



**Impact of Re-engineering Human Resources on High Performance:  
An Empirical Research in the Central Statistical Organization /  
Ministry of Planning**

**Omar Nabeel Talib\***

Department of Public Administration  
College of Administration and Economics  
University of Baghdad  
Baghdad, Iraq.

[omarnabeel15@gmail.com](mailto:omarnabeel15@gmail.com)

\*Corresponding author

**Mohsin Rashed Musaheb**

Department of Public Administration  
College of Administration and Economics  
University of Baghdad  
Baghdad, Iraq.

[mohsen.rashed@coadec.uobaghdad](mailto:mohsen.rashed@coadec.uobaghdad)

**Received: 14/6/2023 Accepted: 20/8/2023 Published Online First: 30 /6/ 2024**



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International \(CC BY-NC 4.0\)](https://creativecommons.org/licenses/by-nc/4.0/)

**Abstract:**

Two variables represent the research's central concept. Reengineering human resources is the first, and high performance is the second. By examining and elaborating on the offered factors, the research intends to diagnose the influence that the first variable (reengineering of human resources) and the second variable (high performance) have on each other. What is the status of the human resources re-engineering approach and its impact on high performance in the Central Statistical Organisation, and what is the extent of awareness and knowing the extent of contribution of the human resources re-engineering approach to upgrading work and achieving high performance? These are some of the key questions that were used to represent the main research problem. The researcher adopted the descriptive analytical approach in its completion with its theoretical and applied aspects. The researcher also designed a questionnaire according to several ready-made foreign standards, as the questionnaire included (50) items, the first variable consisting of four dimensions included (20) items, and the second variable consisting of five dimensions (30) paragraphs, which were distributed to a random sample of employees at various administrative levels and job positions, consisting of (208) employees at the headquarters of the Central Statistical Organization. A set of statistical methods were relied upon in testing hypotheses, which are (arithmetic mean, standard deviation, coefficient of variation, and simple linear regression) by using a set of statistical tools in the processing of research data available in ready-made statistical programs (SPSS.V21). Finally, the researcher presented several conclusions based on appeared in the practical side of the research.

**Paper type:** Research paper

**Keywords:** Re-engineering of Human Resources, High Performance, Central Statistical Organization, Ministry of Planning

## **1.Introduction:**

The most crucial distinction between management science and the other sciences is its ongoing acceptance of growth in accordance with the variables and requirements of the workplace. Since the workplace of today is characterised by an accelerating dynamic that is uncontrollable, the researchers observed in the organisational sector that it is not possible to meet the quick changes with the same speed of performance and the use of the same old approaches. Therefore, organizations tend to try to adapt to it by adopting the method of reengineering human resources to represent it as one of the contemporary trends that work to invest in human resources. Which is considered one of the most important driving forces for all programs. Continuous improvement allows the organization to develop and continue within the dynamic environment. This study makes an effort to emphasise the significance of its factors by understanding the effects of re-engineering human resources on high performance and the impact variables where high-performance trends may help shape the reality of public organisations to perform more effectively. This study aims to determine the current ability of the government sector represented by the (Central Statistical Organisation) to implement human resources re-engineering by understanding the prerequisites for its application, the likelihood that it will be available, and disclosing the challenges that the CSO's senior management might encounter during implementation, as well as solutions to these challenges.

### **1.1 Literature review:**

There are many studies on re-engineering human resource including:

Elias et al. (2017) evaluated the impact of reengineering and human resource management on the knowledge economy of the Sirjan Free Trade Zone, Iran. The study sample included all the experts in Sirjan Free Trade Zone. The required data were obtained through an open interview with 385 experts working in the free trade zones through the random sampling method in 2015, the questionnaire was used to describe the opinions of employees and the results showed that the reengineering of human resources has a positive impact on the economy of the trade area in Sirjan.

Hussein (2018) determined the degree of the contribution of human resource reengineering programs in enhancing the morale of workers, at Al-Rafidain University College, and used the simple random sample method consisting of (138) individuals. It used the descriptive statistical method, and the questionnaire was adopted as a tool for obtaining data and used (SPSS) program in entering and analyzing research data. Additionally, the results confirmed the importance of human resources re-engineering programs in enhancing employee morale.

Kalinina et al (2020) identified human resource re-engineering tools in the context of the strategy for the development of corporate structures for crisis response at the Donetskstal Metallurgical Factory - Ukraine.

As the research concluded, the re-engineering of human resources plays a crucial part in the development strategy to deal with crises that depend on institutional structures and the need to take those structures into consideration. The study depended on a logical strategy as well as the use of systems analysis and structural investigation methods. Organisations often face complex issues with regard to finances, operational procedures, organisational design, and workplace systems.

Al-Dajah (2021) investigated how re-engineering human resources affected the organisational revival of travel and tourist businesses in Amman, Jordan. Four businesses that are active in the capital's travel and tourist industry made up the study's sample. Amman: An analytical descriptive technique (questionnaire) was used in conjunction with a proportionate stratified random sample of (260) people. The results revealed the importance of the dimensions of the study variables and their impact on the dimensions of the organizational approach.

Also, there are many studies that discussed high performance including:

Al-Taie (2008) determined the level of performance in two of the Iraqi public institutions, namely (the General Establishment for Leather Industries and the General Establishment for Grain Trade). Is the level of performance consistent with the philosophical principles of high performance? Using the questionnaire as a tool for collecting information, the research found that the two organizations that failed to reach the level of high performance, in addition to the existence of statistically significant differences between them. In addition to the lack of administrative interest and access to its various details and dimensions.

Gu-Ne, Kim, and Min Lee (2016) demonstrated the relationship between job formulation and job characteristics as well as demonstrated the possibility of job formulation that increases job satisfaction and organizational commitment of employees. Thus, it increases financial performance in insurance companies - Korea, the study population was represented by employees working in sales in Insurance companies (the sample size was 406 sales consultants). The questionnaire was adopted as a means of data collection and analysis using the SPSS and AMOS programs. The results displayed that the job formula has a positive effect on the job satisfaction of the organization's members. Job formulation has a positive effect on organizational commitment.

Al-Amiri (2018) studied the role of strategic intelligence in its dimensions (prediction, future vision, partnership, motivation and empowerment) and social responsibility in its dimensions (economic responsibility, legal responsibility, moral responsibility, human responsibility) in achieving high performance. In terms of its dimensions (managerial quality, long-term commitment, continuous improvement, quality of the workforce) in a sample of Iraqi cement factories, the size of the sample included in the study was (521) managers. The questionnaire was used as a main tool. In collecting data as well as personal interviews and observations, the statistical program (SPSS) was used to perform statistical treatments. The study, which is the interaction of the dimensions of strategic intelligence and social responsibility together, affects positively and clearly high performance.

Junior and Fujihara's (2018) analysed the factors of creative industries in high-performing organizations by presenting the main drivers of organizational innovation in a cohort of 19 Brazilian organizations, from both the public and private spheres. The study used a mixed approach (qualitative and quantitative) to collect and analyze data. The exploratory factor was used as a tool for the study, and it was concluded that the most appropriate explanatory model is the one that contains four factors that stimulate innovation: management model, senior management, innovation culture, and innovation-oriented strategy.

Knowing the impact of reengineering human resources in the Central Statistical Organisation, one of the divisions of the Ministry of Planning, and its high performance in it, is the research topic at hand. The researcher discovered that there were issues that arose as a result of the functional turnover of the workforce caused by higher authorities' organisational or budgetary directives. In addition to the workers' failure to keep up with the programs Advanced communication technology at the emergence of the Corona pandemic, and the lack of sufficient understanding of the senior management of the research variables, which necessitated the need to find solutions to preserve and develop the remaining ones by improving their technical, intellectual and knowledge level. Which face current and future challenges in light of the uncertainty environment to overcome them and continue to provide the entrusted services in it.

## 2. Material and method :

### 2.1 Data Collection Sources:

The researcher depended on Arab and foreign sources to cover the theoretical side of the study as well as the global information network, in which he focused on the subject of re-engineering human resources and high performance, and about the practical side of the study. The Data was obtained through the distribution of the questionnaire at the headquarters of the Central Statistical Organization of the Ministry of Planning.

### 2.2 The research sample:

The research community includes the employees at the Central Statistical Organization, several numbers of (453) employees representing the field of study, while the target sample was (208) employees selecting a random sample of the research community from various job grades at all administrative ( general managers, directors departments, directorates, division officials, employees). This was based on the Krejcie and Morgan (1970) distribution table and using the questionnaire tool to reach an explanation that explains the relationship of the variables and their effects among them.

### 2.3 Data collection:

The questionnaire is the main tool for collecting data and information for research. It considered the main variables of the research, which are the (re-engineering of human resources and high performance). Each variable includes several sub-dimensions shown in Table (1), which represent the structure of the research questionnaire.

**Table 1:** The Structure of the Research Questionnaire

	Main variables	Sub-variables	Number of paragraphs	Number of paragraphs	Source
1	Re-engineering Human resource	Re-engineering work culture	5	1-5	Wen Lee, Leng Peng and Chuan Chen ,etal,2022
		Re-engineering training and development	5	6-10	
		Re-engineering Business process	5	11-15	
		Re-engineering Workplace systems	5	16-20	
2	High performance	continuous improvement	5	21-26	De Waal, 2020
		Openness and work orientation	5	27-32	
		Management quality	5	33-40	
		employees quality	5	41-45	
		Long term orientation	5	46-50	

To indicate the level of availability according to the arithmetic mean, the categories shown in Table (2) will be adopted.

Table 2: Availability level

Category	Availability level
1 – 1.80	Very low availability
1.81 – 2.60	Low availability
2.61 – 3.40	Moderate availability
3.41 – 4.20	High availability
4.21 – 5	Very high availability

source :(Likert, 1932)

#### 2.4 The research plan:

The research's default design intends to make explicit relationship between the important sub-variables and the primary variable. Based on the findings of the literature research on re-engineering human resources and high performance in public organisations, the variables' dimensions were selected. . Figure (1) shows the aspects of the research plan through the following:

The independent variable: (Reengineering of human resources) and consists of sub dimensions (reengineering of work culture, re-engineering of training and development, re-engineering of business processes, and reengineering of workplace systems).

The dependent variable: (High performance) consists of sub-dimensions (continuous improvement, openness and work orientation, management quality, employees' quality, and long-term orientation)

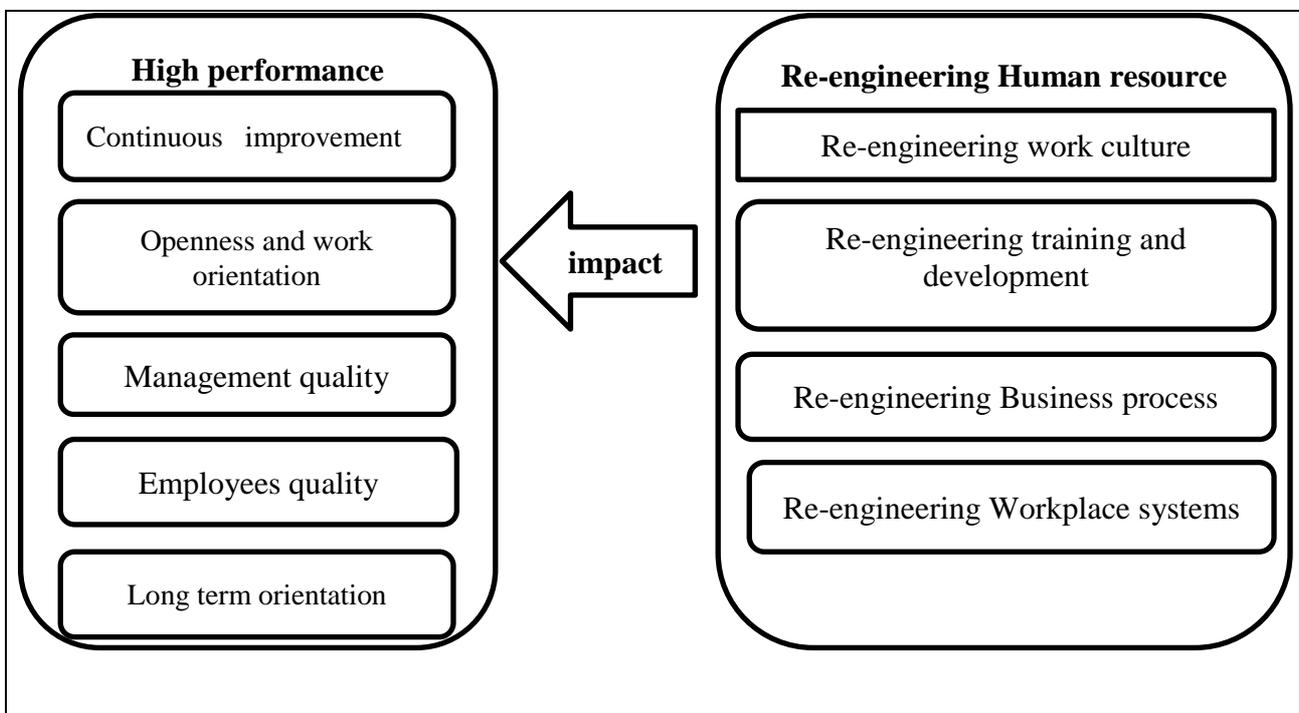


Figure 1: The hypothetical outline of the research

#### 2.5 The Research hypotheses

The research hypotheses were formulated depending on the research problem and objectives, and it is a group of hypotheses, including those related to impact relationships (regression), as follows:

The main hypothesis: It appears that there is no evidence of statistically significant effect of human resources re-engineering with its dimensions on high performance with its dimensions. The following sub-hypotheses branched out from this main hypothesis:

- a. The first sub-hypothesis: There is no statistically significant effect of re-engineering work culture on high performance.
- b. The second sub-hypothesis: There is no statistically significant effect of re-engineering training and development on high performance.
- c. The third sub-hypothesis: There is no statistically significant effect of re-engineering business process on high performance.
- d. The fourth sub-hypothesis: There is no statistically significant effect of re-engineering workplace systems on high performance.

The stability coefficient refers to the research scale's internal consistency, which means that all of the questions have a purpose to be measured and that it is possible to obtain the same results when the scale is repeated on the same sample over time. The coefficient (Cronbach's Alpha) is used to assess the internal consistency of the scale items. Which is with a value ranging from (0-1), and to accept the results of the Cronbach's Alpha test, it is required that the test value equals or exceeds (0.70), that is, it has an acceptable consistency, and the following table (3) shows that:

**Table 3:** Cronbach's Alpha coefficient analysis

Variants	Dimensions	Paragraphs	Cronbach's alpha coefficient		
			Dimensions	Variants	Scale
Re-engineering Human resource	Re-engineering work culture	Q1-Q5	0.741	0.777	0.899
	Re-engineering training and development	Q6-Q10	0.765		
	Re-engineering Business process	Q11-Q15	0.760		
	Re-engineering Workplace systems	Q16-Q20	0.769		
High performance	Continuous improvement	Q21-Q26	0.751	0.814	
	Openness and work orientation	Q27-Q32	0.720		
	Management quality	Q33-Q40	0.731		
	employees quality	Q41-Q45	0.751		
	Long term orientation	Q46-Q50	0.750		

The previous Table 3 shows that the values of the stability coefficient ranged around (0.720-0.777) for the research dimensions and its variables, and it is equals or exceeds than (0.70), as the value of the stability coefficient for the research scale is (0.899), which is greater, which meaning that the questionnaire is of high stability and its results can be adopted.

### 2.6 Re-engineering Human Resources Concept:

Re-engineering in its general form is defined by Hammer and Champy, (1993) as a process of radical rethinking, fundamental and deep re-design, and organization of operations in the organization with the aim of achieving clear fundamental improvements and changes in important, major and vital aspects of organizational performance, such as cost, quality, service, and speed. According to (Abdul Hafeez, 2003), one of the most significant contemporary trends that has caught the attention of contemporary researchers is the re-engineering of human resources. This trend plays a significant role in helping organisations invest their available human resources, which is the main driver for various improvement programs that strive to improve the organization's performance and prevent from habits and limited perspectives of job duties and conventional approaches of management. Hussein, (2018) defined it as "an administrative process implemented by senior management with the aim of redesigning the

organizational aspects of its human resources by taking advantage of the advantages of information technology, and in a way that enhances their ability to carry out the tasks and duties assigned to them and thus achieve the general objectives of their organization.” In relation to the idea of reengineering human resources, which are the organisational values that serve as the fundamental building blocks of the organization's culture, he added (Dubon, 2009) something significant. The remainder of the changes, including the technology changes on top of them, will be simple to implement if the value and behavioural transformation in the organisation has been successful.

### **2.6.1 Dimensions of re-engineering human resource:**

#### **2.6.1.1 Re-engineering work culture:**

**Re-engineering human resource** is the process of changing the way work is done within the organization to improve efficiency, productivity, and employee satisfaction (Appelbaum et al, 2012) and (Francis et al, 2016) referred to senior management and how it can correctly perceive the relationship between re-engineering the work culture through its measures that are represented in the organization's values and standards and the organizational response to change in the organization's culture and the trend towards re-engineering human resources, organizations can re-engineer their work culture by instilling a positive organizational culture, which can improve employee morale, reduce Staff turnover, increased productivity. This can be achieved by emphasizing values such as trust, respect, transparency, and fairness, and by fostering a sense of community and common purpose (Cameron and Quinn, 2011).

#### **2.6.1.2 Re-engineering Training and Development:**

It entails analysing and enhancing the procedures, frameworks, and equipment utilised in the organisation for employee development. To better engage and develop people and achieve significant changes in performance, this involves assessing training programmes, identifying skills shortages, and putting new ideas into practise (Daugherty and Wilson, 2018). Therefore, the senior management must make decisions regarding manpower planning and ensure the validity of decisions relating to employee relations, wages, benefits, training and development, and health and safety for the organization's members (Sharma, 2013). According to Walters and Rodriguez (2017), training and development is an essential tool that helps to maximise employee performance and makes them more effective, motivated, efficient, and innovative at work.

#### **2.6.1.3 Reengineering Business Process:**

Reengineering Business Process is described as the most essential element of re-engineering, as it has received great attention from specialists (Al-Lami and Kazem, 2016). Also, it is a management approach that aims to fundamentally rethink and redesign business processes to achieve significant improvements. This can be in performance such as cost reduction and quality improvement through analysis and redesign Operations. (Hammer and Champy, 1993), explained (Linden, 1994) that re-engineering is not related to improving business, improving operations, or modifying business. However, rather devising better ways to get work done, and this is done by relying on human resources and technology.

#### **2.6.1.4 Re-engineering Workplace systems:**

Generally, is a management strategy aimed at improving the efficiency and effectiveness of operations within the organization that includes a comprehensive and systematic approach to the analysis, design, implementation and improvement of systems and processes that support the basic functions of the organization (Krishnan, 2005). In the end, it requires remaining on constant pace with the rapid changes in the environment and the continuation of technology in revolutionizing the world of work and the emergence of artificial intelligence (AI). This will create in the future the design of smart buildings, so it is necessary to think about the future and design workplaces that are constantly changing. Aswell as, it adapts to employee preferences and therefore organizations must find ways to increase the engagement of their employees with the organization through planning and re-engineering the workplace (Anupindi et al, 2016).

## **2.7 High performance Concept (HPO):**

Al-Khazraji and Al-Zaidi, (2016) defined it as "a specific set of human resources practices, business structures, and processes that develop employee skills and increase his knowledge and commitment to the organization." The ability of organisations to achieve high and superior results continuously by maximising the use of resources, improving operations, and promoting a culture of excellence and continuous improvement is referred to as high performance (Hitt and Hoskisson, 2016). According to research by Akdemire et al. (2010), high performance can be attained when an organisation has an organisational culture that encourages employees to take responsibility for their work. The method of using human resources to meet the demands of high performance, which is fundamentally different from the bureaucratic and authoritarian methods.

(Al-Anazi et al, 2011).

### **2.7.1 Dimensions of high performance:**

#### **2.7.1.1 Continuous Improvement:**

In fact, this term of Japanese origin means "change for the better or better", as it aims to make continuous gradual improvements throughout the organization and not in part through the participation of all employees at various administrative levels (Khalaf, 2015). Continuous improvement includes all employees from Senior management to general management by the adoption of a strategy that distinguishes the organization from other organizations operating in the same sector which deepens people's sense of moral duty in high-performance organizations to continuously strive to achieve the organization's goals (Abdeljawad, 2022).

#### **2.7.1.2 Openness and Work Orientation:**

Choi, (2007) defined the orientation toward change, it is the efforts of individuals in the organization to diagnose and make changes to the methods of work, procedures, and policies to improve the performance of the organization. Also, Moon et al, (2005) refer to directing behavior in the organization towards change and openness at work in order to enhance organizational development. For example, adopting ideas and suggestions of employees to improve the work environment in the organization in order to motivate and encourage them to provide other change initiatives to increase the performance of the organization.

#### **2.7.1.3 Management Quality:**

For high performance organisations, management quality is regarded as being of utmost importance because it strives to uphold a relationship of trust with employees at all organisational levels by valuing their loyalty, showing respect, developing personal relationships with them, working to foster mutual trust, and enhancing methods of treatment with fairness through the high-performance managers of the organisation. According to (Jaafar, 2017) and (Frenkel and Sanders, 2011), effective management is what cultivates favourable attitudes among workers and executives since it yields behaviours that deepen satisfaction and raise staff retention intentions.

#### **2.7.1.4 Employees Quality:**

The fifth dimension demonstrates the importance of learning from others to develop their skills so that they can achieve exceptional results. This can be done by bringing together a diverse and integrated management team and workforce and employing a workforce with maximum flexibility to help discover complexities in processes and stimulate creativity in solving them as high-performance organizations work continuously to develop their workforce through training to increase their creativity to achieve high performance for the organization (De wall, 2008).

### 2.7.1.5 Long-Term Orientation:

Long-term commitment in high-performing organisations is more significant than short-term commitment, according to Liberman and Boehe (2011) who defined this dimension as "the organization's tendency to give priority to the long-term effects and effects of decisions and actions that appear after an extended period." (De Wall, 2008) also supported this definition. Because it involves all parties involved—both inside and outside the organization—and helps to increase the value of consumers while fostering ongoing connections with them by attending to their needs, conversing with them, and acting on them.

## 3. Results and discussions:

### 3.1 Measuring the level of variables (reengineering human resources, high performance)

Table 4 shows the values of the descriptive analysis of the study variables (re-engineering human resources, high performance), where the statistical methods used for the descriptive analysis are (arithmetical means, standard deviations and coefficients of difference) as shown below:

**Table 4:** Statistical measures for the variables (re-engineering human resources, high performance)

Variable	Arithmetic mean	Standard deviation	Coefficient of difference	Arrangement
Re-engineering human resources	3.143	0.411	13.09%	1
High performance	2.677	0.340	12.70%	2

The variable (high performance) has a relative coefficient of difference (12.70%), and its effect came in the first order. As for its arithmetic mean, it is (2.677), which indicates that this variable has moderate availability and that its standard deviation is (0.340), as it indicated homogeneity and convergence in the visions of the researched sample, which indicates its availability in the Ministry of Planning / Central Statistical Organization. While the variable (re-engineering of human resources) has a relative coefficient of difference (13.09%), and it came in the second order, its arithmetic mean is (3.143), which indicates that this variable has moderate availability and that its standard deviation is (0.411). As it indicated homogeneity and convergence in Visions of the researched sample, which indicates its availability in the Ministry of Planning / Central Statistical Organization.

### 3.2 Hypothesis testing:

By using a straightforward linear regression analysis to identify the effect between the study's variables, its direction (direct or inverse), and the degree of variation between the variables, the researcher tested the study's hypotheses to determine whether they would be realised. the form of the general regression equation is:

$$Y = \alpha + \beta * X$$

Y is the independent variable

$\alpha$  is the constant term of the equation

$\beta$  is the marginal slope of the equation

X represents the independent variable

The research hypothesis test is as follows:

Testing the main hypothesis: There is no statistically significant effect of re-engineering human resources with its dimensions on high performance with its dimensions.

**Table 5:** Indicators of the impact re-engineering human resources on high performance

significant F	F	R <sup>2</sup>	Significant t	t(β)	β	α
0.000	79.203	0.278	0.000	8.900	0.436	1.308

From Table 5 whose values were obtained in the program (SPSS), the following is clear:

The value of (F) came in the amount of (79.203), and the significance of (F) came in the amount of (0.000), which is less than (0.05), which indicates an effect of the re-engineering human resource variable on high performance, while the value of (R<sup>2</sup>) is the coefficient of determination of the amount (0.278). She indicates that the percentage (28%) is the amount of increase of the variable high performance due to the increase in the variable re-engineering of human resources and that the percentage (72%) that remained is due to other factors that were not the subject of the study.

The value of the fixed event is (1.308), while the marginal slope value is (0.436). Which is positive and can indicate that the effect is direct, that is, with the increase of the variable re-engineering of human resources, the variable of high-performance increases, and the value of the marginal slope was tested by (t) and reached the significance of this test is (0.000), which is less than (0.05), which indicates its significance.

From the above results, the main hypothesis with content is rejected (there is no statistically significant effect of re-engineering human resources with its dimensions on high performance with its dimensions), and the alternative hypothesis is accepted for it, which is with content (there is a statistically significant effect of re-engineering human resources with its dimensions in high performance dimensions).

**a.** Testing the first sub-hypothesis: There is no statistically significant effect of re-engineering work culture on high performance.

From Table (6) whose values were obtained in the program (SPSS), the following is clear:

**Table 6:** Indicators of the effect of re-engineering work culture on high performance

significant F	F	R <sup>2</sup>	Significant t	t(β)	β	α
0.000	31.661	0.133	0.000	5.627	0.210	1.998

The value of (F) came in the amount of (31.661), and the significance of (F) came in the amount of (0.000), which is less than (0.05), which indicates an effect of the variable re-engineering the work culture in high performance, while the value of (R<sup>2</sup>) is the coefficient of determination of the amount (0.133). She indicates that the percentage (13%) is the amount of increase for the high performance variable due to the increase in the variable re-engineering the work culture and that the percentage (87%) that remained is due to other factors that were not the subject of the study.

The value of the fixed event is (1.998), while the value of the marginal slope is (0.210), which is positive, which indicates that the effect is direct, the significance of this test is (0.000), which is less than (0.05), which indicates its significance.

From the above results, the first sub-hypothesis with content is rejected (there is no statistically significant effect of re-engineering work culture in high performance), and its alternative hypothesis is accepted, which is in content (there is a statistically significant effect of re-engineering work culture in performance higher)

**b.** Testing the second sub-hypothesis: There is no statistically significant effect of re-engineering training and development on high performance.

From Table 7 whose values were obtained in the program (SPSS), the following is clear.

**Table 7:** Indicators of the effect of re-engineering training and development on high performance

significant F	F	R <sup>2</sup>	Significant t	t(β)	β	α
0.000	37.563	0.154	0.000	6.129	0.232	1.977

The value of (F) came in the amount of (37.563), and the significance of (F) in the amount of (0.000), which is less than (0.05), which indicates an effect of the variable re-engineering training and development on high performance, while the value of (R<sup>2</sup>) is the coefficient of determination of the amount (0.154). It indicates that the percentage (15%) is the amount of increase for the variable high performance due to the increase in the variable re-engineering training and development and that the percentage (85%) that remained is due to other factors that were not the subject of the study.

The value of the fixed event is (1.977), while the value of the marginal slope is (0.232), which is positive, which indicates that the effect is direct, that is, with the increase of the variable re-engineering training and development, the variable of high-performance increases, and the value of the marginal slope was tested by (t) and reached the significance of this test is (0.000), which is less than (0.05), which indicates its significance.

From the above results, the second sub-hypothesis with content is rejected (there is no statistically significant effect of re-engineering training and development in high performance), and the alternative hypothesis is accepted for it, which is in content (there is a statistically significant effect of re-engineering training and development in performance higher)

**c. Testing the third sub-hypothesis:** There is no statistically significant effect of business process re-engineering on high performance.

From Table 8 whose values were obtained in the program (SPSS), the following is clear:

**Table 8:** Impact indicators for the third sub-hypothesis

significant F	F	R <sup>2</sup>	significant t	t(β)	β	α
0.000	40.734	0.165	0.000	6.382	0.238	1.891

The value of (F) came in the amount of (40.734), and the significance of (F) in the amount of (0.000), which is less than (0.05), which indicates an effect of the variable re-engineering business processes on high performance, while the value of (R<sup>2</sup>) is the coefficient of determination of the amount (0.165). She indicates that the percentage (17%) is the amount of increase of the high performance variable due to the increase in the variable re-engineering of business processes and that the percentage (83%) that remained is due to other factors that were not the subject of the study.

The value of the fixed event is (1.891), while the value of the marginal slope is (0.238), which is positive, which indicates that the effect is direct that is, with the increase of the variable re-engineering of business processes, the variable of high-performance increases and the value of the marginal slope was tested by (t) and reached The significance of this test is (0.000), which is less than (0.05), which indicates its significance.

Based on the above results, the third sub-hypothesis with content is rejected (there is no statistically significant effect of business process reengineering on high performance), and its alternative hypothesis is accepted, which is based on content (there is a statistically significant effect of business process reengineering on performance higher).

d. Testing the fourth sub-hypothesis: There is no statistically significant effect of re-engineering workplace systems on high performance

From Table 9, whose values were obtained in the program (SPSS), the following is clear:

**Table 9:** Impact indicators for the fourth sub-hypothesis

Significant F	F	R <sup>2</sup>	Significant t	t(β)	β	α
0.000	40.354	0.164	0.000	6.352	0.295	1.789

The value of (F) came in the amount of (40.354), and the significance of (F) came in the amount of (0.000), which is less than (0.05), which indicates that there is an effect of the variable re-engineering workplace systems on high performance, while the value of (R<sup>2</sup>) is the coefficient of determination of (0.164). ) and indicates that the percentage (16%) is the amount of increase of the high performance variable due to the increase in the variable re-engineering of workplace systems and that the remaining percentage (84%) is due to other factors that were not the subject of the study.

The value of the fixed event is (1.789), while the marginal slope value is (0.295), which is positive, which indicates that the effect is direct, that is, with the increase of the variable re-engineering of workplace systems, the high-performance variable increases and the value of the marginal slope was tested by (t). The significance of this test was (0.000), which is less than (0.05), which indicates its significance.

From the above results, the fourth sub-hypothesis with content is rejected (there is no statistically significant effect of re-engineering workplace systems on high performance), and the alternative hypothesis is accepted for it, which is with content (there is a statistically significant effect of re-engineering workplace systems in high performance).

#### 4. Conclusions:

It became obvious that the organization's management seems to be interested with the concept of innovation and continuous improvement in work procedures. As it seeks to achieve efficiency and effectiveness in its performance. This provides evidence that the organization's management is well prepared to improve its services and enhance its operations. Also, it is looking for the most effective ways to achieve the set goals. Also, the management of the organization seems to be interested with the concept of applying the principles of integrity and transparency in its work and wants to promote these principles among the employees who work for it to maintain its reputation and credibility and believes that integrity and adherence to ethical standards are the basis of its success. In addition, it turns out that the long-term orientation dimension is the most involved in the representation of the high-performance variable and is the most available in the Central Statistical Organization, while the quality of management is the least involved in the representation of the high-performance variable and is the least available in the Central Statistical Organization. Next, the organization's management pays great attention to building good and long-term relationships with all stakeholders (employees, beneficiaries, international organizations, and government agencies) and the organization's management believes that building strong relationships with stakeholders is a key factor in achieving success and continuity in work and leads to Achieving mutual benefits and exchanging experiences and information between different parties. Farther, the human resources re-engineering variable directly affects the high-performance variable in the Central Statistical Organization, which achieved the alternative hypothesis of the main hypothesis. Finally, it turns out that the dimensions (re-engineering of work culture, re-engineering of training and development, re-engineering of business processes, and re-engineering of workplace systems) have a direct effect on the variable high performance and achieved the alternative hypotheses of the sub-hypotheses emanating from the main hypothesis of the research.

**Authors Declaration:**

Conflicts of Interest: None

-We Hereby Confirm That All The Figures and Tables In The Manuscript Are Mine and Ours. Besides, The Figures and Images, Which are Not Mine, Have Been Permitted Republication and Attached to The Manuscript.

- Ethical Clearance: The Research Was Approved By The Local Ethical Committee in The University.

**References:**

1. Abdel Hafeez, A. (2003). Engineering , Dar Wael for Publishing and Distribution, Amman - Jordan.
2. Abdel Jawad, N. (2022). Applying High Performance Organizational Model (HPO) On Greater Amman Municipality Jordan. *Leadership And Management Theory In Practice*, Vol.53.
3. Akdemir, B., Erdem, O., and Polat, S. (2010). Characteristics of high-performance organizations. *Suleyman Demirel University Journal of Faculty of Economics and Administrative Sciences*, Vol.15(1).
4. Al-Amiri, A. A. (2018). The Role of Strategic Intelligence and Social Responsibility in Achieving High Performance. PhD thesis, Karbala University, Iraq.
5. Al-Anzi, S. A, Al-Atwi, A. A., Al-Abadi, A.R. (2011). High performance work systems as an approach to enhancing talent management strategy in organizations. Research published in the *Journal of Management and Economics*, Vol. 3), (89).
6. Al-Khazraji, Q.I, Al-Zaidi, N. J. (2016). The role of organizational flexibility and its repercussions in responding to achieving the requirements of high performance: An empirical research in the municipalities sector. *Journal of Economic and Administrative Sciences*, Vol. 2294. pp53.
7. Al-Lami, G.Q, Kazem, B. H. (2016). The effect of re-engineering administrative processes on institutional performance: A research in the Office of the Inspector General of the Ministry of Higher Education and Scientific Research, Vol. 22, (91). pp59.
8. Al-Taie, A.H. (2008). High performance organizations: An exploratory research in the General Organization for Leather Industries and the General Organization for Grain Processing. *Journal of Economic and Administrative Sciences*, Vol. 14 (50).
9. Anupindi, R., Chopra, S., Deshmukh, S. D., Van Mieghem, J. A., and Zemel, E. (2016). Managing business process flows (Vol. 400). New York: Prentice Hall, United States.
10. Appelbaum, S. H., Habashy, S., Malo, J. L., and Shafiq, H. (2012). Back to the future: A revisiting Kotter's 1996 change model. *Journal of Management Development*, Vol. 31, (8). pp 764-782.
11. Maher, M.A., 2000. Diagnosing and changing organizational culture: Based on the competing values framework. *Journal of Organizational Change Management*, Vol. 13(3), pp 300-303.
12. Choi, J. N. (2007). Change-oriented organizational citizenship behavior: An effects of work environment characteristics and intervening psychological processes. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, Vol. 28, (4). pp 467-484.
13. Da'jah, M. A. (2021). The impact of re-engineering human resources on organizational revitalization: entrepreneurial learning as a modified variable: A empirical study on travel and tourism companies in the capital, Amman. (Master's thesis), Faculty of Business, Middle East University, Jordan.
14. Daugherty, R., and Wilson, H. J. (2018). Humanizing the workplace: A multi-level perspective to balancing humanity and productivity. *Journal of Business Research*, Vol. 88, pp 241-248.

15. de Waal, A. (2020). Creating high-performance organizations in Asia, *International Journal of Management and Applied Research*, Vol. 7, (2). pp 86-103.
16. De Waal, A. A. (2008). The secret of high-performance organizations., *Management Online Review*, Vol. 2, pp 100-108.
17. Dubon, A.Q. (2009). The contribution of enterprise human resource management to adapting to technological change: A the case of Algeria Telecom. Unpublished doctoral dissertation in management sciences, University of Algiers 3, Faculty of Economic, *Commercial and Management Sciences*, pp 184.
18. Enzo, M. and Vittorio, C. (2000). Business Process Reengineering: A Consolidated Methodology.
19. Francis, A., Jane C, Akujor., and Benedict, A. (2016). Managing human resources and organizational change for effective information systems reengineering in Nigeria. *International Journal of Research in Management, Science and Technology*, Vol. 4, (1), pp14- 19.
20. Gu-Ne, K., and Lee, Y. M. (2016). Towards high-performance organization: A the impacts of job characteristics and job crafting. *International Journal of u-and e-Service, Science and Technology*, Vol. 9, (2), pp 85-100.
21. Hammer, M., and Champy, J. (1993). Business process reengineering. London: Nicholas Brealey, 444(10), 730-755.
22. Hitt, M. A., Ireland, R. D., and Hoskisson, R. E. (2016). Strategic management: Concepts and cases: Competitiveness and globalization. Cengage Learning.
23. Hussein, W.H. (2018). The impact of re-engineering human resources in enhancing the morale of workers:An epirical research in Al-Rafidain University College, *Journal of Economic and Administrative Sciences*, Vol. 24 106.
24. Jaafar, Q.Z. (2017). The impact of strategic intelligence in a high-performance organization: An Exploratory Study of the Directors of the Center for Kidney Diseases and Transplantation in the Medical City-Baghdad), *Journal of Economic and Administrative Sciences*, Vol. 23, (96), pp175 .
25. Junior, P. C. R., and Fujihara, R. K. (2018). Factor analysis on innovation inductors in high performance organizations. *International Journal of Innovation*, Vol. 6, (3), pp 275-286.
26. Kalinina, S., Davydyuk, L., and Horudzy, Y. (2020). Human resources reengineering as a direction of the strategy of anti-crisis development of corporate structures. *Public Security and Public Order*, (24).
27. Khalaf, B.A. (2015). An integrated framework for cost reduction techniques and process re-engineering to develop company strategies: An empirical study in some companies affiliated to the Ministry of Oil, Vol. 21, (86), pp 495 .
28. Krishnan, V.R., 2005. Transformational leadership and outcomes: Role of relationship duration. *Leadership & Organization Development Journal*, Vol. 26(6), pp.442-457.
29. Lee, C. W., Peng, C. L., and Chen, H. C. (2022). Reengineering Human Resources and Entrepreneurial Learning towards Organizational Revitalization in Malaysian Travel and Tourism Companies during the COVID-19 Pandemic. *Sustainability*, 14(20), 13509.
30. Li, X., Frenkel, S. J., and Sanders, K. (2011). Strategic HRM as process: A how HR system and organizational climate strength influence Chinese employee attitudes *International Journal of Human Resource Management*, Vol. 22 (9), pp. 1825–1842.
31. Liberman, L., and Boehe, D. (2011). Worldwide willingness to delegate and country labour quality. *The International Journal of Human Resource Management*, Vol. 22 (17), pp. 3477-3495.
32. Likert, R. (1932). A Technique for Measurement of Attitudes. Archives of Psychology, Published by Columbia University Press, New York, United statesP:17.
33. Linden, R. M., and Linden, R. M. (1994). Seamless government: A practical guide to re-engineering in the public sector. Jossey-Bass.

34. Mh, K., Elyas, K. M., Mahmood, S. N., and Hossein, A. (2017). Evaluation of human resources re-engineering and knowledge management processes on the economy of Sirjan free trade zone (Iran). *International Journal of Business and Economic Affairs*, Vol. 2 (2)
35. Moon, H., Van Dyne, L., and Wrobel, K. (2005). The Circumplex Model and the Future of Organizational Citizenship Behavior Research. In D. L. Turnipseed (Ed.), *Handbook of organizational citizenship behavior* (pp. 3–24). New York: Nova Science Publishers Inc, United States.
36. Ravi Anupindi, Sunil Chopra, Sudhakar D. Deshmukh, Jan A. Van Mieghem, and Eitan Zemel (2016). "Managing Business Process Flows"
37. Rodriguez, J., and Walters, K. (2017). The importance of training and development in employee performance and evaluation. *World Wide Journal of Multidisciplinary Research and Development*, Vol. 3(10), pp. 206-212.
38. Sharma, A. (2013). Human Resource Reengineering (A Radical Rethinking and Role of New Technology in HR Optimization), Vol 2(2) | Feb 2013 • ISSN No 2277 – 8179, India.194.
39. Zhiqiang, M., Khan, H. S. U. D., Chughtai, M. S., and Mingxing, L. (2021). Re-engineering the human resource strategies amid and post-pandemic crisis: A probing into the moderated mediation model of the high-performance work practices and employee's outcomes, *Frontiers in Psychology*, 12, 710266.

## تأثير إعادة هندسة الموارد البشرية في الأداء العالي دراسة تحليلية في الجهاز المركزي للإحصاء/ وزارة التخطيط

محسن رشيد مصيحب  
جامعة بغداد/ كلية الإدارة والاقتصاد/ قسم الإدارة العامة  
[mohsen.rashed@coadec.uobaghdad](mailto:mohsen.rashed@coadec.uobaghdad)

عمر نبيل طالب  
جامعة بغداد/ كلية الإدارة والاقتصاد/ قسم الإدارة العامة  
[omarnabeel15@gmail.com](mailto:omarnabeel15@gmail.com)

Received: 16/6/2023 Accepted: 20/8/2023 Published Online First: 30 /6/ 2024

هذا العمل مرخص تحت اتفاقية المشاع الإبداعي نسبة المُنصّف - غير تجاري - الترخيص العمومي الدولي 4.0  
[Attribution-NonCommercial 4.0 International \(CC BY-NC 4.0\)](https://creativecommons.org/licenses/by-nc/4.0/)



### مستخلص البحث:

متغيرين يمثلان المفهوم المركزي للبحث. إعادة هندسة الموارد البشرية هو الأول والأداء العالي هو الثاني. من خلال دراسة العوامل المعروفة والتوسع فيها، يهدف البحث إلى تشخيص تأثير المتغير الأول (إعادة هندسة الموارد البشرية) والمتغير الثاني (الأداء العالي) على بعضهما البعض. ما هو واقع نهج إعادة هندسة الموارد البشرية وأثره على الأداء العالي في الجهاز المركزي للإحصاء، وما مدى الوعي ومعرفة مدى مساهمة منهج إعادة هندسة الموارد البشرية في الارتقاء بالعمل وتحقيقه أداء عالي؟ هذه بعض الأسئلة الرئيسية التي تم استخدامها لتمثيل مشكلة البحث الرئيسية. اعتمد الباحث في استكمال المنهج الوصفي التحليلي بجوانبها النظرية والتطبيقية. كما صمم الباحث استبانة وفق عدة معايير أجنبية جاهزة حيث اشتمل الاستبيان على (50) فقرة، المتغير الأول المكون من أربعة أبعاد اشتمل على (20) فقرة، والمتغير الثاني مكون من خمسة أبعاد (30) فقرة، والتي وزعت على عينة عشوائية من العاملين في مختلف المستويات الإدارية والوظيفية، قوامها (208) موظف بمقر الجهاز المركزي للإحصاء. تم الاعتماد على مجموعة من الأساليب الإحصائية في اختبار الفرضيات وهي (المتوسط الحسابي، والانحراف المعياري، ومعامل الاختلاف، والانحدار الخطي البسيط) باستخدام مجموعة من الأدوات الإحصائية في معالجة بيانات البحث المتوفرة في البرامج الإحصائية الجاهزة (SPSS.V21). وأخيراً قدم الباحث عدة استنتاجات مبنية على ما ورد في الجانب العملي من البحث.

### نوع البحث: ورقة بحثية.

المصطلحات الرئيسية للبحث: إعادة هندسة الموارد البشرية، الاداء العالي، الجهاز المركزي للإحصاء، وزارة التخطيط

\*البحث مستل من رسالة ماجستير