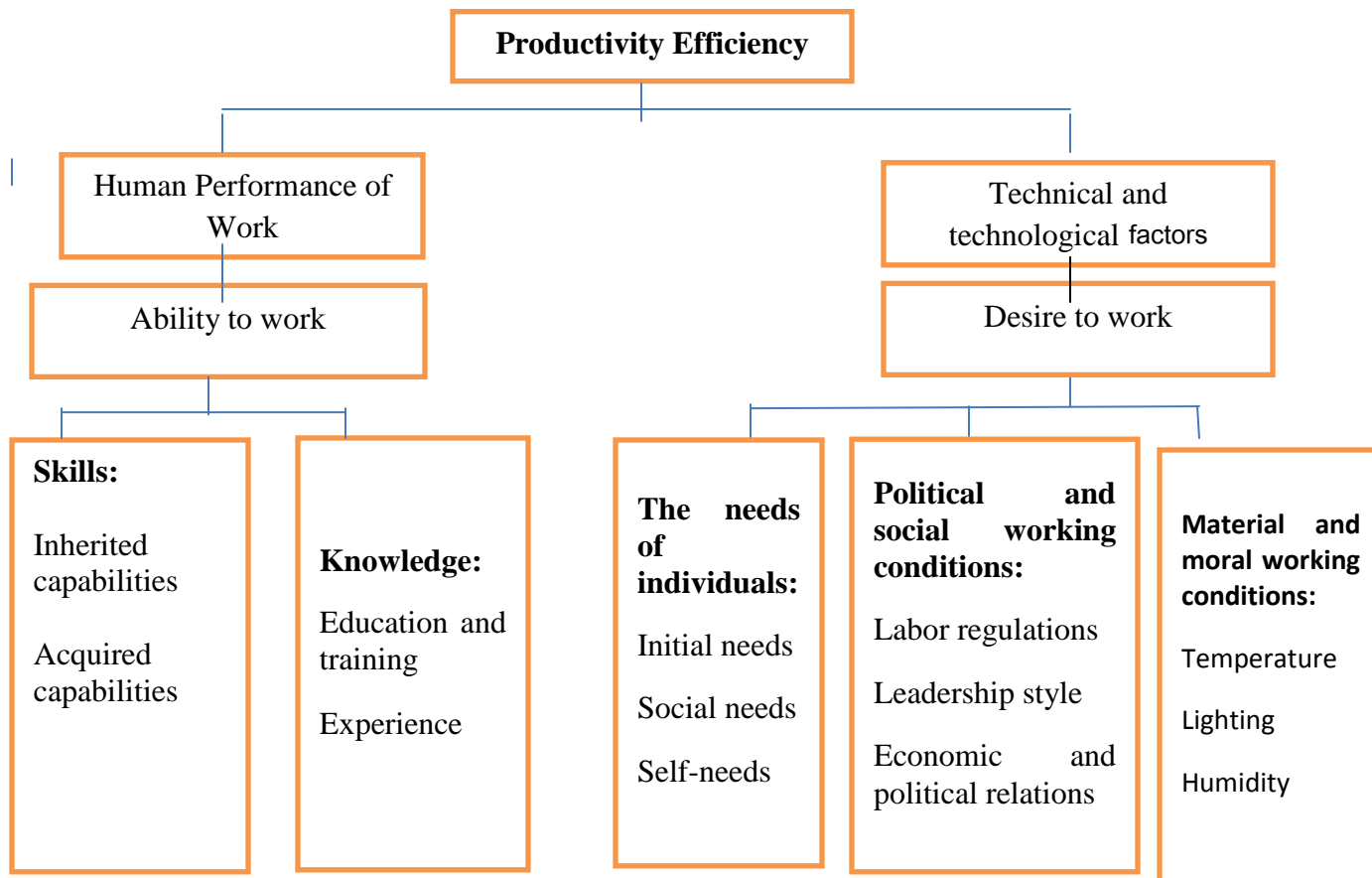


Figure 1: Factors Affecting Productivity Improvement (Najib, 2013)

Population of the Study

The study population is defined as all the characteristics of the phenomenon studied by the researcher. Based on the problem of the study and its objectives, the target population consists of the directors and heads of the administrative departments and employees in the production department of the Greater Amman Municipality who were (275).

Sample of the study

The researcher used the random stratified method according to the job location, where 200 questionnaires were distributed to the study community. 167 questionnaires were retrieved by 83.5%.

DISCUSSION OF THE RESULTS OF THE ANALYSIS

The results of the analysis of the first criterion of process reengineering strategy, which was measured by nine

items, showed an average of (0.598). This means that the average level of approval of the sample was reached. This indicates that there is an average strategy in the department which is the study sample. As shown by the results of the analysis of the second criterion, which is the criterion of commitment and satisfaction of senior management, which included seven items, where the mean of this criterion (0.561) which means that it achieved the approval of the sample to a medium degree, that is, there is a clear weakness in senior management in the commitment and support activities necessary for the application of re-engineering of administrative processes in the production department.

As demonstrated by the analysis of the third criterion for measuring the re-engineering of administrative processes, which is the information technology, which was measured through seven items, where the arithmetic average of this criterion is (0.656), therefore, the field of information technology is statistically significant at the level of significance ($\alpha=0.05$) indicating that the average degree of response to this area is essentially different from that of intermediate approval. This means that there

is a moderate degree of approval by the respondents on the paragraphs of this field.

The researcher attributes this to the availability of the minimum information technology required to implement the reengineering of administrative processes in the production department. The department has an interest in acquiring the necessary technology in the IT infrastructure. The administrative offices have computers and a private network for internal communication between them and most other departments. The department has also developed and computerized most of their transactions. It also linked the main stores to the specialized departments and senior management, to know the balances and to request the necessary materials and consumables via the Tech technology, as the department has worked hard to provide the Internet in most administrative offices, and with these achievements, but the production department still did not meet the required information technology to reduce dependence in re-engineering of administrative processes.

The communication criterion was averaged with an average of (0.634) and was measured by seven items. Therefore, the field of communication is statistically significant at the level of ($\alpha=0.05$) indicating that the average response rate for this field varies in essence, the degree of intermediate approval, which means that there is a moderate approval by the sample members on the paragraphs of this area.

This means that there are minimum communication requirements for the application of re-engineering of administrative processes in the production department, but they are not sufficient for the ideal application, which can be explained by the degree of intermediate approval. The results of the analysis of the "Empowering the Employees" criterion, measured by seven items to a medium grade, reached an average of (0.558). This is explained by the lack of approval by the sample members of the availability of the staff empowerment components

in the production department of the Greater Amman Municipality.

It is shown by analyzing the results of the sixth criterion "readiness for change", which was measured by seven items, where the mean (0.563) and the degree of approval medium, so the field of "readiness for change" is statistically significant at the level of significance of ($\alpha=0.05$) this means that there is little agreement by the respondents on the paragraphs of this field.

Through the results of the paragraphs of the field, the researcher finds that all the paragraphs did not reach the medium degree of approval, but was less than that and there is a lack of consent by the sample on the availability of elements of readiness for change in the department, this is attributed to:

- Lack of incentives and rewards system for hardworking employees who are capable of presenting new and distinctive ideas. For positive change in the production department.

- The commitment of senior management to the laws and regulations in place away from the radical changes in performance.

View and discuss the results of the relations test:

Testing the first hypothesis which states: There is a significant statistical effect at the level of significance ($\alpha=0.05$) between the application of the principles of re-engineering administrative processes in the production department of the Greater Amman Municipality and improve production efficiency.

Table 1 shows that the correlation coefficient is (0.671) and that the probability value (Sig) is (0.000) which is less than the significance of ($=0.05$). This indicates a strong positive correlation between the application of engineering processes and improved production efficiency in the production department of the Greater Amman Municipality.

Table (1): The correlation between the applications of the principles of re-engineering administrative processes in the production department production efficiency

Hypothesis	Pearson correlation coefficient	Sig
There is a statistically significant effect at the level of significance ($\alpha=0.05$) between the application of the principles of re-engineering administrative processes in the production department of the Greater Amman Municipality and improving productivity efficiency.	0.671	* 0.000

* The correlation is statistically significant at ($\alpha=0.05$)

The first main hypothesis stems from the following sub-assumptions:

Table (2): The correlation coefficient between the principles of reengineering administrative processes and improvement Production efficiency in the production department

Hypothesis	Pearson coefficient of correlation	Sig
There was a statistically significant effect at the level of significance ($\alpha=0.05$) between the readiness for change in the production department of the Greater Amman Municipality and improving productivity efficiency.	0.559	0.000*
There is a statistically significant effect at the level of significance ($\alpha=0.05$) between communication in the production department of Greater Amman Municipality and improving production efficiency.	0.636	0.000*
There is a statistically significant effect at the level of significance ($\alpha=0.05$) between the strategic direction in the production department of the Greater Amman Municipality and improving production efficiency.	0.507	0.000*
There is a statistically significant effect at the level of significance ($\alpha=0.05$) between the commitment and conviction of the management in the production department of the Greater Amman Municipality and improving production efficiency.	0.527	0.000*
There is a statistically significant effect at the level of significance ($\alpha=0.05$) between the empowerment of workers in the production department of the Greater Amman Municipality and improving production efficiency.	0.574	0.000*
There is a statistically significant effect at the level of significance ($\alpha=0.05$) between information technology in the production department of the Greater Amman Municipality and improving production efficiency.	0.641	0.000*

* The correlation is statistically significant at ($\alpha=0.05$)

Prepare for change

Table (2) shows that the correlation coefficient is (0.559) and that the probability value (Sig) is (0.000) which is less than the significance level ($=0.05$). This indicates a statistically significant positive correlation between the readiness for change in the production department of the Greater Amman Municipality. This shows that whenever there is a generalization of the culture of change in the production department through the development of the systems and administrative units required to implement this and change in the organizational structures to become more flexible, this will contribute to improving the level of productive efficiency.

Communication

Table 2 shows that the correlation coefficient is (0.636) and that the probability value (Sig) is (0.000) which is less than the significance level ($=0.05$). This indicates a statistically significant positive relationship between the effective communication in the production department of the Greater Amman Municipality and improving production efficiency.

This indicates that whenever channels of effective communication are available between the various administrative levels in the production department, this will contribute to improving the productive efficiency of the production department of the Greater Amman Municipality.

Strategic orientation

Table (2) shows that the correlation coefficient is (0.507) and that the probability value (Sig) is (0.000) which is less than the significance level ($=0.05$). This indicates a statistically significant positive relationship between the strategic orientations in the production department of the Greater Amman Municipality.

This indicates that whenever the strategic plans in the production department are clear and studied in a manner that suits the internal and external challenges and is characterized by objectivity and flexibility and is evaluated periodically to contribute to the desired development.

Commitment and conviction of senior management

Table (2) shows that the correlation coefficient is (0.527) and that the probability value (sig) is (0.000) which is less than the significance level ($\alpha=0.05$). This indicates a statistically significant positive relationship between the commitment and conviction of senior management in the production department of the Greater Amman Municipality Productivity Efficiency.

This indicates that whenever there is a commitment and conviction of senior management to reduce the number of times of audit and review during the implementation of administrative processes, and remove routine procedures, and support the simplification of administrative work, through the integration of integrated sub-tasks, and the delegation of administrative powers of

different levels of management in the organizational structure, This contributed to improving the production efficiency of the production department of the Greater Amman Municipality.

Empower staff (employees)

Table (2) shows that the correlation coefficient is (0.574) and that the probability value (Sig) is (0.000) which is less than the significance level ($\alpha=0.05$). This indicates a statistically significant positive relationship between the empowerment of workers in the production department of the Greater Amman Municipality.

This indicates that whenever budgets and plans are available for the development of the staff, they have been given the necessary confidence to participate in decision-making and to delegate the appropriate powers to do so.

Information Technology

Table (2) shows that the correlation coefficient is (0.641) and that the probability value (Sig) is (0.000) which is less than the significance level ($\alpha=0.05$). This indicates a statistically significant positive relationship between the information technology in the production department of the Greater Amman Municipality and improving productivity efficiency.

This indicates that whenever the information technology available in the production department is developed and reduces the administrative and financial control processes, and facilitates the coordination of administrative work and the speed of completion and the accuracy of information flowing through it, as this is a reason to improve the efficiency of productivity at the Greater Amman Municipality.

CONCLUSIONS

1. The basic requirements for the re-engineering of administrative operations in the Greater Amman Municipality / Department of Production are available at (59.50%). This shows that the Greater Amman Municipality has the minimum required to implement the re-engineering of administrative processes, which is a good result in the current economic conditions.

2. The strategy criterion is 59.81%, and this result is a reflection of the difficult reality experienced by the Amman Municipality / Department of production through the lack of financial resources necessary to implement the strategy to the required degree and increase the administrative workload and to solve problems of daily work.

3. The commitment and support of senior management is (56.13%), and this result is a reflection of the objection of a number of senior management. The policy of career rotation and the frequent and undisciplined movements in this category have confused

the process of supporting and developing administrative work in the Greater Amman Municipality, or career progression in this category has led to the creation of a category that is unable to support innovation and managerial development.

4. The IT criterion is (65.57%), and this result could have been achieved even better under the new programs and technology developed in recent years by the General Directorate of Information Technology (GAM).

5. The criterion of communication is (63.36%), and the researcher considers that this criterion needs further improvement within the department. The possibilities available within the Municipality of the various means of communication (fixed line, cellular telephone, fax, Internet, wireless communication) It is possible to give better results than obtained, but because of the increase in administrative work within the department to increase the number of departments and similar departments in the performance of different departments, and to rely on central communication without developing the organizational structure commensurate with the available communication technology.

6. The staff empowerment standard is (55.79%). This criterion is an indication that senior management does not give the various administrative levels enough opportunity to make decisions, delegate authority, and not rely on the scientific capabilities of administrative staff in managing administrative work.

7. The criterion of readiness for change is 56.27%. This percentage is weak to reflect the lack of adoption by the top management of the culture of change in the production department and the lack of adoption of modern management methods in the management of administrative works. The administrative levels also did not deal with this criterion as required, Because of their lack of motivation, and the lack of reward for outstanding employees for their positive results.

RECOMMENDATIONS

1. Enhancing the participation of employees in the preparation of the plan and the strategic objectives of the department, because of their involvement in adopting their success, and benefiting from the experiences and facilities enjoyed by the technical and administrative staff in the department.

2. Promoting the adoption of strategic plans and objectives that are flexible in the face of the surrounding variables, and analyze the internal and external environment and future scenarios in a precise and clear way.

3. Strengthening the principle of job stability in senior management and the non-movement of administrative rotation and non-studied follow-up, because of the bad impact on the confusion of administrative and technical work in the Department.

4. Strengthening the principle of delegation of powers in senior management, to follow up the plans and policies and the development of operations and administrative and technical work in the Department.

5. To develop the organizational structure in the production department in accordance with the applications of information technology and electronic management, to keep pace with the surrounding changes and reduce inflation in the organizational structures of the department.

6. Development of the infrastructure of methods and techniques of administrative communication between different administrative levels to achieve an effective system of communication and administrative communication, and taking into account preventive maintenance.

7. Delegation of powers to employees to enable them to manage their work efficiently and responsibly and away from centralization of senior management.

8. Enhancing the participation of employees in the production department through the formation of teams of them to accomplish the administrative and technical work and thus have the ability to provide their technical and administrative expertise and raise their morale by assuming the responsibilities of the works they manage.

9. To develop the administrative regulations and laws in force in the Greater Amman Municipality to suit the reality they live in, away from the administrative complexities and traditional systems, through the adoption by senior management of these modern and flexible concepts to cope with changes and advanced technology.

REFERENCES

- Ahmadi, et al. (1997) Recent Trends in Production and Operations Management, Faculty of Commerce, Ain Shams University, Cairo
- Al-Anbali, N. (1995) Human and Organizational Behavior from a Comparative Perspective, Riyadh: Institute of Public Administration, General Administration of Research.
- Al-Louzi, M. (2002) Organization and Procedures, 1st edition, Dar Wael for Publishing, Amman
- Al-Otaibi, S. & Al-Hamali, R. (2004) Re-engineering of Administrative Processes in the Public Sector Critical Success Factors, First National Quality Conference, King Saud University, Saudi Arabia.
- Al-Rub, S. (2009) Advanced Management Topics and their Applications in International Business Organizations, First Edition, Egyptian Book House, Cairo.
- Amer, S. & Alaa M. (2010) Organizational Development, Dar Al Fikr Publishers & Distributors, Amman, Jordan
- Ameri, S. & Al-Albi, T. (2008) Administration and Business, Amman: Dar Wael Publishing, 1st edition
- Aqili, O. (2001) Introduction to Integrated TQM Methodology, 1st edition, Dar Wael Publishing, Amman, Jordan.
- Caldas, T. (2012) Technology in Healthcare Business Process Reengineering and RFID at Hospital Beatriz Ângelo, Master Theses, Universidade Católica, Portuguesa
- Davenport T. (1993) Process innovation reengineering work through information technology, Harvard Business school press, Boston, M.A
- Dessler, G. (2003) Human Resource Management, Dar Al-Marikh Publishing, Riyadh, Saudi Arabia, translated by Dr. Mohamed Sayed Ahmed Abdel-Motaal.
- Hammer, M. & Champy, J. (1993) **Information Technology for Management Re-engineering the Corporation: A Manifesto for Business Revolution**, (New York, NY: Harper Business).
- Khalil, A. (2008) **The Role of Process Engineering in Supporting Cost Reduction Decisions under the Philosophy of Change Management**, 8th Annual International Scientific Conference Change Management and Knowledge Society, Zaytoonah University, Jordan.
- Lunithal, J. (2002) Re-engineering the Organization Step-by-step approach to revitalize the company Dar Al-Marikh, Riyadh, Saudi Arabia
- Mallah, N. (1986) **The Role of Accountability System in Enhancing Production Efficiency**, Applied Study in the Directorate of the University Press of Mosul, Master Thesis, Faculty of Management and Economics, University of Mosul.
- Masri, A. (2000) **Production and Industrial Relations Department**, 1st edition, University Youth Foundation, Alexandria
- Melhem, Y. (2006) Empowerment as a Contemporary Administrative Concept, 1st edition, Cairo, Egypt
- Mintzberg, H. (1993) **Le management au Coeur des organisations, Editions d'Organisations Paris p480.**
- Mohsen, A. & Najjar, S. (2006) **Production and Operations Management**, Baghdad, Memory Library.
- Najib, A. (2013) Effectiveness of the worker and its impact on improving the efficiency of the organization's productivity: applied study), Technical Institute, Hawija, Journal of Al-Farahidi, No. 17
- Neill, P. & Sohal, A. (1999) **"Business process reengineering: a review of recent literature"**, Technovation, Vol.19, No. 9.
- Nicholas, j. Aquilano , A. (1995) **Fundamentals of operation Management**, 2nd edition., McGraw – Hill, Inc., New York , Richard Irwin Chicago.
- Nijm, A. (1995) **Time System**, Cairo, Arab Organization for Administrative Development.
- Raymond, I. & Bergeron, F. (1998) Determinants of Business Process Reengineering Success in Small and Large Enterprises An empirical Study in Canadian Context, **Journal of Small Business Management**, Vol. 36. 1., (PP 72-86)
- Rock, N. (2003) **Examining the Relationship between Business Process Reengineering and Information Technology**. Master Of Science, Bowie State University, Maryland in Europe.