The Applied Reality of the Human Resource Information Systems Strategy and Its Field Impact on Institutional Performance: *A Descriptive and Exploratory Study of the Opinions of a Sample of Military Leaders in the Iraqi Ministry of Defense*

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Abstract

The purpose of the current study is to shed light on the applied reality of the human resource information systems strategy in its dimensions (using the system, training on the system, providing technical support, supporting senior administrations, providing infrastructure) and the implications of that reality on the institutional performance of the Iraqi Ministry of Defense, where the ministry's performance is represented in the following sub-dimensions: (Service improvement, efficiency and effectiveness, creativity and innovation) that are relevant to the activities of (planning and organization, work analysis and design, training, recruitment and employment, salaries, wages and bonuses). A sample of senior leaders has been chosen as a targeted sample of (181) managers. Their opinions are surveyed according to a questionnaire prepared for this purpose. The study attempts to address problem of the absence of applied digital indicators at the Ministry from which it can derive its strategies and activities that rely on the use of human resources information systems. Consequently, the present paper aims to diagnose the sample's level of awareness of the intellectual frameworks of the study variables, as well as identifying the relationship and mutual influence between the study variables. These variables are expected to achieve the importance of guiding leaders digitally with indicators inspired by the reality of the work of the organization's human resources in the Ministry that leads to accurate outputs based on scientific facts. The practical side has adopted non-parametric statistical tools to test the hypotheses of the work such as the median and the range. The present study has arrived at a final conclusion that the strategy of human resources information systems has dimensions that have been working effectively, such as (supporting senior departments), while it has regressed after (using the system).

Keywords

Human Resources Information Systems Strategy, Institutional Performance, Iraqi Ministry of Defense, Defense Military University for Postgraduate Studies.

Introduction

The world is witnessing a rapid development in the fields of information technology, as information and informatics in most of the developed countries are racing to develop their strategies and plans for the development of information technology, and it has become necessary for organizations to join the technology race in order to achieve a competitive advantage and maximize achievement, especially in large organizations. An example of such organizations is the Iraqi military organization represented by the Ministry of Defense which has taken the initiative to use the human resources information system and payroll in 2009, realizing the importance of moving to the strategic level in using the human resources information system and its role in improving the institutional performance of the Ministry of Defense and the adoption of the post 2003 as a timeline for the current study.

Theoretical and Conceptual Framework

1. HRIS Strategy Framework

### A. Concept and Strategic Dimensions

The concept of strategic management of human resources in contemporary institutions is the most important product of the challenges and transformations that the world is witnessing today in terms of globalization along with the accompanying technological developments and the intensification of competition that has become global in nature (Al-Saidi et al., 2020). Human resource information systems are defined as a systematic way to store data and information, as it enables managers to plan and make decisions in line with the goals of the organization. Its positions aim to ensure the best operation of human resources information systems, in a way that reflects the activities of human resources and contributes to its development and the emergence of software that has the ability to take decisions in an easier and simpler way than its predecessors. Also, it aims to move towards collective working of the different organizational levels and individuals working in this field and to get access to a common vision in terms of the strategic or operational goals. This means we are moving towards the expansion of roles by roles, targeting the expansion of Management information systems with the expansion of human resources information systems (Jahan, 2014), as shown in Figure (1).
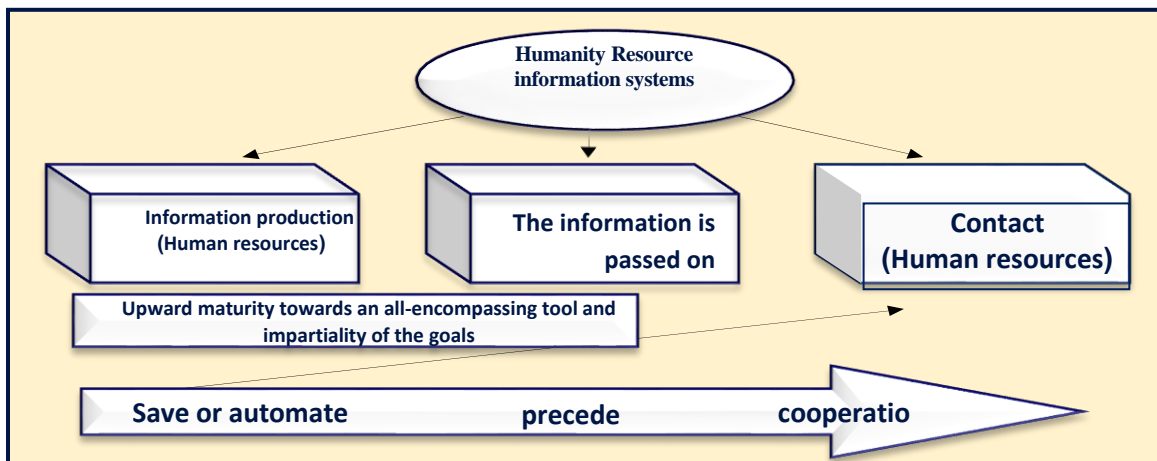
**Figure 1 The Extended roles of human resource information systems
Source: S. Maire, le systeme d'information des ressources humaines, seminaire MBA
MRH, Paris, 2010. NS**

B. Contributions of Human Resource Information Systems in Creating Strategic Value

The human resource's function has emerged as a strategic partner in creating value for the organization by considering human resources activities as non-permanent basic activities, as Spencer has indicated that more than half of the job's time is consumed in the completion of low-value routine work, as illustrated in Figure (2).
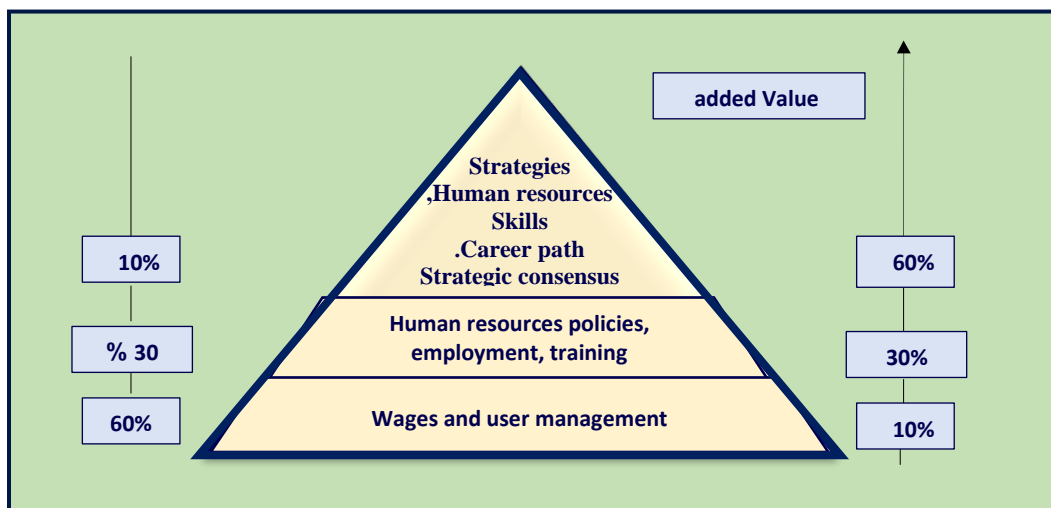
**Figure 2 Spencer Pyramid
Source: Human resource information system, www. habsis. Org/public/documents**

In light of the aforementioned facts, human resource information systems can be considered as a major component that contributes to the addition of value to human resource activities in the areas of (time economy, cost economy, quality decisions).

C. Achieving the Strategic Value of Human Resource Information Systems

It is noted that the use of human resources information systems is not ideal and is still used in the practical aspect as a tool to automate and accelerate daily work procedures away from its strategic vision; this has been confirmed by Campbell, Tansley, Ball, Bassett, and Hugues. Moreover, the strategic transition does not stop when thinking about technical change of human resources information, but in making changes, above all, in the internal contexts of business performance in order to develop them and achieve strategic value. In business administration), one of the most important mechanisms of governance is (Governance) and (Urbanization), as demonstrated in Figure (3).

D. Dimensions of Human Resource Information Systems Strategy

The strategic dimensions of the human resource information system include multiple and varied concepts, but they are intertwined and mutually supportive in their elements by ensuring (information system efficiency, technical innovation, strategic information resources) in achieving the competitive advantage of (the lowest cost leadership, differentiation and alliances) (Al-Mubayedeen, 2015) which has been reformulated on five dimensions that achieve the above goals (use of the system, training on the system, availability of technical support, support of senior management, availability of infrastructure) as an independent variable that expresses the strategy of human resource information systems.
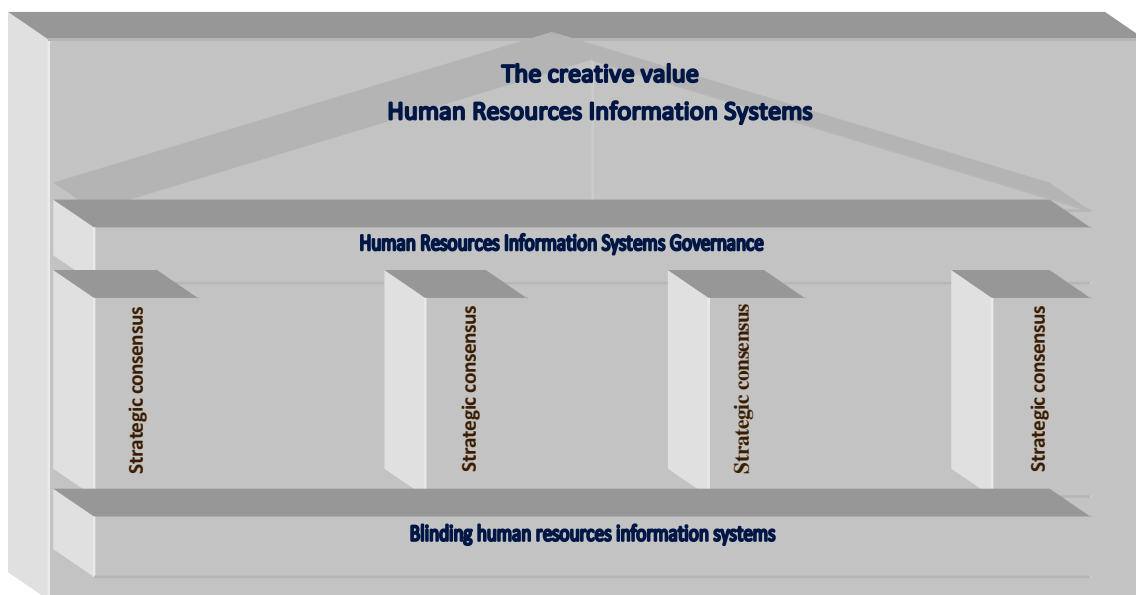
Figure 3 The Value Creation Framework for HRIS
Source: Cigref.fr, alignment stratégique des systèmes d'information comment faire du système d'in formation un atout pour l'entreprise ?2009, www.cigref.fr

2. Institutional Performance

A. The Concept of Institutional Performance of Human Resources Management

The use of information technology has increased the effectiveness and efficiency of organizational activities like planning, staffing, human resource accounting, training, development, and other management processes, particularly human resource management (HRM). Likewise, over time, it has become Human Resource Information System (HRIS) that is an integral part of modern organizations (Kapoor, 2012; Nawaz, 2013; Nawaz and Anjali, 2012).

B. The Importance of Institutional Performance and its Advantages

Based on the above-mentioned ideas, it is thought that performance is an integrated system embodying the results of the organization's work, and is characterized by several characteristics, the most important of which is maintaining the stability and continuity of work through cumulative experiences and previous experiences that enrich the organization and pass these experiences from generation to generation so that the organization is not affected by the absence or change of leaders. Therefore, it is considered as an essential part of the administrative work that aims to find out how to implement the activities and how to achieve a set of objectives. It also seeks to compare the reality and results in sub-units and their suitability with the objectives of the institution and the most important advantages (implementation of strategies and plans with high efficiency, knowledge of the impact of the practice of strategic planning process on the institutional performance presenting some appropriate recommendations based on realistic results).

C. Objectives

Contemporary organizations possess large numbers of human resources of various specializations, which require the development of methods and information systems, especially in the human field, and in a manner that helps these organizations to adopt appropriate decisions in this regard based on the information that is provided for those systems. Additionally, there are those who stress the need to provide information systems Human Resources for Human Resources Management (Al-Alkawi, 2006). Determining organizational goals is the purpose that the administration is interested in applying through performance appraisal, which includes collecting appropriate data for this process in order to achieve many goals (Abd Rahman, 2017)), includes the following:

- First) Improving performance and productivity.
- Second) Diagnosing, solving problems and identifying the institutional strengths and weaknesses of.
- Third) Providing feedback to the sub-systems - that is, the institutional departments and the system as a whole for the sake of the preventive control.
- Fourth) Performance appraisal at the enterprise level is a reflection of the senior management, as it reflects the performance of the departments and branches and thus enables them to draw directions and policies such as promotions, salary increases or the introduction of new technology.
- Fifth) Knowing the weaknesses to strengthen them and the strengths to develop and maintain them.
- Sixth) Unifying the behavior of employees towards the unified goal that is linked to the organization's strategy.
- Seventh) Increasing the added value, efficiency and organizational effectiveness, as the added value expresses the output of subtracting the inputs from the outputs, and the efficiency is the actual outputs that have been achieved relatively to the expected standard outputs, and the effectiveness is the degree of achieving organizational goals.

D. Applications, Components and Functions

Sources, research and field studies indicate that the commonest applications of the human resources information system are those advanced in Table (1) below.

Table 1 Elements of Human Resource System Applications

Seq	Author	the Year	ERP	Polarization and Employment	Compensation	Labor Market	Work Environment	industrial Safety	Training and Development	Performance Evaluation	Job Analysis	Total Applications
1	Martin	1979	*	*	*				*	*		5
2	Walker	1980		*	*	*	*			*		5
3	Al, Alwani	1985	*	*			*		*	*		5
4	Meiner & Vis	1989		*	*				*	*		4
5	Obrien	1990		*	*				*	*		4
6	Broderick & Boudreau	1992	*	*	*	*			*	*		6
7	Hussain	1992		*	*				*	*	*	5
8	Bagaber& Mufti	1993	*	*	*				*	*		5
9	Noe	1994			*				*	*		3
10	Safrin	1994	*	*	*			*	*	*		6
11	Doughman	1997	*	*	*				*	*		5
12	Al, Muqabi	1998	*	*	*				*	*	*	6
13	Pattanyak & Verma	1998	*	*	*				*	*		5
14	McLeod	1998	*	*	*		*		*			5
15	Uzbek	2001	*	*	*				*	*		5

Table 2 Human resources functions and their names according to the objectives

Jobs	Job names according to their objectives
• Work analysis • Manpower planning • Research into manpower • Choice and then employment	Jobs for attracting manpower
• Human relations • Psychological contracting • Occupational safety and health • Economic security	Jobs related to the preservation of manpower
• Performance assessment • Training, organizational learning, development and creativity • Track and career line management program	Jobs related to the development of manpower

Source: Mahfouz Jouda et al., Reference P, 154-155 at the disposal of. Mahfouz Jouda et al., Business Organizations - Concepts and Functions, Wael Publishing and Distribution House, Amman, i2 2008.

E. Obstacles and Elements of its Application in the Military Establishment

The specificity of the military institution's job performance makes it an institution that is difficult to standardize like the jobs of civil institutions and companies in terms of the quality of its duties, service laws, qualifications of its members, the nature of its duties that depend on continuous movement and the instability of work sites, its performance results, which are difficult to standardize. Such characteristics have made it far from standard evaluation tools along with the adoption of evaluation controls and instructions that achieve the principle of internal evaluation of the unit, with the difficulty of preparing an evaluation at a higher level for the institution.

F. Dimensions of Institutional Performance

The dimensions that are shown below have been adopted to measure the institutional performance (service improvement, efficiency and effectiveness, creativity and innovation) in the areas of human resources functions that are primarily approved in the Human Resources Department of the Ministry of Defense (human resource planning, work design analysis, recruitment and employment, training, salaries, wages and bonuses) as a dependent variable that represents the performance of the founders.

3. Theoretical Relationship between Human Resource Information Systems Strategy and Institutional Performance

The decision to implement the human resources information system is a major investment decision for all organizations of all sizes, including the Ministry of Defense, as many previous studies (Al-Rousan and Al-Amoush, 2013) indicated the importance and benefits of implementing this system at the operational and strategic levels. According to (Al-Makhadem, 2005), this includes but not limited to achieving high levels of accuracy of work and improving its procedures, providing access to information in a timely manner, reducing costs). Kovach et al. (2002) have mentioned many administrative and strategic advantages of using human resource information systems in the performance of organizations and its support (Bsat & Beckers, 2006). These are attributed to five basic positive aspects that will be adopted in the current study to clarify the link between the research variables, the strategy of human resource information systems and institutional performance in the Ministry of Defense through (enhancing the competitiveness of the organization, producing a larger and diverse number of human resources operations, shifting focus Human resources from processing transactions in its traditional form of human resources strategy, making employees part of human resources information systems, completely re-engineering human resources functions).

For the sake of linking the two variables of the study (i.e. the strategy of human resources information systems and institutional performance in the Ministry of Defense) a focus has been placed on simplifying the procedures and accuracy of positions in improving the human resources environment. In this regard, HR is improved in terms of justice and equality in granting rights and privileges, and optimal selection of jobs and those who occupy them in human resources management, with the importance of developing knowledge and skills in the development of Human Resources. Especially as the world is racing against time to develop strategies and plans for the development of information technology (Al-Murshidi, 2012). As the use of human resource information systems leads to ease of data flow and decision-making mechanism away from pressures and workloads

(Nawaz & Gomes, 2014). This improvement implies (improving the service of human resources management, increasing effectiveness in terms of institutional performance, efficiency of performance in institutional performance, affecting creativity in terms of institutional performance, competitive advantage in terms of institutional performance).

The Design of the Study

1. The Problem of the Study

The current study attempts to address the problem that there are no practical indicators inspired by the reality of the situation. How the existing work of the Ministry of Defense reflects the results of using the human resources information system in improving institutional performance that can be represented by the following questions:

a. Does the Iraqi Ministry of Defense realize the level of importance of its human resources through the dimensions of the strategy of human resources information systems and institutional performance? What is the level of this awareness?

b. Does the Ministry of Defense realize which of the dimensions of the human resources information systems strategy have the most significant impact on the Ministry's institutional performance?

c. What is the nature of the correlation between the main and sub-variables?

d. What is the extent of the influence caused by the dimensions of the human resources information systems strategy on the institutional performance of the Ministry of Defense?

2. The Aims of the Study

The current study aims to:

a) Detect the level of awareness of the study sample about the study variables.

b) Verify the correlation between the two study variables.

c) Verify the level of impact of the human resource information systems strategy on the institutional performance.

3. The Importance of the Study

The significance of the present study lies in reflecting the Iraqi Ministry of Defense's need for conducting this type of study by revealing the level of the sample's awareness of the intellectual contents of the study's variables, as well as diagnosing the relationship and

influence between them. Its strategies are related to the operational areas that are related to the functions of human resource management (planning and organization, analysis and design of work procedures, salaries, wages and bonuses, training, and recruitment and recruitment). In addition, the digital indicators significantly reflect the strengths and weaknesses of the institutional performance in the Ministry of Defense, which constitutes a case of a new challenge that puts officials in view of the necessity of drawing strategic treatments for them in light of the use of the human resources information system.

4. The Hypothesis of the Study

The study adopts six basic hypotheses, the basis of which is to prove the level of awareness of the study's sample of the strategy of human resource information systems and institutional performance, while verifying the correlation relationship that combines the study's variables at the macro and sub-levels with the extent of the impact of the above-mentioned strategy in improving the institutional performance. The hypotheses have been presented in detail in the study's hypotheses test.

5. The Hypothetical Scheme of Study

Conceptual technique reflects the researcher's perception of the nature of the movement and interactions of the variables of his research and paints the features of the reality that he cares about to embody the causal relationship between these variables, thus it is an intellectual construct of a set of facts represented by a set of variables related to quantitative logical relationships or how, explanatory with causal effect and other responsive offering a simplified and concise hypothetical representation of a particular phenomenon that embodies a particular reality (Al-Saidi, 2021).

The diagram shows the correlation at the total level of the independent variable of the study (the strategy of human resources information systems) and (the institutional performance of the Ministry of Defense) and the relationship of influence at the sub-level between the dimensions of the strategy of human resources information systems and institutional performance. It also shows the total impact of the independent variable (information systems strategy human resources) in (institutional performance). Look Figure 4: The Hypothetical Scheme of Study.

Independent variable
Human Resources Information Systems Strategy
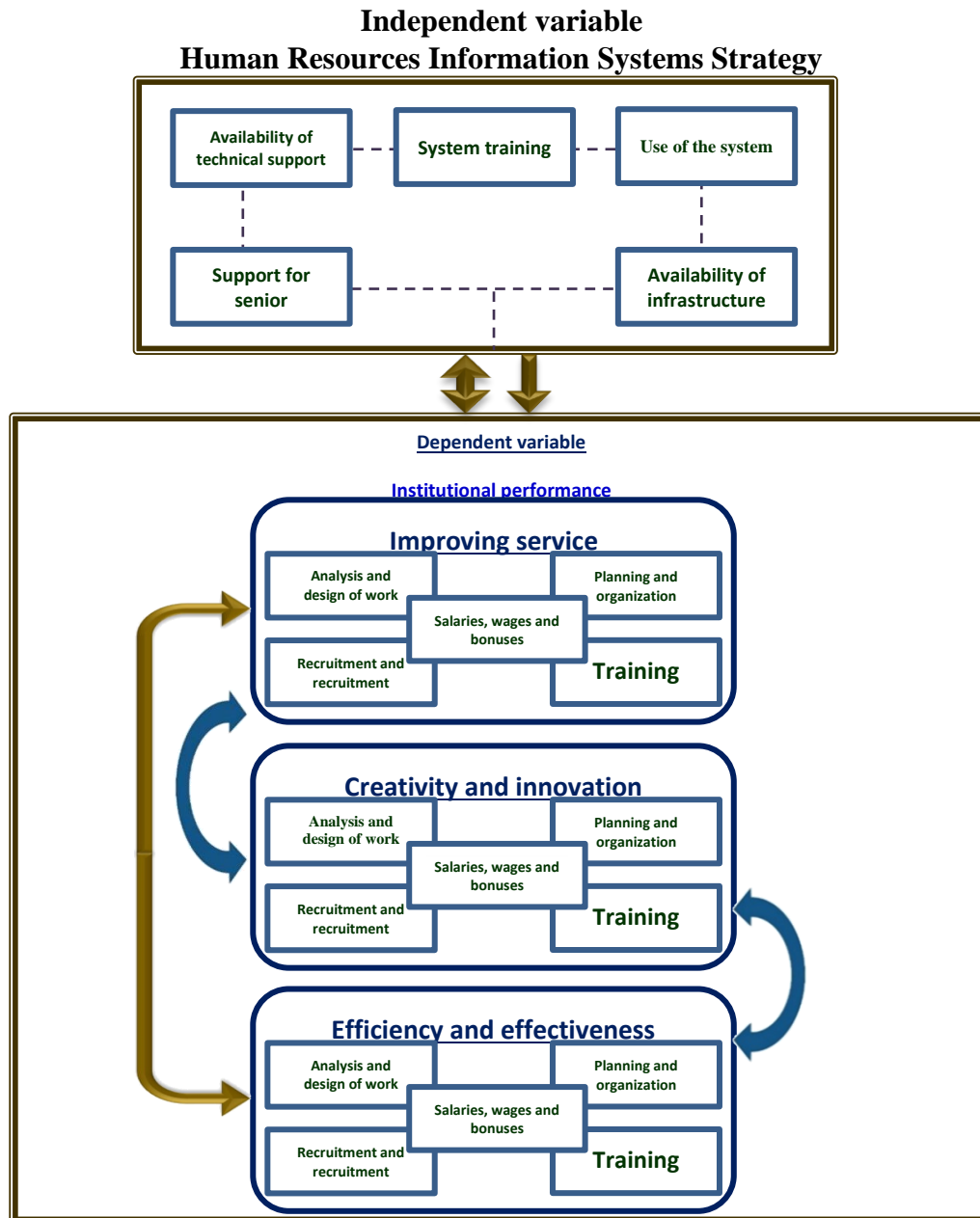
Figure 4 The Hypothetical Scheme of Study

6. The Methodology of the Study

The current study (Curriculum - present study and meta-analysis), that are stressed (Bratton& Gold, 2003), and adopted in this approach as a design through which plans could be developed to collect information that would reveal the study's effects in a simplified, coherent and systematic manner (Al-Saidi & Muhammad, 2013); a modern technique that allows researchers to mix the results of research involving different branches and sciences. For example, here studies of organization theory and human

resources management, as shown in the work of (Hobbler & Johnson, 2004). It is a comprehensive approach because at the same time it is based on other approaches in reaching its objectives, for example descriptive approach, and the empirical approach is to provide evidence that takes into account cause and effect. (Al-Saidi, Al-Ghanmi, & Jawad, 2020).

7. The Study Community and Sample

To determine the size of the sample adopted in the study is of great importance, and the appropriate selection of the study sample is made according to the size of the complex community of the study. It also gives accuracy in the results of testing the hypotheses of the Iraqi Ministry of Defense to conduct study according to the modernity in its variables and dimensions and adopted a study (Glen, 2003) to determine the size of the intended sample that is being interviewed including a number of managers at the higher, middle and executive administrative levels.

$$n= N \backslash N1+Ne2$$

As: n = sample size N = e- community size = the level of accuracy or sin allowed
$$n=317 \backslash 18841+1884(0.05)^2$$
$$= 181$$

The appropriate size of the staff is (181) out of a total study community of (317) people leaders and directors of the Iraqi Ministry of Defense.

8. Tools for Collecting Data and Information

The questionnaire is used as a main researching tool, as well as personal interviews with a group of seniors, middle and executive administrations. And taking their opinions, while presenting it to an initial sample of (15) people for a preliminary test, and the results were encouraging for its adoption.

9. Analysis and Statistical Processing Tools

A set of statistical tools are used, including (median, range, factor analysis, Kendal correlation coefficient, alpha-Cronbach's coefficient, multiple regression coefficient, simple regression coefficient).

10. The Structure of the Study

The study is presented through four paragraphs consisting of a theoretical presentation of its variables and then the design of the study through its methodology where the practical

side tests reside in the third position to end the study by poviding a number of conclusions and recommendations

11. Research Limits

Studies and research must be characterized by a specific horizontal range and vertical depth, and if the vertical depth represents the intellectual aspect of the study, the horizontal range remains the task of the limits of the study, as its orientation must be defined within clear and known limits, limiting the effort to the framework of a point itself and not at several points, no matter how strong its links to the base point (Al-Saidi, et al., 2020), and the limits of the study include spatial, temporal and scientific limits, which are as follows:

a) Spatial boundaries: The limits of the spatial study are at the Iraqi Ministry of Defense in Baghdad, the capital, and its institutions that are scattered across the capital.
b) Temporal limits: 1/5/2021 to 10/10/2021.
c) Practical limits: The work is scientifically determined by its objectives.

The Practical Aspect of the Research

In this section, the results of the data are presented and analyzed based on the statistical program (SPSS) employed in the statistical analysis to show the level of awareness of the study sample in relation to the paragraphs of the questionnaire, the level of their importance and the analysis of the correlation and influence relationships between its variables, in order to accept or reject the study hypotheses (Al-Saidi & Saleh, 2020). Also, for the purpose of testing the sample's adequacy and level of importance, a test is adopted (Kaiser-Meyer-Olkin Measure), which stands for (KMO) in the adequacy test of the study sample, and the Bartlett test is adopted to indicate the presence or absence of the level of morale (Al-Saidi, Ala'a, 2020), the results are shown in Table (3).

Table 3 Testing the sample-KMO and Bartlett's

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.930
Bartlett's Test of Sphericity	Approx. Chi-Square	14552.101
	Df	2485
	Sig	0.000

The Table above asserts that (Bartlett) test indicates a very high index of (KMO) that exceeds the standard percentage of 50% with a level of significance (0.000).

1. The Relationship of Demographic Variables to the Dimensions of the Main and Sub-variables

Based on the statistical analysis of the demographic variables and their relationships with the main variables, it has been found that most of the significant correlational relationships are negative, as shown in Tables (4) and (5), which means that the relationship is inverse between personal information and the variable or sub-dimension. Moreover, this finding assures the existence of obstacles for the continued success of the human resources information system in the Ministry of Defense. Thus, it is necessary to re-combine the human resources that are used in the system (age, educational attainment, years of service, gender) with the importance of involving them in training and courses to develop their skills in order to be able to optimally use the system and to be supportive to improve institutional performance.

Table 4 Correlation coefficients of the relationship between demographic variables with the dimensions of the main and sub-variables of the independent variable (human resource information systems strategy)

Variable	Use of system	Training system	Availability of technical support	Support of senior departments	Availability of infrastructure	Human resources information systems strategy
Lifetime	-0.069	-0.019	-0.035	-0.019	-0.073	-0.049
Gender	0.201**	-0.123	0.142	-0.055	0.082	0.039
Educational attainment	-0.058	-0.094	0.006	-0.135	-0.1	-0.097
Number of years of service	-0.057	0.003	-0.046	-0.037	-0.084	-0.05
Number of years of service in the current work	0.061	0.088	0.108	0.032	-0.061	0.054
Career location	0.076	-0.035	0.218**	0.042	0.055	0.074
Field of work	0.123	0.062	0.03	0.018	-0.001	0.053
Training in the use of the system	-0.115	-0.033	-0.139	-0.08	-0.159*	-0.121
Local training certificates	0.034	0.102	0.013	0.046	-0.009	0.049
International certificates	-0.069	-0.136	-0.035	-0.199**	0.001	-0.111

* At a significant level 0.05 **At a significant level 0.01

Table 5 Correlation coefficients of the relationship between demographic variables with the dimensions of the main and sub-variables of the child variable (institutional performance)

Variable	Improving Service	Creativity and Innovation	Efficiency and Effectiveness	Institutional Performance
Lifetime	-0.157*	-0.143	-0.119	-0.147*
Gender	.154*0	0.113	0.009	0.091
Educational attainment	-0.248**	-0.313**	-0.300**	-0.307**
Number of years of service	-0.186*	-0.186*	-0.161*	-0.187*
Number of years of service in the current work	-0.095	-0.078	-0.046	-0.075
Career location	0.074	0.026	-0.001	0.032
Field of work	0.072	0.041	0.051	0.057
Training in the use of the system	-0.164*	-0.138	-0.062	-0.125
Local training certificates	-0.012	0.008	0.015	0.005
International certificates	-0.103	-0.088	-0.127	-0.114

* At a significant level 0.05 ** At a significant level 0.01

2. Factor Analysis of the Study Variables

In this paragraph, the strength and weakness of the respondents' answers to the questionnaire's paragraphs are revealed, which are (71) paragraphs distributed over the variables under analysis, these findings are obtained through the factor analysis method that is utilized in making the study analysis. Determining the basic components percentage of saturation for each paragraph in the questionnaire (Al-Saidi; Iman & Afrah, 2020), which indicate that the paragraph is considered saturated if the percentage of saturation reaches (40%), and determine the degree of excellence of each paragraph based on the matrix of factors first, and then the rotation matrix, and given that the matrix of components has not achieved the necessary saturation percentages. The Rotation matrix has been adopted for this purpose, Table (6), illustrates these percentages.

Table 6 Total Variance Analysis

Component		Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
		Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
dimension0	1	48.725	43.120	43.120	48.725	43.120	43.120	22.536	19.943	19.943
	2	9.620	8.514	51.633	9.620	8.514	51.633	16.470	14.575	34.518
	3	7.673	6.790	58.423	7.673	6.790	58.423	12.473	11.038	45.556
	4	5.054	4.472	62.895	5.054	4.472	62.895	12.337	10.918	56.474
	5	4.298	3.804	66.699	4.298	3.804	66.699	8.376	7.412	63.886
	6	4.139	3.663	70.362	4.139	3.663	70.362	5.193	4.596	68.482
	7	4.019	3.557	73.918	4.019	3.557	73.918	4.934	4.367	72.849
	8	3.587	3.174	77.092	3.587	3.174	77.092	4.017	3.555	76.404
	9	3.356	2.970	80.062	3.356	2.970	80.062	3.716	3.289	79.692
	10	3.284	2.906	82.968	3.284	2.906	82.968	3.532	3.125	82.817
	11	1.207	1.069	84.037	1.207	1.069	84.037	1.256	1.112	83.929
	12	1.086	0.961	84.998	1.086	0.961	84.998	1.172	1.037	84.966
	13	1.033	0.914	85.912	1.033	0.914	85.912	1.069	0.946	85.912

Extraction Method: Principal Component Analysis.

Based on the results of the statistical analysis program (SPSS) illustrated in Table (6), the statistical analyzes of the general variance of these factors indicate that they explain (85.912) of the study population and this percentage ensures the integrity of the data and allows (to know the level of awareness of the sample of the study variables through Agreement or disagreement in the contents of the paragraphs of the scale, which are referred to as percentages of saturation).

The level of significance has been analyzed in relation to the percentages of saturation in the factorial analysis to determine the level of awareness of the sample about the study variables, as stated in Table (7), which shows the percentages and clear variance in the level of importance with the adoption of the first root as a measure of the level of importance based on the percentage of saturation.

Table 7 Determines the level of importance for the research variables

Component matrix for saturation ratios of key and sub-variables						
Component Matrix						
Key and sub-variable			**Components**			**Order**
The main variable	**Sub-variable and secondary**		**Root III**	**Root II**	**Root I**	
Human Resources Information Systems Strategy	Use of the system		-0.026	0.462	0.663	fifth
	System training		-0.493	0.09	0.737	Second
	Availability of technical support		-0.11	0.472	0.672	Fourth
	Support for senior departments		-0.318	0.125	0.82	First
	Availability of infrastructure		-0.334	0.399	0.695	Third
	Human Resources Information Systems Strategy		-0.338	0.346	0.868	X
Institutional Performance of the Iraqi Ministry of Defense	Improving service	Planning and organization	0.042	0.314	0.839	First
		Planning and design of business procedures	0.185	0.21	0.804	Second
		Hiring and hiring	0.104	-0.086	0.746	Fourth
		Training	0.317	0.04	0.788	Third
		Salaries, rewards and wages	0.507	0.104	0.743	fifth
	Creativity and innovation	Planning and organization	0.206	-0.02	0.865	Second
		Planning and design of business procedures	-0.053	-0.257	0.872	First
		Hiring and hiring	-0.225	-0.375	0.781	Fourth
		Training	0.559	0.153	0.651	Fifth
		Salaries, rewards and wages	0.23	0.017	0.837	Third
	Creativity, efficiency and effectiveness innovation	Planning and organization	-0.027	-0.329	0.804	Fourth
		Planning and design of business procedures	-0.131	-0.39	0.813	Third
		Hiring and hiring	-0.066	-0.242	0.841	First
		Training	-0.142	-0.4	0.8	fifth
		Salaries, rewards and wages	0.057	-0.201	0.833	Second
		Institutional Performance of the Ministry of Defense	0.092	-0.156	0.983	Y
Extraction Method: Principal Component Analysis.						
a. 3 components extracted.						

3. Testing the Study Hypothesis

Table 8 briefly shows testing the study hypotheses

The first hypothesis: Business organizations still do not care about the awareness of their human resources about information systems as global consumption. For resources and technology, it is now higher than ever (Chams & Blandon, 2019). The first zero hypothesis: The study sample does not highly recognize the human resources information systems strategy.

The first alternative hypothesis: The study sample is highly aware of the human resources information systems strategy.

Subdivisions	Saturation ratio	Level of importance based on saturation	Order
Use of the system	0.385 – 0.730	0.663	Fifth
System training	0.541 – 0.832	0.737	Second
Availability of infrastructure	0.695 - 0.807	0.672	Fourth
Support for senior departments	0.485- 0.536	0.820	First
Availability of infrastructure	0.422 - 0.536	0.695	Third

Finding: The zero hypothesis is rejected while the alternative hypothesis is verified that the study sample is aware of the intellectual contents of the human resources information systems strategy adding to that the support of senior departments is the most interesting thing followed by training and then the availability of infrastructure while the availability of technical support and the use of the system have declined.

These indicators achieve the first aim of the study and answer the first question stated in the study problem.

The hypothesis: Business organizations still do not have a full view of the impact of the human resource on better institutional performance) (Al-Faouri, 2012).

The second zero hypothesis: The study sample does not recognize the intellectual contents of institutional performance and its importance.

The second alternative hypothesis: The study sample recognizes the intellectual contents of institutional performance and its importance.

Dimension	Subdivision	Saturation ratio	Order
Improving Service	Planning and organization	0.538-0.660	Planning and organization are the most interesting factors; followed by planning and designing work procedures and then training, while the recruitment,
	Planning and design of business procedures	0.639-0.749	
	Recruitment and recruitment	0.493-0.557	

	Training	0.542-0.640	employment, salaries, wages and equivalents are the least important.
	Salaries, wages and equivalents	0.698-0.784	
Creativity and Innovation	Planning and organization	0.532-0.572	Planning and organization are the most important factors, followed by planning and designing work procedures and then training, while the recruitment, employment, salaries, wages and equivalents are the least important.
	Planning and design of business procedures	0.491-0.810	
	Recruitment and recruitment	0.776-0.792	
	Training	0.625-0.795	
	Salaries, wages and equivalents	0.535-0.781	
Efficiency and effectiveness	Planning and organization	0.503-0.573	Recruitment and employment are the most important ones, followed by salaries, wages and equivalents, and then planning and designing work procedures while planning, organization and training declined.
	Planning and design of business procedures	0.684-0.814	
	Recruitment and recruitment	0.527-0.768	
	Training	0.610-0.808	
	Salaries, wages and equivalents	0.568-0.720	

Conclusions: The zero hypothesis is rejected and the alternative hypothesis is adopted (the study sample recognizes the intellectual contents of the institutional performance and its importance highly.

These indicators achieve the first aim of the study and answer the first question mentioned in the study problem.

The third Hypothesis: The adoption of the human resources information systems strategy in business organizations does not eliminate the application of curricula or other strategies to maintain their continuity and survival (Iqbal, 2020.)

The Zero Hypothesis III: There is no morally significant correlation between the independent variable, the human resources information systems strategy, its dimensions, and the variable of the institutional performance of the Ministry of Defense.

The Alternative hypothesis III: There is a morally significant correlation between the independent variable and the human resources information systems strategy with its dimensions and variable of the institutional performance of the Ministry of Defense.

Institutional performance	N	Sig.2-tailed	Corrcoefft	Subdivision
0.433	181	0.000	1.000	Use of the system

There is a morally significant correlation between the human resources information systems

strategy (system use) and the institutional performance of the Ministry of Defence at a moral level (0.01) at an average level where this indicator rejects the zero hypothesis and accepts the alternative hypothesis.

Institutional performance	N	Sig.2-tailed	Corr_coefft	Subdivision
0.520	181	0.000	1.000	System training

There is a morally significant correlation between the human resources information systems strategy (system training) and the institutional performance of the Iraqi Ministry of Defense at a very good level (0.01) and this indicator rejects the zero hypothesis and verifies the alternative hypothesis.

Institutional performance	N	Sig.2-tailed	Corr_coefft	Subdivision
0.426	181	0.000	1.000	Availability of technical support

There is a morally significant correlation between the human resources information systems strategy (system use) and the institutional performance of the Iraqi Ministry of Defense at a moral level (0.01) at an average level, which rejects the zero hypothesis and adopts the alternative hypothesis.

Institutional performance	N	Sig.2-tailed	Corr_coefft	Subdivision
0.594	181	0.000	1.000	Support for senior departments

There is a morally significant correlation between the human resources information systems strategy (support for senior departments) and the institutional performance of the Iraqi Ministry of Defense at a very good level (0.01) so this indicator rejects the zero hypothesis and accepts the alternative hypothesis.

Institutional performance	N	Sig.2-tailed	Corr_coefft	Subdivision
0.455	181	0.000	1.000	Availability of infrastructure

There is a morally significant correlation between the HUMAN Resources Information Systems Strategy (infrastructure availability) and the institutional performance of the Iraqi Ministry of Defence at a moral level (0.01) at an average level, which rejects the zero hypothesis and approves the alternative hypothesis.

		Human Resources Information Systems Strategy	Institutional performance
Institutional performance	Corr_cofffft	0.587	1.000
	Sig.2-tailed	0.000	0.000
	N	181	181

The Findings: The statistical analysis and the data of the Kendal correlation matrix that combines the strategy of human resource information systems and institutional performance, assert that there is a significant correlation between the strategy of human resource information systems and institutional performance of the Ministry of Defense at a level of morale of 0.01 which is a very good level.

This finding rejects the third null hypothesis. These findings achieve the third aim of the study and answer the third question of its problem.

The fourth hypothesis: One of the main approaches to improve the quality of performance of employees is the strategies adopted and followed by the Human resources in those organizations including cascio human resources information systems strategy, 2018)) in Improve performance quality.

Hypothesis 4: There is a morally significant correlation between the HR information systems strategy and performance dimensions of the Ministry of Defense at the macro level and sub-level.

Table 9 Kendall Correlation Matrix for Institutional Performance Dimensions and Human Resources Information Systems Strategy

			Improving service	creativity and innovation	efficiency and effectiveness	strategy human resources information systems
Kendall's tau_b	Improving service	Corr Coeff	1.000	0.651**	0.580**	0.544**
		Sig. (2-tailed)	0.000	0.000	0.000	0.000
		N	181	181	181	181
	creativity and innovation	Corr Coeff	0.651**	1.000	0.735**	0.551**
		Sig. (2-tailed)	0.000	0.000	0.000	0.000
		N	181	181	181	181
	efficiency and effectiveness	Corr Coeff	0.580**	0.735**	1.000	0.542**
		Sig. (2-tailed)	0.000	0.000	0.000	0.000
		N	181	181	181	181
	strategy human resources information systems	Corr Coeff	0.544**	0.551**	0.542**	1.000
		Sig. (2-tailed)	0.000	0.000	0.000	0.000
		N	181	181	181	181

*At a significant level 0.05 **At a significant level 0.01

The Findings: Table (9) reveal the following findings:

- There is a morally significant correlation between the HR Information Systems strategy and improved service in the institutional performance of the Ministry of Defence at a moral level (0.01), with a value of 0.544 and a good level.
- There is a morally significant correlation between the HR Information Systems Strategy and creativity and innovation in the institutional performance of the Ministry of Defence at a moral level (0.01) with a value of 0.551 and a good level.
- There is a morally significant correlation between the HR Information Systems strategy and efficiency and effectiveness of the Ministry of Defense's institutional performance at a moral level (0.01) with a value of 0.542 and a good level.

The above-mentioned findings actualize the third aim of the current work and answer the third question mentioned in the problem of study through the existence of a morally significant correlation between the strategy of human resources information systems and dimensions of the performance of the Iraqi Ministry of Defense at the macro and subsidiary level.

Hypothesis 5: The strategy of human resources information systems and the application of the human resources information system is a tool and a method, a strategist who works to spread knowledge and participate in it and to achieve creativity and innovation (Attar Abdul Majid and Burbain, 2017).

Hypothesis 5: There is a morally significant impact on the implementation of the Human Resources Information Systems Strategy in the Ministry of Defense through the dimensions of the Institutional performance at the macro level.

Note: The relationship of effect is measured by the regression coefficients, in a simple regression style.

Institutional Performance = a + B (Human Resources Information Systems Strategy)…..
Equation (1) simple regression.

Table 10 ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	258.558	1	258.558	251.655	0.000
	Residual	183.910	179	1.027		
	Total	442.468	180			

a. Dependent Variable: The Institutional performance
b. Predictors: (Constant), Human Resources Information Systems Strategy

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	**(Constant)**	**1.712**	**0.379**		**4.514**	**0.000**
	Human Resources Information Systems Strategy	**0.778**	**0,049**	**0.764**	**15.864**	**0.000**

Table 11 Transactions

a. Dependent Variable: The Institutional performance

The Findings: Tables (10) and (11) affirm that the beta marginal tilt angle that is associated with the HR information systems strategy has achieved (0.764) meaning that a one-unit change in the HR information systems strategy will lead to a change of (0.764) in the institutional performance, which is a very high moral impact. This is finding answer the fourth question posed in the study problem and achieves the fourth aim of the study.

Hypothesis VI: The HR Information Systems Strategy has a strategic impact through the use of an information system.

Human resources as a strategic information system with the capacity to provide a reasonable degree of efficiency and effectiveness via supporting business operations (Al-Marki, 2018).

The sixth key hypothesis states: There is a morally significant impact on the implementation of the Human Resources Information Systems Strategy in the Ministry of Defence Through (system use, system training, technical support, support for senior departments, availability Infrastructure) and reflected in the institutional performance of the Ministry of Defense through (resource planning). Humanity, analysis and design of work, recruitment and employment, training, salaries, wages and equivalents).

Note: The impact relationship is measured by the regression coefficients and multiple regression
Institutional Performance = a + B (System Use) + Beta2 (System Training) + Beta 3 (Management Support Upper) + Beta4 (availability of technical support) + beta5 (availability of infrastructure)
……….. Equation (2) Multiple Slope

Table 12 Factors

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.592	0.370		7.014	0.000
	Human Resources Information Systems Strategy	0.695	0.048	0.736	14.549	0.000

a. Dependent Variable: Improving service

Table 13 Factors

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.515	0.431		3.514	0.001
	Human Resources Information Systems Strategy	0.795	0.056	0.729	14.255	0.000

a. Dependent Variable: Creativity and innovation

Table 14 Factors

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.028	0.500		2.057	0.041
	Human Resources Information Systems Strategy	0.843	0.065	0.698	13.054	0.000

a. Dependent Variable: Efficiency and Effectiveness

Summary of statistical analysis: It is clear:

- Table 12 demonstrate that there is a morally significant impact relationship between the HRS strategy in improving service at a border mile angle of 0.736, which assures a one-unit change in the HR Information Systems strategy will lead to a change in the institutional performance in improving service by 0.736, which has a very high impact.

- Table13 reveals that there is a morally significant impact relationship between the HR information systems strategy in creativity and innovation at a limit of 0.729 miles,

indicating a one-unit change in the HR information systems strategy will lead to a change in the institutional performance in creativity and innovation by 0.729, which has a very high impact.

- Table 14 asserts that there is a morally significant impact relationship between the HRS strategy in efficiency and efficiency at a marginal mile angle of 0.698, meaning a one-unit change in the HR information systems strategy will lead to a change in the institutional efficiency and effectiveness performance by 0.698, which has a very high impact.
- These findings answer the fourth question that raised in the study problem and achieve the fourth aim of the current study.

Conclusions and Recommendations

Below are the most important conclusions and recommendations:

1. Conclusions

a. First, awareness is found among the administrative leaders in the Ministry of Defense concerning the intellectual contents of the human resources information systems strategy, despite the fact that the ministry does not have a written and approved strategy. Moreover, the importance of the human resources information system in improving the institutional performance and simplifying daily work procedures through a prepared and approved policy is currently verified for this purpose.

b. The emergence of the indicators of the aging of the infrastructure and the limitations of its specifications (servers, communication network, terminal stations) represents one of the main reasons for the occurrence of interruptions along the span of time required for calculating salaries. In this regard, the accompanying halt to the marking and updating processes has been reflected in the respondents' lack of support regarding the keenness of the Directorates of Military Communications and the Directorate of Information Systems on the sustainability of the work of the human resources information system.

c. There are indications of negative inverse relationships for the administrations using the human resources information system towards the improvement in the institutional performance, which requires a review of the qualifications, experiences and educational certificates of users, as well as the type and number of internal and external courses by studying the reasons in an accurate scientific manner.

d. Supporting senior management has progressed in its impact as one of the dimensions of the human resource information systems strategy, while it has regressed after using the system.

e. The results of the current study reveal that the intensification of competition shows that service improvement is the most important dimension in the institutional performance in response to the strategy of human resources information systems, followed by the creativity and innovation, and then efficiency and effectiveness. This finding confirms the importance of exploiting creativity and innovation skills to raise the level of efficiency and effectiveness and to improve service in the Ministry Defense.

f. There is a need for the horizontal expansion in the number of terminals due to the importance of the human resources information system in business performance, which asserts the need to increase the number of users of the system, train and qualify them and develop their capabilities through specialized training centers, increase the number of courses and diversify their curricula.

2. Recommendations

In accordance with the aforementioned conclusions, it is recommended that:

a. A specialized committee must be formed to prepare a strategy for human resources information systems for the purpose of moving to the strategic level in the use of the human resources information system with the awareness of the administrative leaders about the strategic intellectual contents of the study variables.

b. Initiating the development of infrastructure and allocating the necessary funds for this development must be done through the development and modernization of communication networks, the renewal and development of software and server equipment, and the expansion of data storage devices and terminals.

c. The extension of the telecommunications network is to be expanded to secure the connection of additional stations in the volunteering and training centers due to their importance in checking and marking.

d. Reconsidering the numbers and types of users of the human resources information system through criteria that take into account qualifications, experiences and educational certificates in a way that supports improvement in institutional performance.

e. Emphasis should be placed on the strategic role of human resources information systems in improving the institutional performance by supporting governance

plans in simplifying procedures, accuracy of procedures, and speed in preparing positions and statistics for the purpose of decision-making.

f. The continuous developing work plans must be identified and procedures that support service improvement and allow creativity and innovation must be achieved that are characterized by the efficiency and effectiveness should be determined through the use of electronic forms compatible with the work of the human resources information system to be an important source in issuing reports and important statistics in the transition to the strategic level of using the resource information system people and governance.

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