International Journal of Data and Network Science 5 (2021) 831–836

Contents lists available at GrowingScience

International Journal of Data and Network Science

homepage: www.GrowingScience.com/ijds

Drivers of e-training intention to use in the private universities in Jordan

Hussam Mohd Al-Shorman[a], Rawan Odeh Khalaf Alshawabkeh[b], Faraj Mazyed Faraj Aldaihani[c], Fatima Lahcen Yachou Aityassine[d], Ayat Mohammad[e] and Sulieman Ibraheem Shelash Al-Hawary[f*]

[a]*Management information system, Faculty of Amman College, AL-Balqa Applied University, Jordan*
[b]*Assistant professor, Business Administration Department, Business School, Al-Ahliyya Amman University, Jordan*
[c]*Assistant professor of Marketing, street 122, home 1, Kuwait*
[d]*Department of Financial and Administrative Sciences, Irbid University College, Al-Balqa'Applied University, Jordan*
[e]*Business and Finance Faculty, the World Islamic Sciences and Education University (WISE). P.O Box 1101, Postal Code 11947, Amman, Jordan*
[f]*Department of Business Administration, School of Business, Al al-Bayt University, P.O.BOX 130040, Mafraq 25113, Jordan*

C H R O N I C L E

Article history:
Received: July 10, 2021
Received in revised format: October 3, 2021
Accepted: October 10, 2021
Available online: December 1, 2021

Keywords:
Drivers
E-training
Intention to Use
Private universities
Jordan

A B S T R A C T

The purpose of this research is to look into the drivers that influence whether or not users will use e-training. The research identified six elements that influence e-training intention to use: perceived ease of use (PEU), computer and internet self-efficacy (CIS), perceived usefulness (PUS), interaction (INT), technical support (TEC), and management support (MGS). Data were collected using a questionnaire distributed to a sample consisting of employees in private universities to test six hypotheses related to these factors. The results showed that four of these factors, i.e., perceived ease of use (PEU), computer and internet self-efficacy (CIS), perceived usefulness (PUS), and technical support (TEC) are key drivers of e-training intention to use. Results are discussed and conclusion is reported.

1. Introduction

Employee training is very important practice in human resource management. It enriches employee knowledge and skills and therefore enhances employee competencies to execute to execute job tasks efficiently and be able to adapt to changes in the nature and environment of work (Al-Hawary & Al-Rasheedy, 2021; AlHamad et al., 2022; Mohammad et al., 2020). According to (Arsovski et al., 2007), employee training is a process that helps an employee acquire knowledge and skills that enhance the ability to do work tasks. Therefore, employee training is positively associated with good job performance (Al-Lozi et al., 2017; Kamal et al., 2016), work motivation (Wolor et al., 2020), and employee resilience, which is known as employee ability to cope with change (Janna et al., 2021). There are many other positive effects of training (Al-Lozi et al., 2018). Umar et al. (2020) found a significant positive effect of e-training on task performance and adaptive performance. For them, define adaptive performance as employee ability to adapt to change in work system such as problem solving. With the advent of modern technology, it has become possible to apply training electronically, as modern technology allows providing training without the limitations of time and place (Al-Hawary & Obiadat, 2021; Altarifi et al., 2015; Allahow et al., 2018; Arsovski et al.,

* Corresponding author.
E-mail address: dr_sliman73@aabu.edu.jo (S. I. S. Al-Hawary)

doi: 10.5267/j.ijdns.2021.x.003

2007). E-training also helps to increase the diversity of training content and increase the number of trainees, and it can be implemented on an ongoing basis, which helps to keep the employee informed of the latest developments job area (Ozturan & Kutlu, 2010). One of the most important models of technology adoption cited in the literature is Technology Acceptance Model (TAM). The model assumes that the behavioral intention of individuals to use technology is subject to attitudes toward use, which in turn subject to external variables (e.g., computer self-efficacy, innovativeness, and learning style), perceived usefulness, and perceived ease of use (Chong et al., 2004; Alkali & Mansor, 2016). Previous research has looked into the characteristics that influence whether or not people will use the training, and the present study aims to uncover more of these factors.

2. Theoretical background and hypotheses building

E-training has been defined as "a process of distance training through the use of the Internet or Intranet, giving individuals the required knowledge about various subjects chosen" (Amara & Atia, 2016 cited in Wolor et al., 2020). It refers to knowledge delivery to employee through electronic means (Eldahamsheh et al., 2021; Tariq et al., 2022; Umar et al., 2020). E-training is carried out using various methods such as electronic brainstorming, virtual applications, electronic chats, visual electronic applications (Tariq et al., 2022; Al-Hawary & Alhajri, 2020; Kamal et al., 2016). In view of its positive effects, e-training has attracted the attention of companies, trainees and researchers. Factors influencing the behavioral intent to use electronics training are examples of factors that have piqued the interest of researchers (Al-Hawary et al., 2020; Al- Quran et al., 2020).

Researchers agree on a variety of criteria that influence the adoption of e-training, including perceived utility, perceived simplicity of use, management support, interaction, and trust (Alkali & Mansor, 2016). User satisfaction and propensity to use e-training are positively influenced by simplicity of use and course content, according to Garg and Sharma (2020). Organizational support, computer/internet self-efficacy, and perceived usefulness all had substantial effects on the intention to use e-training systems, according to Alkali and Mansor (2020). Furthermore, the authors discovered that perceived usefulness had a substantial impact on the effects of organizational support, online self-efficacy, and perceived ease of use on the desire to utilize e-learning systems.

According to Zainab et al. (2017), perceived utility and perceived ease of use influence e-training acceptance, with the latter being influenced by technical support. Perceived utility, interaction, trust, and perceived ease of use were identified as antecedents of e-training use by Alkali and Abu Mansor (2017). The amount to which an individual believes the system is effective in terms of enhancing outcomes such as work performance is referred to as perceived usefulness. The degree to which a person believes the system is simple to use is referred to as perceived ease of use.

Computer and internet self-efficacy describes the extent of the individual's belief in his ability to perform certain tasks, such as training through electronic means. Organizational support is management commitment to procure the required resources and assist the employees to achieve the objective of e-training (Alkali & Mansor, 2020). Trust designates the extent to which the individual feels privacy and security, system reliability and compatibility, when using the electronic system. Interactivity describes the role of the training system in facilitating the process of communication between the trainer and the trainee and with other system tools, regardless of time and place. As well as support, which means the technical and administrative support system for the use of the electronic training system (Alkali & Mansor, 2016; Alkali & Abu Mansor, 2017). Consequently, the following hypotheses were introduced:

H_1: *Perceived ease of use (PEU) significantly predicts e-training intention to use.*

H_2: *Computer and internet self-efficacy (CIS) significantly predicts e-training intention to use.*

H_3: *Perceived usefulness (PUS) significantly predicts e-training intention to use.*

H_4: *Interactivity (INT) significantly predicts e-training intention to use.*

H_5: *Technical support (TEC) significantly predicts e-training intention to use.*

H_6: *Management support (MGS) significantly predicts e-training intention to use.*

3. Research methodology

3.1 Research sample

The sample of this study includes employees working at private universities and training and consultation centers. Data were collected by an online questionnaire administered to a sample consisting of 200 members, and 160 complete questionnaires were used to carry out data analysis.

3.2 Research measures

Drivers of e-training as identified in the literature are measured using items adapted from previous studies. The study uses six drivers, which are: perceived ease of use, computer and internet self-efficacy, perceived usefulness, interactivity, technical support, and management support. These drivers as well as intention to use e-training are measured using 21 items based on the literature (Alkali & Abu Mansor, 2017; Alkali & Mansor, 2016; Alkali & Mansor, 2020). Respondents were asked to assess these variables using a five-point Likert scale in which 1 refers to "strongly disagree" and 5 refers to "strongly agree".

3.3 Research conceptual model

The study seeks to test six hypotheses covering potential effects of e-training drivers on e-training intentions to use. The hypotheses in Fig. 1 link e-training intention to use to perceived ease of use (PEU) (H1), internet and computer self-efficacy (CIS) (H2), perceived usefulness (PUS) (H3), interaction (INT) (H4), tech support (TEC) (H5), and managerial support (MGS) (H6) (ETI).

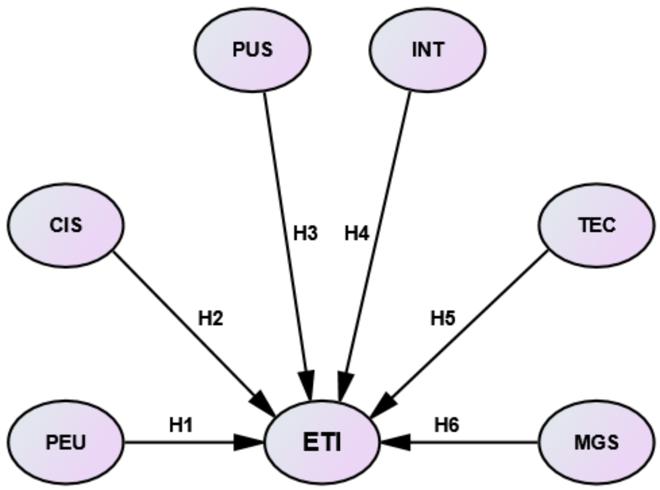

Fig. 1. Research theoretical model

4. Research results

4.1 Common method bias

Common method bias is used to investigate the extent to which the answers of the sample members are accurate. According to MacKenzie and Podsakoff (2012), the members of a sample provide inaccurate answers due to many reasons such as scale length, low self-efficacy, forced participation or unclear items. Jakobsen andJensen (2015) stated that inaccurate answers lead to biased results. Harman's single-factor test is one of the most common ways for dealing with common method bias (Sembada & Kalantari, 2021). This test is used to examine if the majority of the variance between research results is due to one factor or not (Jakobsen &Jensen, 2015). This is assured through calculating the shared variance between the items, which should be less than 50%. For the current study, common method bias is not an issue, as the shared variance equals 33.45%.

4.2 Multicollinearity

Multicollinearity should be tested to find if there are high correlations between the independent variables. One of the most common methods used to test multicollinearity is variance inflation factor (VIF). Values of VIF should be less than 5 and tolerance values should be more than 0.2. For the current study, VIF values were between 1.334 and 1.687, and tolerance values more met the criterion value, therefore, no multicollinearity problem was detected.

4.3 Validity and reliability

Loadings and average variance extracted (AVE) were used to assess validity, while Cronbach's alpha and composite reliability were used to assess reliability (CR). Loadings on factors should be more than 0.50 (Al-Hawary & Hussien, 2017). AVE values should be higher than 0.50 (AlTaweel & Al-Hawary, 2021). Coefficients and CR values should be more than 0.70 (Alshurideh et al., 2017; Mohammad et al., 2020). The results are Table 1 show that the loadings were higher than 0.50 for all variables as ranged from 0.66 to 0.86. As well, AVE values ranged between 0.53 and 0.711. On the other hand, composite reliability and Cronbach's alpha values were greater than 0.70, ranging from 0.771 to 0.881 for composite reliability and from 0.772 to 0.869 for alpha coefficients. These results indicate that validity and reliability as a prerequisite step prior to hypothesis testing were ensured. A next step in data analysis is to test the measurement model in terms of items factorability.

4.4 Measurement model

The measurement model in Figure 1 shows that perceived ease of use (PEU) was loaded on three items (PEU1-PEU3), computer and internet self-efficacy (CIS1-CIS3), perceived usefulness (PUS1-PUS3), interactivity (INT1-INT3), technical support (TEC1-TEC3), and management support (MGS1-MGS3) to e-training intention to use (ETI1-ETI3). In terms of model fit, Hair et al. (2010) indicated that the goodness-of-fit index (GFI) should be more than 0.90. Generally, a value of 1 specifies a perfect fit; therefore, a value of GFI close to 0.90 is acceptable. For the current model GFI value was 0.887. As well, the better RMR (root mean square residual) value is better. A perfect fit is achieved if RMR value is zero. The value of RMR of the current model is 0.241, which is close to zero. Consequently, the measurement model shows that the research variables were loaded on their related indicators and fits the current data, and therefore, the model can be converted to a structural one.

Table 1
Validity and reliability results

Varia-bles	Items	Validity		Reliability		Result
		Factor Loadings	AVE	CR	α	
	PEU1	0.75				
PEU	PEU2	0.73	0.584	0.808	0.781	Accepted
	PEU3	0.81				
	CIS1	0.73				
CIS	CIS2	0.81	0.555	0.788	0.772	Accepted
	CIS3	0.69				
	PUS1	0.86				
PUS	PUS2	0.84	0.711	0.881	0.869	Accepted
	PUS3	0.83				
	INT1	0.78				
INT	INT2	0.74	0.539	0.778	0.764	Accepted
	INT3	0.68				
	TEC1	0.82				
TEC	TEC2	0.73	0.560	0.792	0.786	Accepted
	TEC3	0.69				
	MGS1	0.68				
MGS	MGS2	0.87	0.631	0.835	0.827	Accepted
	MGS3	0.82				
	ETI1	0.75				
ETI	ETI2	0.66	0.530	0.771	0.765	Accepted
	ETI3	0.77				

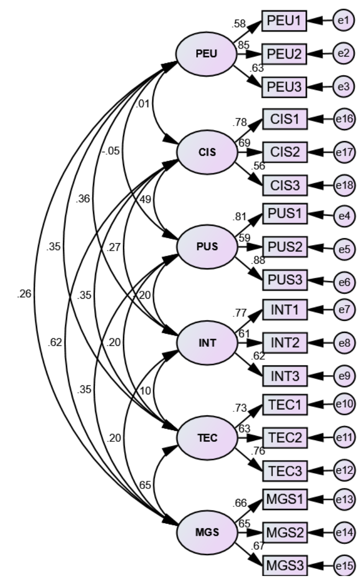

Fig. 2. Research measurement model

4.5 Structural model

Fig. 2 shows a structural model for testing research hypotheses. Perceived ease of use (PEU), internet and computer self-efficacy (CIS), perceived usefulness (PUS), interaction (INT), tech support (TEC), and managerial support (MGS) are all associated to e-training intention to use, according to the model (ETI). Some of these hypotheses were supported and some others were rejected. The results in Table 2"results of hypothesis testing" show that the first hypothesis (H1) "perceived ease of use (PEU) significantly predicts e-training intention to use" is supported (β std. = 0.24, P = 0.000). The second hypothesis (H2) "computer and internet self-efficacy (CIS) significantly predicts e-training intention to use" is accepted (β std. = 0.49, P = 0.000). The third hypothesis (H3) "perceived usefulness (PUS) significantly predicts e-training intention to use" is accepted (β std. = 0.35, P = 0.000). The fourth hypothesis (H4) "interactivity (INT) significantly predicts e-training intention to use" is rejected (β std. = 0.21, P = 0.067). The fifth hypothesis (H5) "technical support (TEC) significantly predicts e-training intention to use" is supported (β std. = 0.35, P = 0.004). Finally, the sixth hypothesis (H6) "management support (MGS) significantly predicts e-training intention to use" is rejected (β std. = 0.10, P = 0.147).

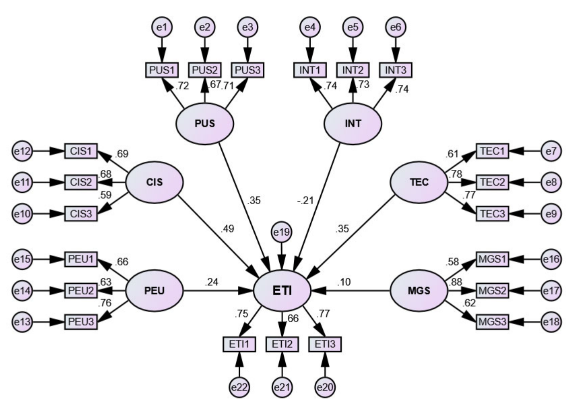

Fig. 3. Research structural model

According to the findings in Fig. 3 and Table 2, perceived ease of use (PEU), internet and computer self-efficacy (CIS), perceived usefulness (PUS), and tech support are the four drivers of e-training intention to use (ETI) (TEC). Interactivity (INT) and managerial support (MGS), on the other hand, had no significant impact on e-training intent to use (ETI). It should be noted that these findings are based on respondents' perceptions of e-training system ease of use, internet and computer self-efficacy, perceived utility of e-training systems, technical support, trainer-trainee interaction, and management support.

Table 2
Results of hypotheses testing

Hypotheses	Paths			β std.	P	Results
H1	PEU	→	ETI	0.24	0.000	Accepted
H2	CIS	→	ETI	0.49	0.000	Accepted
H3	PUS	→	ETI	0.35	0.000	Accepted
H4	INT	→	ETI	0.21	0.067	Rejected
H5	TEC	→	ETI	0.35	0.004	Accepted
H6	MGS	→	ETI	0.10	0.147	Rejected

5. Discussion and conclusion

The study aimed at investigating the drivers of e-training intention to use based on a quantitative research method included data collected by a questionnaire. Six hypotheses were introduced based on a review of the relevant literature. Perceived ease of use (PEU), internet and computer self-efficacy (CIS), perceived usefulness (PUS), interaction (INT), tech assistance (TEC), and management support are six potential determinants of e-training intention to use (MGS). The first hypothesis was confirmed, implying that perceived ease of use (PEU) is strongly linked to the intention to use e-training (ETI). This finding implies that respondents saw complexity of the system as a deterrent to using e-learning systems. The second hypothesis was likewise confirmed, indicating that computer and internet self-efficacy (CIS) had a substantial impact on the intention to use e-training (ETI). As a result, respondents consider their computer and internet self-efficacy sufficient for using e-learning systems.

The third hypothesis was also accepted, that is, perceived usefulness (PUS) is a critical factor for using e-training systems. Users request training that be related to their job tasks to improve their skills and to develop new experiences. The fourth hypothesis was rejected, i.e., interactivity (INT)had no significant effect on e-training intention to use. According to Alkali and Mansor (2016) and Alkali and Abu Mansor (2017), interactivity refers to the role of the training system in facilitating the process of communication between the trainer and the trainee and with other system tools, regardless of time and place. Therefore, interactivity from respondents' perspectives does not facilitate their communication with the trainers.

The fifth hypothesis, which is related to the effect of technical support (TEC) was accepted, which means that respondents consider e-training system technical support to be very essential for e-training success. The sixth hypothesis is rejected, as respondents perceived the management support concerning e-training is not enough, and this might be due to management preference of in-job training or training during work with professional employees, particularly in jobs like accounting or other jobs with practical activities. In short, the study revealed that perceived ease of use (PEU), computer and internet self-efficacy (CIS), perceived usefulness (PUS) and technical support (TEC) are four key drivers of e-training intention to use. These Results are in agreement with Alkali and Mansor (2016), Alkali and Mansor (2020), and Zainab et al. (2017).

Based on these findings, it was determined that increasing e-training intention to use is a function of at least four characteristics, including the extent to which users evaluate the system's ease of use in relation to their computer and internet self-efficacy, as well as the system's usefulness and role in improving users' skills. In this regard, users should receive technical support to ensure proper functionality of the e-training system.

References

Al-Quran, A. Z., Alhalalmeh, M. I., Eldahamsheh, M. M., Mohammad, A. A., Hijjawi, G. S., Almomani, H. M., & Al-Hawary, S. I. (2020). Determinants of the Green Purchase Intention in Jordan: The Moderating Effect of Environmental Concern. *International Journal Supply Chain Management, 9*(5), 366-371.

AlHamad, A., Alshurideh, M., Alomari, K., Kurdi, B., Alzoubi, H., Hamouche, S., & Al-Hawary, S. (2022). The effect of electronic human resources management on organizational health of telecommunications companies in Jordan. *International Journal of Data and Network Science*, *6*(2), 429-438.

Al-Hawary, S. I. S., & Alhajri, T. M. S. (2020). Effect of Electronic Customer Relationship Management on Customers' Electronic Satisfaction of Communication Companies in Kuwait. *Calitatea*, *21*(175), 97-102.

Al-Hawary, S. I. S., & Al-Rasheedy, H. H. (2021). The effect of strategic learning for human resources on dynamic capabilities of airlines companies in Kuwait. *International Journal of Business Information Systems*, *37*(4), 421-441.

Al-Hawary, S. I. S., & Obiadat, A. A. (2021). Does mobile marketing affect customer loyalty in Jordan?. *International Journal of Business Excellence*, *23*(2), 226-250

Al-Hawary, S. I. S., Mohammad, A. S., Al-Syasneh, M. S., Qandah, M. S. F., & Alhajri, T. M. S. (2020). Organisational learning capabilities of the commercial banks in Jordan: do electronic human resources management practices matter?. *International Journal of Learning and Intellectual Capital*, *17*(3), 242-266.

Al-Hawary, S.I.S., & Hussien, A.J. (2016). The impact of electronic banking services on the customers loyalty of commercial banks in Jordan. International Journal of Academic Research in Accounting, Finance and Management Sciences, 7(1), 50-63.

Alkali, A. U., & Abu Mansor, N. N. (2017). Interactivity and trust as antecedents of e-training use intention in Nigeria: A structural equation modelling approach. *Behavioral Sciences, 7*(3), 47.

Alkali, A. U., & Mansor, N. N. A. (2016). Factors Affecting Employees' Intention to Use e-Training in Organisations. *Indian Journal of Innovations and Developments, 5*(11), 1-8.

Alkali, A. U., & Mansor, N. N. A. (2020). E-training integration in organisation: Modeling factors predicting employee's acceptance in adeveloping country. *European Journal of Molecular & Clinical Medicine, 7*(3), 775-798.

Allahow, T. J. A. A., Al-Hawary, S. I. S., & Aldaihani, F. M. F. (2018). Information Technology and Administrative Innovation of the Central Agency for Information Technology in Kuwait. *Global Journal of Management and Business, 18*(11-A), 1–16.

Al-Lozi, M., Almomani, R. Z., & Al-Hawary, S. I. (2017). Impact of Talent Management on Achieving Organizational Excellence in Arab Potash Company in Jordan. *Global Journal of Management and Business Research: A Administration and Management*, *17*(7), 15–25.

Al-Lozi, M., Almomani, R. Z., & Al-Hawary, S. I. (2018). Talent Management strategies as a critical success factor for effectiveness of Human Resources Information Systems in commercial banks working in Jordan. *Global Journal of Management and Business Research: A Administration and Management*, *18*(1), 30–43.

Alshurideh, M. T., Al-Hawary, S., Mohammad, A., Al-Hawary, A., & Al Kurdi, A. (2017). The impact of Islamic bank's service quality perception on Jordanian customer's loyalty. *Journal of Management Research, 9*(2), 139-159.

Altarifi, S., Al-Hawary, S. I. S., & Al Sakkal, M. E. E. (2015). Determinants of E-Shopping and its Effect on Consumer Purchasing Decision in Jordan. *International Journal of Business and Social Science, 6*(1), 81–92.

AlTaweel, I. R., & Al-Hawary, S. I. (2021). The mediating role of innovation capability on the relationship between strategic agility and organizational performance. *Sustainability, 13*(14), 7564.

Arsovski, Z., Stefanovic, M., & Arsovski, S. (2007). Effectiveness of e-training. *International Journal of Qualitative Research, 1*(4), 339-346.

Chong, B., Martinsons, M. G., & Wong, M. (2004). Adoption of e-Learning for work-based training: An exploratory study of the Hong Kong apparel industry. *International journal of innovation and learning, 1*(3), 312-326.

Eldahamsheh, M.M., Almomani, H.M., Bani-Khaled, A.K.,Al-Quran, A.Z., Al-Hawary, S.I.S., & Mohammad, A.A (2021). Factors Affecting Digital Marketing Success in Jordan. *International Journal of Entrepreneurship, 25*(S5), 1-12.

Garg, S., & Sharma, S. (2020). User satisfaction and continuance intention for using e-training: A structural equation model. *Vision, 24*(4), 441-451.

Hair, J.F., Black, W.C., & Babin, B.J. (2010). *Multivariate data analysis: A global perspective.* [7] ed., . N.J.: Prentice Hall.

Jakobsen, M., & Jensen, R. (2015). Common method bias in public management studies. *International Public Management Journal, 18*(1), 3-30.

Janna, N. N., Wolor, C. W., & Suhud, U. (2021). The role of e-training, career development, and employee resilience in increasing employee productivity in Indonesian state-owned enterprises. *Business Excellence and Management, 11*(3), 5-21.

Kamal, K. B., Aghbari, M., & Atteia, M. (2016). E-training & employees' performance a practical study on the ministry of education in the Kingdom of Bahrain. *Journal of Resources Development and Management, 18,* 1-8.

MacKenzie, S. B., & Podsakoff, P. M. (2012). Common method bias in marketing: Causes, mechanisms, and procedural remedies. *Journal of Retailing, 88*(4), 542-555.

Mohammad, A. A. S., Alshura, M., S, K, Al-Hawary, S. I. S., Al-Syasneh, M. S., & Alhajri, T. M. S. (2020). The influence of Internal Marketing Practices on the employees' intention to leave: A study of the private hospitals in Jordan. *International Journal of Advanced Science and Technology, 29*(5), 1174-1189.

Ozturan, M., & Kutlu, B. (2010). Employee satisfaction of corporate e-training programs. *Procedia-Social and Behavioral Sciences, 2*(2), 5561-5565.

Sembada, A. Y., & Kalantari, H. D. (2021). Biting the travel bullet: A motivated reasoning perspective on traveling during a pandemic. *Annals of tourism research.* https://doi.org/10.1016/j.annals.2020.103040.

Tariq, E., Alshurideh, M., Akour, I., & Al-Hawary, S. (2022). The effect of digital marketing capabilities on organizational ambidexterity of the information technology sector. *International Journal of Data and Network Science*, *6*(2), 401-408.

Tariqa, E., Alshuridehb, M., Akourc, I., Al-Hawary, S., & Al, B. (2022). The role of digital marketing, CSR policy and green marketing in brand development. *International Journal of Data and Network Science*, *6*(2), 1-10.

Umar, T. R., Yammama, B. A. and Shaibu, R. O. (2020). The Implications of Adopting and Implementing Electronic Human Resource Management Practices on Job Performance. *Journal of Human Resource Management, 8*(2), 96-108.

Wolor, C. W., Solikhah, S., Fidhyallah, N. F., & Lestari, D. P. (2020). Effectiveness of e-training, e-leadership, and work life balance on employee performance during COVID-19. *The Journal of Asian Finance, Economics, and Business, 7*(10), 443-450.

Zainab, B., Bhatti, M. A., & Pangil, F. (2017). An examination of the factors affecting the adoption of E-training in the Nigerian civil service sector. *Global Business and Organizational Excellence, 36*(4), 33-42.