



The Impact of the Adoption of Human Resource Information Systems on The Employees' Performance Efficiency in the Pharmaceutical Companies in Saudi Arabia

Kainkan Marie

Department of Management, University of Tabuk, Saudi Arabia

Correspondence Author: Kainkan Marie, Department of Management, University of Tabuk, Saudi Arabia
E-mail:- Kmarai@ut.edu.sa; Claude_11104@yahoo.com

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Abstract

This research is undertaken as a response to the accelerating changes, and challenges in the era of knowledge, and the digital economy, where the transition from traditional business to contemporary technical business has become an imperative necessity for all activities of business organizations, especially those related to their human resources. Thus, this empirical study aims to examine the impact of the adoption of Human Resource Information Systems (HRIS) on the employees' performance efficiency in the pharmaceutical companies in Saudi Arabia. Technology Acceptance Model (TAM) is used with its components: Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Intention to Use (IU), and it is extended with additional components: Technical Support (TS) and Employees' Performance Efficiency (EPE) to determine the impact. The results of the current study indicate that (TS) positively affects both (PU) and (PEOU). Moreover, (PU), and (PEOU) positively affect (IU), which in return positively affects (EPE). This indicates that (EPE) can be improved with the usage of (HRIS) in the pharmaceutical companies. It is also evident through the results that having technical support is significant to enhance the efficiency of using the system in the searched companies. This study makes a valuable contribution due to the lack of studies that dealt with the impact of using the human resource information system in the industry sectors in general, and the pharmaceutical sector in particular in the Kingdom of Saudi Arabia. Finally, this study concludes that it is worth to conduct future researches on other sectors, and determine other variables using (TAM) that may shed more light on the importance of using the human resource information system to improve the performance of business organizations, and increase their ability to keep pace with various changes in various fields.

Keywords: Human Resource Information Systems, Technology Acceptance Model, Performance Efficiency, Pharmaceutical Companies, Saudi Arabia

INTRODUCTION

Business organizations have witnessed accelerating changes in the information technology (IT) revolution caused by the accelerating growth of information and communication technology. All types of business organizations have been forced to adopt the new technologies to survive in the global competitive market (Buzkan, 2016). These organizations believe that their success depends inevitably on the performance of their human resources (RH) (Nousta et al, 2017; Al-Mobaideen et al, 2013).

The last two decades have seen the publication of many studies on the implementation and use of HRIS concerning the type of applications that dominate HRIS (Al-Dmour et al, 2016). More so, the economic environment is changing rapidly due to globalization and deregulation of markets, investors, demands, and ever-increasing product-market competition (Siengthai et al, 2016; Bondarouk et al, 2017). These changes led to increasing pressure to support strategic objectives that led to the changes in job content and expectations of HR professionals that made HRIS a flexibly designed software solution for business organizations to help automate and manage their human resources more effectively and efficiently (Mohan, 2015).

Similarly, (Shaji & Kavitha, 2017) represented HRIS as an integration between HRM and IT that has become an essential component for effective managing of the human resources management (HRM) functions and applications. On the other hand, the

importance of using IT in human resources management has increased as an administrative mediator that helps employees accomplish their tasks in an efficient and effective manner as HRIS supports numerous HR practices functioning as workforce planning, staffing compensation programs, salary forecasts, pay budgets and employees' relations (Siegthai et al, 2016).

Analysis indicates that increased human resource information systems (HRIS) usage enabled improved professional performance of employees. Therefore, a large number of business organizations have invested in HRIS in recent years to support their structure and operations (Brandon-Jones & Kauppi, 2018). Similarly, (Kavanagh & Johnson, 2017) declared that HRIS is an efficient tool to gather information and process data necessary to support various planning issues.

In the light of the above, HRIS has become a global HR practice in the developed nations for its strategic contributions (Rahman et al, 2016). It Provides management with strategic data concerning all human resource functions and practices that help in making appropriate strategic decisions (Hayajneh et al, 2012). The introduction of HRIS has greatly modified human resource processes from the automation of routine tasks to the transformation of HR into strategic player in the organization (Bayraktaroglu, 2019; Al-Khowaiter et al, 2014).

This study aims to investigate the factors affecting the adoption of HRIS in the pharmaceutical companies in Saudi Arabia from the actual users' perspectives by using the Technology Acceptance Model (TAM) whereas the study added the Technical Support (TS) and the Employees' Performance Efficiency (EPE) to the model.

Theoretical Framework and Literature Review

Today, technology and information systems have become an integral part of strategic decisions of business organizations in all their activities and sizes, and they represent the cornerstone of possessing competitive advantages for growth, survival and coping with challenges. Many also see it as the best way to reduce the costs of completing transactions, especially those related to human resources and their functions that are the most benefited from the diffusion of information systems (Bondarouk et al, 2009; Pary & Tayson, 2011; Maier et al, 2013), as well as the best guarantee for the flow of information and improving the relationship between management and workers (Chakraborty & Abu Mansor, 2013).

HRIS Concept

Human Resource information systems (HRIS) is one of the most technologies that has been developing with (IT) as a function of human resource management (HRM) as both an operational tool to organize and manage data and a strategic tool to help support the decision making process (Zanudin, 2016; Buzkan, 2016; Kamaludin & Kamaludin, 2017) . (Al-Khowaiter et al, 2014; Kovach et al, 2002; Tarawneh & Tarawneh, 2012; Alshibly, 2011; Perera et al, 2018), addressed HRIS as a systematic approach that integrates systems to gather, store, record, analyze, and control information of an organization's human resources comprising data bases, computer applications and hardware and software necessary to collect, store, manage, deliver, present and manipulate data for human resources functions. In addition, HRIS usage in HR acts as a cost reduction by automating information that allow managers to reach relevant information easily, conduct analysis, make strategic decisions, and communicate effectively with others (Tarawneh & Tarawneh, 2012). Similarly, (Al-Mobaideen et al, 2013) in his study quoted from Hendrickson, 2003 that HRIS is the backbone technology of contemporary human resources that is not limited to the computer hardware and software applications, but has the people, policies, procedures and data required to manage the HR functions.

In sum HRIS is considered as an embodiment of the integration of IT and HR deployed to support all HR operational, relational, and transformational purposes and practices to cope with challenges.

Technology Acceptance Model (TAM)

TAM was first introduced by Davis 1989 based on the theory of reasoned action (TRA) as an intention-based model developed for predicting the user acceptance of computer technology (Al-Khowaiter et al, 2014). It is considered as one of the most influential research model related to undertaking information technology usage. (Sago, 2013), and it has been the most-widely adopted framework in the field of information systems to understand the acceptance and usage of various types of information systems where its validity to predict the users' behavior and attitude toward the information systems has been empirically proven in many previous studies (Bayraktaroglu et al, 2019); (Alharbi & Drew, 2014; Sago, 2013).

TAM proposes two fundamental factors: the perceived usefulness (PU) and perceived ease of use (PEOU) to predict the users' attitude towards the technology usage (SHaji & Kavitha, 2017; Sevim et al, 2017).

(Sago, 2013) quoted from Davis ,1989 that PU is "the prospective users' subjective probability that using a specific application system will increase his or her job performance within an organization" where PEOU is " the degree to which the perspective user expects the target system to be free of effort". Similarly, (Sevim et al, 2017) presented PU as "the degree to which the person believes that using the technology will increase their work performance' ", while PEOU is " a physical and mental concentration effort that occurs when a user is deemed as able to use a given technological system without any effort".

In the present study, employees' performance efficiency (EPE) and intention to continue using the HRIS will be examined based on TAM. Considering the findings of previous studies, a model for the present study was developed by adding the technology support and EPE to the model. Application of the TAM framework spans different areas. In their study, (Al-Mobaideen et al, 2013) aimed to identify the main factors that affect the implementation of HRIS in the context of Aqaba Special Economic Zone Authority (ASEZA) in Jordan. The study findings by adopting TAM revealed on one hand, that there is no statistical significant impact for the PEOU, PU, the individual computer experience, and the top management support on the successful adoption of HRIS. On the other hand, there is a positive relation between IT infrastructure and the successful adoption of HRIS in ASEZA. Al-Khowaiter et al. (2014) study in the Saudi ministries was to examine the adoption of HRIS in a mandatory context from the users' point of view depending on the technology acceptance model. The study concluded that if HRIS is easy to use it will lead to a stronger perception of usefulness and would have a positive impact on the user intention to continue using the system. Moreover, the system quality doesn't have a significant effect on the users' intention to use the system. They found that TAM factors PU and PEOU had a significant effect on both the use of the system, and the user satisfaction. Finally the study concluded that using HRIS enhances the user performance.

In his dissertation, (Zainudin, 2016) under the title of "Human resource information system (HRIS) user acceptance and usage model for public service department of Malaysia" that was conducted based on TAM2 with utilizing two additional constructs namely : efficiency and national culture to examine the effect of HRIS usage on productivity and efficiency and to determine the influence of national culture on the HRIS usage. The findings indicate that performance factors in term of efficiency as well as cultural factors have significant influence on the HRIS adoption in the public service department in Malaysia.

(Wilfried et al, 2016) conducted their study using the technology acceptance model (TAM) and the theory of reasoned action (TRA) to examine the factors adoption of Facebook in the workplace Cameron. They found that the intention to use the social network Facebook is explained by the three factors: (PEOU, (PU), and attitude of users to use the social network.

Further more, (Kamaludin & Kamaludin, 2017) aimed to understand the factors that influence user acceptance of the HRIS at Ipoh Specialist Hospital in Malaysia. Based on TAM, they found that the system usage is influenced by perceived ease of use, information quality, and social influences. On the contrary, perceived usefulness was found to be inversely related to usage. On the other hand, they found that the system usage influence user satisfaction.

The study of (Shaji & Kavitha, 2017) was undertaken by using TAM to determine the extent to which an information system is able to transfer human resource routine activity into an automated activity in various B-Schools across Bangalore. The study aimed to find the rate of correlation between the components of the TAM (PU, PEOU, Attitude towards change, and Behavioral intention towards use). The study found that there is a significant positive change in the perceived ease of use, attitude of user, and the behavioral intention of the user towards using the HRIS.

In a study of the analysis of the extended technology acceptance model in online travel products (Sevim et al, 2017) concluded that the perceived ease of use positively and significantly affected perceived usefulness ($\beta = 0.259, P < 0.01$), and perceived usefulness and attitudes toward online shopping positively and significantly affected intentions ($\beta = 0.410, P < 0.01$), ($\beta = 0.384, P < 0.01$). Moreover, the purpose of (Bayraktaroglu et al, 2019) study was to identify necessary acceptance conditions for an effective adoption of HRIS within the small and medium-sized enterprises in Turkey. Based on the extended TAM, they concluded that there is a positive correlation between acceptance and use of technology variables and user satisfaction where PU revealed a strong significant positive relationship with the user satisfaction. Although the adoption of technology acceptance has been addressed in different sectors as noted from the review of the literature and many other previous relevant studies, there were rare implementation in the healthcare environment. This makes the present study a valuable addition in the field as it is conducted in the pharmaceutical companies in Saudi Arabia where the pharmaceutical sector is considered as a vital contribution in the world economy in general and in Saudi Arabia in particular.

Research Model and Hypotheses

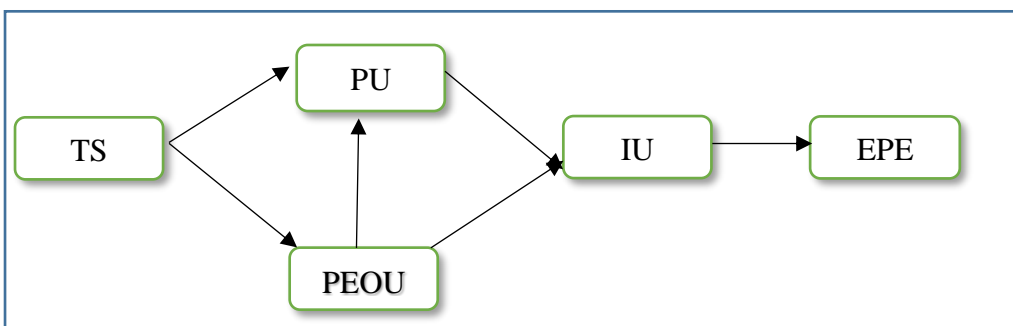


Figure 1.

- H1: Technical Support (TS) positively affects the Perceived Usefulness (PU) of the HRIS in the pharmaceutical companies.
 H2: Technical Support (TS) positively affects the Perceived Ease of Use (PEOU) of the HRIS in the pharmaceutical companies.
 H3: Perceived Ease Of Use (PEOU) positively affects the Perceived Usefulness (PU) in the pharmaceutical companies.
 H4: Perceived Usefulness (PU) positively affects the users' Intention (IU) to Use HRIS in the pharmaceutical companies.
 H5: Perceived Ease of Use positively (PEOU) affects the users' Intention (IU) to Use HRIS in the pharmaceutical companies.
 H6: The users' Intention (IU) to Use HRIS positively affects Employees' Performance Efficiency (EPE) in the pharmaceutical companies.

Research Methodology

In the present study, non-probability convenience samples were used to collect the data where questionnaires were sent to all HRIS users in all pharmaceutical companies in Saudi Arabia. Survey items were drawn from prior studies using Likert five-point scale. The processing of data collection was conducted through both online surveys and field surveys. As for the online survey, an electronic questionnaire was created on Google Drive and distributed to the respondents' emails and received in the same way. While for the field distribution, some pharmaceutical companies were visited and the questionnaire distributed by hand and received within days. A total number of (137) questionnaires were collected, and screened for missing responses yielding a total of (120) responses seemed usable for analysis. The questionnaire used for data collection included two parts: the first part aimed to collect demographic characteristics of the respondents (sex, age, qualification, and experience).

The second part contained a total of twenty five likert-scale questions for testing the study proposed hypotheses. The data was analyzed using (SPSS) software packages. Frequencies and descriptive statistics were used to analyze the respondents' characteristics, and simple regression was used to indicate the relationships among variables. Cronbach Alpha was performed to figure out the internal validity of the items of the tool used were Cronbach Alpha ranges between 0.83 to 0.91 as shown in Table (1) below, and this rate is high enough to be accepted.

Table 1: Cronbach Alpha

Variables	Rate
Perceived usefulness (PU)	0.91
Perceived ease of use (PEOU)	0.83
Technical support (TS)	0.85
Intention to continue use (IU)	0.87
Employees' performance efficiency (EPE)	0.86

Statistical analysis

The data was analyzed using (SPSS) software packages where frequencies and descriptive statistics were used to analyze the respondents' characteristics.

Socio-demographic characteristics

Table (2) presents the demographic characteristics of the respondents in terms of gender, age, qualification, and experience.

Table 2: Socio-demographic characteristics

Variables	Frequency	Percentage	
Gender	Male	67	55.8
	Female	53	44.2
Age	20-30	45	37.5
	31-40	48	40.0
	41-50	27	22.5
Qualification	Diploma	14	11.7
	Bachelor	93	77.5
	Master	13	10.8
Experience	6 months – a year	14	11.7
	1-2 years	20	16.7
	More than 2 years	86	71.7

As to age, Table (2) indicates that the average age of the study sample as 40% of the respondents were 31-40 years old, and 37.5% of them were 20-30 years old. This finding indicates that most of the HRIS users in the pharmaceutical companies are

young, and usually young people have the ability and desire to deal with technology.

Regarding gender, the study found that 55.8% of the respondents were males, and 44.2% were females. This finding reflects the attractive nature of the work sector, and that the employers have no discrimination towards employing females in Saudi Arabia. With regard to the academic qualifications, 77.5% of the respondents were bachelor degree holders, and 10.8% were master degree holders. This finding reflects the vital nature of medicine sector that needs to employ educated employees. Finally, the results show that 71.7% of the respondents have more than two years experience in their companies, and this reflects again the attractive nature of the sector and the employees' satisfaction in the work environment.

Descriptive Statistics of TAM Components

Using (SPSS) software packages, descriptive statistics to indicate the means and standard deviations were used to analyze the respondents' characteristics.

Table (3) shows the respondents answers' means and standard deviations that was performed to test if there are any difference in the respondents' answers.

Table 3: Means and Standard deviation of dimensions items

Variable Items		Mean	Standard Deviation
Perceived usefulness (PU)	I find the system useful in getting things done	4.37	0.685
	Using the system enables me to perform tasks more quickly	4.26	0.655
	Using the system increases my productivity	4.21	0.787
	Using the system improves my performance	4.00	0.756
	The system encourages me to get things done without delay	4.09	0.661
	Total	4.19	0.613
Perceived ease of use (PEOU)	System applications are clear and understandable	3.88	0.471
	It's easy for me to be good at using HRIS	4.00	0.343
	I find it easy to use the HRIS	3.72	0.568
	Learning how to operate HRIS is easy for me	4.17	0.613
	I can describe all the HRIS procedures related to my duties	4.02	0.879
	Total	3.96	0.469
Technical support (TS)	IT personnel do not delay to respond to user requests about the HRIS	3.66	0.804
	The IT personnel behavior instills confidence in the HRIS users	3.58	1.058
	IT personnel have full knowledge of HRIS	3.60	0.824
	IT personnel understand the specific needs of users	3.82	0.823
	IT personnel are cooperative	3.82	0.673
	Total	3.65	0.677
Intention to continue use (IU)	I will continue to use the HRIS permanently	4.16	0.686
	I trust HRIS in my work more than any other method	3.84	0.944
	This system will remain my first choice in the implementation of my duties in the future	4.00	0.820
	I will expand my use of HRIS in the future	4.33	0.823
	Total	4.08	0.701
Employees' performance efficiency (EPE)	HRIS contributes to improving the quality of employees' performance	4.38	0.597
	Using HRIS reduces work errors	4.44	0.591
	HRIS helps to overcome work obstacles	4.39	0.584
	HRIS reduces the cost of working for the company	4.17	0.882
	HRIS helps provide workers with advanced methods of work	4.03	0.859
	HRIS helps in increasing self-learning	4.09	0.745
	Total	4.25	0.560

From Table (3), PU items show that the respondents have strong positive feelings towards the usefulness of HRIS as it reveals from the values of the items' means that range from 4.00 to 4.37, and the mean for PU dimension is 4.19. This means that the respondents believe that the system benefits them in completing their tasks quickly, increases their productivity, leads to improve their performance, and gives them the desire to accomplish these tasks without delay. On the other hand, the values of standard

deviation that range from 0.655 to 0.787 reveal that there is no difference among the respondents' answers toward PU. As to PEOU items, the mean of items ranges from 3.72 to 4.17, and the mean for all the items together is 3.96. Standard deviation for the dimension is 0.469 and ranges from 0.343 to 0.879. This means that the respondents find that the system's applications are understandable and clear, as well as easy to use, and the employee can describe all the system procedures related to his tasks.

For Ts items, the mean of items ranges from 3.58 to 3.82, and the mean for all the items together is 3.65. Standard deviation for the dimension is 0.677 and ranges from 0.673 to 1.058. This result indicates that the respondents have a great belief that the IT staff have full knowledge of the system and understand the needs of the users of the system, as they see them cooperative and they do not hesitate in responding to the requests of users, which increases their confidence in using the system.

Regarding IU items, the mean of items ranges from 3.84 to 4.33, with the mean of means 4.08. Standard deviation for the dimension is 0.701 and ranges from 0.686 to 0.944. This indicates that respondents are determined to continue using the system in the future because they see it as the best option. They are also ready to expand their uses of the system in the future. It appears from the values of the standard deviation that the respondents' answers are close and there are no differences between them.

Finally, the mean of all the EPE items is 4.25, and ranges from 4.03 to 4.44. From this it can be concluded that the respondents believe that their use of HRIS contributed to improving the quality of their performance, reducing work errors, helped them to overcome work obstacles and also contributed to reducing the cost of work in the company. This is in addition to the fact that the system helped provide employees with modern methods, which contributed to increasing their self-learning. It turns out here that the values of the standard deviation indicate a high degree of agreement in the respondents' answers.

Inferential Statistics

To test the hypotheses, simple linear regression was performed with the analysis of variance ANOVA and the coefficients to indicate the relationships among variables.

H1: Technical Support (TS) positively affects the Perceived Usefulness (PU) of the HRIS in the pharmaceutical companies.

Table 4: Results of a simple linear regression analysis of the effect of (TS) on (PU)

Model	Model Summary		ANOVA		Coefficients			
	R	R ² Square	F	Sig.	B	Std. Error	t	Sig.
Technical support (TS)	.234	.055	6.858	.010	.212	.081	2.619	.010

Dependent Variable: Perceived usefulness (PU)

The results indicate the existence of a statistically significant effect of (TS) on (PU), where the correlation coefficient ($R = 0.234$), which indicates the existence of a statistically significant correlation relationship between the independent variable and the dependent variable. It has emerged that the value of the coefficient of determination ($R^2 = 0.055$) indicates that (TS) has interpreted (55%) of the variance in (PU). The value of ($F = 6.858$) at confidence level ($\text{sig} = 0.010$), which confirms the significance of the regression at the level of significance ($\alpha \leq 0.05$). It appears from the table of parameters that the values of (B) for (TS) have reached (0.212) and the value of (t) was (2.619) with a statistical significance (0.010), which indicates that this effect is significant. This means that the increase in (TS) by one unit will lead to an increase in (PU) by (0.212). This finding is consistent with the results of (Perera et al, 2018; Nausta et al, 2017; Bayraktaroglu, 2019).

H2: Technical Support (TS) positively affects the Perceived Ease of Use (PEOU) of the HRIS in the pharmaceutical companies.

Table 5 : Results of a simple linear regression analysis of the effect of (TS) on (PEOU)

Model	Model Summary		ANOVA		Coefficients			
	R	R ² Square	F	Sig.	B	Std. Error	t	Sig.
Technical support (TS)	.350	.123	16.511	.000	.243	.060	4.063	.000

a Dependent Variable: Perceived ease of use (PEOU)

The results indicate the existence of a statistically significant effect of (TS) on (PEOU), where the correlation coefficient ($R = 0.350$), which indicates a statistically significant correlation between the independent and the dependent variable.

It has shown that the value of the coefficient of determination ($R^2 = 0.123$) indicates that (TS) has interpreted 12.3% of the variance in PEOU, and the value of ($F = 16.511$) at a confidence level ($\text{sig} = 0.000$), which confirms the significance of the regression at the level of significance ($\alpha \leq 0.05$).

It appears from the table of parameters that the values of (B) for (TS) have reached (0.243) and that the value of (t) was (4.063) and with a statistical significance of (0.010), which indicates that the effect is significant. This means that the increase in (TS) by one unit will lead to an increase in (PEOU) by (0.243). The results of the current study agree with the findings of previous studies (Nausta et al, 2017; Pererea et al, 2018), while not agreeing with the results of (Jain and Aeron, 2015) which believes that technical support does not affect the ease of the system, and this is explained by the fact that increasing experience in using the system makes users familiar in using it easily.

H3: Perceived Ease Of Use (PEOU) positively affects the Perceived Usefulness (PU) in the pharmaceutical companies.

Table 6 : Results of a simple linear regression analysis of the effect of (PEOU) on (PU)

Model	Model Summary		ANOVA		Coefficients			
	R	R ² Square	F	Sig.	B	Std. Error	t	Sig.
Perceived ease of use (PEOU)	.658	.433	90.192	.000	.860	.091	9.497	.000

a Dependent Variable: Perceived usefulness (PU)

The results reveals a statistically significant effect of (PEOU) on (PU), where the correlation coefficient ($R = 0.433$), which indicates a statistically significant correlation between the independent and the dependent variable.

It has shown that the value of the coefficient of determination ($R^2 = 0.433$) indicates that (PEOU) has interpreted 43.3% of the variance in PU, and the value of ($F = 90.192$) at a confidence level ($\text{sig} = 0.000$), which confirms the significance of the regression at the level of significance ($\alpha \leq 0.05$). It appears from the table of parameters that the values of (B) for (PEOU) have reached (0.860) and that the value of (t) was (9.497) with a statistical significance of (0.000), which indicates that the effect is significant. This means that the increase in (PEOU) by one unit will lead to an increase in (PU) by (0.860). This finding support the findings of (Shaji and Kavitha, 2017; Sevim et al, 2017).

H4: Perceived Usefulness (PU) positively affects the users' Intention (IU) to Use HRIS in the pharmaceutical companies.

Table 7 : Results of a simple linear regression analysis of the effect of (PU) on (IU)

Model	Model Summary		ANOVA		Coefficients			
	R	R ² Square	F	Sig.	B	Std. Error	t	Sig.
Perceived usefulness (PU)(a)	.450	.202	29.951	.000	.514	.094	5.473	.000

a Dependent Variable: users' intention (IU)

The results indicate the existence of a statistically significant effect of (PU) on (IU), where the correlation coefficient ($R = 0.450$), which indicates a statistically significant correlation between the independent and the dependent variable. This result supports the findings of (Wilfried et al, 2016; Kamaludin and Kamaludin, 2017).

It has emerged that the value of the coefficient of determination ($R^2 = 0.202$) indicates that (PU) has interpreted 20.2% of the variance in IU. The value of ($F = 29.951$) at a confidence level ($\text{sig} = 0.000$), which confirms the significance of the regression at the level of significance ($\alpha \leq 0.05$).

It appears from the table of parameters that the values of (B) for (PU) have reached (0.514) and the value of (t) was (5.473) with a statistical significance (0.000), which indicates that this effect is significant. This means that the increase in (PU) by one unit will lead to an increase in (IU) by (0.514).

H5: Perceived Ease of Use positively (PEOU) affects the users' Intention (IU) to Use HRIS in the pharmaceutical companies.

Table 8 : Results of a simple linear regression analysis of the effect of (PEOU) on (IU)

Model	Model Summary		ANOVA		Coefficients			
	R	R ²	F	Sig.	B	Std. Error	t	Sig.
Perceived ease of use (PEOU)	.497	.247	38.704	.000	.742	.119	6.221	.000

Dependent Variable: Intension to continue use (IU)

The results indicate the presence of a statistically significant effect of (PEOU) on (IU), where the correlation coefficient ($R = 0.497$), which indicates a statistically significant correlation between the independent and the dependent variable.

It has shown that the value of the coefficient of determination ($R^2 = 0.247$) indicates that (PEOU) has interpreted 24.7% of the variance in IU, and the value of ($F = 38.704$) at a confidence level ($\text{sig} = 0.000$), which confirms the significance of the regression at the level of significance ($\alpha \leq 0.05$).

It appears from the table of parameters that the values of (B) for (PEOU) have reached (0.742) and that the value of (t) was (6.221) with a statistical significance of (0.000), which indicates that this effect is significant and this means that the increase in (PEOU) by One unit will lead to an increase in (IU) by (0.742). This finding is consistent with the results of (Sevim et al, 2017; Kamaludin and Kamaludin, 2017).

H6: The users' Intention (IU) to Use HRIS positively affects Employees' Performance Efficiency (EPE) in the pharmaceutical companies.

Table 9 : Results of a simple linear regression analysis of the effect of (IU) on (EPE)

Model	Model Summary		ANOVA		Coefficients			
	R	R ² Square	F	Sig.	B	Std. Error	t	Sig.
Intension to continue use (IU)	.591	.350	63.419	.000	.473	.059	7.964	.000

Dependent Variable: Employees' performance efficiency (EPE)

The results indicate the existence of a statistically significant effect of (IU) on (EPE), where the correlation coefficient ($R = 0.591$), which indicates a statistically significant correlation between the independent and the dependent variable.

It has shown that the value of the coefficient of determination ($R^2 = 0.350$) indicates that (IU) has interpreted 35% from the variance in EPE, and the value of ($F = 63.419$) at a confidence level ($\text{sig} = 0.000$), and this confirms the significance of the regression at the level of significance ($\alpha \leq 0.05$). It appears from the table of parameters that the values of (B) for (IU) have reached (0.473) and the value of (t) was (7.964) with a statistical significance of (0.000), which indicates that this effect is significant and this means that the increase in (IU) by one unit will lead to an increase in (EPE) by (0.473). The final results support previous studies (Mohan, 2015; Nousta et al, 2017; Rahman and Jinnah, 2016). This finding is consistent with the results of (Seingthai et al, 2016; Buzkan, 2016; Bayraktagroglu, 2019).

CONCLUSION AND LIMITATIONS

The purpose of this empirical research was to examine the adoption of HRIS in the pharmaceutical companies from the users' perspectives. Factors of the Technology Acceptance Model was used by adding technical support factor to the model. The results have shown that all the hypotheses were supported. Results of the study revealed that the employees' perception of technical support is predictive of their perceived usefulness and perceived ease of use toward using HRIS, Meanwhile, perceived usefulness is a powerful predictor of PEOU. On the other hand, the findings indicated that PU and perceived ease of use play strong positive roles in the employees' adoption of HRIS. The findings also indicated a statistically significant correlation between the intention of the users' to continue using HRIS and their performance efficiency.

Moreover, the findings indicated that (TS) positively affects both (PU) and (PEOU). Additionally, (PU), and (PEOU) positively affect (IU), which in return positively affects (EPE). This indicated that (EPE) can be improved with the adoption of (HRIS) in the pharmaceutical companies. It was also evident through the results that having technical support is significant to enhance the effectiveness of using the system in the searched companies.

Whenever technical support was available to users, this led to their belief of the ease and usefulness of the system, especially in light of the successive developments in the uses of devices and software. Also, the ease of use of the system for users makes them

feel the benefit achieved from its use, which leads to an increase in their enthusiasm and their desire to continue using the system. Through this research results which came consistent with previous researches results, we find that the continued use of the human resources information system plays a vital role in increasing the efficiency of users, which in turn leads to an increase in the ability of business organizations to achieve their goals and increase their competitiveness in an environment of intensive competition in all sectors in general and in the pharmaceutical sector in particular.

This study makes a valuable contribution due to the lack of studies that dealt with the impact of using the human resource information system in the industry sectors in general, and the pharmaceutical sector in particular in the Kingdom of Saudi Arabia. Finally, This study concluded that it is worth to conduct future researches on other sectors, and determine other variables using TAM that may shed more light on the importance of using the human resource information system to improve the performance of business organizations, and increase their ability to keep pace with various changes in various fields.

The limitation of the present study is mainly its dependence on HRIS users' perspectives in a specific sector. Therefore, future research on other sectors that may develop on different levels in the companies may highlight more evidence on TAM applications.

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