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The Modified Role of Organizational Flexibility in Influencing Human Resources Re-engineering and Adaptive Performance - An Exploratory Study of a Sample of Employees of the Iraqi Ports Company in Basra

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Abstract

The current study aims to know the effect of re-engineering human resources with its dimensions (organizational dimension, technological dimension, human dimension) on adaptive performance through the modified role of organizational flexibility for the employees of the Iraqi Ports Company - Basra. The researchers used the quantitative analytical method to collect accurate data using the questionnaire. (350) questionnaires were distributed to the study sample, with only (306) receiving valid for analysis. The study relied on two main hypotheses, from which a group of sub-hypotheses branched out. Statistical tools were used by (SPSS.V.23) and (AMOS.V.23) programs to analyze the data and test the validity of the study hypotheses. The study reached a set of conclusions and recommendations, the most important of which is that the company (the research community) has sufficient knowledge and awareness of the variables of the current study and the existence of the modified role of organizational flexibility in the positive impact relationship between human resource re-engineering and adaptive performance.

Keywords: human resources engineering, adaptive performance, organizational flexibility, Iraqi Ports Company.

Introduction

Nowadays, companies need innovative methods in the process of human resources management, as human resources management in companies tends to introduce new technological methods and techniques in their work, which in turn works to develop and modernize all aspects of the company. Corporate management is moving towards modern technological techniques because it helps simplify its work and reduce effort and time. In turn, does not work on a simple change but seeks radical changes within the company, including human resource management practices. It also works to cancel and add new jobs and increase the company's job speed, efficiency, and accuracy. The companies' orientation towards modern technology calls for the need to re-engineer human resources due to the rapid technological changes, which means re-designing the basic principles and processes practiced by human resources management, reducing routine work, reducing work efforts, and allowing the company's employees to focus on important activities and decisions in it (Al-Rabiawi, Al-Amiri, 2022: 1). In a world that is becoming more competitive, the importance of developing the ability at the company level to operate, interact and evolve with the markets becomes critical. This ability is often called organizational resilience, and the body of literature on resilience reflects the importance attributed to this concept by scholars and practitioners. It is important to understand the role that organizational resilience plays, as organizational flexibility is not an end in itself, as it is an important means to maintain the proper performance of the company. Knowing the important role that organizational flexibility plays as an interactive variable in the current study is necessary to analyze the true value of changing and re-engineering the information needed by the human resources management in the company. Organizational flexibility operates in a competitive environment with big change, and its performance has become associated with its ability to analyze big data and convert it into information of higher interest to achieve the required performance in the company. (van der Weerdt, 2009: 1). As a result of the combination of inherent characteristics of the work context, such as uncertainty, complexity, and disruption over the adequacy of traditional measures of employee performance, which focus almost exclusively on the completion of tasks listed in job descriptions. Changes in the work context contributed to redefining the behaviors that companies encourage to achieve the set goals, as the concept of employee performance was expanded to include behaviors compatible with organizational development through improving adaptive performance levels. Adaptive functioning can be described as an individual's ability to adapt to dynamic work situations and modify behavior according to the demands of new environments, situations, or events.(Charbonnier & Roussel, 2012:281)

For the purpose of covering those above, the structure of the current study can be presented through four sections. The first section is concerned with presenting the paragraphs on scientific research methodology. In contrast, the second section reviews the theoretical side of the study. The third section presents the applied side and discusses the study's results. The study concludes with the fourth and final section of the conclusions and recommendations that have been reached.

The First Section: Scientific Research Methodology

This research aims to identify the main problem of the study, the most important goals that the researchers seek to achieve, the importance of the study, the main and sub-hypotheses from which it was launched, and to identify the most important tools used in collecting and analyzing data, through the following paragraphs:

First: Study problem:

The problem of achieving adaptive performance in the General Company for Iraqi Ports - Basra as a study society is one of the problems that drew the attention of many companies in light of the presence of a group of companies within a dynamic and rapidly changing work reality. As well as the ability of the company's employees to adapt is a major way to avoid failure to achieve performance results. The ability to change and adapt is a reality of work that has become imposed on all public and private companies, especially since most companies consider adaptive performance as one of the elements of job performance that their employees must perform continuously, regardless of the skills, experiences, and capabilities required by adaptive performance that enable their employees to confront Any urgent change.

Also, the re-engineering of human resources, which represents the independent variable in the current study, is one of the main drivers that determine the extent to which companies can cope with changes and what constitutes human resources from an important aspect within companies. The importance of re-engineering human resources appears for its effective role in stimulating the resources of the researched company and investing them in ways that enable it to face all obstacles that prevent its achievement of adaptive performance. The company under study needs to re-engineer its human resources commensurate with the reality of the renewed and constantly changing work, as it represents the main resource on which the company relies in accomplishing its tasks. It has a positive role in the positive impact relationship between re-engineering human resources and adaptive performance in the company and the study population.

In light of the preceding, the problem of the current study can be summarized by the following question ((What is the impact of re-engineering human resources in achieving adaptive performance in the General Company for Iraqi Ports - Basra, the study population, and what is the role of organizational flexibility in that?)) Moreover, the following sub-questions were embodied from the main research question:

1- What is the extent to which the General Company for Iraqi Ports knows the variables of the current study represented by the independent variable (re-engineering of human resources), the modified variable (organizational flexibility), and the dependent variable (adaptive performance)?

2- What is the level of adaptive performance in the researched company?

3- Does the independent variable (re-engineering of human resources) affect the dependent variable (adaptive performance) in the study community company?

4- Does the modified variable (organizational flexibility) have a role in the influence relationship between human resources re-engineering and adaptive performance?

Second: Study Objectives:

1- Knowing the level of interest of the Iraqi Ports Company, the study community, in the variables of the current study represented by the independent variable (re-engineering of human resources), the modified variable (organizational flexibility), and the dependent variable (adaptive performance).

2- Knowing the impact of human resources re-engineering in achieving adaptive performance in the researched company.
3- Examining the modified role of (organizational flexibility) in the relationship between (re-engineering human resources) and (adaptive performance).

Third: The Importance of The Study:

The current study's importance emerges from the recent changes in human resources management, as re-engineering human resources is one of the contemporary basic pillars adopted by companies in designing jobs and dividing tasks between their human resources at various organizational levels. Adaptive performance is a necessary condition for sustainability, as adaptive performance consists of a set of behavioral responses that individuals engage in when expecting or experiencing uncertainty. It has been proven that adaptive performance is linked to the individual characteristics of the employee, such as individual attitudes, intelligence, and self-efficacy, as well as organizational flexibility and the positive aspects it adds as it represents the modified variable in the current study. As the current study contributes to supporting the literature that dealt with its variables (re-engineering of human resources, organizational flexibility, adaptive performance), and this was associated with its selection of the employees of the Iraqi Ports Company in Basra, which is considered one of the important institutions in Basra Governorate in particular and in Iraq in general. The researchers see that the researched company is one of the organizationally advanced institutions. The current study attempts to draw the attention of the researched company to the importance of re-engineering human resources in achieving adaptive performance through the modified role of organizational flexibility to increase its ability to avoid obstacles facing the company and, in particular, to adopt new methods and approaches in managing its human resources that enable them to be able to achieve adaptive performance to face all extraordinary changes.

Fourth: Hypothetical Plan of The Study:

The current study derived its roots from previous theories, and as a result of the findings of several researchers and thinkers and in conjunction with helpful knowledge accumulation, a hypothetical model was designed in which the influence between the variables appears based on which the problem of the study was formulated. The scale of the variables was chosen according to the sources available to the researchers, as shown in Figure (1) listed below:

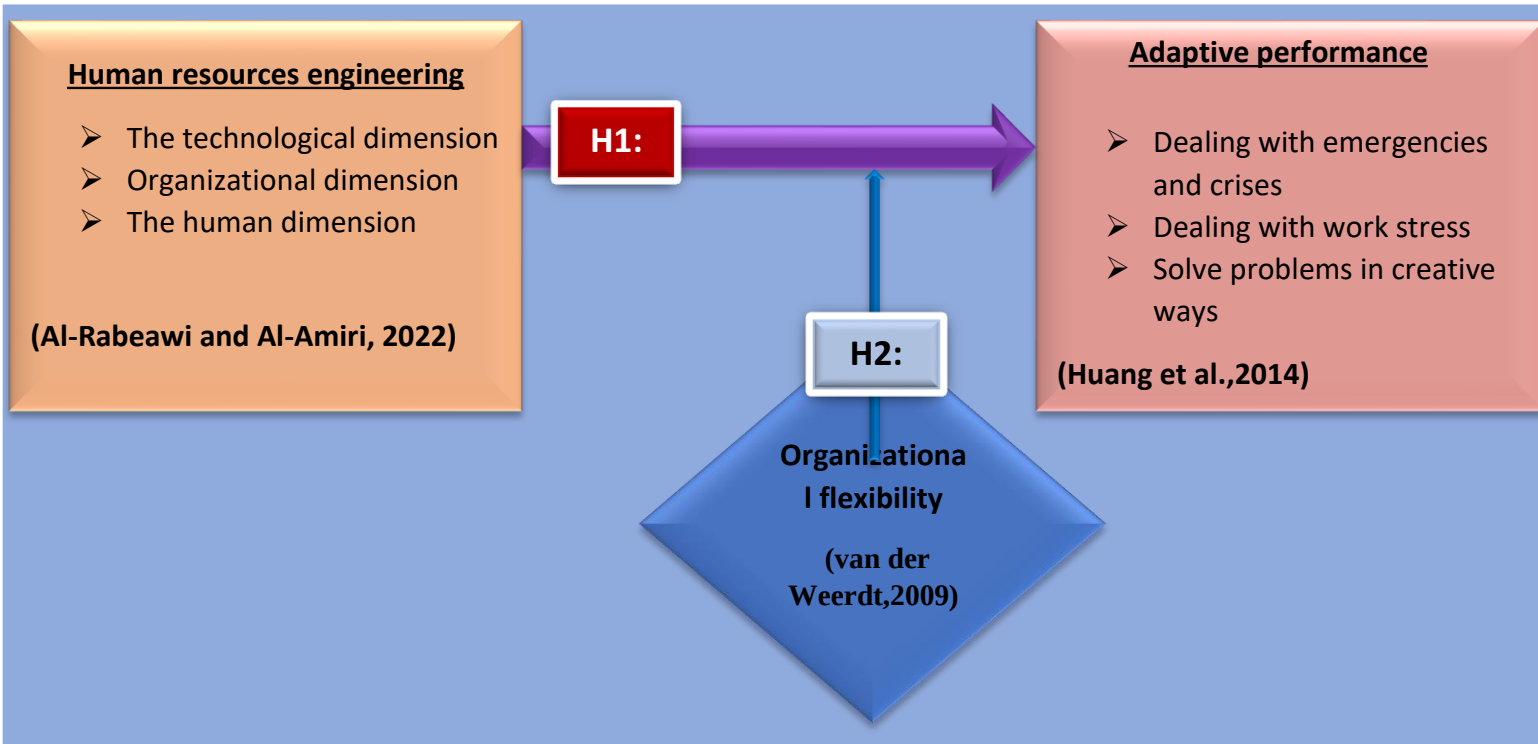

Figure (1) Hypothetical diagram of the study
Source: Prepared by the researchers

Fifth: Formulating The Study Hypotheses:

Main hypothesis H1: - A positive, statistically significant, and morally influential relationship exists between human resources engineering and adaptive performance.
The following sub-hypotheses emerge from it:
Sub-hypotheses:-
H1-a: - A positive, statistically significant, and moral relationship exists between the technological dimension and adaptive performance.
H1-b: - A positive influence relationship with statistical and moral significance exists between the organizational dimension and adaptive performance.
H1-c: - A positive, statistically significant influence relationship exists between the human dimension and adaptive performance.
Main hypothesis H2: - There is a role for the modifying variable organizational flexibility in the positive influence relationship between human resources engineering and adaptive performance.
The following sub-hypotheses emerge from it:
Sub-hypotheses: -
H2-a: - There is a role for the modifying variable in the positive influence relationship with statistical and moral significance between the technological dimension and adaptive performance.
H2-b: - There is a role for the modifying variable in the positive influence relationship with statistical and moral significance between the organizational dimension and adaptive performance.
H2-c: - There is a role for the modifying variable in the positive influence relationship with statistical and moral significance between the human dimension and adaptive performance.

Sixth: Methods of Collecting and Analyzing Study Data:

The study adopted the questionnaire form as a tool for obtaining data, which is characterized by clarity and accuracy in diagnosing the variables. The five-point Likert scale was relied upon to measure the responses of the sample members, which ranged between (1-5) and were divided in the following manner (5 strongly agree, 4 agree, 3 neutral, 2 disagree, 1 strongly disagree). In addition, a group of statistical methods were relied upon, including (skewness and kurtosis, descriptive statistics represented by the arithmetic mean and standard deviation, coefficient of variation, Pearson correlation coefficient, and path analysis to test the impact hypotheses). These statistical tools were applied using the program (SPSS.V.23).) and the program (AMOS.V.23)

Seventh: Study Population and Sample:

The Iraqi Ports Company in Basra represents the population of the current study. The study sample, which the company's employees represent, is the study population, numbering (1498) individuals. The study sample, which is part of the community, consists of (306) individuals. (350) questionnaires were distributed, and (320) were retrieved. The valid ones for analysis were (306) questionnaires, and the study (Sekaran & Bougie, 2016, p. 160) was relied upon to determine the sample size.

The Second Section: The Theoretical Framework of The Study Variables

First: Concepts of The Study Variables: This paragraph explains a group of opinions of researchers and writers about the variables of the current study represented by the independent variable (human resources re-engineering), the moderating variable (organizational flexibility), and the dependent variable (adaptive performance), as shown in Table (1) attached below:

Independent variable (human resources reengineering)		
No	Name & Year	Concept
1	**Bhasin & Dhami, 2018**	It represents the methods and techniques for designing new business strategies and the actual activity of designing processes that implement change in all dimensions of human resources management.
2	**Abubakar & Palisuri,2019**	It is rethinking the flow of human resources operations within the company and what it requires of using new technologies and methods to reach developments related to performance standards, quality of service provided, and speed in completing work.
3	**Kalinina et al., 2020**	It means continuously improving the company's performance through re-modeling, analyzing, and designing all processes related to managing its human resources.
Modifying variable (organizational flexibility)		
4	**Srinivasan & Swink,2018**	The ability of company managers to face the internal and external changes facing them efficiently and effectively.
5	**Ni et al.,2020**	The company's level of ability to make positive changes and adapt to emerging environmental changes.
6	**Dubey et al.,2021**	The organizational capability that enables a company to operate in a dynamic, turbulent environment.
Dependent variable (adaptive performance)		
7	**Pradhan et al., 2017**	It is a set of flexible work behaviors that enable company employees to adapt to change by demonstrating excellence in solving problems, confronting environmental uncertainty, and the ability to adapt to other employees, cultures, and the organizational environment.
8	**Park & Park, 2019**	Ability to respond quickly to dynamic environmental changes.

9	**Luo, & Chen,2022**	The ability of employees to form interpersonal connections, acquire knowledge and abilities to adapt to changes and assignments, manage crises calmly, and solve problems creatively.

Table 1: Prepared by the researchers

Second: Measures of Study Variables: This paragraph explains the measure that the current study adopted to measure its variables, represented by the independent variable (human resources re-engineering), the moderating variable (organizational flexibility), and the dependent variable (adaptive performance), as shown in Table (2) included in Below:

No	Main variable	Scale (Sub-variables)	operational definitions
1	Human resources re-engineering (Al-Rabeawi and Al-Amiri, 2022)	Technological dimension	It means applying knowledge and scientific discoveries to developing and improving company human resources practices and processes.
		Organizational dimension	It means all the activities within the company, including dividing tasks and creating an appropriate organizational environment that is flexible and capable of infinite change and adaptation.
		The human dimension	It is an essential element in any change process within the company, and the company's employees are considered a group of capabilities, knowledge, and skills that the company possesses. They are the cornerstone to complete the re-engineering process of human resources.
2	Organizational flexibility (van der Weerdt, 2009)		The company's ability to develop all organizational levels, adapt to all changes, respond quickly to the dynamism of the environment, and the ability to respond to various types of environmental disturbance.
3	Adaptive performance Huang et al.,2014	Dealing with emergencies and crises	It represents a rapid and appropriate response to the company's emergencies and the possibility of rapid analysis of available alternatives that enable the company to find quick solutions during a crisis.
		Dealing with work stress	It refers to a situation that threatens average performance and results in the company's employees interacting and differentiating changes that force them to change their normal performance path.
		Solve problems in creative ways.	It represents the ability to find appropriate solutions and develop creative approaches capable of dealing with ill-defined or complex problems.

Table 2: Measures of study variables **Source**: Prepared by the researchers

The Third Section: The Applied Aspect and Discussion of The Results

This section presents an analysis of the data related to the variables and dimensions of the study, which were obtained through the questionnaire form. The current study included a set of hypotheses and objectives that must be tested and verified to clarify whether these data are distributed normally or not. The type of statistical tools and methods appropriate for this data will be determined in light of the above.

First: Testing the Normal Distribution of Data: The statistical method is used in the analysis by determining the type of data distribution for the variables of the study, so (parametric statistics) is the most appropriate method when the data is normally distributed, but if the data is not normally distributed, then reliance is placed on (nonparametric statistics) (Field,2009:145). Previous studies indicated that a sample larger than (100) is normally distributed (Tabachnick & Fidell, 2001, p. 689). Since the sample size of the current study exceeded (100) individuals, the data will be normally distributed. We will rely on conducting this test to ensure the correct distribution of our data if several statistics are available to meet this purpose, including Skewness and Kurtosis, which are characterized by their high accuracy and provide a clear picture of the nature of the distribution of the data, whether it is normally distributed or not. The details of the test are explained according to the following table (3):

Skewness				**Kurtosis**		
Variables and dimensions	**Statistic**	**Std .Error**	**Z Skewness**	**Statistic**	**Std .Error**	**Kurtosis**
Technological dimension	-0.650	0.139	-0.213	0.416	0.278	0.668
Organizational dimension	-0.564	0.139	-0.246	0.233	0.278	1.193
Human dimension	-0.580	0.139	-0.239	0.170	0.278	1.635
Human resources re-engineering	-0.496	0.139	-0.28	-0.346	0.278	0.803
Organizational flexibility	-0.740	0.139	-0.187	0.464	0.278	0.599
Dealing with emergencies and crises	-0.686	0.139	-0.202	0.968	0.278	0.287
Dealing with work stress	-0.690	0.139	-0.201	1.215	0.278	0.228
Solve problems in creative ways	-0.510	0.139	0.272	0.652	0.278	0.426
Adaptive performance	-0.520	0.139	-0.267	0.270	0.278	1.029

Table 3: Normal distribution test
Source: Prepared by the researchers based on the outputs of (spss.v.23)

The table above shows that the values of (Z Skewness, Z Kurtosis) for all paragraphs fall within the range of (±1.96). This means that the data is distributed normally, the sample is well representative of the original research population, and the data fits the parametric statistics method (Hair et al., 2019, pp. 96-95). The value of Z can be extracted through the following two equations:

$$\text{Z Kurtosis} = \frac{\text{Kurtosis}}{\sqrt{\frac{24}{n}}} \quad , \quad \text{Z Skewness} = \frac{\text{Skewness}}{\sqrt{\frac{6}{n}}}$$

Second: The Final Validity Test: The final validity test of the questionnaire expresses the extent to which the measure or set of measures correctly represents the variables of the study, and the extent to which the data collection tool is free from any intentional error (Hair et al, 2019, p. 3). To ensure the validity of the research standards, reliance will be placed on the Corrected Item-Total Correlation values, which indicate the extent to which each item of the scale relates to the total sum of the remaining items. Through this, the scale will be corrected by excluding items that obtain insufficient correlation values (Less than 0.40) to keep the items that increase the scale's validity and are well and sufficiently linked to the rest of the items that represent a specific scale. Table (4) below indicates the items for the study tool according to the (Corrected Item-Total Correlation) scale.

Q	**Corrected Item -Total Correlation**	Q	**Corrected Item -Total Correlation**	Q	**Corrected Item -Total Correlation**
Q1	**.485**	**Q13**	**.491**	**Q25**	**.624**
Q2	**.627**	**Q14**	**.576**	**Q26**	**.741**
Q3	**.614**	**Q15**	**.706**	**Q27**	**.551**
Q4	**.619**	**Q16**	**.624**	**Q28**	**.552**
Q5	**.692**	**Q17**	**.741**	**Q29**	**.666**
Q6	**.595**	**Q18**	**.565**	**Q30**	**.614**
Q7	**.498**	**Q19**	**.628**	**Q31**	**.515**
Q8	**.708**	**Q20**	**.527**	**Q32**	**.650**
Q9	**.706**	**Q21**	**.456**	**Q33**	**.567**
Q10	**.709**	**Q22**	**.491**	**Q34**	**.520**
Q11	**.604**	**Q23**	**.576**	**Q35**	**.654**
Q12	**.528**	**Q24**	**.706**	**Q36**	**.663**

Table 4: Final internal validity results
Source: Prepared by the researchers based on the outputs of (spss.v.23)
Table (4) mentioned above shows that the values of all the items are more significant than (0.40). This shows that all items in the questionnaire are characterized by validity and acceptable internal consistency and can be relied upon by statistical analysis.

Third: Stability of The Study Tool: Stability is when questions are repeated and applied to sample members at different times, giving the same answer based on the Cronbach's Alpha coefficient, which is one of the common types of tests used to stabilize the study administration, and most studies indicate that the value of the Cronbach's Alpha coefficient

Alpha (is good and acceptable when it is more significant than (0.70) (Morgan et al., 2004: 122). The researchers used Cronbach's Alpha to measure reliability, and the results are shown in Table (5) as follows:

Themes	Number of questions	Cronbach's Alpha coefficient value
Technological dimension	5	0.87
Organizational dimension	5	0.86
Human dimension	5	0.85
Human resources re-engineering	15	0.85
Organizational flexibility	9	0.86
Dealing with emergencies and crises	4	0.87
Dealing with work stress	4	0.88
Solve problems in creative ways	4	0.9
Adaptive performance	12	0.88
All Themes	36	0.88

Table 5: Cronbach's Alpha values to measure the stability of the variables and dimensions of the study

Source: Prepared by the researchers based on the outputs of (spss.v.23)

Through the results of (Cronbach's Alpha) in the table above, the researchers concluded that the scale adopted in the study is stable, as all the results reached are more significant than (0.70). This confirms the validity and final consistency of the data obtained through the members of the research sample. This, in turn, demonstrates the stability of the results reached (Sekaran & Bougie, 2016, p. 290).

Fourth: Descriptive Statistics for The Study Variables: Descriptive statistics are a group of basic statistical methods that accurately describe the essential characteristics and summarize the data in a clear and simplified way (Zikmund et al., 2010, p. 413). This paragraph describes employees' responses at the Iraqi Ports Company in Basra. It discusses them by relying on the independent variable of the research represented by (re-engineering human resources), the modified variable represented by (organizational flexibility), and the dependent variable represented by (adaptive performance). In order to interpret the results descriptively, the current study relied on a five-point Likert scale that uses ascending weights (1, 2, 3, 4, 5), representing (5 strongly agree, 4 agree, 3 neutral, 2 disagree, 1 disagree). Also, this paragraph includes displaying the arithmetic means, standard deviations, and coefficient of variation. The hypothetical arithmetic mean of (3) is relied upon as the average of the measurement tool, and using the results of the electronic calculator within the statistical software (SPSS.V.23) the analysis will be presented in Table (6).) The following:

No	Study variables	Mean	S.d	C.V
1	Human resources re-engineering	3.885	0.777	0.2
2	Organizational flexibility	3.962	0.779	0.197
3	Adaptive performance	4.039	0.523	0.129

Table 6: Summary of results of descriptive statistics for study variables
Source: Prepared by the researchers based on the outputs of (spss.v.23)

Table (6) mentioned above shows that the arithmetic mean values of the independent variable represented by (reengineering human resources) amounted to (3.885) with a standard deviation of (.777), which are homogeneous values within the scale that was adopted in the current study. The arithmetic mean of the modified variable represented by (organizational flexibility) was also recorded (3.962) with a standard deviation of (.779), as this is consistent with the answers of the sample members. The arithmetic mean for the dependent variable (adaptive performance) was (4.039) with a standard deviation of (.523), which is the highest arithmetic mean among the means that were extracted for the rest of the variables. This indicates that the answers of the sample members were homogeneous with the variables of the current study.

Fifth: Testing The Study Hypotheses: This paragraph explains the testing of hypotheses by adopting two aspects, where the first aspect shows the test of the correlation relationship. In contrast, the other side explains the test of the influence relationship between the variables.
1- Correlation Testing of The Study Variables: Hypotheses are tested according to the Pearson correlation coefficient, which shows the correlation coefficient values ranging between (+1) and (-1). If the correlation coefficient has a positive value, the correlation is interpreted as positive. If the correlation coefficient value equals (+1), the correlation is interpreted as a perfect positive correlation. If the value of the correlation coefficient is negative (-1), it is interpreted as an inverse correlation. If the value of the correlation coefficient is equal to (-1), the correlation is interpreted as a perfect inverse correlation. If the value of the correlation coefficient is equal to (0), it means that there is no correlation. The following table shows the testing of correlation hypotheses between the study variables.

No	Correlation data	Human resources re-engineering	Organizational flexibility	Adaptive performance
1	Human resources re-engineering	1		
2	Organizational flexibility	.620**	1	
3	Adaptive performance	.570**	.629**	1

Table 7: Correlation between the study variables according to the Pearson correlation coefficient

Source: Prepared by the researchers based on the results of the (SPSS.V.23) software, after arranging them

Table (9) indicates the matrix of simple correlation coefficients (Pearson), the type of test (2-tailed), and the abbreviation (Sig), as well as the size of the study sample (306). The table also shows the test of the significance of the correlation coefficient through (T) calculated with the tabulation. However, its values are shown. If the presence of a sign (**) indicates that the approved level of significance is (0.01), the results will be explained as follows:

1- The correlation coefficient value between human resources re-engineering and adaptive loyalty reached (.570**). This value is interpreted to mean a positive and statistically significant relationship at a significant level (0.01).

2-The correlation coefficient value for human resources re-engineering and organizational flexibility is (.620**), which is a direct value and statistically significant at a significance level (0.01).

3- The correlation coefficient value for organizational flexibility and adaptive performance is (.629**), which is a direct value and statistically significant at a significance level (0.01).

2- Testing the Effect of The Study Variables: This paragraph explains the testing of the main and subsidiary hypotheses using path analysis through the program (AMOS.V.23), as path analysis depends on the idea of least squares (least squares) used in regression analysis, and path analysis includes regression weights. (Regression Weights), whose outputs include path coefficients (Estimate), which are weights similar to regression weights (Beta). The Critical Ratio (C.R) corresponds to the calculated (T) value, which shows the level of differences between the regression weights. In order for the hypothesis to be acceptable, the (C.R) values must be greater than ((±1.96) at a significance level ($p<0.05$) (Tabachnick & Fidell (2001:688).

A- Testing the first main hypothesis: Table (10) and Figure (2) illustrate the analysis of the first main hypothesis, which states a statistically significant positive impact relationship between human resource reengineering and adaptive performance.

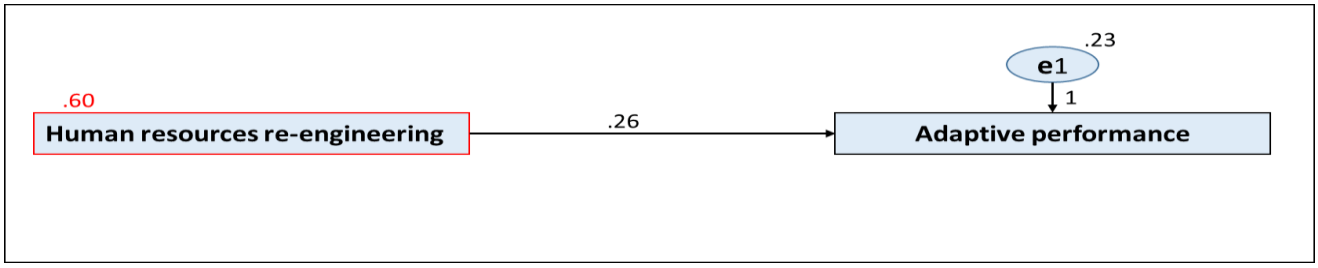

Figure (2): The effect of the independent variable on the dependent variable
Source: AMOS.V.23 software outputs

The path of the first main hypothesis				Estimate	S.E.	C.R.	P	Label
H1:	Human resources re-engineering	----→	Adaptive performance	.263	.036	7.401	***	Acceptance

Table 8: The effect of the independent variable on the dependent variable
Source: Prepared by the researchers based on outputs of AMOS.V.23 software

We note from Table (8) and Figure (2) mentioned above that there is a path taken by the independent variable (re-engineering of human resources) through its effect on the dependent variable (adaptive performance), and this explains the existence of a positive effect relationship with statistical significance, as the value of (CR is greater from 1.96) between human resources re-engineering and adaptive performance, which amounted to (14,423), thus accepting the first main hypothesis.

B- The sub-hypothesis emanating from the first main hypothesis is clarified according to the following table (9) and figure (3).

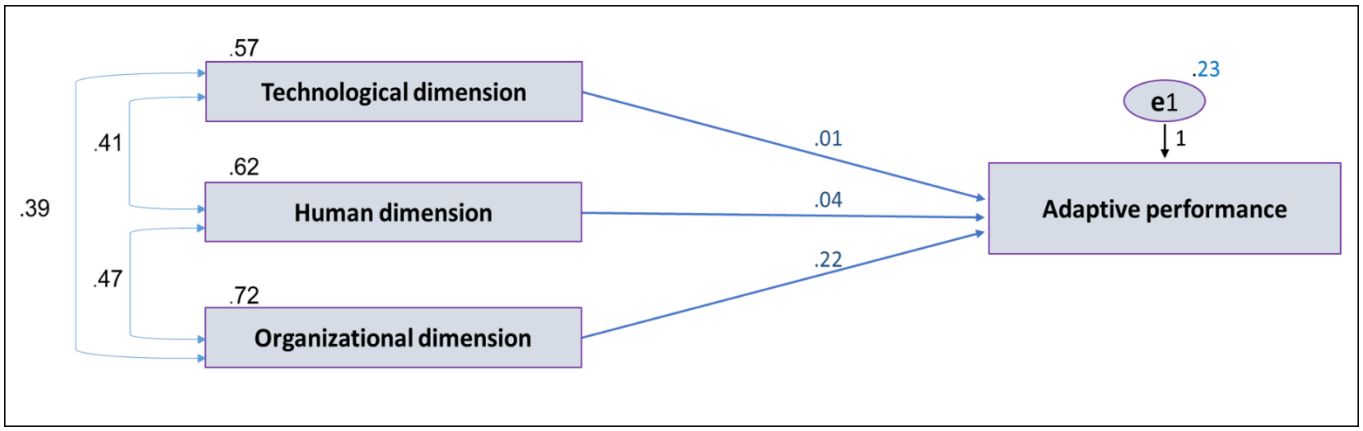

Figure 3: The relationship between the influence of the dimensions of the independent variable on the dependent variable
Source: AMOS.V.23 software outputs

The path of sub-hypotheses of the second main hypothesis			Estimate	S.E.	C.R.	P	Statistical decision
Technological dimension * Organizational flexibility	----→	Adaptive performance	0.013	0.012	1.123	0.261	Acceptance
Organizational dimension * Organizational flexibility	----→	Adaptive performance	0.016	0.013	1.273	0.203	Acceptance
Human dimension * Organizational flexibility	----→	Adaptive performance	0.025	0.011	2.223	0.026	Acceptance

Table 9: Testing the relationship of influence of the independent variable's dimensions in the modified variable on the dependent variable
Source: Prepared by the researchers based on outputs of AMOS.V.23 software
Table (9) and Figure (4) mentioned above show the following results:

1- There is a role for the modifying variable (organizational flexibility) in the positive influence relationship between the technological dimension and adaptive performance, which means accepting the first sub-hypothesis.
2- There is a role for the modifying variable (organizational flexibility) in the positive influence relationship between the organizational dimension and adaptive performance, which means accepting the second sub-hypothesis.
3- There is a role for the modified variable (organizational flexibility) in the positive influence relationship between the human dimension and adaptive performance, which means accepting the third sub-hypothesis.

Section Four: Conclusions and Recommendations

The first conclusion: The study, through the answers of the sample, concluded that the Iraqi Ports Company in the city of Basra has sufficient knowledge and awareness of the variables of the study represented by (re-engineering of human resources, organizational flexibility, adaptive performance), and seeks to confront crises and obstacles by relying on what It possesses competencies and experiences within the researched company.

Recommendation: It is necessary to activate the variables of the current study and give them more importance by informing all company employees of the importance of completing their tasks following what the work environment requires by supporting them, providing them with developmental training courses, and involving them in all development and educational aspects that enhance their potential and make them more capable on change, development and confronting crises.

The second conclusion: The study concluded that there is an effect of human resources re-engineering in achieving the adaptive performance of the employees of the studied company, as rehabilitating and equipping the company and its employees enhances the company's ability to change under exceptional circumstances and makes it capable of responding to crises in the required time.

Recommendation: The results of the study demonstrated that there is an impact of human resources re-engineering in achieving adaptive performance in the surveyed company. Therefore, the researched company must focus on re-engineering its human resources to empower its employees and give them the ability to achieve adaptive performance in the company as a study population.

Third conclusion: The study also demonstrated the existence of a failure in the technological field owned by the surveyed company, and the company also suffers from a lack of interest in organizational aspects, and this, in turn, was reflected in the ability of the company's employees to achieve adaptive performance in both aspects.

Recommendation: The company should focus on developing technological fields and technologies and work to employ them in all work tasks. Also, working on coordinating tasks, dividing work, and operating organizational areas through them, as these two areas contribute effectively to achieving adaptive performance in the company under investigation.

Fourth conclusion: The results of the study demonstrated the existence of a role for the modifying variable represented by (organizational flexibility) in the positive influence relationship that was proven to be confirmed through the results of the current study, as

organizational flexibility has an influential role in influencing between re-engineering human resources and achieving adaptive performance in the investigated company.
Recommendation: The company's management must deal with its employees with high organizational flexibility and give them sufficient powers and responsibilities that enable them to take what is necessary, especially during crises, as organizational flexibility has an influential role in the positive influence relationship that leads to achieving adaptive performance.

Fifth conclusion: The results of the study demonstrated the existence of a role for the modified variable (organizational flexibility) in the positive influence relationship between all dimensions of the independent variable represented by (the technological dimension, the organizational dimension, and the human dimension) in achieving adaptive performance in the company under study if the company seeks to activate flexibility. Organizational management in all work areas among its employees to achieve adaptive performance.
Recommendation: The necessity of activating aspects of organizational flexibility for the employees of the researched company and giving them the capabilities that enable them to use new technologies and accomplish additional tasks and duties without getting tired or bored. Organizational flexibility also has a role in activating the human resource that enhances the company's value with the experience, competencies, and capabilities that enable it to achieve adaptive performance under all changing environmental conditions.

Theoretical and contextual contributions of the study
Theoretical contribution: The current study contributes to providing a theoretical framework that accommodates its variables represented by the independent variable (reengineering human resources), the modified variable (organizational flexibility), and the dependent variable (adaptive performance) by presenting a summary of the ideas of researchers and thinkers in this field. Accordingly, the current study attempts to bridge the knowledge gap among the variables. Most contemporary researchers have focused their studies on testing the relationship between the independent variable (human resources engineering) and the dependent variable represented by (adaptive performance) without referring to the modifying variable (organizational flexibility) and its influential role in improving Adaptive performance. Also, this study was applied in the Ports Company in Basra, which is one of the essential institutions whose results can be generalized to other institutions after making simplified modifications according to the nature and understanding of the institution.

Contextual contribution: Through the results available in the current study, we note that they can be used in other future studies. They are contributing to the transfer of advanced scientific experiments and adapting them to the reality of other institutions by testing the standards used and trying to evaluate those experiments through analysis and scientific study of each variable in the study, and trying to realize its compatibility with the nature of the institutions' work. Human resources engineering has a fundamental role in the nature and climate of work within institutions. The availability of methods and means that institutions need to re-engineer their human resources, handle their administrative processes, and keep pace with rapid technical developments enables them to face the challenges and radical and comprehensive changes that would achieve changes in service and quality. Also, improving adaptive performance in institutions can be achieved through engineering their resources and

the organizational institution's flexibility, which was proven by the results of the current study.

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