

THE EFFECT OF E-HUMAN RESOURCES MANAGEMENT PRACTICES ON ORGANIZATIONAL AMBIDEXTERITY IN TELECOMMUNICATION COMPANIES OPERATING IN JORDAN

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ABSTRACT

The major aim of the study was to examine the impact of e-human resource management on organizational ambidexterity. Therefore, it focused on telecommunication companies operating in Jordan. Data were primarily gathered through self-reported questionnaires creating by Google Forms which were distributed to a purposive sample of senior managers via email. The statistical program AMOSv24 was used to test the study hypotheses. The results of the study show that e-human resource management has a positive impact relationship on organizational ambidexterity. Based on the findings of the study, researchers recommend managers and decision makers to strengthen the electronic human resources management system, to raise the level of organizational ambidexterity and improve organizational performance, and to use electronic human resources management applications to improve the organization's performance.

Keywords: E-Human Resources Management Practices, Organizational Ambidexterity, Telecommunication Companies, Jordan

INTRODUCTION

Human resource management is one of the most important functions of organizations, as it performs many tasks, activities and functions that will provide efficient, qualified and appropriate human resources for the organization's current and future needs, which are supposed to be able to contribute to achieving its goals efficiently and effectively (Al-Hawary, 2015). As a result of the advent of web-based technology, which aided in the emergence of a new concept of human resource management in the field of human resources, today's businesses face numerous issues such as globalization, value chain competitiveness, and technology change. (Al-Hawary & Obiadat, 2021; Al-Hawary et al., 2020). In light of the great technological progress that the business world has witnessed in recent decades, organizations have become operating in a highly competitive environment and in uncertainty conditions, which in turn led these organizations to research more ways to deal with these conditions and ways to identify competitors' capabilities and market needs (Al-Hawajreh et al., 2011). Organizations benefited from the technological revolution in harnessing the practices and activities of human resources, which made them practice electronically, and the most important of these practices were electronic polarization, electronic training, electronic performance evaluation, and compensation.

Marchese & Dollar (2015) has pointed out the companies need for organizational ambidexterity through simultaneous exploration and exploitation of opportunities in the context of company learning processes, although there is a general consensus that companies are required to practice exploration and exploitation simultaneously to improve performance in the short term and long-term survival (O'Rielly & Tushman, 2013; Birkinshaw & Gupta, 2013). The importance of this study stems from the important role that human resources management plays in the progress and continuity of companies, which enhances organizational ambidexterity. Proceeding from the modern theoretical concept of human resource management and based on its ability to enhance the organizational ambidexterity of contemporary companies, which makes them able to put themselves on the right track. Therefore, the importance of studying these concepts is a necessity that competition dictates. The goal of this research is to find out how electronic human resource management strategies affect organizational ambidexterity.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Electronic Human Resource Management

E-HRM refers to any type of technology that aids in the delivery of human resource services (Lengnick, et al., 2013). In general, E-HRM is characterized as a broad-based, adaptable, and integrated strategy that links internal processes and knowledge workers to the organization's commercial goals (Al-Hawary & Al-Namlan, 2018). Other academics define E-HRM as a technological application that allows managers and employees' immediate access to human resources and other workplace services, such as performance appraisal, reporting, team management, knowledge management, and learning management applications (Lujan et al. al, 2007). Others characterized E-HRM as an umbrella term that encompasses all of the mechanisms and consequences of the possible integration of human resource management and information technology in order to generate value for employees and management in enterprises (Bondarouk et al., 2009). Web-based technologies are used to apply numerous human resource management methods and practices in E-HRM (Ruel et al., 2014). We may state that E-HRM encompasses a wide range of services, including recruiting, training and development, performance evaluation, remuneration, safety and health, and employee relations, but the research will focus on the following six functions:

E-Recruitment: One of the main goals of the E-Recruitment process is to share vacancies with as many potential candidates as possible, i.e., to attract and screen key applicants with the necessary skills for the job being offered. Organizations can use online recruitment systems to share not only important details about open positions, but also more specific information such as job descriptions, company culture or brand identity, and business incentives. (Stone et al., 2016).

E-polarization: Organizations must implement tactics that reduce the amount of time and money spent on traditional recruitment because it is currently quite expensive (Al-Hawary & Nusair, 2017; Tong, 2009). As a result, online recruitment has grown in popularity over the last decade, and most firms now use it as a major tool, as the first step in the hiring process.

Electronic selection: Web testing, face-to-face interviews, interaction, and job offers are all examples of electronic selection activities. The goal of electronic selection is to reduce costs, maximize human capital usage, and ensure long-term viability. The electronic selection procedure is used to find the best employment for individuals with the necessary knowledge, skills, and abilities (Al-Hawary & Shdefat, 2016; Abzari et al., 2013). HR professionals can better oversee the selection process with an electronic selection system.

E-training: This approach is used in businesses without the limitations of traditional training, such as time and location (Al-Lozi et al., 2018; Bell, 2007). E-learning is also possible and valuable thanks to the rapid growth of telecommunications. Any sort of programmed learning, training, or education in which electronic devices and applications are utilized to create

knowledge is referred to as this notion. Web-based learning, computer-based learning, virtual classrooms, and virtual collaboration are all examples of e-learning applications and procedures.

Electronic performance appraisal: It is the fastest growing trend in electronic human resources management, which is a self-service system for employees that helps in managing their own affairs through information on the Web. Businesses use administrative self-service that allows managers to electronically access employee information and performance assessments (Al-Lozi et al., 2017; Mohammad et al., 2020). The use of technology to establish systems and processes that employees have appraised based on their performance on needed duties within the firm is known as electronic performance appraisal (Piggot-Irvine, 2013).

Electronic Compensation: Represents a new web-based compensation tool set that allows a company to collect, store, process, assess, use, and disseminate compensation, data, and information. In any firm, compensation and reward systems are critical for attracting, motivating, and retaining personnel. Organizations have a competitive advantage in attracting and maintaining exceptional individuals thanks to compensation and reward schemes. HR personnel can use the computerized compensation system to make informed decisions about their life insurance, health insurance, disability insurance, and other benefits (Moilanen, 2013).

Organizational Ambidexterity

The notion of organizational ambidexterity has gained traction in study, resulting in a large increase in the number of studies on the topic during the last decade (Raisch et al., 2009). Duncan (1976) coined the phrase "organizational ambidexterity." According to researchers, an organization is effective when it operates its operations efficiently while also adapting to a fast changing environment (Raisch & Birkinshaw, 2008). Organizational ambidexterity might be difficult to accomplish since the talents required for exploitation and exploration are incompatible. A number of studies in the management literature have begun to look into possible precedents and organizational designs to address this issue, with one recent study claiming that "the company's ability to recognize, absorb, and exploit knowledge from the environment can alleviate the tension between exploration and exploitation" (Al-Hawary & Hadad, 2016; Cohen & Levinthal, 1989).

March (1991) points out that business success depends on the company's ability to strike a balance between exploiting existing efficiencies and exploring new opportunities. Exploitation was recently referred to as radical innovation (Enkel et al., 2016). Exploitation includes terms such as "refinement, efficiency, selection or execution", and exploration is associated with activities such as "search, difference, experiment, or discovery". Therefore, many scholars say that there is a trade-off between the organization's ability to exploit existing competencies and explore new ones (Raisch & Birkinshaw, 2008), because this requires high skills to develop management competencies that make today's business in the organization advanced and developed (He & Wong, 2004). Bodwell & Chermack (2010); Cao; Gedajlovic & Zhang (2009) indicated that organizational ambidexterity consists of:

Exploring Opportunities: It is defined as the ability of the organization to follow a number of steps in order to find and develop products that have not been previously produced in the market (Day, 2011). (Al-Obaidi, 2005) pointed out that exploration means the ability of the organization to find a product that has not previously been found in the market or work to modify an existing product in a way that enhances its added value, and this is done by finding new production and designing methods in order to achieve the needs and desires of the customer, based on the existing competition between competitors at the level of one industry (Ussahawanichakit, 2012). Al-Quraishi (2008) emphasized that exploration means implementing accurate knowledge in a way that results in effective results in finding methods and designing modern products that enhances its added value.

Exploiting opportunities: Pai (2007) indicated that the exploitation of opportunities is the ability of the organization to improve its various activities in order to enhance the added

value and improve the products offered by the organization. While Miles & Darroch (2006) emphasized that the organization's ability to exploit opportunities is enhanced even if It was not part of its current strategy, and this enhances the strategic ability to deal with exploiting opportunities as the strategy is characterized by a business intelligence structure.

Study Model

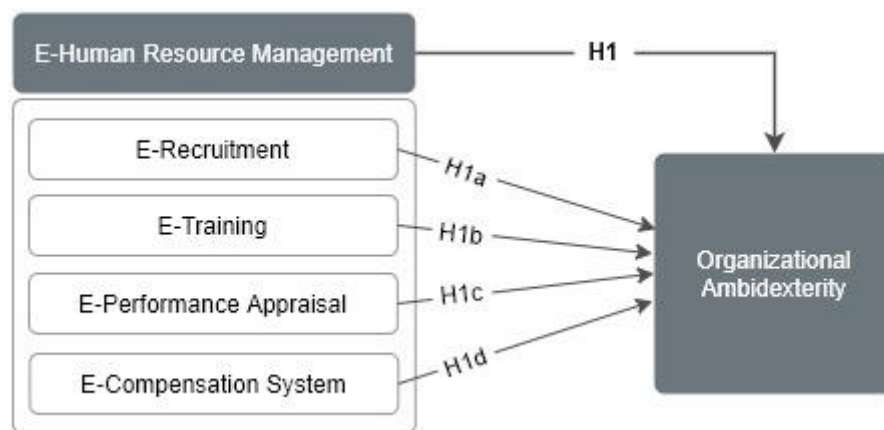


FIGURE 1
RESEARCH MODEL

H1: There is a statistically significant effect of the electronic human resources management dimensions (electronic polarization, electronic training, electronic performance appraisal system and electronic compensation system) on organizational ambidexterity.

METHODOLOGY

Population and Sample Selection

A qualitative method based on a questionnaire was used in this study for data collection and sample selection. The major aim of the study was to examine the impact of e-human resource management on organizational ambidexterity. Therefore, it focused on telecommunication companies operating in Jordan. Data were primarily gathered through self-reported questionnaires created by Google Forms which were distributed to a purposive sample of senior managers via email. In total, (293) responses were received including (9) invalid to statistical analysis due to uncompleted or inaccurate. Hence, the final sample contained (284) responses suitable to analysis requirements, where it proved to be sufficient to the extent that was predictable and allowed for a presumption of data saturation (Sekaran & Bougie, 2016).

Measurement Instrument

A self-reported questionnaire that consists of two main sections along with a section regarding control variables was used as the measurement instrument. Control variables considered as categorical measures were composed of gender, age group, educational level, and experience. The two main sections were dealt with a five-point Likert scale (from 1= strongly disagree to 5= strongly agree). The first section contained (19) items to measure e-human resource management based on (Charlotta, 2012). These questions were distributed into dimensions as follows: five items dedicated for measuring e-recruitment, four items dedicated for measuring e-training, five items dedicated for measuring e-performance appraisal, and five items dedicated for measuring e-compensation system. Whereas the second section included

eight items developed to measure organizational ambidexterity according to what was pointed by (Wulf, et al,2010; Simsek,2009).

FINDINGS

Measurement Model Evaluation

This study was conducted structural equation modeling (SEM) to test hypotheses, which represents a contemporary statistical technique for testing and estimating the relationship between factors and variables (Wang & Rhemtulla, 2021). Accordingly, the reliability and validity of the constructs were tested using confirmatory factor analysis (CFA) through the statistical program AMOSv24. Table 1 summarizes the results of convergent and discriminant validity, as well the indicators of reliability.

Constructs	1	2	3	4	5
1. e-recruitment	0.742				
2. e-training	0.598	0.758			
3. e-performance appraisal	0.495	0.460	0.740		
4. e-compensation system	0.468	0.553	0.428	0.746	
5. organizational ambidexterity	0.697	0.682	0.655	0.692	0.771
VIF	1.568	2.439	2.066	1.245	---
Loadings range	0.662-0.793	0.705-0.825	0.671-0.822	0.711-0.791	0.637-0.845
AVE	0.550	0.575	0.547	0.556	0.595
MSV	0.501	0.438	0.394	0.512	0.522
Internal consistency	0.856	0.840	0.856	0.859	0.918
Composite reliability	0.859	0.843	0.857	0.862	0.921

Note: Bold fonts in the table indicate to square root of average variance extracted.

Table 1 shows that the standard loading values for the individual items were within the domain (0.637-0.845), these values greater than the minimum retention of the elements based on their standard loads (Al-Lozi et al., 2018; Sung et al., 2019). Average variance extracted (AVE) is a summary indicator of the convergent validity of constructs that must be above 0.50 (Howard, 2018). The results indicate that the AVE values were greater than 0.50 for all constructs, thus the used measurement model has an appropriate convergent validity. In covariance-based SEM, Rimkeviciene et al. (2017) suggested using the comparison approach to cope with discriminant validity assessment. This method compares the values of maximum shared variance (MSV) to the values of AVE, as well as the values of square root of AVE (AVE) to the correlation between the remaining structures. The results demonstrate that the MSV values were lower than the AVE values, and that the AVE values were greater than the correlation values among the other constructs. As a result, discriminative validity is a feature of the measurement model used.

Internal consistency, as assessed by Cronbach's Alpha coefficient (α), and compound reliability, as measured by McDonald's Omega coefficient (ω), were used to assess the measurement model. The values of Cronbach's Alpha coefficient and McDonald's Omega coefficient were both larger than 0.70, which is the lowest limit for determining measurement reliability, as shown in Table 1. (de Leeuw et al., 2019).

Structural Model

Because the variance inflation factor (VIF) values are below the threshold of 5, the structural model revealed no multicollinearity issues among predictor constructs, as shown in Table

1. (Hair et al., 2017). Figure 1 shows the values of model fit indices, which support this conclusion.

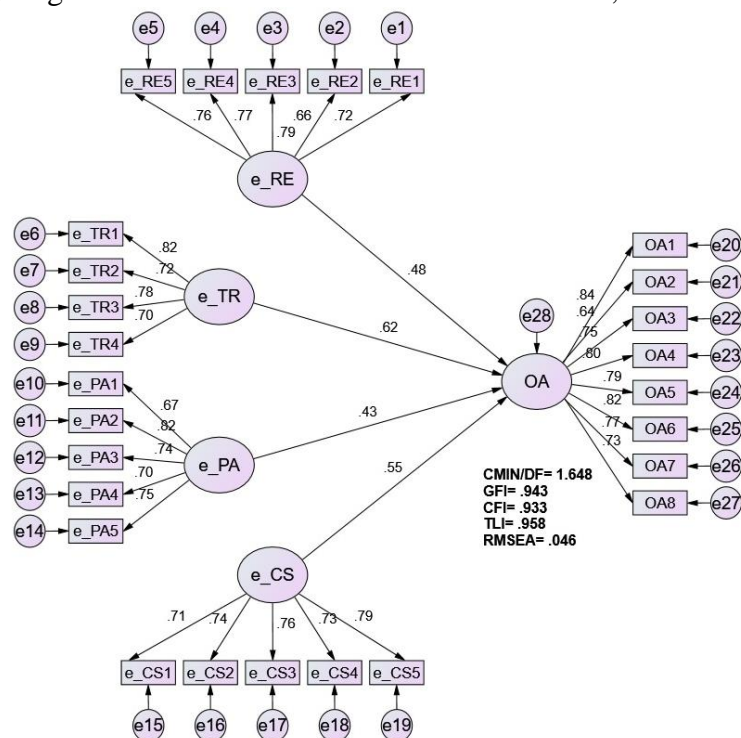


FIGURE 2
SEM RESULTS OF THE E-HUMAN RESOURCE MANAGEMENT EFFECT ON ORGANIZATIONAL AMBIDEXTERITY

Figure 1 shows that the chi-square to degrees of freedom (CMIN/DF) was 1.648, which is less than the indicator's maximum limit of 3. The goodness of fit index (GFI), comparative fit index (CFI), and Tucker-Lewis index (TLI) were all higher than the 0.90 minimum allowed criterion. Moreover, the result of root mean square error of approximation (RMSEA) indicated to value 0.046, this value is a reasonable error of approximation because it is less than the higher limit of 0.08. Consequently, the structural model used in this study was recognized as a fit model for predicting the DEP and generalization of its result (Ahmad et al., 2016; Shi et al., 2019). To verify the results of testing the study hypotheses, structural equation modeling (SEM) was used, the results of which are listed in Table 2.

Hypothesis	Relation	Standard Beta	t value	p value
H1	e-HRM → OA	0.864***	36.96	0.000
H1a	e-RE → OA	0.484**	20.48	0.003
H1b	e-TR → OA	0.618***	29.79	0.000
H1c	e-PA → OA	0.428*	18.41	0.02
H1d	e-CS → OA	0.551***	24.54	0.000

Note:e-HRM: electronic human resource management, OA: organizational ambidexterity, e-RE: electronic recruitment, e-TR: electronic training, e-PA: electronic performance appraisal, e-CS: electronic compensation system, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

The results demonstrated in Table 2 show that e-human resource management has a positive impact relationship on organizational ambidexterity ($\beta = 0.864$, $t = 36.96$, $p = 0.000$), which justifies support for the study's major hypothesis. Moreover, the results indicated that the highest impact was for e-training ($\beta = 0.618$, $t = 29.79$, $p = 0.000$), followed by e-compensation ($\beta = 0.551$, $t = 24.54$, $p = 0.000$), then e-recruitment ($\beta = 0.484$, $t = 20.48$, $p = 0.003$), and finally the

lowest impact was for e-performance appraisal ($\beta = 0.428$, $t = 18.41$, $p = 0.02$). Thus, all the minor hypotheses of the study were supported based on these results.

DISCUSSION

The results of the study indicate that companies follow sound activation methods in accomplishing tasks related to electronic recruitment, selection, training, compensation, and performance evaluation, and try to empower workers with the highest levels of diverse skills, where the highest was the dimension related to the electronic compensation system in terms of Companies' dependence on software to determine compensation, incentives, and direct and indirect wages for their employees, followed in terms of influencing organizational ambidexterity, the practice related to electronic performance evaluation, then electronic polarization, and finally electronic training. This arrangement in terms of impact may be due to the fact that the compensation system comes as an advanced first stage in promoting and encouraging employees to achieve organizational ambidexterity (exploration and exploitation of opportunities) and these practices are linked to evaluating the performance of employees. As for the practices of polarization and e-training, they are somewhat different stages. Polarization is a stage that precedes employment, which makes the organization unable to absolute judgment on the ingenuity of the worker to be attracted to a high degree, and if so, any employee needs to Rehabilitation and recovery training to adapt with the reality of the new work that he will practice in the company. This finding is consistent with the study of Owais (2015), which dealt with the impact of trustworthy leadership on organizational ambidexterity, and the study of Al-Najjar (2015), which examined the impact of human resource practices on organizational ambidexterity.

RECOMMENDATIONS

Based on the findings of the study, researchers recommend managers and decision makers to strengthen the electronic human resources management system, to raise the level of organizational ambidexterity and improve organizational performance, and to use electronic human resources management applications to improve the organization's performance and organizational prowess to discover and exploit opportunities to enhance innovation in products and ambidexterity, and improve the effectiveness and efficiency. Finally, conducting new studies that seek to understand the impact of electronic human resources management on organizational agility and dynamic capabilities in the researched companies.

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