Evaluating the Role of Electronic Services Provided by the Ministry of Education and its Impact on Improving the Performance of Human Resource Departments: Case of Education Directorates in Jordan

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Abstract
The purpose of the study is to evaluate the role of electronic services provided by the Ministry of Education, and then the impact of these services has been evaluated for the improvement of the performance of human resource departments. In recent years, the Ministry of Education has introduced several electronic services, and they are aimed at assisting and strengthening the Directorate of education. The study has evaluated the topic as a case study on education directorate and found the impact on human resource departments. Quantitative research methods have been used where correlation and regression have been applied to the collected data. The paper finds a weak and a negative relationship between the chosen variables of electronic services and their impact on performance improvement of human resource departments. Conclusions and recommendations have been drawn at the end. Future research limitations call for researching with qualitative research methods and time should be spent to evaluate the impact of electronic services on performance improvements of human resource departments.

Keywords: Electronic Services, Human Resource Department, Ministry of Education, Directorate, Performance.

Introduction
Jordan has been progressing in the modern era with the modernization of its systems. There are several initiatives which have been taken so that the governance of different departments and institutions can be made better. The project of e-Government is also there to govern and oversee government affairs through technology. In recent years, the need for automation and use of technology has been promoted in Jordan, and respective government institutions and ministries are introducing electronic services in different domains. In the same way, the Ministry of Education has also provided electronic services to education departments and directorates of the country. These services have enabled the institutions under the ministry of education to be automated and more efficient. It has been noted and reported that electronic services had promoted automation of services and in the result; bureaucracy and administrative corruption have been minimized. Human resource departments in the education directorate of the country have also been affected by the provision of these electronic services, and their role is yet to be identified. This study has evaluated the role of electronic services provided by the Ministry of Education and then the impact of these
services has been found in the performance improvement of human resource departments. The study has focused on taking the case on the Education Directorate of Jordan.

The Rationale of Study:
In the last decade, Jordan has taken steps towards e-Governments initiatives, and in recent years, such initiatives have been taken by the Ministry of Education. The ministry has provided electronic services to education directorate, and it has helped students and education institutes. Automation procedures have been introduced which give little room for mistakes in the operations and processes. After the introduction of electronic services, it was assumed that the performance of human resources of education directorate would increase. It was assumed based on positive perceptions of technology. In this context, this study has been carried out so that reality can be confirmed. The provision of electronic services to human resource departments in the education directorate has been made so that it can improve its performance. It is, however, yet to be confirmed whether this improvement happens in reality or it remains less significant. Therefore, this study has been conducted to find out in the following: some objectives of the study are going to be noted.

Objectives of the Paper:
- To evaluate the role of electronic services for the improvement of the performance of human resource departments
- To find the impact of electronic services on performance improvements of human resource departments

Electronic Services:
According to the website of the ministry of education of Jordan, there are many e-government services. In the education directorate, services include filing complaints, report abuse, school calendar, eLearning system, additional education system, and grants and external missions. These are some of those electronic services, of which the role and impact on human resources departments in education directorate are going to be evaluated. These electronic services have been introduced to assist and strengthen the human resource department’s activities.

Literature Review:
The role of electronic services in the improvement of the performance of human resources has been studied, and in this review of the literature, the role of electronic services would be studied in light of their impact on the performance of human resources or human resources departments. The provision of electronic services provided by the ministry of education can be related to the studies on the provision of technology for improvement in the performance of human resource department. Jimoh (2007) has conducted a study on the information technology, and the communication technologies as these assist in the handling and processing of information and they use electronic services and devices. The researcher has also noted that electronic services are provided with the help of electronic devices such as computers, cameras, and telephones. Kuyoro et al. (2012) have taken into consideration of electronic devices which may have assistance from humans and other
interactive materials and these electronic devices are used for the improvement in the learning process as well as they are effective for individual use.

To address the importance or impact of electronic services to human resource departments, it is vital to recall the terminology of e-HRM in which electronic sources or technology is used for the improvement of human resources. However, the use of human resources should be comprehensive because human resources should be aligned with the use of technology. Gargallo-Castel and Galve-Górriz (2007) have highlighted the importance of various human resources attributes along with the introduction of information technology. Information technology and communication services may not be sufficient for improvement in the productivity of an organization. They have emphasized on other attributes like capabilities, talent, and creativity of workers, and the proactive approach of employees.

In the dynamic and technology-driven environment, Armstrong (2009) has redefined the terminology of human resource management as it is a coherent, strategic, and integrated approach towards people in an organization through which they are employed, developed and provided with well-being opportunities. Valverde et al. (2006) have termed human resource function as totally a managerial action, and it may be carried out at any level of the organization. It is ensured through human resource function to achieve the best performance of an employee by employing their competencies. However, the performance of industries and individuals in an industry should also be evaluated in light of human resource management where some researchers have taken the ICT industry as an example. The ICT industry is relevant to this particular research as it is also related to e-services.

Mathur (2009) has conducted a financial analysis of the ICT industry and has taken into consideration the technical efficiency of ICT. The technical efficiency in 52 countries has been quantified. The study has found that growth in productivity in developing countries due to the application of ICT is slower than the growth in the developed world. The data collection in this study was done on a country level, and it is not from the firm level. The use of technological services and resources has been studied in relation to productivity and efficiency by Saleem et al. (2011) where they have conducted this study in the context of developing country of Pakistan. The study finds a significant and positive relationship between technology adoption and effectiveness. However, the study has found an insignificant relationship between efficiency and technology adoption. Despite the fact, there is a positive relationship between both variables with technology adoption. Zafar (2009) has conducted a study in the context of Pakistan, where the electronic, human resource management practices in the central bank of the country have been studied. The study is relevant to this research in the context of Jordan because the introduction of technological or internet services is new in Jordan too. It is found that employees feel happiness at the changes made based on technological advancement.

Electronic Services and Performance of Human Resource Department:
There have been several studies which have found the relationship between electronic services and performance of human resource department. Some of the studies are going to be reviewed in the
following so that electronic services and their role in the performance of human resource department can be established.

Atallah (2016) has conducted a study to find the relationship of electronic services in human resource department and the organizational development. The study has found that electronic services in the human resources department affect organizational development positively and the objectives of the organization along with staff development are also achieved with the help of the electronic aspects of the human resource department.

Saleh (2014) has taken into consideration the factors which lead to affect the acceptance for electronic services in human resource department. It is found that technological services are perceived to be convenient and easy to use and easy communication in the result of electronic services leads to promote the use of electronic services. In the result, the electronic services are helping to affect human resources positively. On the other hand, there are some other factors which are less significant including perceived risk from the use of electronic services and system security and the role of the organization. These factors have helped to understand in what conditions and in the presence of which factors, the use of electronic services may be facilitated. Certainly, the perceived benefits of electronic services in human resource department help to decide its use.

Ammar (2012) has found the relationship between employee satisfaction and implementation of human resource management. There are several factors found which may help employees to be productive and high performing. Electronic services in human resource department enable simplifying procedures to work, reduction in the workload, better and effective communication, and development of transparent procedures. The satisfaction level of employees towards electronic services in human resource department or management has a positive relationship with computability of using electronic services and the provision of technical expertise for the system. Overall, the electronic aspect of the human resource department helps to promote the performance levels of employees, and it’s due to the use of electronic services.

Rawash et al., (2012) have conducted a study in the context of Jordan and they have found the relationship between electronic, human resource management and market share of the organization in the market. The chosen organization for this empirical study was the Housing Bank for Trade and Finance in Jordan. The research has found a significant and strong relationship between the market share of the chosen organization and electronic services used in human resource management and department. The human resources of the organization were also developed significantly with the help of electronic management of the department. It is not much difficult to note that market share is increased because of an increase in the performance of the organization. The use of electronic services in the department can be said as assisting in serving this purpose for the organization.

Khashman et al., (2015) have studied the relationship of electronic services in human resource department and the performance of the department as well as the organization. The study has been conducted on the Jordanian telecommunication sector, and the perspective of employees has been taken. Different dimensions of human resource management practices have been taken into consideration in this study about the performance of the organization. Different functions of human resource management have been studied about electronic services, and they include recruitment, selection, training, and development, performance appraisal, communication, and compensation.
Their impact on the performance of the organization has been identified, and it is to remember that electronic services are linked with each of these human resource management functions. The study findings state that positive and statistically significant relationship has been established and found between these dimensions of human resource management concerning electronic services and different dimensions of performance of an organization. Dimensions of performance of the organization include time, quality, cost, flexibility, and service standards. The availability of information and ease of sharing with the help of electronic services are the main benefits of electronic services in combination with human resource development.

The literature review has been related to two main variables of the study, which are electronic services and performance of human resource department. In a broader sense, the role of electronic services provided by the ministry of education has been investigated in terms of their impact on the performance of human resource departments. This study has particularly been conducted on education directorate in Jordan. Following, hypotheses have been developed at the end of this literature review.

**Hypotheses:**

H1: There is a strong positive role in electronic services in the improvement of the performance of human resource departments.

H2: There is a strong and positive impact of electronic services on performance improvements in human resource departments.

**Methodology:**

In the methodology section, the methodology used in this research has been explained and discussed. This is quantitative research in which two variables have been taken where one variable is dependent, and the other one is independent. Moreover, the case of one department or institution has been taken; therefore; it adopts a case study approach as well.

As it has been noted and indicated in the topic of the research that the role of electronic services provided by the Ministry of Education has to be evaluated. Therefore, it needs to have an overview of these electronic services. In the introduction of this research, these electronic services have been mentioned. Then the title of the research calls for seeking the impact of these electronic services for the improvement of the performance of human resource departments. Overall, the case of the education directorate in Jordan has been taken in this regard which has received these electronic services. To find the impact of variables and to predict the relationship between the variables, the correlation, and regression analysis of these variables has been conducted. It implies that the relationship and intensity of the relationship between the two variables have been analyzed in this study (Lavrova & Pechenkin, 2015).

The two variables used in the study are electronic services and performance of human resource departments. Electronic services have been provided by the Ministry of Education. The impact of these services has been found in human resource departments in the case of the education directorate in Jordan. Regression analysis helps to predict the relationship between the two variables
and in so doing, it has been noted that the relationship between the variables exists and it has some meanings. In the next section, the results of these two tests on the relationship have been presented. So far as the sample is concerned, there are 100 participants of the study, those have filled the questionnaire, i.e. a data collection tool. Convenience random sampling method has been employed where participants have been selected randomly. As it has been noted that the education directorate of Jordan has been researched; therefore, the directorate is the target population. However, employees working in the human resource departments of the directorate have been chosen for data collection because the study has been conducted on them. The human resource department has many employees, and they have been contacted to fill the questionnaire. This is a research paper, but it can be considered as a case study to find the relationship between variables in the case of education directorate and its human resource departments. In the data collection process and throughout the research process, ethical considerations have been taken. The research purpose was communicated to participants, and their consent was taken before getting the questionnaire filled with them. It is ensured that the data would be used only for professional purposes and the confidentiality of data would be ensured. Now, in the following the results of correlation and regression analysis have been presented.

Results, Discussion and Findings

Results:
- **Correlations**

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- **Regression**

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a. Dependent Variable: HR
b. All requested variables entered.
Model Summary

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a. Predictors: (Constant), ES

ANOVAa

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a. Dependent Variable: HR
b. Predictors: (Constant), ES

Coefficientsa

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a. Dependent Variable: HR

Interpretation of Results:
The results have shown that there is a negative relationship between the variables and the relationship is not very much significant. It means that there is no improvement in the performance of human resource departments because of these electronic services provided by the Ministry of Education. However, it is important to note that the relationship is not significant and the negative relationship is not very negative. Overall, results are average or normal with negative inclination where the electronic services are not having a considerable impact on the performance improvement of the human resource department.

Discussion:
The discussion of results would be conducted in light of the results of correlation and regression tests. So far as statements in the questionnaire related to electronic services are concerned, it is noted that the majority of responses have been for the neutral option. There are 42 respondents choosing neutral option while agree option has been chosen by 23 respondents and 21 respondents have chosen disagree option. It shows that there is a modest negative tendency in the responses.
where slightly more than agreeing respondents, there are disagreeing responses. While the most important response should be seen for the neutral option which contains 42 respondents which shows that there is an average response to statements on electronic services. The same case is there for responses to the statements on performance improvement of human resource department which have the highest responses for the neutral option at 35 in number. The “disagree” option has 29 responses while there are 24 responses for “agree” option. Here as well, the responses towards agreeing and disagreeing are almost equal and slightly more than one-third of total respondents have remained neutral. It shows that it is not sufficient to state that the relationship is negative because generally, responses are average and there is the only inclination towards the negative side. It may also be because of the room for more research into this topic. Moreover, the relationship is also not very significant which means that the role of electronic services is not showing much impact on the improvement of human resources departments. There might be some hidden reasons why electronic services are not having a considerable impact on human resource departments, and it should be researched in terms of future research directions. The discussion has enabled to draw findings of this research which would also be aligned with any previous research study.

**Findings:**
The study has found that there is a modest negative relationship between the variables of the study where electronic services are independent variable and improvements in human resource department’s performance are the dependent variable. It is found that the electronic services provided by the Ministry of Education do not have a strong relationship to the performance of human resource departments in the education directorate. It does not indicate that electronic services are of low value or they are not able to affect the performance positively. The reason may be present in the way how these services are implemented and employees in human resource department practice on these services. These findings are aligned with one of the previous research studies. In a study conducted by Al-Soud, Al-Yaseen, and Al-Jaghoub (2019), the effectiveness of e-Government’s initiatives has been investigated. Although, the research has been conducted on citizens which is quite a different population of this present study, lack of awareness among citizens has been associated with e-Governments due to which interest of citizens is declining among citizens. Therefore, it is vital to note the level of interest among employees in human resource departments of education directorate because the findings have revealed a modest and slightly negative relationship between the electronic services and performance improvement of human resource departments in the education directorate.

**Conclusion and Recommendations:**
The research paper concludes that e-government initiatives by the government of Jordan include technology and electronic resources intensive initiatives through which technology is being used in different departments. Similarly, the ministry of education in Jordan has provided education directorate with electronic services through which human resource departments can improve their performance. It was assumed that the adoption of electronic services would have a positive impact
on the performance of human resource departments, but it is not found. There is a less significant relationship between the variables, and it is also noted that there is a negative relationship between the variables. However, there is no categorically negative relationship between the variables because respondents have expressed mixed responses and a large number of them have chosen the neutral option.

It is recommended that education directorate should think again on the provision of electronic services from the Ministry of Education. This is a change, and therefore, it is recommended studying the electronic services in relationship with the performance of human resource management with the help of change management theories. It is recommended focusing on the culture of the education directorate and human resource departments because more awareness and technology friendly culture may benefit from the introduction of electronic services in a better manner. Moreover, it is recommended that cultural and department-wide factors should be taken into consideration so that electronic services can be integrated into departments’ culture.

Future Research Directions:
Future research directions may also be considered as limitations of this study. The study has adopted quantitative research methods, but the nature of research calls for conducting qualitative research methods so that the reasons for the negative relationship between the variables can be found. Moreover, the relationship is negative, and it may be the reason for implementing change in the organization in a developing country. There is usually resistance to change, and this perspective should be taken in future research studies.

References
Ammar, R. (2012). The satisfaction level of employees towards the implementation of E-HRM in UNRWA. Master Thesis.


