

Availability of Re-Engineering Requirements for Palestinian Industrial Companies

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Abstract: The study aimed at identifying the availability of re-engineering requirements in the Palestinian industrial companies. The researchers used the analytical descriptive method. The study society consists of all the Palestinian industrial companies (wood, plastic, aluminum and metal) operating in the Gaza Strip and registered with the Federation of Industries (236) companies. The sample of the study was selected using the stratified random sampling method. The sample size was 95 companies with 40% of the size of the society. The recovered and valid questionnaires were 85 (89.5%). A sample of 30 companies was selected from within the study sample. Statistical analysis was conducted to verify the validity and consistency of the questionnaire.

The study reached a number of results, the most important of which is: High availability of the requirements of process engineering in the Palestinian industrial companies, as follows (organizational requirements: 81%, technological requirements: 76.8%, human requirements: 75.8%).

The study presented a number of recommendations, the most important of which is the need to carry out periodic studies to identify changes and developments in the Palestinian industrial environment and to work to keep pace with those changes. The need for the attention of senior management in modern management approaches in general and the process reengineering method in particular. As well as work on reviewing the organizational structure periodically to avoid duplication and routine and repeated control.

Keywords: Process Reengineering, Industrial Companies, Palestine

1. INTRODUCTION

In view of the large and rapid changes and developments in the external environment of companies, especially in the field of information technology, and the orientation towards the knowledge-based economy, new trends and developments have emerged, keeping abreast of these changes and developments. Hence, Business reengineering, which is one of the latest concepts of change that revolutionized the world of modern management. This is a bold call to review all the work, procedures, study, evaluation and radical restructuring of the enterprise, in other words to completely abandon the old work procedures and to think in a new way to help face the drastic changes that may have suddenly occurred in the events affecting

The development of the industrial sector is a major objective for achieving the desired economic development in various societies. The industrial sector in any country occupies a special place in economic construction because of its weight in contributing to GDP and GDP, labor force, solving problems of unemployment and poverty and achieving economic independence. Industrialization in Palestine, 2014). Workers in the industrial sector represent 17% of the total Palestinian labor force (Palestinian General Federation of Industries, 2016).

Despite the interest of many researchers in the process of re-engineering operations, there is a relative scarcity, especially

in the studies studied by the organizations in general and industrial companies in particular, and is one of the topics worthy of research extensively and with great care of researchers, Competition, and high customer expectations, which ultimately affect performance improvement. Samalali and Bilali (2004) note that the most important high performance factors come from the organization itself, rather than from the ocean.

Based on the above, the current study is considered one of the rare studies aimed at answering the following main question:

How satisfied are the re-engineering requirements of the Palestinian industrial companies operating in the Gaza Strip governorates?

It has the following sub-questions:

1. What are the regulatory requirements for the re-engineering of operations in the Palestinian industrial companies in the Gaza Strip governorates?
2. What is the availability of technological requirements for the re-engineering of operations in the Palestinian industrial companies in the Gaza Strip governorates?
3. What is the availability of human requirements for re-engineering operations in the Palestinian industrial companies in the Gaza Strip governorates?

2. RESEARCH OBJECTIVES

In line with the study's questions, the present study sought to achieve a set of objectives, namely:

1. Identify the level of availability of regulatory requirements for process reengineering in Palestinian industrial companies.
2. Identify the availability of technological requirements for process re-engineering in Palestinian industrial companies.
3. Measuring the level of availability of human requirements for re-engineering operations in Palestinian industrial companies.
4. Provide a set of recommendations for Palestinian industrial companies to improve re-engineering processes.

3. RESEARCH IMPORTANCE

1. To provide the General Federation of Palestinian Industries with the requirements of re-engineering processes in the Palestinian industrial companies.
2. To provide documented recommendations and proposals from the field study so that the senior management of the Palestinian industrial companies will assist in implementing the process re-engineering approach.
3. This study may contribute to drawing the attention of researchers to undertake many studies and researches in modern administrative curricula and apply them to vital sectors such as the industrial sector.
4. The absence of adequate field studies concerned with the disclosure of the requirements of the process re-engineering approach in the industrial companies in particular.

4. RESEARCH LIMITS AND SCOPE

For each study, scientific or theoretical objective limits, human limits, spatial limits, as well as temporal limits, can be clarified as follows:

1. **Objective Limit:** The study was limited to identifying the availability of re-engineering entry requirements.
2. **The spatial limit:** The application of the study was limited to the Palestinian industrial companies (wood, plastic, and aluminum, metal) in the governorates of the Gaza Strip.
3. **Human Limit:** This study focused on senior management personnel in companies.
4. **Time Limit:** Data for this study were collected during the year (2016- 2017).

5. THEORETICAL FRAMEWORK

Process Reengineering Approach:

The concept of reengineering has spread considerably in the field of American administrative thought when Hammer and Chambi published their first re-engineering book, *Re-engineering the Organization* (Peppard and Fitzgerald, 1997).

Many authors confirm that the re-engineering entrance originated in the field of information technology and then spread strongly in all functional areas within the organization. The result of massive IT investments was expected to increase productivity at high rates, but this did not happen (Drew, 1994; Dixon et al., 1994).

While Davenport believes that there are many approaches and methods that led to the advent of reengineering and contributed to the formation of its foundations and principles, which are as follows: Total Quality Entrance - Industrial Engineering - Systems Portal - Social Art Portal - Active Traffic for Innovations - Use Information Systems to Achieve Advantage Competitive (Raymond et al., 1998).

Introduction to Reengineering: There are a set of definitions for the concept of reengineering. The following is a set of definitions: Hammer and Chambi define process reengineering as "serious and fundamental rethinking of the organization's operations, radically redesigned to achieve revolutionary improvements in important performance criteria such as: cost - quality - service - fast completion of work (Hammer and Chambi 1993).

Process re-engineering requirements:

Each of the development entrances has a set of requirements that must be pursued in order for the portal to achieve the desired results. The requirements of applying the process reengineering approach represent a set of changes to be made in the department so that it can function in a modern framework, , But there are basic requirements common between them and necessary to implement this portal, which is one of the entrances to administrative development. (2009), the study of (Al-Jerba, 2011), the study of (Salimifard et al., 2010), the study (Deep, 2009) and the study of (Al-Aga, 2006), (Ibrahim & FarajAllah, 2017), (Abu Naser & Al Shobaki, 2016), (Al-Nabil, 2006) and (Al-Natsheh, 2009), (Al Shobaki, 2016), and (Al Shobaki, 2017). The researchers concluded with a list of requirements for process reengineering: regulatory requirements, technological requirements and human requirements.

These dimensions are consistent with the RBV theory. Barney (1991) noted that the institution is a portfolio of productive resources (financial, human, material) and adds that the growth of the institution is determined through the portfolio of productive resources monitored by the institution, As well as the capacity of the administrative machinery to coordinate and utilize those resources.

First- Regulatory requirements:

Organizational requirements and dimensions are those that coordinate and link the elements of the organization to enable them to achieve their objectives as the force that enables the linking and unification of everything in the organization (Rachman et al., 2001).

And to familiarize researchers with previous studies on the regulatory requirements for process reengineering as a study Al-Khnaq (2008), Hamzawi (2004) and Al-Aga

(2006). The researchers concluded a list of regulatory requirements for process reengineering, which will be presented as follows:

1. **Organizational Restructuring:** As the organizational structure is a safety valve for the organization, it reduces the risks it may encounter due to sudden changes.
2. **Participate in the evaluation of the organization's performance:** Success factors can be achieved only through committed staff with the power to make decisions in a timely manner. Successful organizations believe that profit is the inevitable outcome to take into account the concerns of both employees and customers.
3. **Revisiting FAO's internal systems:** Actions that help to sustain the organization. Systems support the organization's organizational structure, but if they are rigid and bureaucratic, they kill the entrepreneurial spirit, inhibit the flow of communication, and undermine the flexibility of the organizational structure.

Second- Technological requirements:

The rapid development of the organizational environment has led to the increasing adoption of information technology as a strategic and decisive tool in the survival and sustainability of contemporary organizations. The increasing volume of information flows led to the need to adopt appropriate technology. Over the last 30 years, humankind has produced more information than the amount of information produced in the last five thousand years, and 43% of the world's managers are convinced that important decisions are delayed because of the need for more information (Al-Qassimi, 2009). The transformation into IT achieves a range of achievements in increasing business efficiency, reducing the cost of business processes, increasing the accuracy of business-related data, and the enormous amount of information, as well as timely access to information (Turner, 2009).

The IT overview was a computer that performed calculations very quickly, or was perceived by managers as the three components (information system design, information systems operations, and information system skills). This was due to the historical view of information technology as merely an unnecessary tool (Henderson & Venkatraman, 1993), but with the evolution of business the outlook for information technology has evolved to be seen as a tool for the development of organizations.

Third- Human requirements:

Human elements are a vital resource and a vital component in the current circumstances. They are also a competitive advantage that the organization can achieve by creating more efficient, committed, skilled, and quality human resources that help them compete through rapid response to the market, providing high quality products and services As well as through technological innovations (Al-Dahmi, 2012).

The researchers conclude that the means to the success of any organization is its human resources and without all

possibilities are disabled, where the human element is the central variable in the organization, without which lose material assets value, and therefore the organizations must pay attention to its staff. Deep, 2009 and Qowaie (2007) and Al-Aga (2006) indicate that achieving the results of process engineering requires attention to the human element, which imposes a distinct contribution to human resources management in the successful implementation of process reengineering through:

1. **Support and support for process reengineering efforts** the success of efforts to re-engineer processes depends on the degree of conviction and the extent to which senior management adopts re-engineering programs to improve the competitive position of the organization.
2. **Contributing to the formation of task forces** where it is noted that employees who work collectively, their ideas and decisions are better than the individual who works alone, and in this sense the organization must work on redesigning the work so that teams can emerge naturally.
3. **Contribute to changing the nature of the work** through which the functions will be converted from simple tasks to composite work, where teams will be specialized in performing business in specific places, clear and easy to access and simple procedures.
4. **Contributing to the transition from monitoring tasks to possible tasks** as organizations that implement the process reengineering approach do not require staff to follow instructions, but require staff who are able to establish rules themselves.
5. **Contribute to the transition from training to education** so that the individual must not only understand how to perform the tasks, but also how to perform these tasks.
6. **Providing human resources with successful managerial and managerial mindsets** capable of grasping the concept of process reengineering, having self-commitment to achieve the desired goals, and being aware of the concept of operations.

Methodology of the Study:

The Study Method: The study followed the analytical descriptive method, in which he tries to describe the phenomenon of the subject of the study, analyze its data, and explain the relationship between its components, and the views that are raised around them, and the processes involved, and effects.

Study Society: The study community means that all individuals, persons or objects that are the subject of the research problem. The study population consists of all Palestinian industrial companies (wood, plastic, aluminum, metal) operating in the Gaza Strip and registered with the Federation of Palestinian Industries (236).

The Study Sample: The sample of the study was selected using the stratified random sampling method as one of the statistical methods used to represent the study society according to the scientific research rules in the selection of samples. The sample size was 95 companies with 40% of the size of the society. (89.5%). A sample of 30 companies was selected from within the study sample. Statistical analysis was conducted to verify the validity and stability of the questionnaire.

Study Tool: To achieve the objective of the study, the questionnaire was used as a data collection tool, which was developed and developed using the criteria set by the researchers. In order to arrive at the questionnaire in its final form, the following steps were followed: Defining the objective of the questionnaire, The measurement of the dimensions of the questionnaire and the formulation of its terms, and the use of the scale of Likert pentagram, which means approval of the degree of improvement (very large and have five degrees, large and have four degrees, medium and have three degrees, a low degree and have two degrees, very few And have one degree).

Statistical Processes: The researchers used the Statistical Package for Social Sciences (SPSS) to perform the necessary analysis and statistics for the questionnaire data, based on the

Table 1: The correlation coefficients and the level of significance of each paragraph of the "regulatory requirements" area with the total score of the field

| No. | Item | Pearson Correlation | Sig. |
|-----|--|---------------------|------|
| 1. | The company is working to reduce the work steps of various operations | 0.849 | 0.00 |
| 2. | The company is characterized by effective communication between employees | 0.941 | 0.00 |
| 3. | The company integrates several functions into one job | 0.927 | 0.00 |
| 4. | Organizational change is the responsibility of everyone at all organizational levels | 0.894 | 0.00 |
| 5. | Employees accept radical and rapid change of processes and activities | 0.927 | 0.00 |
| 6. | The company predominates in the culture of achieving quality performance | 0.906 | 0.00 |

Table 2: The correlation coefficients and the level of significance of each paragraph of the "technological requirements" area with the total score of the field

| No. | Item | Pearson Correlation | Sig. |
|-----|---|---------------------|------|
| 1. | The company has good knowledge of technological developments appropriate to the company's objectives | 0.806 | 0.00 |
| 2. | The company is characterized by its high level of technological developments in the surrounding environment | 0.657 | 0.00 |
| 3. | The company coordinates its internal operations using IT | 0.708 | 0.00 |
| 4. | The company relies on information technology in its control operations | 0.852 | 0.00 |
| 5. | The company uses IT to redesign its operations | 0.856 | 0.00 |
| 6. | The company engages its employees in IT-related training courses | 0.875 | 0.00 |

Table 3: Correlation coefficients and the level of significance for each paragraph of the field of "human requirements" with the total score of the field

| No. | Item | Pearson Correlation | Sig. |
|-----|------|---------------------|------|
|-----|------|---------------------|------|

five-point estimate, which is to approve the degree of improvement (very large, large, medium, few, very few).

Validation of the Study Tool: Two methods were used to verify the veracity of the questionnaire:

First: The Judges: The questionnaire is intended to measure the questions of the questionnaire and to achieve this objective, the questionnaire was presented to a group of specialized arbitrators to guide their opinions on the appropriateness of the question paragraphs, as well as for verifying the accuracy and clarity of the language. Delete or modify some of the paragraphs, so that the questionnaire was finalized.

Second: Validating the scale:

1. Internal consistency: The integrity of the internal consistency is the strength of the correlation between the scores of each paragraph of the questionnaire and the total score of the main field to which it belongs, that is, measures the veracity of the scales to measure the objectives. The internal consistency of the questionnaire paragraphs is calculated by calculating the correlation coefficients between each paragraph and the total score of its area As follows:

| No. | Item | Pearson Correlation | Sig. |
|-----|--|---------------------|------|
| 1. | The company has qualified management competencies to lead the company's change team | 0.881 | 0.00 |
| 2. | Employees at the company have a positive outlook for the success of the change in the company | 0.728 | 0.00 |
| 3. | The company can maneuver the workers to work on most of the equipment and machines of the company | 0.751 | 0.00 |
| 4. | The company has human resources that have the ability to deal with IT | 0.708 | 0.00 |
| 5. | The company is working to put the right person in the right place | 0.538 | 0.02 |
| 6. | The company helps to develop administrative leadership to understand and apply modern administrative thought | 0.775 | 0.00 |

It is clear from the previous tables that the first area "availability of regulatory requirements" is directly correlated with all the paragraphs that measure it, the correlation coefficients ranged between (0.894- 0.941), and the second area "technological availability" is directly correlated with all the paragraphs that measure it, (0.657- 0.875), while the third field "availability of human requirements" is directly correlated with all the paragraphs that measure it. The correlation coefficients ranged between (0.538- 0.881), all of which are statistically significant ($\alpha = 0.01$) which indicates the correlation of the paragraphs that measure the first domain in its field, which means that they are internally consistent with the area you measure, which is essential in measuring.

2. Structural honesty: Structural honesty is one measure of the validity of a tool that measures the extent to which the objectives of the tool are achieved and shows how closely each area of study relates to the questionnaire. The following table shows the extent to which each area of study is related to the overall score of the questionnaire and its strong relation to the general objective of the study. The correlation coefficients ranged between (0.789 - 0.860) and thus the scale is characterized by a high degree of honesty.

Table 4: correlation coefficients and level of significance for each field and the total score of the questionnaire

| No. | Dimension | Pearson Correlation | Sig. |
|-----|----------------------------|---------------------|------|
| 1. | Regulatory requirements | 0.778 | 0.00 |
| 2. | Technological requirements | 0.706 | 0.00 |
| 3. | Human requirements | 0.598 | 0.00 |

Stability of the study instrument: The stability of the study questionnaire was verified by the Cronbach's Alpha Coefficient to measure the stability of each of the domains of the scale separately, as well as the calculation of the stability of the scale as a whole. Cronbach's Alpha coefficient is between 0-1 and the nearest one showed a high stability and the closer it came to zero, the more unstable it was.

Table 5: Determination of Determination of Determination of Determination by Cronbach's Alpha

| No. | Dimension | No. Of Items | Cronbach's Alpha |
|---|----------------------------|--------------|------------------|
| 1. | Regulatory requirements | 6 | 0.969 |
| 2. | Technological requirements | 6 | 0.917 |
| 3. | Human requirements | 6 | 0.876 |
| Availability of process reengineering requirements | | 18 | 0.892 |

The results shown in the previous table indicate that the value of the Cronbach's Alpha coefficient was high for the availability of re-engineering process requirements, ranging between (0.876 - 0.969), and Cronbach's Alpha coefficient for the whole sample was 0.892, which means that the questionnaire is stable.

Natural distribution test (Kolmogorov–Smirnov test)

The researchers used the Kolmogorov–Smirnov test to determine whether the data follow normal distribution, a necessary test in the case of hypothesis testing, because most laboratory tests require that the data be distributed naturally. The following table (6) shows the results of the test where it was found that the value of the significance level for each field is greater than 0.05 (sig.> 0.05). This indicates that the data follow the normal distribution and the scientific tests should be used.

Table 6: Natural distribution test (1- Sample K-S) for all fields

| No. | Dimension | Sig. |
|---|----------------------------|-------|
| 1. | Regulatory requirements | 0.193 |
| 2. | Technological requirements | 0.052 |
| 3. | Human requirements | 0.837 |
| Availability of process reengineering requirements | | 0.904 |

Answer the study questions:

In order to answer the study questions, the researchers used several statistical methods, such as: arithmetical averages, standard deviations, as well as the use of a single sample test for each of the domains. The answer of the paragraph is positive in the sense that the sample agrees with its content if

the calculated t value is greater than the tabular t value of 1.99 or the probability value is less than 0.05 and the arithmetic mean of the paragraph is greater than (3) Do not agree with their content if the calculated t value is less than the t-value of the t-table, which is 1.99, the probability value is greater than 0.05, the arithmetic mean of the paragraph is smaller than (3) Probability is greater than (0.05).

The answer to the first question is, "To what extent are the regulatory requirements for the re-engineering of operations in the Palestinian industrial companies in the Gaza Strip governorates?"

In reviewing the responses of the study sample on the availability of the organizational requirements of the process reengineering methodology, Table (7) indicates that the arithmetical averages for all the fields ranged from (3.95 - 4.19) according to the fifth scale (Likert)), Which states that: "The idea of institutional change is the responsibility of everyone at all levels", with an average of 4.19, while the last ranked paragraph (6), which states: "The company has a culture of achieving quality performance "With an average of (3.95). In general, the availability of regulatory requirements has reached an average of (4.05).

Table 7: Analysis of the availability of regulatory requirements

| No. | Item | Mean | S. D. | T – Test | Sig. | Rank |
|---|--|------|-------|----------|------|------|
| 1. | The company is working to reduce the work steps of various operations | 3.96 | 0.79 | 11.21 | 0.00 | 5 |
| 2. | The company is characterized by effective communication between employees | 4.05 | 0.83 | 11.64 | 0.00 | 3 |
| 3. | The company integrates several functions into one job | 4.09 | 0.81 | 12.44 | 0.00 | 2 |
| 4. | Organizational change is the responsibility of everyone at all organizational levels | 4.19 | 0.78 | 14.06 | 0.00 | 1 |
| 5. | Employees accept radical and rapid change of processes and activities | 4.04 | 0.79 | 12.03 | 0.00 | 4 |
| 6. | The company predominates in the culture of achieving quality performance | 3.95 | 0.79 | 11.19 | 0.00 | 6 |
| Paragraphs of regulatory requirements as a whole | | 4.05 | 0.69 | 14.07 | 0.00 | |

The results indicate that the responses of the members of the research sample exceeded the average approval level, which is 3 in all the paragraphs. The low dispersion is also evident, which indicates the convergence of their views. Given the probabilistic value (SIG), there were no differences in the views of the study sample members on the "availability of regulatory requirements" clauses. All of the paragraphs were statistically significant at the level of ($\alpha \leq 0.01$)

The results indicate that the regulatory requirements for re-engineering in the industrial companies are very large. This indicates that companies are continuously developing themselves to cope with the large changes in their internal and external organizational environment, especially in the circumstances of these companies in the Gaza Strip. Electricity for long hours and the poor economic conditions in society that need these companies to be organizationally ready to re-engineer from time to time.

Answer the second question, which states: "To what extent are the technological requirements for the re-engineering of operations in the Palestinian industrial companies in the Gaza Strip governorates?"

In reviewing the responses of the study sample on the availability of technological requirements that support the process reengineering approach, Table (8) indicates that the mathematical averages for all fields ranged from 3.75 to 3.92 according to the Likert scale. And ranked first in paragraph number (1), which states: "The company has good knowledge of technological developments appropriate to the objectives of the company", with an average of (3.92), while ranked last paragraph (6), which states: "The company engages employees in courses Training related to information technology ", with an average of (3.75). In general, the availability of technological requirements has obtained an arithmetic mean (3.84).

Table 8: Analysis of technological requirements

| No. | Item | Mean | S. D. | T – Test | Sig. | Rank |
|-----|---|------|-------|----------|------|------|
| 1. | The company has good knowledge of technological developments appropriate to the company's objectives | 3.92 | 0.85 | 9.98 | 0.00 | 1 |
| 2. | The company is characterized by its high level of technological developments in the surrounding environment | 3.85 | 0.78 | 10.02 | 0.00 | 3 |
| 3. | The company coordinates its internal operations using IT | 3.82 | 0.82 | 9.27 | 0.00 | 4 |
| 4. | The company relies on information technology in its control operations | 3.89 | 0.87 | 9.44 | 0.00 | 2 |
| 5. | The company uses IT to redesign its operations | 3.82 | 0.85 | 8.96 | 0.00 | 4 |
| 6. | The company engages its employees in IT-related training | 3.75 | 0.80 | 8.67 | 0.00 | 6 |

| No. | Item | Mean | S. D. | T – Test | Sig. | Rank |
|--|---------|------|-------|----------|------|------|
| | courses | | | | | |
| Paragraphs of technological requirements as a whole | | 3.84 | 0.71 | 10.97 | 0.00 | |

The results also show that the responses of the members of the research sample exceeded the average approval level, which is 3 on all the paragraphs representing the second field. The low dispersion is also shown, which reflects the convergence of their views. Given the probability value (SIG), there are no differences in the views of the study sample members on the "availability of technological requirements" section, where all of the paragraphs were statistically significant at the level of ($\alpha \leq 0.01$).

The results show that the Palestinian industrial companies provide the technological requirements for reengineering significantly. The researchers point out that the Palestinian people are known for their openness to other societies and the transfer of experience gained through the work of their members in many developed countries. Keep abreast of the latest developments in the field of information technology necessary for proper re-engineering.

Answer to the third question, which states, "How satisfied are the human requirements for the re-engineering of operations in the Palestinian industrial companies in the Gaza Strip governorates?"

In reviewing the responses of the sample of the study on the availability of human requirements that support the process reengineering approach, Table (9) indicates that the arithmetic averages for all the domains of the field ranged from 3.66 to 3.93 according to the Likert scale. And ranked first in paragraph number (6), which states that: "The company helps to develop administrative leadership to understand and apply modern administrative thought", with an average of (3.93), while ranked last paragraph (3), which states: "The company can maneuver workers to work on most of the company's equipment and machinery ", with an average of (3.66). In general, the availability of human requirements has obtained an arithmetic average (3.79).

Table 9: Analysis of the field of human requirements

| No. | Item | Mean | S. D. | T – Test | Sig. | Rank |
|---|--|------|-------|----------|------|------|
| 1. | The company has qualified management competencies to lead the company's change team | 3.89 | 0.95 | 8.66 | 0.00 | 2 |
| 2. | Employees at the company have a positive outlook for the success of the change in the company | 3.88 | 0.82 | 9.89 | 0.00 | 3 |
| 3. | The company can maneuver the workers to work on most of the equipment and machines of the company | 3.66 | 0.93 | 6.51 | 0.00 | 6 |
| 4. | The company has human resources that have the ability to deal with IT | 3.71 | 0.88 | 7.36 | 0.00 | 4 |
| 5. | The company is working to put the right person in the right place | 3.67 | 0.89 | 6.93 | 0.00 | 5 |
| 6. | The company helps to develop administrative leadership to understand and apply modern administrative thought | 3.93 | 0.87 | 9.85 | 0.00 | 1 |
| Paragraphs of the field of human requirements as a whole | | 3.79 | 0.73 | 9.92 | 0.00 | |

These results indicate that the responses of the members of the research sample exceeded the average approval level, which is 3 for all the paragraphs representing the third field, and the low dispersion which reflects the convergence of their views. Given the probability value (.Sig), there are no differences in the views of the study sample members on the "availability of human requirements" clauses. All the paragraphs were statistically significant at the level of ($\alpha \leq 0.01$).

The results show that the human requirements for re-engineering are widely available for the expertise available in these companies in terms of dealing with the human element, which is ready to accept the changes in the work. The Palestinian people are known for their professional skills due to their work in many of the countries regionally and internationally, in addition to that the Palestinian society educated community as the proportion of university degree holders in it than in neighboring countries.

6. RESULTS

The results of the study showed:

- High availability of process engineering requirements in Palestinian industrial companies.
- The order of the engineering requirements is as follows (organizational requirements, technological requirements, and human requirements) in order.
- Regulatory requirements for reengineering (81%)
- Field of engineering requirements for reengineering in percentage (76.8%)
- Regulatory requirements for reengineering were 75.8%

7. RECOMMENDATIONS

Based on the above results, the study recommended:

- The need to carry out periodic studies to identify changes and developments in the Palestinian industry environment, and work to keep pace with those changes.
- The importance of senior management in modern management approaches in general and the process reengineering methodology in particular.
- The importance of relying on the scientific and field methodology to solve and solve problems, and work to strengthen the organizational culture in the company, which works to improve the chances of successful application of process reengineering.
- To review the organizational structure periodically to avoid duplication, routine and repeated control.

REFERENCES

- [1]Abdulla, A., Aziz, A., Al Shobaki, M., & Abu Naser, S. S. (2017). The Reality of Integrating the Dimensions of Computerized Health Information Systems in Dar Al-Shifa Medical Complex. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(9), 80-104.
- [2]Abu Amuna, Y. M., Al Shobaki, M. J., Abu Naser, S. S., & El Talla, S. A. (2017). The Reality of Electronic Human Resources Management in Palestinian Universities-Gaza Strip. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(3), 37-57.
- [3]Al Hila, A. A., Al Shobaki, M. J., & Abu Naser, S. S. (2017). The Effect of Academic Freedoms in Enhancing the Social Responsibility of Palestinian University Staff in the Gaza Governorates. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(5), 22-35.
- [4]Al Shobaki, M. J. (2016). The Impact of the Use of Decision Support Systems in the Re-Engineering in the Palestinian Universities in Gaza Strip. Paper presented at the Fifth International Conference Centre London, 18 to 20 April 2016- Conference on contemporary trends in education institutions (reform of the development ...) Jordan- Petra University.
- [5]FarajAllah, A. M., El Talla, S. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The Nature of Work and Its Relation to the Type of Communication among Employees in Palestinian Universities-A Comparative Study between Al-Azhar and Al-Aqsa Universities. *International Journal of Academic Multidisciplinary Research (IJAMR)*, 2(6), 10-29 .
- [6]El Talla, S. A., Al Shobaki, M. J., Abu-Naser, S. S., & Amuna, Y. M. A. (2018). The Nature of the Organizational Structure in the Palestinian Governmental Universities-Al-Aqsa University as a Model. *International Journal of Academic Multidisciplinary Research (IJAMR)*, 2(5), 15-31.
- [7]Ahadi, H. (2004). An examination of the role of organizational enablers in business process reengineering and the impact of information technology. *Information Resources Management Journal*, 17(4), 110-118.
- [8]Al-Hila, A. A., Alhelou, E. M., Al Shobaki, M., & Abu Naser, S. S. (2017). The Quality of Banking Services in Light of the Financial Transformations and Their Impact on the Marketing Performance of the Banks in Gaza Strip. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(8), 36-57.
- [9]Abu Naser, S. S., & Al Shobaki, M. J. (2016). Enhancing the use of Decision Support Systems for Re-engineering of Operations and Business-Applied Study on the Palestinian Universities. *Journal of Multidisciplinary Engineering Science Studies (JMESS)*, 2(5), 505-512.
- [10]El Talla, S. A., Al Shobaki, M. J., Abu-Naser, S. S., & Amuna, Y. M. A. (2018). Organizational Structure and its Relation to the Prevailing Pattern of Communication in Palestinian Universities. *International Journal of Engineering and Information Systems (IJEAIS)*, 2(5), 22-43.
- [11]Al- Dahmi, Tarash (2012). The impact of information technology on administrative methods: quotations from my doctoral thesis, was entered on 1/10/2015. http://aziz-phd.blogspot.com/2011/02/blog-post_25.html
- [12]Al Hila, A. A., Al Shobaki, M. J., Amuna, Y. M. A., & Abu-Naser, S. S. (2017). Organizational Excellence in Palestinian Universities of Gaza Strip. *International Journal of Information Technology and Electrical Engineering*, 6(4), 20-30.
- [13]Abu Naser, S. S., & Al Shobaki, M. J. (2016). The Impact of Management Requirements and Operations of Computerized Management Information Systems to Improve Performance (Practical Study on the employees of the company of Gaza Electricity Distribution). Paper presented at the First Scientific Conference for Community Development.
- [14]Al Shobaki, M. J., & Abu Naser, S. S. (2016). The Dimensions of Organizational Excellence in the Palestinian Higher Education Institutions from the Perspective of the Students. *GLOBAL JOURNAL OF MULTIDISCIPLINARY STUDIES*, 5(11), 66-100.
- [15]Ammar, T. M., Al Shobaki, M. J., & Abu-Naser, S. S. (2018). Evaluation and Follow-Up and Their Relationship to the Level of Administrative Transparency in the Palestinian Universities. *International Journal of Academic and Applied Research (IJAAR)*, 2(2), 30-44.
- [16]Madi, S. A., El Talla, S. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The Organizational Structure and its Impact on the Pattern of Leadership in Palestinian Universities. *International Journal of Academic Management Science Research (IJAMSR)*, 2(6), 1-25 .

- [17]Salama, A. A., Al Shobaki, M., Abu-Naser, S. S., AlFerjany, A. A. M., & Abu Amuna, Y. M. (2018). The Relationship between Performance Standards and Achieving the Objectives of Supervision at the Islamic University in Gaza. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(10), 89-101 .
- [18]Ahmed, Adel A., Abu-Naser, Samy S., El Talla, Suliman A. and Al Shobaki, Mazen J. (2018). The Impact of Information Technology Used on the Nature of Administrators Work at Al-Azhar University in Gaza. *International Journal of Academic Information Systems Research (IJAISR)*, 2 (6), 1-20
- [19]Abu Naser, S. S., & Al Shobaki, M. J. (2017). Organizational Excellence and the Extent of Its Clarity in the Palestinian Universities from the Perspective of Academic Staff. *International Journal of Information Technology and Electrical Engineering*, 6(2), 47-59.
- [20]Al Shobaki, M. J., & Abu Naser, S. S. (2017). Requirements for Applying Decision Support Systems in Palestinian Higher Education Institutions-Applied Study on Al-Aqsa University in Gaza. *International Journal of Information Technology and Electrical Engineering*, 6(4), 42-55.
- [21]Abu Sultan, Y. S., Al Shobaki, M. J., Abu-Naser, S. S., & El Talla, S. A. (2018). Effect of the Dominant Pattern of Leadership on the Nature of the Work of Administrative Staff at Al-Aqsa University. *International Journal of Academic Information Systems Research (IJAISR)*, 2(7), 8-29 .
- [22]Al-Aga, Maram (2006). Applied Study of Re-Engineering of Administrative Processes in Banks in the Gaza Strip, Unpublished Master Thesis, Islamic University, Palestine.
- [23]Al-Hila, A. A., Alshaer, I. M. A., Al Shobaki, M., & Abu Naser, S. S. (2017). The Impact of the Governance of Private Universities in Building Partnership with NGOs Operating in Gaza Strip. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(9), 11-30.
- [24]Abu Naser, S. S., & Al Shobaki, M. J. (2017). The Impact of Senior Management Support in the Success of the e-DMS. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(4), 47-63.
- [25]Al Shobaki, M., Abu-Naser, S. S., El Talla, S. A., & Amuna, Y. M. A. (2018). Performance Reality of Administrative Staff in Palestinian Universities. *International Journal of Academic Information Systems Research (IJAISR)*, 2(4), 1-17.
- [26]AlFerjany, A. A. M., Salama, A. A., Amuna, Y. M. A., Al Shobaki, M. J., & Abu-Naser, S. S. (2018). The Relationship between Correcting Deviations in Measuring Performance and Achieving the Objectives of Control-The Islamic University as a Model. *International Journal of Engineering and Information Systems (IJEAIS)*, 2(1), 74-89.
- [27]Abu Naser, S. S., & Shobaki, M. (2016). Requirements of using Decision Support Systems as an Entry Point for Operations of Re-engineering in the Universities (Applied study on the Palestinian universities in Gaza Strip). *World Wide Journal of Multidisciplinary Research and Development*, 2(4), 32-40.
- [28]Al Shobaki, M. J., & Abu Naser, S. S. (2017). Studying the Reality of Applying Re-Engineering of Operations and Business in the Palestinian Universities in Gaza Strip, Al-Azhar University in Gaza a Model. *International Journal of Information Technology and Electrical Engineering*, 6(2), 10-21.
- [29]Al-Hila, A. A., Alhelou, E., Al Shobaki, M., & Abu Naser, S. S. (2017). The Impact of Applying the Dimensions of IT Governance in Improving e-training-Case Study of the Ministry of Telecommunications and Information Technology in Gaza Governorates. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(7), 194-219.
- [30]Al Shobaki, M. J., Abu Naser, S. S., & Kassab, M. K. I. (2017). The Reality of the Application of Electronic Document Management System in Governmental Institutions-an Empirical Study on the Palestinian Pension Agency. *International Journal of Engineering and Information Systems*, 1(2), 1-14.
- [31]Abu Naser, S. S., Al Shobaki, M. J., & Abu Amuna, Y. M. (2016). KM Factors Affecting High Performance in Intermediate Colleges and its Impact on High Performance-Comparative Study. *Computational Research Progress in Applied Science & Engineering*, 2(4), 158-167.
- [32]Alshaer, I. M. A., Al-Hila, A. A., Al Shobaki, M., & Abu Naser, S. S. (2017). Governance of Public Universities and Their Role in Promoting Partnership with Non-Governmental Institutions. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(9), 214-238.
- [33]Al-Habil, W. I., Al-Hila, A. A., Al Shobaki, M., Abu Amuna, Y., & Abu Naser, S. S. (2017). The Impact of the Quality of Banking Services on Improving the Marketing Performance of Banks in Gaza Governorates from the Point of View of Their Employees. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(7), 197-217.
- [34]Alhelou, E., Al hila, A., Al Shobaki, M., & Abu Naser, S. (2017). The Quality of Banking Services as an Input to Improve the Marketing Performance of Banks in Gaza Governorates from the Point of View of Customers. *International Journal of Information Technology and Electrical Engineering*, 6(5), 58-66.
- [35]Al-Shobaki, M. J., & Abu-Naser, S. S. (2017). Usage Degree of the Capabilities of DSS in Al-Aqsa University of Gaza. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(2), 33-48 .
-

- [36]Al-Jerba, Fener (2011). The Effect of the Department of Administrative Process Engineering on the Organizational Effectiveness of Private Hospitals in Amman, Unpublished Master Thesis, Middle East University, Jordan.
- [37]Abu Naser, S. S., Al Shobaki, M. J., & Abu Amuna, Y. M. (2016). Measuring knowledge management maturity at HEI to enhance performance-an empirical study at Al-Azhar University in Palestine. *International Journal of Commerce and Management Research*, 2(5), 55-62.
- [38]Al Shobaki, M. J., Abu-Naser, S. S., Amuna, Y. M. A., & El Talla, S. A. (2018). Support Extent Provided by Universities Senior Management in Assisting the Transition to e-Management. *International Journal of Academic Management Science Research (IJAMSR)*, 2(5), 1-26.
- [39]Al-Khnaq, Sana (2008). Educational and Regulatory Requirements for Virtual University Development: Malaysian Experience, *Journal of Economic and Management Research*, (3), 25-46.
- [40]Abu Naser, S. S., Al Shobaki, M. J., & Abu Amuna, Y. M. (2016). Promoting Knowledge Management Components in the Palestinian Higher Education Institutions-A Comparative Study. *International Letters of Social and Humanistic Sciences*, 73, 42-53.
- [41]Al Shobaki, M. J., Abu Naser, S. S., Abu Amuna, Y. M., & El Talla, S. A. (2017). Impact of Electronic Human Resources Management on the Development of Electronic Educational Services in the Universities. *International Journal of Engineering and Information Systems*, 1(1), 1-19.
- [42]Almasri, A., El Talla, S. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The Organizational Structure and its Role in Applying the Information Technology Used In the Palestinian Universities-Comparative Study between Al-Azhar and the Islamic Universities. *International Journal of Academic and Applied Research (IJAAR)*, 2(6), 1-22.
- [43]Abu Naser, S. S., Al Shobaki, M. J., Abu Amuna, Y. M., & Al Hila, A. A. (2017). Trends of Palestinian Higher Educational Institutions in Gaza Strip as Learning Organizations. *International Journal of Digital Publication Technology*, 1(1), 1-42.
- [44]Al Shobaki, M. J., & Abu Naser, S. S. (2017). The Role of the Practice of Excellence Strategies in Education to Achieve Sustainable Competitive Advantage to Institutions of Higher Education-Faculty of Engineering and Information Technology at Al-Azhar University in Gaza a Model. *International Journal of Digital Publication Technology*, 1(2), 135-157.
- [45]Al-Natsheh, Hazem (2009). The implications of administrative reengineering on institutional success in Hebron, unpublished master thesis, Hebron University, Palestine.
- [46]Abu Naser, S. S., Al Shobaki, M. J., Amuna, Y. M. A., & El Talla, S. A. (2017). The Reality of Electronic Human Resources Management in Palestinian Universities from the Perspective of the Staff in IT Centers. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(2), 74-96.
- [47]Al Shobaki, M. J., Abu Naser, S. S., Abu Amuna, Y. M., & El Talla, S. A. (2017). Importance Degree of eHRM and its Impact on Various Administrative Levels in Palestinian Universities. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(7), 181-196.
- [48]FarajAllah, Ahmed M. A. (2016). The role of organizational culture as a moderator variable in the relationship between intellectual capital and performance development. *Palestine University Journal for Research and Studies*, 6 (4):369-396.
- [49]Al-Qassimi, Mohammed (2009). Activating Business Reengineering Tasks from an ICT Perspective: An Integrative Approach, Working Paper for the Third Scientific Conference of the Faculty of Economics and Administrative Sciences, Business Organizations Management and Contemporary Global Challenges, Applied Science University, Jordan.
- [50]Abu Naser, S. S., Al Shobaki, M., & Ammar, T. M. (2017). Impact of Communication and Information on the Internal Control Environment in Palestinian Universities. *International Journal of Hybrid Information Technology*, 10(11), 41-60.
- [51]Al hila, A. A., Al Shobaki, M. J., Abu Naser, S. S., & Abu Amuna, Y. M. (2017). Proposed Model for Learning Organization as an Entry to Organizational Excellence from the Standpoint of Teaching Staff in Palestinian Higher Educational Institutions in Gaza Strip. *International Journal of Education and Learning*, 6(1), 39-66.
- [52]Al Shobaki, M. J., Abu Naser, S. S., Amuna, Y. M. A., & Al Hila, A. A. (2017). Learning Organizations and Their Role in Achieving Organizational Excellence in the Palestinian Universities. *International Journal of Digital Publication Technology*, 1(2), 40-85.
- [53]Ibrahim, Siddig Balal & FarajAllah, Ahmed M. A. (2017). The interaction Between Market and Learning Orientation and their Impact on Production Flexibility. *Palestine University Journal for Research and Studies*, 7 (2):3-28.
- [54]Al-Serr, Ayman (2008). The Reality of Reengineering Administrative Processes in the Ministry of Interior and National Security in the Gaza Strip, Unpublished Master Thesis, Islamic University, Palestine.
- [55]Badwan, J. J., Al Shobaki, M. J., Abu Naser, S. S., & Abu Amuna, Y. M. (2017). Adopting Technology for Customer Relationship Management in Higher Educational Institutions. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(1), 20-28.

- [56]Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.
- [57]Al Shobaki, M. J., Abu Naser, S. S., El Talla, S. A., & Amuna, Y. M. A. (2017). HRM University Systems and Their Impact on e-HRM. *International Journal of Information Technology and Electrical Engineering*, 6(3), 5-27.
- [58]Damanhuri, Amal (2013). Factors affecting the application of reengineering of administrative processes, *Al-Quds Open University Journal for Research and Studies*, 31 (2), 41-85.
- [59]Deep, Sheikh (2009). Evaluating opportunities for applying process reengineering as an input to improve competitiveness, *Tishreen Magazine*, 31 (1), 27-45.
- [60]FarajAllah, A. M., El Talla, S. A., Abu Naser, S. S., & Al Shobaki, M. J. (2018). Participation of Administrative Staff in Decision-Making and Their Relation to the Nature of Work in Universities. *International Journal of Academic Multidisciplinary Research (IJAMR)*, 2(7), 13-34 .
- [61]Hamzawi, Sharif (2004). Regulatory Requirements for the Integration of Marketing Direction in Economic Institutions, *Research of the Second National Forum of Institutions, Algeria, Faculty of Economic Sciences and Management Sciences, University of Baji Mokhtar Annaba, Algeria*.
- [62]Henderson, J., & Venkatraman, H. (1993). Strategic alignment: Leveraging information technology for transforming organizations. *IBM systems journal*, 32(1), 472-484.
- [63]Ibrahim, S. B., & FarajAllah, A. M. (2017). The role of market orientation in interpretation of the relationship between the availability of business process re-engineering requirements and product quality, *IUG Journal of Economics and Business Studies* 25 (1): 108-127.
- [64]Al Shobaki, M. J., Abu-Naser, S. S., Amuna, Y. M. A., & El Talla, S. A. (2018). The Level of Organizational Climate Prevailing In Palestinian Universities from the Perspective of Administrative Staff. *International Journal of Academic Management Science Research (IJAMSR)*, 2(5), 33-58.
- [65]Madi, S. A., El Talla, S. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The dominant pattern of leadership and Its Relation to the Extent of Participation of Administrative Staff in Decision-Making in Palestinian Universities. *International Journal of Academic Management Science Research (IJAMSR)*, 2(7), 20-43 .
- [66]Qowaie, Bouhaniyeh (2007). Re-engineering University Performance: A Contemporary Approach, *"Al-Muhath Magazine*, (5), 137-145.
- [67]Rachman, David et al. (2001). *Contemporary Management*, Rifa'i Muhammad Rifai and Sayyed Muhammad Abd Al-Muta'al, Riyadh: Dar Al-Marikh.
- [68]Salama, A. A. M., Abu Amuna, Y. M., Al Shobaki, M. J., & Abu-Naser, S. S. (2018). The Role of Administrative Procedures and Regulations in Enhancing the Performance of The Educational Institutions-The Islamic University in Gaza is A Model. *International Journal of Academic Multidisciplinary Research (IJAMR)*, 2(2), 14-27 .
- [69]Salimifard, K., Abbaszadeh, M., & Ghorbanpur, A. (2010). Interpretive structural modeling of critical success factors in banking process re-engineering. *International Review of Business Research Papers*, 6(2), 95-103.
- [70]Samalali, Yahdha; Bilali, Ahmad (2004). The strategic importance of resources and competencies and their role in achieving competitive advantage, a working paper presented to the International Forum on Human Development and opportunities for integration into the knowledge economy and human competencies, University of Ouargla, Algeria.
- [71]Shama, M. J., Al Shobaki, M. J., Abu-Naser, S. S., & Abu Amuna, Y. M. (2018). Using the Asian Knowledge Model "APO" as a Determinant for Performance Excellence in Universities-Empirical Study at Al-Azhar University-Gaza. *International Journal of Information Technology and Electrical Engineering*, 7(1), 1-19.
- [72]Shobaki, M. J. A. (2017). The impact of the administrative dimensions of the decision support systems in the re-engineering of the Palestinian universities in Gaza Strip from the standpoint of employees. *The Arab Journal for Quality Assurance in Higher Education*, 10(2017).
- [73]Sultan, Y. S. A., Al Shobaki, M. J., Abu-Naser, S. S., & El Talla, S. A. (2018). The Style of Leadership and Its Role in Determining the Pattern of Administrative Communication in Universities-Islamic University of Gaza as a Model. *International Journal of Academic Management Science Research (IJAMSR)*, 2(6), 26-42.
- [74]Ammar, T. M., Al Shobaki, M. J., & Abu Naser, S. S. (2017). The Efficiency Extent of the Internal Control Environment in the Palestinian Higher Educational Institutions in Gaza Strip. *International Journal of Digital Publication Technology*, 1(2), 107-126.
- [75]Turner, W. (2009). *Accounting Information Systems Controls and Processes*, U.S.A.: Wiley.
- [76]Ibrahim, Siddig Balal & FarajAllah, Ahmed M. A. (2017). The relationship between the availability of re-engineering processes requirements and Production Flexibility: The Mediating Role of Learning Orientation. *Palestine University Journal for Research and Studies*, 7 (1):39-64.