The Impact of Electronic Human Resource Management on Organizational Performance in Jordan

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ABSTRACT
The study aimed to find out the impact of electronic human resource management practices on organization's performance in Greater Amman Municipality. The study sample was selected from the Greater Amman Municipality employees. The study used analytical descriptive methodology. A simple random sampling was used. The study sample consisted of 243 Employees. A self-administered questionnaire was designed according to research objectives and hypotheses. The questionnaire was validated before distribution to collect data. The collected data was analyzed through using AMOS. The study concluded that electronic human resources management practices on organization’s performance. The study concluded that e-HRM has a significant effect on competitive advantages and in the same time, E-HRM also has a significant effect on organizational performance. The study also concluded that Competitive advantage has an effect on e-HRM and it mediates the relation between E-HRM and the organizational performance. The study recommends the Greater Amman top management must understand the mechanism behind that how they can manage their human resources to achieve organization performance for better productivity of organization and Greater Amman municipality is advised to use e-HRM available tools in employing new workers, whom in they turn can achieve the tasks entrusted to them in good manner which in its turn will be reflected positively in competitive advantages an organization performance.

INTRODUCTION
Human resources play an important role in organizations this is done by improving employee performance, reducing production costs, working to increase the productivity of the organization And also to provide the best services to customers and work to increase their satisfaction.

On the other hand, the use of technology, which is considered a great revolution in the world of management as through the use of technology, services are transformed from traditional to electronic, and by using technology, it improves administrative performance and improves the use of services with high quality it simplifies administrative procedures and efficient planning and optimal use of resources.
In view of the above, the use of electronic human resources considered the key to success, with the increasing internal demands the application of electronic human resources led to raise the level of human resources, the use of technology is one of the best ways to develop for human resources in order to improve the performance of the organization.

**Literature review**

**Organizational Performance**

To gain sustainability of organisation performance, it is achievable by both short term and long term measurable outcomes. These outcomes include financial, human/social and environmental outcomes. Anyhow, the focus should be the ways these outcomes contribute to the long-term economic survival and adaptation of the organisation. Theeboom, et al., (2014) conducted the study how to measure the impact of HRM on organizational performance, observed that there is a serious limitation that literature pointed out the link between HRM and organizational performance as a “black box”, i.e., lack of clarity, regarding what exactly leads to what.

The HRM policies managing systems may influence organisational performance indirectly through HRM outcomes. However, a direct effect of HRM policies on organisational performance may also be present (Sabarwal, 2014). Organizational Performance was define as the Based on a combination of factors business, including work processes, group/team interaction and communication, and climate that promotes innovation, leadership, creativity, corporate cultural policies, and loyalty (Khan et al., 2014).

The improving performance and automation processes align employee's development and the common achieve with corporate objectives. Administrative performance Institutions can make plans Need to take advantage of Staff efforts in support of organisational objectives and strategic steps to judge outcomes, performance, and core competencies (Theeboom, et al., 2014).

**Competitive Advantage**

Competitive Advantage is work on development of organization to have defendable position in the market against its rivals (Tan, & Sousa, 2015). Hakkak, & Ghodsi (2015) said "excellence in implementation" is a sustainable competitive advantage. Economic growth of an organization is its strength over competitors (Teece, Peteraf, & Leih, 2016). Human capital has excellent potential for competitive advantage, should be maintain because difficult to imitate and replace human capital (Nieves, & Quintana, 2018). Therefore, the cost advantage of human capital is sustainable and difficult to imitate. The composition of the organisation and value of human resources increases probability of the organisation to gain a competitive advantage (Delery, & Roumpi, 2017). Information and knowledge are essential elements for survival and competitive advantage of the organization to compete locally and internationally (Rong, Wu, Shi, & Guo, 2015).

Competitive advantage analyzed through different origins inclusive of company's market position and resources or by measuring the outcome of competitive efforts through firm performance (Dyerson, & Harindranath, 2015). In practice, the sustainability of a firm's competitive advantage is measured by superior performance (Dyerson, & Harindranath, 2015). According to Chen, Miller, (2015) the fundamental need of the strategic management is to consider the competitive advantage as the most important condition for business success. Švárová, & Vrchota, (2014) defined competitive advantage as something that separates the enterprise from others and keeps it alive and growing.
The biggest mistake of companies is insufficient utilization of their competitive advantage (Walsh, & Dodds, 2017). New companies are coming to new markets, competition is getting tougher, and customers have the option to buy and compare products prices, the enterprise is required to increase quality demand, adaptability and flexibility (Švárová, & Vrchota, 2014)

**Electronic Human Resource Management (e-HRM)**

Bondarouk, & Brewster, (2016) the generally critical extremely significant areas of e-HRM. Of Electronic learning, training, and selection (e-HRM) are employee data department, money paid for working, worker, internet instruction, realization department, and compensation. For that, electronic human resource management It ability be activated in several fields of which rotation among employees Incentives, develop staff performance, the process of figuring out the worth, amount, or quality of something, payment, and benefits management (Atallah, 2016).There are some researchers think to believe this extremely significant for the e-HRM,system e-HR are related to workers in general planning, putting something into use and selection, performance appraisal, of value, bonuses, communication, payment and benefits, development and training (Atallah, 2016).

The e-HRM can be activate to complete goals of HRM. This section talking long on e-HRM functions. Besides, it provides books about electronic human resource management and it is regarding ideas, which matter like goals, kind, benefits significant and area of electronic human resource management (Atallah, 2016).

The literature of detection on the importance of electronic human resources, where modern technology played a useful role in order to increase staff skills, the responsibility is great on the shoulders Managers in order to perform tasks (Ibrahim, H., & Yusoff, Y. M. 2015).

Therefore, e-HRM planning leads to direct benefits to the organization and has effect on long-term business growth through the promotion of innovation and capacity building, which can ultimately lead to competitive advantage Which affects the organization's performance (Alomari et al., 2018), the research hypothesis for these relationships as follows:

H1: e-HRM has significant effects on competitive advantage.

H2: e-HRM has significant effects on organization performance.

H3: Competitive advantage mediates the relationship between e-HRM and organization performance.

**Problem statement:**

based on our observations question arises about whether the e-HRM application affects to achieve an organization performance. The current study aims to identify key elements of e-HRM and their impact on achieving the organization productive performance of the Greater Amman Municipality. Although there is no doubt that, the use of electronic human resource appropriates leads to improve the level of organisation performance in the Greater Amman municipality. Therefore, the study seeks to close the gap with regard to the practicability of e-HRM and its effectiveness on organisation performance, use the competitive advantage as a mediator to moderate relationship between e-HRM and the organization performance, which will help raise of Jordan. The need for more research has recently increased in this field to evaluate the impact of e-HRM on the performance and use the competitive advantage as a mediator in order to achieve the organisation performance required. This study will provide evidence-based recommendations how to achieve organization performance through the development of e-HRM on the organization to achieve competitive advantage.

**Research Hypotheses**

Organization performance construct affected by e-HRM: Figure (2-1) 1st model illustrates the Endogenous construct that are affecting e-HRM and the competitive advantage, it acts as a mediator mediating the relationship between e-HRM and organisation performance.

H1: e-HRM has significant effects on competitive advantage.

H2: competitive advantage has significant effects on organization performance.
H3: Competitive advantage mediates the relationship between e-HRM and organization performance.

Research Framework

After performing the following steps of analysis techniques for verifying reliability, validity, normality and correlation, their modeling in the structural model for analysis via SEM is carried out. All measurement model variables transformed into a structural model. All path coefficients have yielded results as hypothesized. SEM technique is a critical statistical technique that has been able to solve multiple problems successfully (Henseler, et al., 2015). AMOS version 21.0 can also be utilized to estimate any direct, indirect, and mediating effects of variables in a structural model, which subsequently and comprehensively is beneficial in inferring the extent of the significance of one variable to another.

Figure 1: The research framework of the study

METHOD

This study uses a quantitative method with the SEM (Structural Equation Modeling) analysis tool to test the hypothesis SEM is a statistical approach used to examine the relationship between variables in a conceptual model. This method allows researchers to examine the causal relationship between these variables and see the extent to which the intermediary variable influences the relationship. This study used a sample of 100 people with a non-random sampling method. Structural Equation Modeling (SEM) is a data-analytics technique that has been gaining popularity over the last decade (Afthanorhan 2014). SEM via AMOS was used for the data analysis. SEM is unique that can answer a large number of research questions and research hypotheses simultaneously. Today, SEM is recognized as comprising two primary methods, known as covariance and component-based SEM, which were developed for confirming and prediction, respectively. Researchers can use SEM for purposes as varied as confirming the factor structure in behavioral sciences and analysing structural
models, potential mediators and moderator effects, testing measurement models and latent growth

RESULT AND DISCUSSION

The research framework of this study consists of one exogenous construct namely, Electronic Human
Resource Management (e-HRM), one mediator constructs namely, Competitive Advantage (CA), and
one endogenous construct namely, Organizational Performance (OP). The research framework is
presented in Figure 7.1.

The framework in Figure 8.1 consists of two direct effect hypotheses labelled as H1 to H2, and one
mediator hypothesis labelled as H3. The hypothesis statement for direct effect and mediator
hypothesis together with the method of statistical analysis is presented in Table 1.

<table>
<thead>
<tr>
<th>Table 1: The hypothesis statement and method of statistical testing</th>
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<tbody>
<tr>
<td><strong>Direct Effect Hypothesis</strong></td>
</tr>
<tr>
<td>H1 Electronic Human Resource Management has positive and significant effect on Competitive Advantage</td>
</tr>
<tr>
<td>H2 Competitive Advantage has positive and significant effect on Organizational Performance</td>
</tr>
<tr>
<td>H3 Competitive Advantage mediates the relationship between Electronic Human Resource Management and Organizational Performance</td>
</tr>
</tbody>
</table>

Validating all Latent Constructs in the Model Prior to Modeling Structural Model and Executing SEM.

This study employed the two-steps procedure where all latent constructs need to be validated
through Confirmatory Factor Analysis (CFA) prior to developing the structural model and executing SEM for further analysis (Awang, 2015; Awang et al., 2018; Mohamad et al., 2016, 2017; Aimran et al., 2017, 2017a; Mahfouz et al., 2019, 2020; Rahlin et al., 2020, 2020a; Raza & Awang, 2020, 2020a).

The Confirmatory Factor Analysis (CFA)

Prior to modelling the structural model and executing Structural Equation Modeling (SEM), the study
needs to validate all measurement models of latent constructs for Uni-dimensionality, Validity, and
Reliability (Kashif et al., 2017; Asnawi et al., 2019; Rahlin et al., 2019, 2019a; Mohamad et al., 2018,
2019; Raza & Awang, 2019; Bahkia et al., 2020; Baistaman et al., 2020, 2020a). This validation
procedure is called Confirmatory Factor Analysis (CFA).

The Pooled-CFA for all Validating Measurement Model of Constructs

The pooled-CFA is procedure is fast, efficient and accurate since by using the pooled CFA, the
researcher could monitor one set of fitness indexes for all constructs involved in the model (Awang,
2014, 2015; Awang et al., 2018). More importantly, through pooled-CFA, the researcher could assess
the correlation between constructs and develop the Discriminant Validity Index Summary in order
to confirm that the constructs are discriminants among each other in the model (Awang et al., 2018;
Afthanorhan et al., 2018, 2019; Rahlin et al., 2019a; Mahfouz et al., 2019, 2020; Raza & Awang, 2020; Baistaman et al., 2020a). The pooled-CFA procedure to assess all latent constructs at once is shown in Figure 2 shows all higher-order constructs have been transformed into first order constructs.

**The Structural Model and Structural Equation Modeling (SEM)**

Once the CFA report is completed and all values meet the required thresholds for validity and reliability, the researcher can conclude that the measurement models for all latent constructs involved in the model have been validated (Awang, 2015; Awang et al., 2018; Mohamad et al., 2016, 2017, 2018, 2019; Afthanorhan et al., 2017, 2017a, 2018, 2019; Asnawi et al., 2019 and Raza & Awang, 2020, 2020a). Then, the next step for the researcher is to assemble these constructs into the structural model in order to execute Structural Equation Modeling (SEM). The constructs should be arranged from left to right, beginning with the exogenous constructs at far left, followed by the mediator constructs in the middle, and the endogenous construct at the far right (Awang et al., 2018; Rahlin et al., 2019a, 2020, 2020a; Mahfouz et al., 2019, 2020; Baistaman et al., 2020, 2020a; Bahkia et al., 2020). Then, based on the direction of hypothesis, the researcher links the exogenous construct to its respective endogenous construct using the single headed arrow. Lastly, all exogenous constructs are linked using the double-headed arrow as presented in Figure 8.2.

The text output for every direct effect relationship in this study as shown by the model in Figure 2 is presented in Table 8.3. The testing of hypothesis in Table 8.4 is decided based on the probability value (p-value < 0.05). The hypothesis is significant if P-value obtained is less than the type I error value (alpha) 0.05 (Kashif et al., 2015, 2016; Mohamad et al., 2016, 2018; Asnawi et al., 2019;
Afthanorhan et al., 2018, 2019; Rahlin et al., 2019a, 2020, 2020a; Mahfouz et al., 2019, 2020 and Bahkia et al., 2020).

Table 2: The regression path coefficient and its significance

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive Advantage</td>
<td>e-HRM</td>
<td>1.479</td>
<td>.188</td>
<td>7.848</td>
<td>.001</td>
</tr>
<tr>
<td>Organization Performance</td>
<td>Competitive Advantage</td>
<td>0.467</td>
<td>.082</td>
<td>5.665</td>
<td>.001</td>
</tr>
<tr>
<td>Organization Performance</td>
<td>e-HRM</td>
<td>0.470</td>
<td>.149</td>
<td>3.161</td>
<td>.002</td>
</tr>
</tbody>
</table>

Table 3: Testing the Direct Effect Hypothesis

<table>
<thead>
<tr>
<th>Direct Effect Hypothesis</th>
<th>P-Value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1</strong> Electronic Human Resource Management has positive and significant effect on Competitive Advantage</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>H2</strong> Competitive Advantage has positive and significant effect on Organizational Performance</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>H3</strong> Electronic Human Resource Management has positive and significant effect on Organizational Performance</td>
<td>0.002</td>
<td>Supported</td>
</tr>
</tbody>
</table>

The Testing Hypothesis for Mediator in the Model

The study employed the method of testing the mediation effects in the model as proposed by Awang (2014, 2015) and Awang et al. (2018) and has been employed by Kashif et al. (2015, 2016), Afthanorhan et al. (2017, 2018), Mohamad et al. (2016, 2017, 2018), Mohd Azli et al. (2017), Yusof et al. (2017), Asnawi et al. (2019), Rahlin et al. (2020, 2020a), Bahkia et al., 2020 and Mahfouz et al. (2020).

Confirming the Mediation Effect through Bootstrapping

The study needs to reconfirm the results of mediation testing conventional procedure using the commonly acceptable method called Bootstrapping. The bootstrapping is employed to assess the standardized indirect effect as well as the standardized direct effect. The number of bootstrapping samples is between 500-5000 (Awang, 2014, 2015; Awang et al., 2018) in this field should be between 500 to 1000 times. The algorithm would compute the mean and standard error of the sample. This resampling process through algorithm will develop the sampling distribution for estimate the indirect effect, direct effect as well as their probability values (Awang, 2014, 2015; Awang et al., 2018; Kashif et al., 2016, 2017; Mohamad et al, 2016, 2017, 2019; Rahlin et al., 2020, 2020a; Bahkia et al., 2020 and Mahfouz et al., 2020).

These values enable the researcher to decide on the result of mediation test. At the same time, the researcher could compare the ordinary test results with the bootstrapping results (Awang et al., 2018; Mahfouz et al., 2019, 2020; Rahlin et al., 2020, 2020a; Bahkia et al., 2020). This study employed the MLE (Maximum Likelihood Estimator) procedure using 1000 bootstrap sample with percentile confidence interval 95% and bias-corrected confidence interval 95%.
The hypothesis testing for mediation effects of a mediator construct in the model is carried out separately as shown in Table 8.5.

<table>
<thead>
<tr>
<th>H3</th>
<th><strong>Competitive Advantage mediates the relationship between Electronic Human Resource Management and Organizational Performance</strong></th>
</tr>
</thead>
</table>

The study conducts the testing procedure for a mediator in the model as proposed by Awang (2014, 2015) and Awang et al. (2018). The procedure is shown in Figure 8.3.

According to Awang (2014, 2015) and Awang et al. (2018), the study needs to confirm the results of mediation testing using the normal procedure with the more efficient procedure called bootstrapping. For that purpose, the study performed the bootstrapping procedure using Maximum Likelihood (ML) Bootst rap with bootstrap sample = 1000, percentile confidence interval = 0.95 and bias-corrected confidence interval = 0.95. The bootstrap result is presented in Table 4.

| Table 4: The bootstrapping procedure to confirm the mediator test results |
|---|---|---|
| **Indirect Effect** | **Direct Effect** |
| Bootstrapping Results | 0.214 | 0.427 |
| Bootstrapping P-Value | 0.028 | 0.002 |
| Result | Significant | Significant |
| Mediation Type | Partial Mediation since the direct effect is also significant |

| Table 5: Summary of Hypothesis Testing and the Result |
|---|---|---|
| **Direct Effect Hypothesis** | **P-Value** | **Decision** |
| H1 **Electronic Human Resource Management** has positive and significant effect on **Competitive Advantage** | **0.001** | Supported |
| H2 **Competitive Advantage** has positive and significant effect on **Organizational Performance** | **0.001** | Supported |

| Table 6: Summary of Hypothesis Testing for Mediator for main constructs |
|---|---|
| **Direct Effect Hypothesis** | **Partial Mediation Occur** |
| H3 **Competitive Advantage mediates the relationship between Electronic Human Resource Management and Organizational Performance** | |

The study aimed to find out the impact of electronic human resource management on organizational performance on Greater Amman Municipality.

Results of testing the three main hypothesis: t test was used and the following results werw obtained.

The first hypothesis: Electronic Human Resource Management has positive and significant effect on Competitive Advantage.

The statistical analysis indicated that Electronic Human Resource Management has positive and significant effect on Competitive Advantage. The result indicates the importance of Electronic Human Resource Management in achieving competitive advantage, since human resources in any
organization forms one of the basic elements in performing the works entrusted to the organization. So they can improve the performance which is reflected on organization performance.

This agrees with the theoretical theories which argued that electronic HRM will save time and effort in HRM functions which in its turn will be reflected in the organization competitive advantage. The result agrees with Delery, & Roumpi, (2017) study results who indicated that the composition of the organization and value of human resources increases probability of the organization to gain a competitive advantage. In the same time, it agrees with (Albrecht, et al., 2015) study which indicated that, active staff participation is a key element in achieving competitive advantage. And agrees with Alshanbri, (2015) study results which indicated that the strategic focus of human resources creates a competitive advantage for the organization. Any action plan executed with a set of reliable, coherent strategic practices with skilled knowledge and values, it results in affecting organizational competitive advantage. In this regard Takeuchi et al (2014) suggested that a proper systematic implementation of human resources could affect the competitive advantage. The results also agree with Stone, & Deadrick, (2015) study results which indicated that e-HRM planning leads to direct benefits to the organization and has effect on long-term business growth through the promotion of innovation and capacity building, which can ultimately lead to competitive advantage which affects the organization's performance.

9.1.2 Competitive advantage has significant effects on organization performance.

The statistical analysis indicated that Competitive Advantage has positive and significant effect on Organizational Performance. The result confirms that any organization that has competitive advantage will be reflected on the organization performance, since the competitive advantage is achieved through the performance and vice versa. The result agreed with Wang, (2014) who indicated that there is a relation between competitive advantage and organizational performance. And with (Noe, et al., 2017).

Competitive advantage mediates the relationship between e-HRM and organization performance.

Results which indicate that there is a positive relationship between the organization and the competitive advantage (Noe, et al., 2017).

The result agrees with Alshanbri, (2015) result which indicate that competitive advantage, y is the mediator between the organization's performance and the e-HRM.

CONCLUSION

The study concluded that electronic human resources management practices on organization’s performance. The study concluded that e-HRM has a significant effect on competitive advantages and in the same time, E-HRM also has a significant effect on organizational performance. The study also concluded that Competitive advantage has an effect on e-HRM and it mediates the relation between E-HRM and the organizational performance. The study recommends the Greater Amman top management must understand the mechanism behind that how they can manage their human resources to achieve organization performance for better productivity of organization and Greater Amman municipality is advised to use e-HRM available tools in employing new workers, whom in they turn can achieve the tasks entrusted to them in good manner which in its turn will be reflected positively in competitive advantages an organization performance. Greater Amman top management must understand the mechanism behind that how they can manage their human resources to achieve organization performance for better productivity of organization. For the purpose of having a good, a productive human resources Greater Amman municipality is advice to use e-HRM available tools in employing new workers, whom in they turn can achieve the tasks entrusted to them in good manner which in its turn will be reflected positively in competitive advantage an organization performance.

Research recommends that Greater Amman Municipality to use e-HRM for the purpose of improving is organizational performance in terms the (cost reduction, quality improvement, increased flexibility, increased innovation, competitive advantage). Greater Amman Municipality is
requested to update all human resources practices for preparing the environment for achieving
competition advantage. Greater Amman Municipality can make plans for the purpose of taking
advantage of Staff efforts in support of organizational objectives and strategic steps to judge
outcomes, performance, and core competencies. Greater Amman Municipality has to find new ideas,
develop resources and activities to achieve competitive advantage. Departments managers in Greater
Amman Municipality are request to evaluate the implementation of e HRM from time to time in
order to find the gaps if any and to enhance the strength points.

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