

# UTAUT2 Model to Investigate the Adoption of E-HRM in the Telecommunication Sector

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**Abstract:** - Because of internal dynamics and external influences, employee adoption of e-HRM in developing countries is minimal. To provide a good working experience for e-HRM users, it is necessary to investigate what variables could be influencing adoption. Consequently, the present research is focused on discovering the reasons why the telecommunications sector in Jordan may or may not use e-HRM systems. The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) was used to generate and define the factors that would be tested experimentally to attain this goal. In this study, we looked at the factors of e-HRM adoption behavior, and we predicted that all of these characteristics had a beneficial impact on the behavior of the telecommunications sector employees. Employees of three private companies which represent the telecommunications sector in Jordan have been given a self-reported questionnaire to complete. SPSS version 25 was used for data analysis. The findings show that e-HRM adoption behavior is favorably influenced by performance expectancy, facilitating conditions, and social influence. In this research, the adoption of e-HRM was not significantly impacted by Effort Expectancy or Hedonic Motivation. Using e-HRM suggests that workers aren't really worried about the degree of conformity and satisfaction it provides. Using the conceptual model, companies may better understand the factors that influence the adoption of e-HRM by their workers, as well as pinpoint areas in which further effort can be made to improve adoption rates.

**Key-Words:** - E-HRM, E-HRM acceptance, E-HRM adoption, Unified Theory of Acceptance and Use of Technology 2 (UTAUT2), Telecommunications Sector, Jordan.

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## 1 Introduction

The use of Electronic Human Resource Management (e-HRM) allows for the management and devolution of a broad variety of Human Resource (HR) activities and information to line managers and workers (Parry, 2011). Information technology (IT) that is used to network and support at least two individuals or groups in carrying out collaborative HR duties is often referred to as e-HRM (Galanaki et al., 2019). E-HRM may also be defined as a term that incorporates all conceivable procedures and contents of HRM integration with IT, with the purpose of producing value inside and via

institutions for focused management and employees (Cheng & Zou, 2021). Effective e-HRM may have an important impact on corporate performance and long-term workplace competitiveness, according to a growing body of studies (Rahman et al., 2018).

Effective characteristics of contemporary e-HRM systems may aid firms in cutting costs and improving the efficiency of HR service delivery while also supporting increased competitiveness and providing strategic capacity and support (Tanya Bondarouk, Parry, et al., 2017a). Businesses may acquire a competitive advantage via the use of e-HRM. Panayotopoulou et al. (2007) suggest that e-HRM may facilitate the transformation of HRM's position into a more

strategic one. E-HRM allows human resource professionals to make a more significant contribution to the company's strategic direction. (Tanya Bondarouk & Ruël, 2013). According to the researchers, HRM is a developing field of study that focuses on all types of HRM material that is exchanged across IT in order to make HRM procedures remarkable, coherent, and effective in order to assist organizations in developing long-term opportunities both within and outside the organization. As a result of fast technological improvement, the literature is overwhelmingly hopeful. (Tanya Bondarouk & Ruël, 2013).

Classical HRM, which occurs as a consequence of the development of e-HRM technology, covered difficulties such as recruiting, finding, developing, paying, keeping, assessing, and motivating personnel inside an organization, all of which could be converted to the virtual world (Ruël et al., 2004a). While there is agreement within academic and practitioner groups on the benefits of e-HRM for HR managers, there is no consensus on how best to implement it (Tanya Bondarouk, Harms, et al., 2017).

Additionally, there is a growing requirement for the e-HRM market value role to be more trustworthy, efficient, and capable of supporting the strategic goals of any business function and the e-HRM market value role (Iqbal et al., 2019). Labrosse (2008) concluded that e-HRM has continuously earned precisely the right amount of satisfaction from HR executives and leaders outside of HR from the point of view of the employees. There is a lot of evidence that e-HRM can improve the performance of HR jobs both conceptually and practically (Talukdar & Ganguly, 2021). More empirical research is needed to better clarify the paradigm of e-HRM adoption and its consequences for organizations. Additionally, there is no precise information accessible on the variables that should be considered while implementing e-HRM. Simultaneously, staffing firms struggle to adapt to new technology, and the outcomes of e-HRM programs are not always as beneficial as the public assumes. Rather than expressing the obvious, e-HRM applications continue to reveal

issues (Rahman et al., 2018), that have been shown to accomplish less than planned (Chapman & Webster, 2003). Human interaction complications, such as managing staff acceptance of new e-HRM programs while introducing new e-HRM programs, further hindered the ability to fully exploit e-HRM capabilities (Wiblen et al., 2010). For example, according to Marler & Parry (2016), the implementation of e-HRM resulted in the substitution of administrative activities with technologically enabled obligations, rather than the freedom of time for human resource professionals. In short, it had little effect on HRM facilities. Additionally, HR professionals have been poor at using technology to initiate and maintain business decisions, as well as at aligning such decisions with strategic objectives. (Luftman et al., 1993). The empirical data presented above demonstrated that, as a result of a lack of awareness of variables that impact e-HRM adoption, the majority of companies are faced with a variety of difficulties.

## 2 Research Problem

E-HRM is intended for use in a networked environment for the purpose of fulfilling responsibilities in collaboration with others (Lin, 2011). HR departments in enterprises must be confronted with a challenging issue when it comes to introducing these modern technologies to their employees. When it comes to effectively implementing e-HRM in enterprises, there is a substantial amount of information that must be taken into consideration (Zhou et al., 2021). The results of E-HRM adoption in the majority of businesses are not always positive, as they have been in the past (Parry, 2011; Ruël et al., 2004b), and they are less than predicted (Tanya Bondarouk, Parry, et al., 2017a; Galanaki et al., 2019). The great majority of studies indicate that HR practitioners have failed to implement e-HRM systems (Panayotopoulou et al., 2007), achieve improved results (Maatman, 2006; Parry, 2014; Parry & Tyson, 2011), and maintain their positions within strategic decision-making, more importantly, the capacity of e-HRM to be fully used was limited by the complexity of human dynamics, such as the need to manage

users' acceptance while accepting digital e-HRM techniques (Tanya Bondarouk & Ruël, 2010; Njoku et al., 2019), which made it more difficult to fully harness the potential of e-HRM. Amin et al. (2008) illustrate how electronic e-HRM interacts directly with enterprise employees. The newly established system's efficiency is then judged by the viewpoints of its users (Strohmeier, 2007). According to empirical studies, a well-adapted e-HRM system for employees results in positive consequences for the organization in terms of productivity (Chandradasa & Priyashantha, 2021).

As a result, the adoption rate was a major challenge that corporations in nations around the world faced when aligning HR operations with the strategic goals of their enterprises (Tanya Bondarouk, Parry, et al., 2017b; Njoku et al., 2019; SHILPA & Gopal, 2011). On the other hand, the clear acceptance of an e-HRM system followed by a sequence of successful implementations resulted in improved performance for the businesses (Panos & Bellou, 2016). The lack of knowledge about variables that impact employee adoption of e-HRM by businesses results in conceptually and empirically problematic outcomes regarding the characteristics that workers seek whenever adopting new e-HRM technologies to execute their jobs. As a result, businesses will be unable to adequately implement e-HRM for their staff unless they are aware of this. This investigation was carried out in order to discover solutions to the current difficult scenario.

According to the Jordanian telecommunications Regulatory Commission (TRC) annual report 2020 (TRC, 2020a), the telecommunications sector is one of the country's fastest-growing industries, and it plays a crucial role in the country's financial system. Based on the information provided by TRC, the number of internet users were 4.63 million in 2015, while in 2020 the users' number has a huge improvement to be 11, 17 million users. The Jordanian population according to Worldometer elaboration of the latest United Nations data is 10,352,788, which means that almost every adult or inhabitant has access and a subscription to the internet using one of the services providers,

considering the firms, companies, and organizations and their employees. Furthermore, they stated in their report that the sector is principally constituted of 6 licensed voice and IP service providers as they name it, which operate in a variety of geographical regions across Jordan. The telecommunications sector, which is one of the most important sectors in the Jordanian economy, contributes significantly to the overall economic growth of the nation in a good and significant way. IT is most used by employees in the telecommunications sector, and all telecommunications operations. As a service sector, the provision of services is unavoidable, and it has a substantial influence on the employment situation. Prospective workers have always been intrigued by technical improvements, and keeping up with technology advancements is critical for survival and progress in today's highly competitive environment.. Everything about a firm, from A to Z, is influenced by IT. IT-related activities must be accepted and applied in order for a company to stay competitive; however, this is only achievable if the company's employees are willing to do so. This research is significant because HRM is critical in the telecommunications sector, where employees are in close contact with consumers. As a result, HRM that is assisted by electronic means is rising in significance (Akman & Mishra, 2010). As a consequence of the above, this study will concentrate on the adoption of e-HRM in the telecommunications sector in a developing country such as Jordan. The key objectives of this study are to investigate the factors that impact e-HRM adoption and to identify the most critical factors that personnel in the telecommunications sector consider when selecting whether or not to use e-HRM in their job and use. The insights gathered will be utilized to more efficiently and effectively deploy specialists, maximizing utilization in order to meet HR department goals that align with the business's strategic objectives and, ultimately, contribute to the company's success.

### 3 Review of the literature

#### 3.1 E-HRM

E-HRM has been defined in a variety of ways in research articles, and Strohmeier & Kabst (2014) is described as the design, development, and deployment of IT to network and aid at least two individual and group actors in performing HR functions collaboratively. E-HRM is a wide term that incorporates all of the integration techniques and their associated content that exist between HRM and IT, all of which are designed to provide value to businesses (T. V. Bondarouk & Ruël, 2009). By using e-HRM to manage HR functions, they will become more exact, quicker, transparent, and capable of being performed in a short period (Fındıklı & Bayarçelik, 2015). The goal of implementing e-HRM in many areas and businesses is to assist human resource departments in providing better service to their clients (both employees and management). As a consequence, HR will be capable of playing a much more strategic role in assisting the company in achieving its goals. The use of e-HRM has helped organizations to reduce their human resource headcount by lowering costs and increasing the overall speed of different activities.

E-HRM is classified into three types: relational, operational, and transformational. The application of E-HRM in the administrative sector is referred to as operational E-HRM. The compensation management (payroll) and human data management functions are included in this. Second, relational E-HRM, which corresponds to more sophisticated HRM operations, is being developed. Here, the emphasis is not on administration, but rather on human resource tools that support essential business operations such as recruiting and choosing new workers; training; performance monitoring and evaluation; and recognition and rewards. An online application or a paper-based strategy (adverts, paper-based application forms, and letters, etc.) can be used to aid in recruitment and selection in relational e-HRM. Finally, there is the Transformational E-HRM, which focuses on the strategic components of HRM. This debate

covers organizational transformation methods, strategic reorientation, strategic competence management, and strategic knowledge management, among other topics. Through transformational e-HRM, an integrated collection of web-based tools may be utilized to develop a workforce that is prepared to respond to the changes in the company's strategic goals.

Descriptive research was performed to conduct the investigation. The researchers employed a qualitative technique that includes an open-ended survey as well as semi-structured interviews to gather information. No one other than personnel in the human resources department was engaged in the selection process; nobody from higher management levels or other divisions was polled. It was discovered that e-HRM is popular because it allows users to save time, have access to personal information, and save money on administrative expenditures. Nagendra & Deshpande (2014) concluded that more intelligent e-HRM systems are necessary to increase the efficiency of HR planning. According to the authors, they aimed to investigate the function of the e-HRM subsystem in training and recruiting as well as workforce planning and the expansion of an organization's personnel. Primary data was gathered from a different department and administrative levels to try to make the sample representative to sample of 50 experienced and new HR managers/executives from three firms in Pune, with the sample size being 50. There is no question that senior HR executives are well aware of the fact that e-HRM has the potential to increase the quality of HRM.

#### 3.2 Adoption of e-HRM

Many researchers describe the adoption of technology in a variety of ways, but in general, it may be characterized as the positive technology acceptance for use in one's working practices by a majority of researchers (Strohmeier, 2007). The distinction between E-HRM and HRIS is that workers do not have access to the HRIS and thus need assistance from the HR Department to do so (Tanya Bondarouk, Harms, et al., 2017; Obeidat, 2012). Employees, on the other hand, may log into their E-HRM systems and carry out

their HR responsibilities on their own. found that developing countries are far behind the times in terms of technical progress and that implementing an E-HRM system is a difficult task. Employee views toward the notion of E-HRM also are negative (Cascio & Boudreau, 2014). Making the switch from a traditional HRIS to an e-HRM system is an expensive but useful strategy that also helps to decrease administrative strain (Tanya Bondarouk, Harms, et al., 2017). Because of a lack of information about the adoption of E-HRM systems, adopting the outcomes of an E-HRM system leads to the generation of negative repercussions. The choice to implement e-HRM varies from one setting and one industry sector to another, and it is influenced by a variety of unknown variables.

### 3.3 Theories of research variables

(Venkatesh et al., 2012) developed an expanded UTAUT model called as UTAUT2 model as a methodical synthesizing of earlier technology adoption studies, based on a review of the existing literature. Technology adoption is influenced by several important dimensions such as performance expectation, effort expectancy, facilitating conditions, social influence, and hedonic motivation, all of which are included in UTAUT2.

The impact of performance expectancy (Masum et al., 2015; Venkatesh & Zhang, 2010; Yusoff & Ramayah, 2021), effort expectancy (Tanya Bondarouk, Harms, et al., 2017; Chao, 2019), facilitating conditions (Venkatesh & Zhang, 2010), social influence (El-Masri & Tarhini, 2017), hedonic motivation (Moorthy et al., 2019; Tak & Panwar, 2017). Figure 1 illustrates the conceptual framework of the research that was constructed in light of the theoretical underpinning and empirical data.

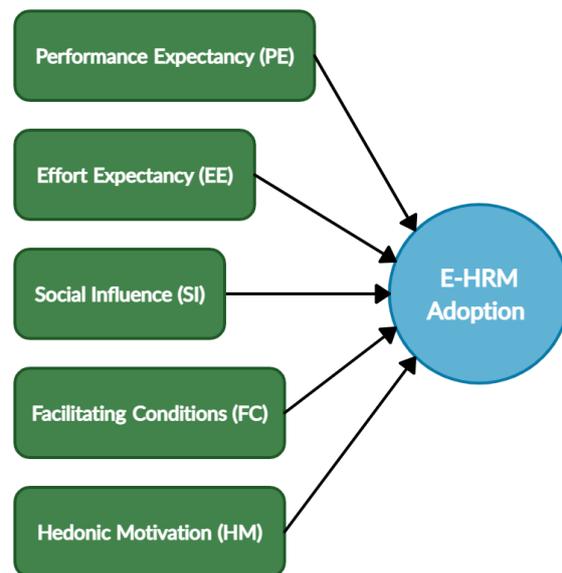


Figure 1: Conceptual Framework  
 Source: Author

### 3.4 The formation of hypotheses

Performance expectation (PE) may be defined as the degree to which the individual feels that following a certain technique will assist him or her in achieving improvements in work performance (Venkatesh et al., 2003). Performance expectancy is an indicator of an organization's intention to employ a new technology (Venkatesh & Zhang, 2016). According to the results of the present study, performance expectation has a statistically significant positive link with e-HRM adoption, and the following hypothesis is proposed were proposed in light of these findings.

H1: Performance Expectancy has a positive and significant influence on the adoption of e-HRM in the Jordanian telecommunications sector.

The effort expectancy (EE) of technology is the degree of ease with which it allows consumers to interact with it (Venkatesh & Zhang, 2016). This is the degree of comfort associated with the use of a software system. Additionally, the extent to which an individual believes he or she can

employ technology without exerting additional effort (Venkatesh et al., 2003). According to several previous research (Zuiderwijk et al., 2019), the Expected effort has a beneficial effect on system acceptance and is a strong predictor of system adoption for e-HRM implementation (Mtebe & Raisamo, 2014). This study makes the premise that if an e-HRM system is simple to use, users will be more likely to use it, and the following assumptions are based on that assumption.

H2: Effort expectancy has a positive and significant influence on the adoption of E-HRM practices in the Jordanian telecommunications sector.

Using the term "social influence," usually means the degree to which a person believes that others must agree with him or her that the new system is something they should utilize (Venkatesh et al., 2003). New technology is more likely to be adopted if it is highly recommended by individuals who are important to the user (Lee, 2005). The acceptance of e-HRM systems, for example, is heavily influenced by social norms, according to many kinds of research (El-Masri & Tarhini, 2017). As a consequence, the following theory was proposed.

H3: Social influence has a positive and significant effect on the adoption of e-HRM in the Jordanian telecommunications sector.

Facilitating conditions (FC) may be defined as the physical surroundings or the environmental elements that influence an individual's decision to engage in a certain activity (Venkatesh et al., 2003). It is a feature of the environment that influences people's perceptions of how difficult or easy it is to complete a job. When the technology and organizational infrastructure necessary to build FCs are accessible, people are motivated to use e-HRM programs to improve their views. FC is often regarded as a critical quality in identifying an individual's technology usage in the realm of information technology. Venkatesh & Zhang (2016), and the majority of research presumes that FC has an impact on the user behaviour of e-HRM. As a result of this debate, the following idea has been proposed:

H4: Facilitating conditions have a positive and significant influence on the adoption of E-HRM by organizations in the Jordanian telecommunications sector.

Hedonic motivation (HM) is defined as the pleasure or satisfaction derived from the application of technological innovation (Venkatesh & Zhang, 2016). It assesses the participants' subjective happiness and enjoyment. Venkatesh found extremely favourable findings when he used this vector in the UTAUT2 model to investigate the function of intrinsic utilities. The findings of the Anouze & Alamro (2020) study demonstrate that HM is critical in influencing customers' adoption behaviour when it comes to technology (Panos & Bellou, 2016). Since utilizing an e-HRM boosts people's happiness, they are more receptive to using it again. Therefore, the following theory is put forth.

H5: Hedonic motivation has a positive and significant influence on the adoption of E-HRM practices in the Jordanian telecommunications sector.

## 4 Methods

A deductive approach has been adopted to investigate the factors that affect the adoption of e-HRM in the Jordanian telecommunication sector. Jordan has three big telecom companies with a total of 4224 employees (TRC, 2020b). An online questionnaire survey was used to conduct this quantitative investigation, which allowed researchers to examine correlations between variables indicated in the model and provide evidence to support or reject the hypotheses. From the current literature, five independent factors were selected and tested. After reviewing the literature and developing the five hypotheses for testing, the conceptual model shown in figure 1 has been produced, and it now serves as an explanatory model.

A simple random sample was adopted to make sure that the sample is representative of the population. Random sampling guarantees that the findings acquired from your sample are

representative of those obtained by measuring the full population (Shadish, 2002). This inquiry was designed for anyone working in the telecommunications sector at all administrative levels, as all employees are forced to use electronic means. As a result, persons were used as the unit of analysis. The personnel in Jordan's telecommunications sector make up the target population for this research. A questionnaire was created with Google Forms because it is the only possible way to collect data in the covid\_19 time. There were 4,5,5,5, and 4 questions used to assess each of the variables (Venkatesh et al., 2003). Questionnaires were disseminated to employees who work in 3 main telecommunications Companies located in Amman province, and 358 replies were obtained. The components PE, EE, FC, SI, HM, and e-HRM adoption were evaluated using a five-point Likert scale, with respondents rating their agreement on a scale ranging from strongly disagree (1) to strongly agree (5). This study used SPSS to analyze the data, and multiple regression was used to assess the hypotheses that were generated.

#### 4.1 Sample size:

The survey has targeted three Jordanian telecommunications sectors that use an E-HRM system. A simple random sampling technique

was adopted to spread the online questionnaire. With a confidence interval of 5% (margin of error) and a confidence level of 95%, and a total population of 4224 (tentative total of all employees of the selected companies), the sample size required is 353. A sample of such population was used, which was based on the Yamane, (1967) equation which reveals that:

$$n = \frac{N}{1 + N(e)^2}$$

where n = sample of study, N = population of study, and e (precision) = 0.05. The sample size

of this research population, where N is 4224 employees are therefore determined to be 353 as the previous equation applied. A total of 368 questionnaires were returned, with 358 being completed and 10 were incomplete. Finally, the completed questionnaires were, in numbers, sufficient for this study and more than enough to represent the population.

#### 4.2 Data Analysis:

Sample composition is shown in Table 1 of the research.

Table 1: Sample Characteristics

Category	Sub. Category	Freq.
Gender	Male	239
	Female	119
Age	18-25 years	98
	26-33 years	118
	34-40 years	67
	41-50 years	43
	50-60 years	32
Education	Diploma	58
	Undergraduate	287
	Postgraduate	13

Source: Author collected data

It was determined that no missing values were present in the data set once the data cleaning screening process had been completed. Cronbach's alpha is a common estimate for determining internal consistency in a statistical sample. An acceptable reliability score is 0.6 or

above on the dependability scale (Bagozzi & Youjae Yi, 1988). As seen in Table 2, all of the

variables in the research had Cronbach's alpha values more than 06, as shown by the numbers in the table.

Table 2: Test for Reliability

Variable	Cronbach's Alpha	No of Items
Performance Expectancy	0.639	4
Effort Expectancy	0.750	5
Social Influence	0.676	5
Facilitating Conditions	0.699	5
Hedonic Motivation	0.634	5
E-HRM adoption behaviour	0.778	4

Source: Author collected data

Table 3: Descriptive Statistics

Variable	Mean	Std. Deviation
Performance Expectancy	3.5855	0.67084
Effort Expectancy	3.4786	0.58996
Social Influence	3.6964	0.59188
Facilitating Conditions	3.7334	0.58511
Hedonic Motivation	3.6854	0.76474
E-HRM adoption behaviour	3.9235	0.45957

Source: Author collected data

Following the descriptive analysis reported in Table 3, the most significant mean value was obtained from e-HRM adoption behaviour, while the least significant mean value was obtained

from effort expectation. Hedonic motivation produced the biggest standard deviation, while e-HRM adoption behaviour produced the lowest standard variance.

Table 4: Regression model summary and ANOVA (a)

R	R Square	Adjusted R Square	Std. An error of the Estimate	Change Statistics		
				R Square Change	F Change	Sig. F Change
.514 <sup>a</sup>	0.254	0.246	0.3994	0.264	13.637	0

Source: Author collected data

According to the results of Table 4, The multiple regression coefficients (R) for the variables components and e-HRM adoption behaviour were 0.514. The R-Square was 0.254 (25.4 percent) and the adjusted R-Square was 0.246, according to research data (24.6 percent ). The collection of variables has a significant level of 0.000.

Table 5: Coefficient

Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Results
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	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>			
Performance Expectancy	0.056	0.038	0.087	1.897	0.007	Supported
Effort Expectancy	0.089	0.054	0.105	1.788	0.388	Not supported
Social Influence	0.142	0.052	0.187	2.899	0.002	Supported
Facilitating Conditions	0.323	0.051	0.435	5.591	0.001	Supported
Hedonic Motivation	0.048	0.03	0.078	1.009	0.341	Not supported

Source: Author collected data

Beta values of all chosen independent factors are positive in Table 5, and it has been shown that these variables have a positive influence on the adoption of e-HRM practices. Particularly significant were the statistical significance values of 0.007, 0.002, and 0.001 for PE, SI, and FC.

## 5 Results and discussion

After the study was completed, the beta coefficient for PE was found to be 0.087, with a positive significant and sign indicating that it supported the hypothesis's direction. The significant level was found to be 0.007. According to the obtained results, H1 was accepted and adopted. In this study, the beta coefficient for EE was 0.105, and the significance value was 0.388. Therefore, it does not meet the required significance threshold and H2 couldn't be supported. According to the results, the SI beta value was 0.187, with 0.002 being the significance level. H3 is accepted as a conclusion due to the positive direction and significance value. The facilitating conditions produced a beta coefficient value and significance of 0.435 with a 0.001 acceptable level of significance. H4 was accepted as a result of this. The hedonic motivation was associated with beta coefficient values of 0.78 and a level of significance of 0.341. It reveals that the hedonic motivation orientation toward adoption is encouraging, but that it does not have a significant impact on the adoption of e-HRM among employees working in the Jordanian telecommunications sector. Then, in this study, H5 was not accepted as a hypothesis.

Employees in the telecommunications sector in Jordan have a positive significant impact on the

adaptation of e-HRM, according to the findings of the research. According to the results, the most significant factors of e-HRM adoption are facilitating conditions, social influence, and performance expectation. Individuals are persuaded to engage in certain activities when they are presented with favourable physical and environmental circumstances. The findings of this study confirmed that the environment has an impact on telecommunications sector employees' perceptions of how easy or difficult it is to complete a task.

As a result, they feel that if they have favourable conditions, such as technology and organizational infrastructure, they will be more likely to embrace and use e-HRM software. Social influence has a significant effect on the adoption of e-HRM by Jordanian telecommunications sector staff. Employees in Jordan's telecommunications sector will evaluate the other ideas and suggestions when determining whether or not to use e-HRM solutions. Employees in the telecommunications sector are anticipated to make extensive use of e-HRM. It demonstrates that telecommunications Staff feel that e-HRM may assist or even enhance job results, and as a result, they prefer to accept and use e-HRM systems in their work. The effect of hedonic motivation and effort expectancy on the adoption of an e-HRM system by Jordanian telecommunications employees is also confirmed in this study, although the effect of hedonic motivation and effort expectancy on the adoption of an e-HRM system by Jordanian telecommunications employees is not considered.

This study contributes both practical and theoretical. According to theory, the conceptual model established in building the context may provide a more complete explanation of the variables that influence workers' e-HRM adoption behaviour at work. The telecommunications sector in Jordan was tackled in this research as recommended by (Venkatesh & Zhang, 2016), as it is one of the fastest-growing sectors with a high percentage of staff retention, and it was done so by choosing a domain that could be verified in a varied setting. This study made use of an expanded UTAUT2 to include more perspectives on telecommunications sector workers' e-HRM adoption behaviour. The goal of this research was to offer patients a clear route forward. The findings will reveal where additional resources should be directed to guarantee the efficacy of the e-HRM implementation process. It also gives the telecommunications sector officials in Jordan an accurate image of their personnel' characteristics in the occasion of implementing an e-HRM device, as well as what employees want to see included in their technological working process, enabling prospective deployments and existing installations to meet the demands and wishes of employees. The outcomes of this study will undoubtedly help and advise on the critical aspects that influence the adoption of e-HRM in the telecommunications sector in developing countries.

The main objective of this research was to identify the important characteristics that affect the adoption of e-HRM management in the Jordanian telecommunications sector using the results of the expanded UTAUT2 study as well as empirical data from the field of technology adoption. The UTASUT2 model was used to determine average expected performance, average expected effort, and facilitation conditions, as well as social influence and delicious stimuli, among others. This research identifies the most important areas for the adoption of e-HRM in the Jordanian telecommunications sector. Three hypotheses were accepted with statistically significant values based on the theories and empirical

evidence, while two hypotheses were not acceptable according to the analysis and statistical significance. According to the findings of this study, the most important positive and influential factors in Jordan's telecommunications industry are performance expectancy, social influence, and facilitating conditions. The most significant factors influencing employees in the Jordanian telecommunications sector's adoption of e-HRM are, in particular, the facilitating conditions available.

## 6 Future research

A list of the study's limitations was recognized, and new research suggestions were given in light of these findings. 358 people responded to the survey using simple random sampling, although different kinds of sampling might be performed to give deeper statistical power and strengthen the study's findings. For example, using a cluster type of sampling. Adoption and use are considered psychological processes, and research utilizing longitudinal empirical investigations would assist to acquire a good grip. Future studies using a longitudinal study design would greatly add to the literature. A restricted number of instruments were utilized to measure variables because of the unique properties of the obtained context data. It is recommended to incorporate additional instruments in the questionnaire in future research to provide more reliable results. According to UTAUT2 theory and empirical data, only five parameters were considered in this investigation which contains aspects that could affect the uptake of E-HRM. Many mediators and moderators could help the findings to be more understandable like experience, knowledge transfer, and system agility. Using some other variables would also help the researchers to go more deeply into some creative support for businesses and knowledge. In the future, researchers will be able to overcome these constraints in their studies.

References:

- [1]. Akman, I., & Mishra, A. (2010). Gender, age and income differences in internet usage among employees in organizations. *Computers in Human Behavior*, 26(3), 482–490.  
<https://doi.org/10.1016/j.chb.2009.12.007>
- [2]. Amin, H., Hamid, M. R. A., Lada, S., & Anis, Z. (2008). The Adoption of Mobile Banking in Malaysia: The Case of Bank Islam Malaysia Berhad (Bimb). *International Journal of Business and Society*, 9(2), 43.  
<http://search.proquest.com/openview/bf0d0d4d36c2861e284344f0ecb888c8/1?pq-origsite=gscholar&cbl=28871>
- [3]. Anouze, A. L. M., & Alamro, A. S. (2020). Factors affecting intention to use e-banking in Jordan. *International Journal of Bank Marketing*, 38(1), 86–112.  
<https://doi.org/10.1108/IJBM-10-2018-0271>
- [4]. Bagozzi, R. P., & Youjae Yi. (1988). On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16(1), 74–94.  
<https://doi.org/10.1177/009207038801600107>
- [5]. Bondarouk, Tanya, Harms, R., & Lepak, D. (2017). Does e-HRM lead to better HRM service? *International Journal of Human Resource Management*, 28(9), 1332–1362.  
<https://doi.org/10.1080/09585192.2015.1118139>
- [6]. Bondarouk, Tanya, Parry, E., & Furtmueller, E. (2017a). Electronic HRM: four decades of research on adoption and consequences. *International Journal of Human Resource Management*, 28(1), 98–131.  
<https://doi.org/10.1080/09585192.2016.1245672>
- [7]. Bondarouk, Tanya, Parry, E., & Furtmueller, E. (2017b). Electronic HRM: four decades of research on adoption and consequences. *International Journal of Human Resource Management*, 28(1), 98–131.  
<https://doi.org/10.1080/09585192.2016.1245672>
- [8]. Bondarouk, Tanya, & Ruël, H. (2013). The strategic value of e-HRM: Results from an exploratory study in a governmental organization. *International Journal of Human Resource Management*, 24(2), 391–414.  
<https://doi.org/10.1080/09585192.2012.675142>
- [9]. Bondarouk, Tanya, & Ruël, H. (2010). The strategic value of e-HRM: Results from an exploratory study in a governmental organization. *CEUR Workshop Proceedings*, 570, 15–32.  
<https://www.tandfonline.com/doi/abs/10.1080/09585192.2012.675142>
- [10]. Bondarouk, T. V., & Ruël, H. J. M. (2009). Electronic human resource management: Challenges in the digital era. In *International Journal of Human Resource Management* (Vol. 20, Issue 3, pp. 505–514).  
<https://doi.org/10.1080/09585190802707235>
- [11]. Cascio, W., & Boudreau, J. (2014). HR strategy: optimizing risks, optimizing rewards. *Journal of Organizational Effectiveness*, 1(1), 77–97.  
<https://doi.org/10.1108/JOEPP-01-2014-0005>
- [12]. Chandradasa, A. H., & Priyashantha, K. G. (2021). *Key Determinants of E-HRM Adoption Behavior*.  
<http://192.248.48.160/handle/iruor/3704>
- [13]. Chao, C. M. (2019). Factors determining the behavioral intention to use mobile learning: An application and extension of the UTAUT model. *Frontiers in Psychology*, 10(JULY).  
<https://doi.org/10.3389/fpsyg.2019.01652>
- [14]. Chapman, D. S., & Webster, J. (2003). The use of technologies in the recruiting, screening, and selection processes for job candidates. In *International Journal of Selection and Assessment* (Vol. 11, Issues 2–3, pp. 113–120). Blackwell Publishing Ltd.  
<https://doi.org/10.1111/1468-2389.00234>
- [15]. Cheng, Y., & Zou, Y. (2021). Whether and when e-HRM improves organizational performance: A meta-analysis. *Academy of Management Proceedings*, 2021(1), 13990.  
<https://doi.org/10.5465/ambpp.2021.133>

- [16]. El-Masri, M., & Tarhini, A. (2017). Factors affecting the adoption of e-learning systems in Qatar and USA: Extending the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2). *Educational Technology Research and Development*, 1–21. <https://doi.org/10.1007/s11423-016-9508-8>
- [17]. Findıklı, M. A., & Bayarçelik, E. beyza. (2015). Exploring the Outcomes of Electronic Human Resource Management (E-HRM)? *Procedia - Social and Behavioral Sciences*, 207, 424–431. <https://doi.org/10.1016/j.sbspro.2015.10.112>
- [18]. Galanaki, E., Lazazzara, A., & Parry, E. (2019). A Cross-National Analysis of E-HRM Configurations: Integrating the Information Technology and HRM Perspectives. In *Lecture Notes in Information Systems and Organisation* (Vol. 27, pp. 261–276). Springer Heidelberg. [https://doi.org/10.1007/978-3-319-90500-6\\_20](https://doi.org/10.1007/978-3-319-90500-6_20)
- [19]. Iqbal, N., Ahmad, M., Raziq, M. M., & Borini, F. M. (2019). Linking e-hrm practices and organizational outcomes: Empirical analysis of line manager's perception. *Revista Brasileira de Gestao de Negocios*, 21(1), 48–69. <https://doi.org/10.7819/rbgn.v21i1.3964>
- [20]. Labrosse, M. (2008). Project Management The Traction of Success. *Wiley Online Library*, 83–88. <https://doi.org/10.1002/ert>
- [21]. Lee, L. B. (2005). Factors influencing email usage: applying the UTAUT model. *Eprints.Usm.My*, May, 1–89. [http://eprints.usm.my/25624/1/FACTORS\\_INFLUENCING\\_EMAIL\\_USAGE\\_APPLYING\\_THE\\_UTAUT\\_MODEL.pdf](http://eprints.usm.my/25624/1/FACTORS_INFLUENCING_EMAIL_USAGE_APPLYING_THE_UTAUT_MODEL.pdf)
- [22]. Lin, L. H. (2011). Electronic human resource management and organizational innovation: The roles of information technology and virtual organizational structure. *International Journal of Human Resource Management*, 22(2), 235–257. <https://doi.org/10.1080/09585192.2011.540149>
- [23]. Luftman, J. N., Lewis, P. R., & Oldach, S. H. (1993). Transforming the enterprise: the alignment of business and information technology strategies. *IBM Systems Journal*, 32(1), 198–221. <https://doi.org/10.1147/sj.321.0198>
- [24]. Maatman, M. (2006). *Measuring the effectiveness of e-HRM: the development of an analytical framework for the measurement of e-HRM and its application within a Dutch Ministry*. December. <http://essay.utwente.nl/583>
- [25]. Marler, J. H., & Parry, E. (2016). Human resource management, strategic involvement and e-HRM technology. *International Journal of Human Resource Management*, 27(19), 2233–2253. <https://doi.org/10.1080/09585192.2015.1091980>
- [26]. Masum, A. K. M., Kabir, M. J., & Chowdhury, M. M. (2015). Determinants that influencing the adoption of E-HRM: An empirical study on Bangladesh. *Asian Social Science*, 11(21), 117–124. <https://doi.org/10.5539/ass.v11n21p117>
- [27]. Moorthy, K., Yee, T. T., T'ing, L. C., & Kumaran, V. V. (2019). Habit and hedonic motivation are the strongest influences in mobile learning behaviours among higher education students in Malaysia. *Australasian Journal of Educational Technology*, 35(4), 174–191. <https://doi.org/10.14742/ajet.4432>
- [28]. Mtebe, J. S., & Raisamo, R. (2014). Investigating students' behavioural intention to adopt and use mobile learning in higher education in East Africa. *International Journal of Education and Development Using Information and Communication Technology (IJEDICT)*, 10(3), 4–20. <https://www.learntechlib.org/p/148476/>
- [29]. Nagendra, A., & Deshpande, M. (2014). Human Resource Information Systems (HRIS) in HR Planning and Development in Mid to Large Sized Organizations. *Procedia - Social and Behavioral Sciences*, 133, 61–67. <https://doi.org/10.1016/j.sbspro.2014.04.169>
- [30]. Njoku, E., Ruël, H., Rowlands, H., Evans, L., & Murdoch, M. (2019). *An Analysis of the Contribution of e-HRM to Sustaining Business Performance* (pp. 21–39). <https://doi.org/10.1108/s1877-636120190000023003>
- [31]. Obeidat, B. Y. (2012). The Relationship between Human Resource Information System (HRIS) Functions and Human Resource Management (HRM) Functionalities. *Journal of Management Research*, 4(4). <https://doi.org/10.5296/jmr.v4i4.2262>

- [32]. Panayotopoulou, L., Vakola, M., & Galanaki, E. (2007). E-HR adoption and the role of HRM: Evidence from Greece. *Personnel Review*, 36(2), 277–294. <https://doi.org/10.1108/00483480710726145>
- [33]. Panos, S., & Bellou, V. (2016). Maximizing e-HRM outcomes: a moderated mediation path. *Management Decision*, 54(5), 1088–1109. <https://doi.org/10.1108/MD-07-2015-0269>
- [34]. Parry, E. (2011). An examination of e-HRM as a means to increase the value of the HR function. *International Journal of Human Resource Management*, 22(5), 1146–1162. <https://doi.org/10.1080/09585192.2011.556791>
- [35]. Parry, E. (2014). *e-HRM: A Catalyst for Changing the HR Function?* (pp. 589–604). [https://doi.org/10.1007/978-3-642-39747-9\\_24](https://doi.org/10.1007/978-3-642-39747-9_24)
- [36]. Parry, E., & Tyson, S. (2011). Desired goals and actual outcomes of e-HRM. *Human Resource Management Journal*, 21(3), 335–354. <https://doi.org/10.1111/j.1748-8583.2010.00149.x>
- [37]. Rahman, M., Mordi, C., & Nwagbara, U. (2018). Factors influencing E-HRM implementation in government organisations: Case studies from Bangladesh. *Journal of Enterprise Information Management*, 31(2), 247–275. <https://doi.org/10.1108/JEIM-05-2017-0066>
- [38]. Ruël, H., Bondarouk, T., & Looise, J. K. (2004a). E-HRM: Innovation or Irritation. An Explorative Empirical Study in Five Large Companies on Web-based HRM. *Management Revu*, 15(3), 364–380. <https://doi.org/10.5771/0935-9915-2004-3-364>
- [39]. Ruël, H., Bondarouk, T., & Looise, J. K. (2004b). E-HRM: Innovation or Irritation. An Explorative Empirical Study in Five Large Companies on Web-based HRM. *Management Revu*, 15(3), 364–380. <https://doi.org/10.5771/0935-9915-2004-3-364>
- [40]. Shadish, W. R. (2002). Revisiting field experimentation: Field notes for the future. In *Psychological Methods* (Vol. 7, Issue 1, pp. 3–18). <https://doi.org/10.1037/1082-989X.7.1.3>
- [41]. SHILPA, V., & Gopal, R. (2011). The Implications of Implementing Electronic-Human Resource Management (E-HRM) Systems in Companies. *Journal of Information Systems and ...*, 2(1), 10–29. <https://search.proquest.com/openview/c25ba470cbaf3bb10e4b06452a0e8b41/1.pdf?pq-origsite=gscholar&cbl=616602>
- [42]. Strohmeier, S. (2007). Research in e-HRM: Review and implications. *Human Resource Management Review*, 17(1), 19–37. <https://doi.org/10.1016/j.hrmmr.2006.11.002>
- [43]. Strohmeier, S., & Kabst, R. (2014). Configurations of e-HRM - an empirical exploration. *Employee Relations*, 36(4), 333–353. <https://doi.org/10.1108/ER-07-2013-0082>
- [44]. Tak, P., & Panwar, S. (2017). Using UTAUT 2 model to predict mobile app based shopping: evidences from India. *Journal of Indian Business Research*, 9(3), 248–264. <https://doi.org/10.1108/JIBR-11-2016-0132>
- [45]. Talukdar, A., & Ganguly, A. (2021). A dark side of e-HRM: mediating role of HR service delivery and HR socialization on HR effectiveness. *International Journal of Manpower*. <https://doi.org/10.1108/IJM-01-2021-0038>
- [46]. TRC. (2020a). *Annual report TRC*. <https://trc.gov.jo/Pages/viewpage?pageID=215>
- [47]. TRC. (2020b). *TELECOMMUNICATIONS REGULATORY AUTHORITY ANNUAL REPORT 2020*. <https://trc.gov.jo/Pages/viewpage?pageID=215>
- [48]. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly: Management Information Systems*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- [49]. Venkatesh, V., Thong, J., & Xu, X. (2012). Consumer acceptance and user of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/10.1111/j.1365-2729.2006.00163.x>
- [50]. Venkatesh, V., & Zhang, X. (2010). Unified theory of acceptance and use of technology: U.S. vs. China. *Journal of Global Information Technology Management*, 13(1), 5–27. <https://doi.org/10.1080/1097198X.2010.108>

56507

- [51]. Venkatesh, V., & Zhang, X. (2016). Unified theory of acceptance and use of technology: U.S. vs. China. *Journal of Global Information Technology Management*, 13(1), 5–27. <https://doi.org/10.1080/1097198X.2010.10856507>
- [52]. Wiblen, S., Grant, D., & Dery, K. (2010). Transitioning to a new HRIS: The reshaping of human resources and information technology talent. *Journal of Electronic Commerce Research*, 11, 251–267. <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1960&context=buspapers>
- [53]. Yamane, T. (1967). Elementary sampling theory. *Taro Yamane*.
- [54]. Yusoff, Y. M., & Ramayah, T. (2021). *The Adoption of e-HRM: A View of a Telecommunications Company in Zimbabwe*. <http://libraryaplos.com/handle/123456789/7950>
- [55]. Zhou, L., Chen, Z., Li, J., Zhang, X., & Tian, F. (2021). The influence of electronic human resource management on employees proactive behavior: based on the job crafting perspective. In *Journal of Management and Organization*. <https://doi.org/10.1017/jmo.2021.33>
- [56]. Zuiderwijk, A., Shinde, R., & Janssen, M. (2019). Investigating the attainment of open government data objectives: is there a mismatch between objectives and results? *International Review of Administrative Sciences*, 85(4), 645–672. <https://doi.org/10.1177/0020852317739115>

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