HUMAN RESOURCES INFORMATION SYSTEMS INFLUENCE ON EMPLOYEE PERFORMANCE IN LIBYAN COMMERCIAL BANKS

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Information of Article

ABSTRACT

This study aims to investigate the influence of human resource information system on employee performance in Libyan commercial banks. The cross-sectional method is adopted by this study; the questionnaire instrument is constructed to collect the data from a sample of 285 employees. The result of this study showed a significant relationship between human resources information systems and employee performance within two Libyan commercial banks that Al-Jumhouria Bank and National Commercial Bank.

1. Introduction

It emerged as a result of technological, scientific and administrative development and the expansion of the activities of institutions abroad and the emergence of multinational institutions. It becomes a need to use modern human resource management technology efficiently and effectively. The main objective of human resources information systems is to maintain an accurate and complete database that is used when needed and provides them with reports and procedures such as job application tracking (Cesário & Chambel, 2017). The need of the information and technology revolution which began in the 1980s, has been emerged. Some institutions developed their own decision-making systems for selection among candidates for employment (Brunstein, 2016). it is defined as a means of gathering and storing data and information for each factor to assist in planning and decision-making (Jahan Sabrina, 2014). It is a group that is regularly and interactively engaged in the collection, storage, analysis and retrieval of human resources data and information. It is to prepare data for beneficiaries to help them make decisions in the field of human resources planning, employment, compensation, training, and development and performance assessment (Cumberland, Herd, Alagaraja, & Kerrick, 2016).

Human resources information systems help to build a database of all human resources management functions starting from recruitment, vacant positions, skills and abilities required for each post, human resource planning, future human resource management policies, identify the type of training programs and teams that are qualified to meet the organization's objectives, the assessment of jobs and employees, the determination of wages to suit them, a survey of wages to identify wages compared to competitors of the same institution and determine changes in salaries due to promotion or excellence in performance (Garcia-Sierra, Fernandez-Castro, & Martinez-Zaragoza, 2016). (Lee, Pak, Kim, & Li, 2016) recommended the interesting with the human resources information system within banks properly and scientifically that suited the needs of the bank. It also helps human resources management to perform the job perfectly. The Human Resources Information System (HRIS) has effectively contributed to many of the activities of the management. The use of computers in archives has saved time and effort while achieving objectivity and accuracy in achievement. That is it reduced the manual and paper transactions, as well as the increased follow-up, control and the possibility of compiling reports and making use of them to make administrative decisions at the right time and place.

2. Literature Review

There is no doubt that in the field of economic, it is necessary to deal with a human being or his skills as a physical head. It was mentioned that a group of scientists dealt with a human being and his skills, most notably (Fisher, Lars, Engel, Adam Smith, Sai and Betty). These economists reached the method of calculating the cost of human being production. It includes the actual cost of human production, as well as the method of calculating the return from human beings. It includes the estimation of the present value of the income flow that is expected during human life (Marchington, Wilkinson, Donnelly, & Kynighou, 2016). Thus, the development of human resources has foundations of a theory as a result of what is happening in the world of human development. It was emerged later a theory in itself called the theory of human capital. One of the most famous theorists is (Theo Dor Schulz) (Baker) and (Lewis) and (Vogel). This theory came as a result of realistic observations and questions about many exciting issues such as: - what are the reasons for different salaries and wages? Is it a product of different levels of education, or because of the different occupations between regions? There is no doubt that the difference between individuals is the result of the level of skills and training or the product of human capital. Investment in the individual for his education and training is an investment of his abilities and skills, such as investment in natural capital. Thus, the individuals who continue their university education are the most active individuals in their performance. Therefore, individuals in societies prefer the continuity in education in order to reach a higher level of urbanization and progress on the one hand and a higher level of material on the other hand. Moreover, investment in human capital is not only a matter of government and individuals, rather the private sector trains and develops the individuals in institutions and companies to achieve better performance with greater efficiency (Morrison, 2016).

The resource theory in information systems was used in the mid-1990s as a framework for analyzing how to deploy technological resources in the organization to achieve its objectives. Many researchers identified the different types of resources based on information systems and then tested the relationship between these resources and performance. Some of these scholars are Hulland and Wade. They identified eight resources, which are classified into three categories. However, Muto and his colleagues lost four resources, while Powell and his colleagues grouped them into three. The following table summarizes information systems resource classifications by resource theory (Odukah, 2016). Researchers have argued that the use of information systems in organizations differs from organization to Organized according to many circumstances and determinants, and therefore cannot be generalized. Human resources management requires information systems that are augmented by current and future data for the organization's employees for planning, decision making and monitoring. It requires a set of procedures, tools, information, methods of operation and personnel who use the information. Therefore, reliance on human resources information systems has become a system capable of collecting, processing, classifying and preserving the data needed by decision-makers, and performing all of its functions from human resources planning and operation (polarization, selection, employment), training process, pay system and incentives (Turulja & Bajgorić, 2016). The information systems used in the institutions are important in improving their performance, rationalizing the decision-making process and developing their loyalty to the institution. Therefore, the organization has endeavored to introduce modern information systems and to develop them and train employees to use them (Wilton, 2016).

It has a large role to provide the facilities in the preparation of the plans of the adoption of the adoption of the computer and the programs contained in the statistical. It helps to analyze the data (Bratton & Gold, 2017). The essence of human resources planning is to identify the future needs of workers in terms of number and type. This requires the gathering of accurate, sufficient and up-to-date information in order to make sound decisions arising from this process. Decisions related to the planning of human resources: the organization takes a set of decisions that concern it for a certain period. The most important of these decisions are Planning decision in itself: it is usually annually to know the status of workers if there is surplus or deficit and to take necessary action at the senior management level in the institution (Brewster & Hegewisch, 2017). Predicting human resources demand: it is based on the decision of human resources planning, where the vacant places are located in the institution. If there are needs, the decision will be on how the jobs will be filled from inside or outside the organization. Predicting the supply of human resources: after answering the previous question, the process of predicting comes to predict the available number of workers who can fill vacant vacancies by supply both inside and outside the institution (Chelladurai & Kerwin, 2017). It helps to facilitate this process through the rapid and accurate access to information, whether received electronically or manually to the computer; it is stored and processed regarding the selection for storing purpose, sorting, identifying, analyzing, and archiving them (Molina, García-Alcaraz, Loya, Tanino, & Tlapa, 2017).

Evaluate the quality of the performance, compile the results and then examine them to ensure that they are consistent with the established standards and compare the results with the objectives to determine their achievement and record them in the database and then prepare them as periodic reports. Thus, it begins planning to support the worker whose performance is positive and to address the weakness of his negative performance. Therefore, the evaluation achieves its goals and takes advantage of the information provided to it. With the increased use of the Human Resources Information System (HRIS), the HR function becomes easier, the opportunity to provide more time in the organization. In order for the system to succeed, it must provide managers and users with adequate information at various stages, such

as human resource conservation and planning (Nguyen & Hadikusumo, 2017). when HR functions are loaded into computers within the Human Resources Information System (HRIS), a more rapid decision is made in the development, planning and management of human resources by storing, updating, classifying and analyzing more easily (Noe, Hollenbeck, Gerhart, & Wright, 2017). As (Synthia, 2017) assured that the Human Resources Information System (HRIS) will reduce costs by automating, maintaining and facilitating the previous labor-intensive processes from the lowest level to the highest level in the enterprise, and it is a tool that will increase efficiency. In this age, globalization is viewed as unrestricted liberalization and transformation, and the structure of an organization, including the Human Resources Information System (HRIS), has become an effective tool in establishing an easier relationship between employees and the enterprise, sharing information and cooperation and thus increasing worker performance. Thus increasing the worker's performance, this is a must in today's institutions today.

3. Methodology

The quantitative approach is used in this study, which describes the current situation based on data from previous studies. According to this approach, the researcher first examined the most important sources and theories that dealt with the reality of human resources management and information systems, human resources management and its impact on the performance of employees. This is done by reviewing relevant theoretical studies in order to create a sufficient theoretical background, As well as access to an explanation of the results of the study and how to test the reliability and validity of the study instrument and the most important statistical methods used in the processing and classification of data and information in order to identify the impact of human resources management information systems on the relationship between human resources management and staff performance.

In this study, the quantitative approach was used to measure the practices and perspectives on a specific subject. Common steps used in conducting previous studies were followed to design the current study. The first step included presenting the theme and the aim of the study. The second step was the theoretical side of the study, followed by a review of relevant literature, followed by data collection, analysis, interpretation of findings and conclusions. The population of this study covers all employees into two Libyan commercial banks that are Al-Jumhouria Bank and National Commercial Bank. A sample was chosen to represent the society of the study, according to Krejcie and Morgan (1970), which was shown below. It was from all branches of Jumhouria Bank and branches of the Commercial Bank of Libya. As mentioned above, society consists of 1070 employees. Therefore, by looking at the table, it is clear that the sample of the study, which can represent the community, is 370 employees. This study relied on the questionnaire, which is a set of questions related to each other in terms of the topic. It ensures obtaining the desired data. It is clearly prepared. The questions in the questionnaire are very clear and do not need further clarifications.

4. Data Analysis and Results

There were several tests that were conducted for the analysis purpose. The analysis was divided into two sections, the first section is validating the collected data, and the second section is for the investigation of this study. The First section included tests like respondents' profiles, reliability, normality test, and multicollinearity test. The second section contained the descriptive statistics analysis and correlation test.

4.1 Respondents' Profiles

This research has used a random sampling method. In order to make sure that the random sampling method was used, the profiles of respondents' test take place. This test has used several characteristics for this research, which are gender, education level, age, working experience, and job position.

The gender characteristic showed that there are males and females participating in this research. Out of the 285 participants, the majority was for male characteristic with 88.8% and n = 253. In the same line, the female characteristic has got only 11.2% The participants showed so many levels of educations such as med diploma, bachelor, master, PhD, and other. But most of the participants were holding certificates of the bachelor with 37.9% and n = 108 and master with 37.5% and n = 107. The med diploma characteristic has got 8.4% and n = 24. The PhD holders were the lesser party in this research with 5.6% and n = 16. Finally, the other party has got 10.5% and n = 30.

The age characteristic has got 4 main ages that all the participants were distributed in. The first age category was less than 25 years old was the lesser category in the research with 2.8% and n = 8. The 25 till 35 years old category had 10.2% and n = 29. The 36 till 45 years old category had 29.5% and n = 84. The last category that most of the participants were from was more than 45 years old, with 57.5% and n = 164.

The working experience category was identified in the above table 4.5, with five different periods of experience. The first period was from 1- 5 years, participants showed that only 2.8% were having this period of experience with n = 8.

The second category was from 5-10 years, with 5.3% and n = 15. The third category was from 11-15 years, which has got 20.7% and n = 59. The fourth category was from 16-20 years, which has got 16.1% and n = 46. The majority of the participant was having experience of more than 20 years, with 55.1% and n = 157.

The final characteristic of the profiles of respondents was the job position. The job position had four categories, which are employee, department head, manager, and general manager. The employee position has got 23.5% and n = 67, while the department head position has got 40.7% and n = 116, also the manager position has got 35.1% and n = 100, and finally, the general manager position has got 0.7% and n = 2.

Table 1: Demographic Background

	Frequency	%		Frequency	%
Gender			More than 45 yrs	164	57.5
Male	253	88.8	Working Experience		
Female	32	11.2	1 - 5 Years	8	2.8
Educational Level			6 – 10 Years	15	5.3
Med Diploma	24	8.4	11 – 15 Years	59	20.7
Bachelor	108	37.9	16 - 20 Years	46	16.1
Master	107	37.5	More than 20 Years	157	55.1
PhD	16	5.6			
Other	30	10.5	Job Position		
Age			Employee	67	23.5
Less than 25 years	8	2.8	Head of Department	116	40.7
25 - 35 yrs	29	10.2	Manager	100	35.1
36 - 45 yrs	84	29.5	General Manager	2	0.7

4.2 Reliability Test

For the current study, the Cronbach alpha reliability values showed that all the variables' items had got great internal consistency among the items of variables. All the variables have obtained values above 0.7 for the Cronbach alpha, where the value found for the Human Resources Information Systems is 0.882, and the value was found for the employee performance is 0.876.

Table 2: Reliability test

Variable	Cronbach Alpha
Human Resources Information Systems	0.882
Employee Performance	0.876

4.3 Normality Test

The use of the probabilistic graph (probabilistic paper) has been traditionally used in the analysis of geochemical data. It is about contrasting two scales, one is normal arithmetic or log-normal, and the other scale is probabilistic. The probabilistic scale is arranged in such a way that a normal cumulative distribution curve (or log-normal) is projected as a straight line.

The current research has used the Skewness and Kurtosis Statistics. The acceptable range of Skewness values is between – 2 and +2, while the acceptable range of Kurtosis values is between – 7 and +7 (F. Hair Jr, Sarstedt, Hopkins, & G. Kuppelwieser, 2014). According to table 3, the Skewness values for the variables (was ranged between – 1.072 and – 0.336. In the other hand, the Kurtosis values for the same variables were ranged between – 0.224 and 1.463. These results reveal that the variables have got the normal distribution of items.

Table 3: Results of Skewness and Kurtosis for Normality Test

Constructs	Skewness	Kurtosis Statistic
Human Resources Information Systems	-.336	-.224
Employee Performance	-1.072	1.463

4.4 Descriptive Statistics Analysis

The descriptive statistics analysis was used for the purpose of identifying the minimum, maximum, mean, and standard deviation. The minimum value was 1.00 for all variables, and the maximum value was 5.00 for all variables. The mean scores for Human Resources Information Systems were 3.17 and for employee performance 3.820, this results means that all the participants were in average agree with the information stated in the questionnaires for each item in each variable. This means that all the items do have valuable and helpful information. Furthermore, the standard deviations for these variables were 0.900 and 0.685, respectively.

Table 4: Descriptive Statistics for Study Variables

	Minimum	Maximum	Mean	Std. Deviation
HRIS	1.00	5.00	3.170	0.900
EP	1.00	5.00	3.820	0.685

Key: HRIS; Human Resources Information Systems EP = employee performance

4.5 Correlation Test

The correlation test is the test that is used to find out the type of direct effect found in the research. The direct effect test is used to find out the type of relationships between the independent variable Human Resources Information Systems and the dependent variable (Employee Performance).

The study found significant and positive relationships between the Human Resources Information Systems and Employee Performance. The r values for these relationships were 0.530, with significant levels = 0.000.

Table 5: Correlations test for the dependent variable

Independent variables		Employee Performance
Human Resources Information Systems	Pearson Correlation	.530**
	Sig. (2-tailed)	.000

Table 6 showed the result of the regression test, which revealed that there is a significant impact of Human Resources Information Systems and the employee performance at ($\beta=0.415$, t=10.375, p=0.000).

Table 6: Regression test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.592	.123		21.052	.000
	HRIS	.415	.040	.530	10.375	.000
Adjusted R^2		27.9%				

a. Dependent Variable: EP

Key: HRIS; Human Resources Information Systems

4.6 Discussion

The result of this study showed a significant relationship between human resources information systems and employee performance within two Libyan commercial banks that Al-Jumhouria Bank and National Commercial Bank. This result in agreed to several previous studies that confirm the importance of human resources information systems on improving the employee performance, these studies such as (Paillé, Chen, Boiral, & Jin, 2014), (Chadwick, Super, & Kwon, 2015), and (Diamantidis & Chatzoglou, 2019). These studies argued that human resources management requires information systems that are augmented by current and future data for the organization's employees for planning, decision making and monitoring. It requires a set of procedures, tools, information, methods of operation and personnel who use the information. Therefore, reliance on human resources information systems has become a system capable of collecting, processing, classifying and preserving the data needed by decision-makers, and performing all of its functions from human resources planning and operation (polarization, selection, employment), training process, pay system and incentives (Hollenbeck, Noe, & Gerhart, 2018). The information systems used in the institutions are important in improving their performance, rationalizing the decision-making process and developing their loyalty to the institution. Therefore, the organization has endeavored to introduce modern information systems and to develop them and train employees to use them. The human resource in the institution is considered in the various sectors and administrative levels and scientific and technical disciplines is the real pillar on which the institution is based. This resource also represents the real tool to achieve the management objectives and contribute to the achievement of the objectives of the institution if the positive conditions that motivate the workers to work and give. They are the source of development and they are able to employ the rest of the material resources available to the institution because it is considered as the real source of competitiveness (Noe et al., 2017).

Therefore, it became necessary for institutions that aimed to remain, work and keep pace with the globalization process to have a scientific perspective in their work. Global competition and work through the Internet and rapid transformation and development began to concern human resources in modern institutions. Management has identified the important role these resources play in helping to achieve the institution's goals and has developed the outlook for human resources in recent years.

Its previous role was to issue tenders, transport and promotions compensation, social security. In its contemporary role, this department has given its role as a consultant to the senior management in the field of human resources. It designed the comprehensive strategies of the institution and human resources management in order to organize it in a way that leads to benefit from them.

Further, it is all the employees who work in the organization, including the heads and subordinates who have been employed in it to perform all their works and functions under their organizational culture. It explains, adjusts and unifies their behavioral patterns and a set of plans, systems, policies and procedures that regulate the performance of their tasks and implementation in order to achieve its mission and future strategic objectives (Otoo, Otoo, Abledu, & Bhardwaj, 2019).

There are several definitions of human resources management practice, including the following: It is an administration that focuses on administrative activities related to the workers such as planning in human resources management to achieve higher goals in developing and improving the human resources.

5. Conclusion

As a final conclusion, it can point out that the achievement of the objectives proposed in this paper has allowed the researcher to empirically prove that, in the Republic and National Commercial Bank of Libya, there is a relationship between human resources information system and employee performance. Specifically, it is shown that the relationship between these practices and the performance of employees. Therefore, it not only supports the relationship raised but also explains the mechanisms by which human resources information system practices improve the performance of employees. The link between different results on human resources has also been established; these results being: absenteeism, rotation and individual performance.

It should be noted as a contribution of this paper that, among human resources information system practices, those that really have an impact on the human resource management of Aljomhuria and National Commercial Bank of Libya employees are those that are least implemented, and which are: contingent compensation, teamwork, and participation in decision making, an aspect that has been detected in the banking analysis, as these are the only significant human resources practices of the model. This can open two new lines of research, the first, to analyze whether the significance of these practices is motivated by the fact of having consolidated the others, and the second, to analyze if even if the other practices were not consolidated, these would continue to be significant.

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