THE IMPACT OF KNOWLEDGE MANAGEMENT ON HUMAN RESOURCE FUNCTIONS AT THE JORDANIAN INDUSTRIAL PUBLIC SHAREHOLDING COMPANIES

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Abstract

The key goal of this study is to measure the impact of knowledge management on the human resources management functions. To achieve the purpose of the study, the following question will be answered: Does knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) affect the functions of human resource management (human resource planning, attraction, selection, recruitment, training and development, retaining, and performance evaluation) in Jordanian industrial public shareholding companies?. The study found that there is a statistically significant effect for knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on the functions of human resource management.

Keywords: *Knowledge Management, Human Resource Functions, and Jordanian Industrial Public Shareholding Companies*

1. INTRODUCTION

Business organizations have witnessed many rapid and successive events and developments, from technological advances and increasing competition, to the process of transition to an economy based on knowledge. This economy has rendered knowledge the lifeblood of organizations, the backbone of their performance and various activities, and a key element to the success, prosperity, and support of any business.

The transformation into such economy had the greatest impact on human resources management and functions in organizations. It has also re-directed organizations to focus on personnel management, as they realized that human resources policies and functions secure the psychological, economic, and social needs of individuals in a way that achieves compatibility and harmony between the needs of individuals and the objectives of the organization. These results help to providing a work environment that stimulates individuals and pushes them towards the development and utilization of their abilities, skills, and knowledge to participate to the development and organizations superiority. Therefore, the main objective in this study is to measure the effect of knowledge management on the functions of human resources management.

1-1 Study Problem and Elements

Access to this knowledge-based economy has increased the value and importance of human resources. Employers have realized that such economy has mental and intellectual components, and is a resource of knowledge, information, suggestions, and innovations. It is also one of the

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most important and crucial assets of every organization which affects the productivity of labor. Therefore, it is necessary to invest the intellectual and mental components of this economy and use them to achieve the organization's goals and mission.

A study conducted by (Sakina, and Abu Sin, 2013) has showed that organizations are aware of the importance of knowledge management and its role in achieving the organization's goals. However, this knowledge was not adequately exploited due to the limited vision of human resources, and the absence of the right methods and strategies. This shortage is a result of a weak organizational structure and a changing business environment.

The key goal of this study is to measure the impact of knowledge management on the human resources management functions. To achieve the purpose of the study, the following question will be answered: Does knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) affect the functions of human resource management (human resource planning, attraction, selection, recruitment, training and development, retaining, and performance evaluation) in Jordanian industrial public shareholding companies?

1-2 The study Objectives

This study tries to explore the effect of knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on the functions of human resource management (human resource planning, attraction, selection, recruitment, training and development, retaining, and performance evaluation) in Jordanian industrial public shareholding companies.

1-3 Hypotheses

This study is based on the following null hypothesis:

Key hypothesis (H0): There is no statistically significant effect at the significance level ($\alpha = 0.05$) for knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on the functions of human resource management (human resource planning, attraction, selection, recruitment, training and development, retaining, and performance evaluation) in Jordanian industrial public shareholding companies.

The following sub-hypotheses branch from H0:

H01: There is no statistically significant effect at the significance level ($\alpha = 0.05$) for knowledge management on human resource planning in Jordanian industrial public shareholding companies.

H02: There is no statistically significant effect at the significance level ($\alpha = 0.05$) for knowledge management on human resources attraction in Jordanian industrial public shareholding companies.

H03: There is no statistically significant effect at the significance level ($\alpha = 0.05$) for knowledge management on the selection of human resources in Jordanian industrial public shareholding companies.

H04: There is no statistically significant effect at the significance level ($\alpha = 0.05$) for knowledge management on the recruitment of human resources in Jordanian industrial public shareholding companies.

H05: There is no statistically significant effect at the significance level ($\alpha = 0.05$) for knowledge management on the training and development of human resources in Jordanian industrial public shareholding companies.

H06: There is no statistically significant effect at the significance level ($\alpha = 0.05$) for knowledge management on the retaining of human resources in Jordanian industrial public shareholding companies.

H07: There is no statistically significant effect at the significance level ($\alpha = 0.05$) for knowledge management on the evaluation of human resources' performance in Jordanian industrial public shareholding companies.

1-4 Study Model

Figure 1 show the study model, which is proposed by the researchers of this paper.

Figure (1): Study model (Source: Prepared by the researchers in light of previous studies)
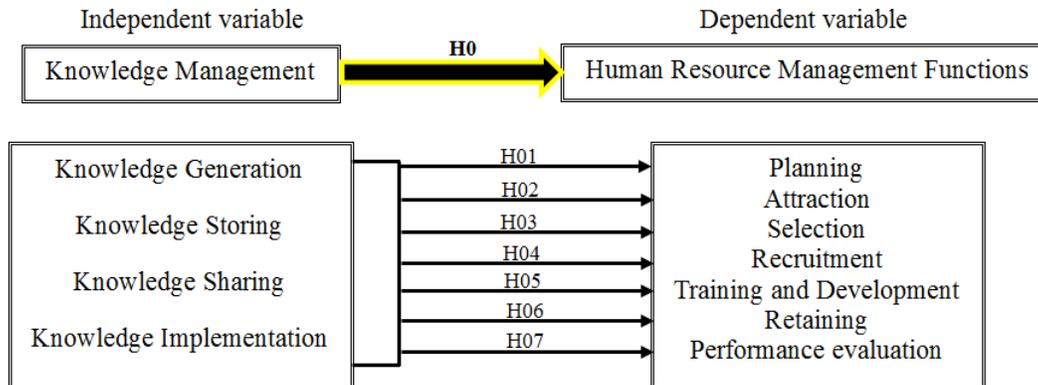
1-5 Importance of the study

The study importance is demonstrated in two aspects:

First, **the theoretical aspect**: The study looks at knowledge management and its dimensions as one of the concepts related to organizations being able to keeping up the requirements of knowledge and knowledge-based economy, and link it to the function of human resources management in organizations. The study also shows the importance of theoretical study as it addresses one of the most important sectors in state economy, and the most dependent on the underlying knowledge.

Second, **the practical approach**: where the dimensions of knowledge management is associated with implicit and explicit knowledge that labor acquire, which impact how they perceive the nature of their operations, as well as the duties and assignments they perform. This acquired knowledge also increases their abilities to solve emerging problems and propose solutions especially those industrial companies rely heavily on this knowledge due to the nature of the work being done. Therefore,

the organization achieves integration between knowledge management and the knowledge of the employees, as a reflection for the efforts of human resources management, starting from human resources planning and policies to attract skilled manpower, to selection, recruitment, training, retaining, and evaluation of the performance of employees.

This study helps the management of public industrial shareholding companies to determine the effect of the dimensions of knowledge management on human resources functions, and how these dimensions are being exploited to achieve objectives.

2. THEORETICAL FRAMEWORK

The business environment inside organizations has become complex and fast evolving during the past decades as a result of economic, political, and social conditions. This form of knowledge openness that the world is witnessing today is the most important features of this environment. This element has increased competition between companies, and made the development of human resources one of the most important topics in organizations' development. Investment in human resources has become the most

successful investment for those who wish to take their organization to the next level and raise the performance of its activities (Rawahnih, 2013). Nowadays, efficient development and improvement of personnel capabilities has become the most prominent human resources management that lead to the improvement of performance.

2-1 Background of Knowledge Management

2.1.1 The Concept of and Types of Knowledge

The definition of the term "knowledge" is controversial, since its intangible. Knowledge is composed of several components like thoughts, regulations, and information. Every researcher who has attempted to define knowledge has done so based on his objective, methodology, his use of the term. Some of them are identified it as "the outcome of information use by employees in organizations, and that knowledge is understood and analyzed information used to do business, make decisions, and achieve goals". Researchers believe that knowledge is "an outcome of the treatment of a range of information that is stored implicitly or explicitly in the memory of the individual or organization".

There are many opinions and classifications that determine the types of knowledge, but the majority believe that knowledge is divided into two basic types, which are (Daft, 2001):

1- Implicit knowledge: This type of knowledge comes by intuition and conclusion. It is the result of an individual's experiences; they appear in his mind and perception and develop through his actions.
2- Explicit knowledge: The product of existing and stored information, which can be retrieved and accessed easily, and shared by various storage media.

Knowledge Management Processes

The concept of knowledge management is linked to knowledge management functions, which altogether transform implicit knowledge into explicit knowledge that can be retrieved and analyzed. As in most knowledge management topics, researchers and scholars specialized in knowledge management did not reach a unified definition for knowledge management processes. However, this does not eliminate the fact that there is almost an agreement on a set of basic processes in the life cycle of knowledge, namely:

1- Generation of knowledge: which is the product of data and information existing in the organization, and that is produced by (purchasing, conclusion, derivation, creation, or acquisition of knowledge).
2- Storage of knowledge: which is the retention of knowledge within the organization for labor to retrieve and use (Yasiri and Hussain, 2012).
3- Sharing of knowledge: which is the process of transfer and exchange of knowledge between individuals through a variety of means. This process is the basis for the generation of new information (Ismail, 2009).
4- Implementation of knowledge: which is the use of appropriate knowledge in the right time and through the right means and individuals. This can be done by sharing knowledge or through separate application. Knowledge, regardless of its nature, is useless and without value unless (Al-Madalel, 2012).

2.2 Human Resources Management

2.2.1 The concept of human resource management

Human Resources Management is the department concerned to identify and direct all administrative activities and works related to human resources to achieve organizational and individual goals equally (Madurai, 2011; Mondy, 2008) defines it as using the members of the organization in the optimum manner in order to acquire the goals of the organization.

2.2.2 Human Resource Management Practices

The success of an organization is deeply linked to its success in the management of human resources through its functions. These functions include the selection, training, development, motivation, and retaining of human resources. To accomplishment of these functions can ensure the implementation of the organization's strategy with regard to human resources management.

1- Human resources planning: This function estimates the numbers and quality of human resources that the organization requires. Human resources planning help reduce the rate of job turnover in the organization (Richard and Johnson, 2001).

2- Attraction: it can be defined as "the process of obtaining experienced candidates for certain jobs in sufficient numbers and in the right time".

3- Selection: (Bardwell and Holden, 2001) defines the selection as "the process by which the organization chooses review a number of applicants for a certain post and then choose the one with the highest chance to meet the organization's requirements and needs.

4- Recruitment: This stage follows the selection process. The decision to recruit a candidate is produced through four key items: the issuance of the recruitment decision, preparation of the chosen individual by introducing him to the organization, colleagues, and job, follow-up during the probationary period, and finally the installation decision (Mahmoud, 2004).

5- Training and Development: (Neo et al, 2006) defined it as "The planned effort which seeks to teach individuals the knowledge they require to increase their efficiency and render them ready for their current jobs.

6- Retaining Human Resource: (Humoud and Kharsheh, 2009) believe that the activities that maintain and preserve human resources include Retaining Human Resource of work relationships that organize relationships between individuals inside the organization and between individuals and the organization. They are also concerned with following up the implementation of contracts that have been agreed between the organization and its employees.

7- Performance Evaluation: This process is essential in the human resources' functions. It helps the organization recognize the employee efficiency, by identifying his-her strengths and weaknesses and measure the employee's performance by means of specified standards within the organization's performance standards (Ballout, 2002).

3.   PREVIOUS STUDIES

The researchers reviewed a number studies that address the topics of this study, but separately, since the researchers found no studies that have linked the two variables together, as most of the studies relied on connecting a the variable of this with other topics.

With regard to knowledge management: Rahimli, (2012) study has shed light on the knowledge that contributes to the promotion of regulatory activity in order to obtain a sustainable competitive feature. The study has found a positive correlation between knowledge management and sustainable competitive feature. It has also found that the knowledge is of great importance on the economic level, since the production of any company depends more on human capital, which in turns involves mental and intellectual capital capabilities. Another study (Huang et al., 2013) has determined the relationship between knowledge management and organizational learning and their impact on organizational performance. Their study has found that knowledge management and organizational learning has the impact on an organizational performance, thus recommended that managers take into account other measures to enhance the level of relations and increasing their importance.

With regard to human resources strategies: (Sakina and Abu Sin, 2013) study addressed the analysis of the reality of human resources strategy and its impact on the organization's performance. The study has identified the impact of organizational construction and work environment on the integration of the human resources strategy with the overall strategy of the company, then examine how this integration impact the process of performance enhancement. The study has found the presence of statistically significant differences between the strength of the organizational structure of a company and the strategies for human resource management.

(Attiyani and Abu Salma, 2014) study has tried to determine the impact of ethical practices of HR departments on employees' satisfaction in cellular telecommunications companies in Jordan. The study has found that the ethical practices of the human resources departments have had a pa statistically significant effect on the employees in the telecommunications companies. The study has also pointed out the need to achieve a higher level of employees' satisfaction in all the activities and functions of the organization.

4. METHODOLOGY OF THE STUDY

4-1 Study Community and Sample

The study population consisted of all managers working in the public shareholding companies listed on the Amman Stock Exchange until the end of 2015, with a total of 243 companies spread over the three

commercial sectors: Financial sector (111 companies), Service sector (59 companies), and Industrial sector (73 companies). Human resources departments' managers in each company have been targeted with a total number of (2916) managers. All study samples were random and stratified.

Depending on Sekaran survey tables (Sekaran, 2010) to determine the size of the sample, 340 questionnaires were distributed, while (318) were retrieved. However, (24) questionnaires were excluded for being incomplete, and thus the number of questionnaire recovered and suitable for analysis were (294) questionnaires, with a retrieval ratio of (86.5%). The following table shows the questionnaires distributed in each company and the proportion of retrieval.

5. DATA ANALYSIS AND HYPOTHESIS TESTING

5.1 Analysis of survey questions

This part of the study describes the variables of the study and the items of the questionnaire. Means and standard deviations of the items have been calculated to adjudicate the level of approval and determine the relative importance for each of them. The final results of the study were as follows:

1- Knowledge Management Processes

The following table compares the knowledge management processes as show in table 1:

Table (1): The Means, standard deviations, and relative importance of knowledge management processes:

No.	Item	Mean	Standard Deviation	Rank	Relative Importance
1	Knowledge Generating	4.344	0.565	1	High
2	Knowledge Storing	4.019	0.548	4	High
3	Knowledge Sharing	4.086	0.615	2	High
4	Knowledge Implementation	4.025	0.624	3	High
Knowledge Management Processes		**4.118**	**0.515**		**High**

Results in table (1) show that the measurement level of the knowledge management processes is high (in terms of relative importance). The mean reached (4.118) with a standard deviation of (0.515). The table also shows that the process (knowledge generation) was ranked first with a mean of (4.344), a deviation standard of (0.565), and with high relative importance. Meanwhile, (Knowledge storage)

process was ranked last with a mean of (4.019), a deviation standard of (0.548), and with high relative importance.

2- Functions of Human Resources Management

The following table compares the functions of human resource management as shown in table 2.

Table (2): The means, standard deviations, and relative importance of the functions of human resource management

No.	Item	Mean	Standard Deviation	Rank	Relative Importance
1	Human Resources Planning	3.836	0.652	5	High
2	Attraction	3.895	0.650	3	High
3	Selection	3.842	0.649	4	High
4	Recruitment	4.073	0.580	1	High
5	Training and development	4.036	0.565	2	High
6	Retaining Human Resource	3.732	0.613	6	High
7	Performance evaluation	3.721	0.680	7	High
Human Resource Management Functions		**3.876**	**0.524**		**High**

Table (2) shows that the measurement levels of human resources management functions were high (in terms of relative importance). The mean reached (3.876) with a standard deviation of (0.524). The table also shows that the process (Recruitment function) was ranked first with a mean of (4.073), a deviation standard of (0.580), and with high relative importance. Meanwhile, (Performance evaluation process) was ranked last with a mean of (3.721), a deviation standard of (0.680), and with high relative importance.

5-2 Testing of Hypotheses

In this part of the study, all the hypotheses are tested. Multiple linear regression analysis is used to test the

main hypothesis. The final results for the study hypotheses were as follows:

Testing of main hypothesis H0:

There is no statistically significant effect at the significance level (α = 0.05) for knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on the functions of human resource management (human resource planning, attraction, selection, recruitment, training and development, retaining, and performance evaluation) in Jordanian industrial public shareholding companies.

Table 3: The results of testing the effect of the combined knowledge management processes on the functions of human resources management

Dependent Variable	Model Summary		ANOVA		Coefficient				
	R	R²	F	Sig F	Item Description	B	Std. Error	T	Sig T
Human Resource Management Functions	0.822	0.676	150.949	0.000	Generating	0.023	0.051	0.459	0.646
					Storing	0.248	0.050	4.967	0.000
					Sharing	0.220	0.046	4.769	0.000
					Implementation	0.323	0.043	7.576	0.000

The results of table 3 show that the correlation coefficient (R = 0.822) refers to the relationship between the independent variable and the dependent variable components. The effect of the independent variables (knowledge management processes) on the dependent variable (the functions of Human Resources Management) is a statistically significant effect, where the value of F value is calculated as (150.949), with a level of significance (Sig = 0.000), which is less than 0.05. The value of the determination coefficient is (R2 = 0.676) which indicates that (67.6%) of the variation in (human resources management functions) can be explained by contrast in (combined knowledge management processes).

The transaction table shows that the value of B in the (knowledge generation process) has reached (.023) and the value of t has reached (0.459) with a level of significance (Sig = 0.646). These values suggest that the effect of this is a dimension is not significant. The value of B in the (knowledge storing process) has reached (.248) and the value of t has reached (4.967), with a level of significance (Sig = 0.000). These values suggest that the effect of this is a dimension is significant. The value of B in the (knowledge sharing process) has reached (.220) and the value of t has reached (4.769), with a level of significance (Sig = 0.000). These values suggest that the effect of this is a dimension is significant. Finally, the value of B in the (knowledge implementation process) has reached (.323) and the value of t has reached (7.573), with a level of significance (Sig = 0.000). These values

suggest that the effect of this is a dimension is significant.

Based on the foregoing, we have to reject the main null hypothesis and accept the alternative hypothesis:

"There is a statistically significant effect at the significance level (α = 0.05) for knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on the functions of human resource management (human resource planning, attraction, selection, recruitment, training and development, retaining, and performance evaluation) in Jordanian industrial public shareholding companies"

There is a statistically significant effect of the combined knowledge management processes (knowledge generation, storing, sharing, and implementation) due to the importance of these processes in providing the human resource management with the knowledge. It needs to do the proper procedures, which in turn would provide optimized human resources. On the other hand, the absence of a statistically significant effect of (knowledge generation process) can be attributed to the fact that performing the functions of human resource management is not affected by the size of generated knowledge until after it is stored and rendered available to those in charge of human resources management.

Testing of the first sub-hypothesis H1:

Table 4: The results of testing the effect of the combined knowledge management processes on human resources planning

Dependent Variable	Model Summary		ANOVA		Coefficient				
	R	R²	F	Sig F	Item	B	Std. Error	T	Sig T
Human Resource Planning	0.809	0.654	136.672	0.000	Generating	0.166	0.065	2.552	0.011
					Storing	0.210	0.064	3.269	0.001
					Sharing	0.193	0.059	3.246	0.001
					Implementation	0.433	0.055	7.877	0.000

Results of table (4) shows that the correlation coefficient (R = 0.809) refers to the relationship between the independent variables and the dependent variable. The effect of the independent variables (knowledge management processes) on the dependent variable (human resource planning) is a statistically significant effect. Where the value of F is calculated to be (136.672), and the level of significance is (Sig = 0.000), which is less than 0.05. The value of the coefficient of determination is (R2 = 0.654), which indicates that (65.4%) of the variation in the (human resource planning) can be explained by the variation in the (combined knowledge management processes).

Based on the foregoing, we reject the first sub-hypothesis and accept the alternative hypothesis:

"There is a statistically significant effect at the significance level (α = 0.05) for knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on human resource planning in Jordanian industrial public shareholding companies"

Testing of the second sub-hypothesis H2 (Results):

Table 5: The results of testing the effect of the combined knowledge management processes on human resources attraction

Dependent Variable	Model Summary		ANOVA		Coefficient				
	R	R²	F	Sig F	Item	B	Std. Error	T	Sig T
Human Resource Attraction	0.785	0.616	115.661	0.000	Knowledge Generating	0.016	0.068	0.234	0.815
					Knowledge Storing	0.318	0.068	4.706	0.000
					Knowledge Sharing	0.268	0.063	4.283	0.000
					Knowledge Implementation	0.365	0.058	6.325	0.000

Results of table (5) shows that the correlation coefficient (R = 0.785) refers to the relationship between the independent variables and the dependent variable. The effect of the independent variables (knowledge management processes) on the dependent variable (human resource attraction) is a statistically

significant effect, where the value of F is calculated to be (115.661), and the level of significance is (Sig = 0.000), which is less than 0.05. The value of the coefficient of determination is (R2 = 0.616), which indicates that (61.6%) of the variation in the (human resource attraction) can be explained by the variation in the (combined knowledge management processes).

Based on the foregoing, we reject the second sub-hypothesis and accept the alternative hypothesis:

"There is a statistically significant effect at the significance level (α = 0.05) for knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on human resource attraction in Jordanian industrial public shareholding companies"

Testing of the third sub-hypothesis H3 (Results):

Table 6: The results of testing the effect of the combined knowledge management processes on human resources selection

Dependent Variable	Model Summary		ANOVA		Coefficient				
	R	R²	F	Sig F	Item	B	Std. Error	T	Sig T
Human Resource Selection	0.669	0.447	58.457	0.000	Knowledge Generating	-0.025	0.082	-0.303	0.762
					Knowledge Storing	0.225	0.081	2.782	0.006
					Knowledge Sharing	0.353	0.075	4.715	0.000
					Knowledge Implementation	0.255	0.069	3.701	0.000

Results of table (6) shows that the correlation coefficient (R = 0.669) refers to the relationship between the independent variables and the dependent variable. The effect of the independent variables (knowledge management processes) on the dependent variable (human resource selection) is a statistically significant effect, where the value of F is calculated to be (58.457), and the level of significance is (Sig = 0.000), which is less than 0.05. The value of the coefficient of determination is (R2 = 0.447), which indicates that (44.7%) of the variation in the (human resource selection) can be explained by the variation in the (combined knowledge management processes).

Based on the foregoing, we reject the third sub-hypothesis and accept the alternative hypothesis:

"There is a statistically significant effect at the significance level (α = 0.05) for knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on human resource selection in Jordanian industrial public shareholding companies"

Testing of the forth sub-hypothesis H4 (Results):

Table 7: The results of testing the effect of the combined knowledge management processes on human resources recruitment

Dependent Variable	Model Summary		ANOVA		Coefficient				
	R	R²	F	Sig F	Item	B	Std. Error	T	Sig T
Human Resource Recruitment	0.739	0.546	86.793	0.000	Knowledge Generating	-0.070	0.066	-1.063	0.289
					Knowledge Storing	0.281	0.065	4.297	0.000
					Knowledge Sharing	0.055	0.061	0.911	0.363
					Knowledge Implementation	0.502	0.056	8.968	0.000

Results of table (7) shows that the correlation coefficient (R = 0.739) refers to the relationship between the independent variables and the dependent variable. The effect of the independent variables (knowledge management processes) on the dependent variable (human resource recruitment) is a statistically significant effect, where the value of F is calculated to be (86.793), and the level of significance is (Sig = 0.000), which is less than 0.05. The value of the coefficient of determination is (R2 = 0.546), which indicates that (54.6%) of the variation in the (human resource recruitment) can be explained by the variation in the (combined knowledge management processes).

Based on the foregoing, we reject the fourth sub-hypothesis and accept the alternative hypothesis:

"There is a statistically significant effect at the significance level (α = 0.05) for knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on human resource recruitment in Jordanian industrial public shareholding companies"

Testing of the fifth sub-hypothesis H5 (Results):

Table 8: The results of testing the effect of the combined knowledge management processes on human resources training and development

Dependent Variable	Model Summary		ANOVA		Coefficient				
	R	R²	F	Sig F	Item	B	Std. Error	T	Sig T
Training and Development	0.568	0.323	34.394	0.000	Knowledge Generating	-0.068	0.079	-0.858	0.391
					Knowledge Storing	0.143	0.078	1.839	0.067
					Knowledge Sharing	0.246	0.072	3.415	0.001
					Knowledge Implementation	0.261	0.067	3.912	0.000

Results of table (8) shows that the correlation coefficient (R = 0.568) refers to the relationship between the independent variables and the dependent variable. The effect of the independent variables (knowledge management processes) on the dependent

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variable (human resource training and development) is a statistically significant effect, where the value of F is calculated to be (34.394), and the level of significance is (Sig = 0.000), which is less than 0.05. The value of the coefficient of determination is (R2 = 0.323), which indicates that (32.3%) of the variation in the (human resource training and development) can be explained by the variation in the (combined knowledge management processes).

Based on the foregoing, we reject the fifth sub-hypothesis and accept the alternative hypothesis:

"There is a statistically significant effect at the significance level (α = 0.05) for knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on human resource training and development in Jordanian industrial public shareholding companies"

Testing of the sixth sub-hypothesis H6 (Results):

Table 9: The results of testing the effect of the combined knowledge management processes on human resources Retaining Human Resource

Dependent Variable	Model Summary		ANOVA		Coefficient				
	R	R²	F	Sig F	Item	B	Std. Error	T	Sig T
Retaining Human Resource	0.684	0.468	63.605	0.000	Knowledge Generating	-0.022	0.076	-0.288	0.773
					Knowledge Storing	0.372	0.075	4.961	0.000
					Knowledge Sharing	0.219	0.069	3.161	0.002
					Knowledge Implementation	0.231	0.064	3.613	0.000

"There is a statistically significant effect at the significance level (α = 0.05) for knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on Retaining Human Resource in Jordanian industrial public shareholding companies"

Results of table (9) shows that the correlation coefficient (R = 0.684) refers to the relationship between the independent variables and the dependent variable. The effect of the independent variables (knowledge management processes) on the dependent variable (Retaining Human Resource) is a statistically significant effect, where the value of F is calculated to be (63.605), and the level of significance is (Sig = 0.000), which is less than 0.05. The value of the coefficient of determination is (R2 = 0.468), which indicates that (46.8%) of the variation in the (Retaining Human Resource) can be explained by the variation in the (combined knowledge management processes).

Based on the foregoing, we reject the sixth sub-hypothesis and accept the alternative hypothesis:

Testing of the seventh sub-hypothesis H6 (Results):

Table 10: The results of testing the effect of the combined knowledge management processes on human resources' performance evaluation

Dependent Variable	Model Summary		ANOVA		Coefficient				
	R	R^2	F	Sig F	Item	B	Std. Error	T	Sig T
Human Resource Performance Evaluation	0.593	0.352	39.227	0.000	Knowledge Generating	0.165	0.093	1.780	0.076
					Knowledge Storing	0.188	0.092	2.051	0.041
					Knowledge Sharing	0.209	0.085	2.466	0.014
					Knowledge Implementation	0.217	0.078	2.768	0.006

Results of table (10) shows that the correlation coefficient (R = 0.593) refers to the relationship between the independent variables and the dependent variable. The effect of the independent variables (knowledge management processes) on the dependent variable (human resources' performance evaluation) is a statistically significant effect, where the value of F is calculated to be (39.227), and the level of significance is (Sig = 0.000), which is less than 0.05. The value of the coefficient of determination is (R2 = 0.352), which indicates that (35.2%) of the variation in the (human resources' performance evaluation) can be explained by the variation in the (combined knowledge management processes).

Based on the foregoing, we reject the seventh sub-hypothesis and accept the alternative hypothesis:

"There is a statistically significant effect at the significance level (α = 0.05) for knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on human resources' performance evaluation in Jordanian industrial public shareholding companies"

6. RESULTS AND RECOMMENDATIONS

6.1 Results

Through data analysis and hypothesis testing, the following results have been reached:

1. The results showed that the general arithmetic mean year for knowledge management processes in general was of relatively high importance, amounting to (4.118). The knowledge generation process occupied the highest relative importance of all other knowledge management processes, followed in second place by knowledge sharing, in third place by knowledge application, and in fourth place by knowledge sharing. It's worth mentioning herein that all these processes were of relatively high importance.

2. The results showed that the general arithmetic mean year for knowledge management functions in general was of relatively high importance, amounting to (3.876). The recruitment function occupied the highest relative importance of all other knowledge management function, followed in second place by training and development, in third place by attraction, in fourth place by human resources planning, in fifth place by Retaining Human Resource , and finally in sixth place by performance evaluation. It's worth mentioning

herein that all these functions were of relatively high importance.

3. The results showed that the respondents approved of the Jordanian industrial public shareholding companies' keenness to attract new knowledge through various means. They also approved the retention of records, documents, and paper to store knowledge, and following policies that facilitate communication and interaction between staff and competent experts. Finally, they approved of the companies' strategy to provide the staff with necessary knowledge when needed.

4. The results showed that the respondents approved that the lack of investment in knowledge management and exploitation is a result of the lack of commitment that the Jordanian industrial public shareholding companies displayed towards monitoring generated knowledge, as well as the absence of regulatory mechanisms which index available knowledge, the low participation rate among employees, and the failure to follow contingency plans to resolve the crises and problems.

5. The results showed that the respondents approved that the Jordanian industrial public shareholding companies are closely following the progress and technological development, as well as the events, economic and social developments in the inner and outer environment. They also approved that the companies fill the vacancies with qualified individuals in line with the approved recruitment criteria and the job description of these vacancies.

6. The results showed that the respondents approved that the Jordanian industrial public shareholding companies is keen to build and maintain positive relationships between the management and the employees. The respondents also said that the companies motivate them to develop through the help of experts and specialists from outside the company who are summoned to give courses

and lectures. Finally, the respondents approved that the companies adopt successful policies and procedures to address the weaknesses during the evaluation process

7. The results showed that the respondents believe that there is a lack of follow-up by the Human Resources Department to the status of manpower in the labor market, the new majors, and graduates GPAs. They also believe there is a lack of collaboration with third parties (universities, labor offices) in terms of human resources attraction, not to mention the absence of justice and equality in the process of selecting candidates to fill vacancies, and recruiting some in jobs that do not suit their experience and qualifications. Respondents seem to believe that companies fail to adopt periodic training and staff development programs, and that they do not compensation policies in force. Finally, the respondents have agreed that all the foregoing and a major incompetence in the adopted rating system, which fails to identify weaknesses accurately – according to the respondents – are the most important points that render them unable to benefit greatly from the functions of human resources management .

8. The results of testing the hypotheses have proved that there is a statistically significant effect at the significance level ($\alpha = 0.05$) for knowledge management – with its dimensions (knowledge generation, knowledge storing, knowledge sharing, and knowledge implementation) on the functions of human resource management (human resource planning, attraction, selection, recruitment, training and development, retaining, and performance evaluation) in Jordanian industrial public shareholding companies.

6-2 Recommendations

Depending on the results of survey analysis and hypothesis testing, the researchers recommend the following:

1. Jordanian industrial public shareholding companies should be keen to harvest the new generated knowledge, and follow flexible mechanisms and means to store the available knowledge.

2. Jordanian industrial public shareholding companies should seek to inculcate a participation culture among employees, and encourage them to implement contingency plans to resolve crises and problems that pass by.

3. Jordanian industrial public shareholding companies should make the Human Resources Department responsible of monitoring the status and development of manpower in the labor market, new majors, graduates GPA.

4. Jordanian industrial public shareholding companies should be encouraged to collaborate with external parties (universities, labor offices) to attract human resources, while adopting the principles of justice and equality in the selection process.

5. The Jordanian industrial public shareholding companies should recruit individuals in jobs that fit their qualifications and experience, and adopt regular programs to develop and train their employees.

6. Jordanian industrial public shareholding companies should work to clarify the direct and indirect compensation policy in force to the company's employees.

7. Jordanian industrial public shareholding companies should follow an efficient evaluation system to identify weaknesses in staff.

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