

Factors Affecting The Adoption Of Cloud Computing In Human Resource Management Among Smes In Jordan

Mohammed Bassam Nassoura

Othman Yeop Abdullah School of Business, Universiti Utara Malaysia UUM, Sintok, Kedah 06010, Malaysia Email :
Mbn8686@gmail.com

Abstract: *This study aims to investigate the effects of technology factors and the intention to adopt Cloud-based Human Resource Management Systems on innovative behavior. This study utilizes the theoretical frameworks of the Theory of Planned Behaviour (TPB) and Diffusion of Innovation (DOI). A sample of 298 employees employed in the manufacturing sector of small and medium-sized enterprises (SMEs) in Jordan was selected for data collection and analysis. The findings obtained from the analysis conducted using Smart Partial Least Squares (SmartPLS) indicate that technology factors have a significant impact on the intention to adopt Cloud-based Human Resource Management Systems (HRMS). This, in turn, influences individuals' innovative behavior. The findings of this study demonstrate the significance of the technological factor in promoting innovative behaviors through the intention to adopt Cloud-based HRMS.*

Keywords: Cloud Computing, Human Resource Management System, Innovative Behaviour, and Technological Factors.

INTRODUCTION

Over the past few years, there has been a notable emergence of transformative advancements in cloud-based Human Resource Management Systems (Nassoura & Hassan, 2021). Over the past few years, there has been a notable emergence of transformative advancements in cloud-based Human Resource Management Systems (HRMS) (Obaid et al., 2022). These advancements have revolutionized the way organizations manage their HR processes and have had a significant impact on overall HR efficiency and effectiveness (Ghaleb, 2021). One of the key advancements is the integration of artificial intelligence (AI) and automation capabilities. Cloud-based HRMS now leverage AI algorithms to automate repetitive and time-consuming tasks, such as resume screening, employee data management, and payroll processing (Obaid et al., 2023). This automation not only reduces the administrative burden on HR teams but also improves accuracy and efficiency, freeing up valuable time for HR professionals to focus on more strategic and value-added activities (Al-Sharafi & Shaalan, 2022). Additionally, cloud-based HRMS have become more customizable and flexible to meet the diverse needs of different organizations. They offer a wide range of modules and functionalities that can be tailored to specific HR processes, such as recruitment, performance management, training, and employee engagement (Ali et al., 2022). Organizations can configure their HRMS according to their unique requirements, ensuring a more personalized and efficient HR experience for employees and managers. Moreover, cloud-based HRMS provide advanced analytics and reporting capabilities (Al-Kabi & Shaalan, 2021). They can generate real-time insights and metrics on various HR parameters, such as employee performance, turnover rates, training needs, and workforce demographics (Ali et al., 2023). This data-driven approach enables HR professionals to make informed decisions, identify trends, and implement strategies to enhance organizational performance and employee satisfaction (Shaalan, 2022). The implementation of corporate citizenship (CC) in the field of Human Resource Management (HRM) was initiated with the objective of achieving innovative solutions that contribute to the long-term sustainability of small and medium-sized enterprises (SMEs). The strategic positioning of data in a central location proves advantageous for small and medium-sized enterprises (SMEs), as cloud technology facilitates streamlined operations and enhances the effectiveness of the human resources (HR) department (RashmiBhadani, 2014). According to Bourini (2021) and Torres et al. (2017), in order to enhance their competitive advantage, small and medium-sized enterprises (SMEs) must pursue growth strategies and introduce innovative services. According to prior studies, it has been argued that fostering the innovative behavior of employees is of utmost importance for small and medium-sized enterprises (SMEs). This is primarily due to the imperative nature of adapting to technological advancements and enhanced competition in the business environment (Yuan & Marquardt, 2015). Despite the increasing interest in the utilization of human resource management (HRM) technologies in diverse business organizations, there exists a scarcity of empirical research conducted on the practical implementation of cloud computing (CC) applications within the HR domain in developing nations (Mjlae, Mohamad, and Suryani 2019). According to AL-Awamleh (2020) and Nassoura and Hassan (2021), there is a lack of innovative capabilities among a significant number of employees in small and medium-sized enterprises (SMEs) in Jordan. Prior research has demonstrated a positive association between the adoption of technology and the manifestation of innovative behaviors (Al-Khattab & Saeed, 2016). According to the findings of Litwin (2011), the integration of new technologies presents a significant opportunity for organizations to enhance their performance in the field of Human Resource Management (HRM). The implementation of a Human Resource Management System (HRMS) as an upgrade to the current traditional HR system has the potential to be a viable and advantageous decision (Yagneshnath & Shankarrao, 2020). The Human Resource Management System (HRMS) has the potential to serve as a valuable resource for employees. Undoubtedly, the benefits of Cloud-based Human Resource Management Systems (HRMS) are perceived as manifold. The benefits encompassed in this list

include potential financial savings, heightened security measures, prompt software enhancements, enhanced mobility, adaptable operations, expandable capacities, improved collaborative efforts, effective quality management, the possibility of disaster recovery, automatic software updates, consistent availability and sustainability, and competitive edge in the market (Avram, 2014; Martins, 2020). This study examined two technology adoption models, namely the Theory of Planned Behavior (TPB) and the Diffusion of Innovation (DOI) framework. The TPB was utilized as the foundational theory, while the DOI framework served as a supplementary theory. Ajzen (1990) introduced the Theory of Planned Behaviour (TPB). Jong and Hartog (2010) as well as Lu and Luh (2013) discovered a positive correlation between innovation outcomes and innovative behavior. According to Wang and Ritchie (2012), it has been observed that individuals tend to exhibit higher levels of intention to engage in innovative behavior when they are given adequate autonomy to plan and regulate their actions. The Diffusion of Innovations (DOI) framework has been widely employed to elucidate the factors influencing the adoption, acceptance, or utilization of novel technologies and innovative systems (Rogers, 1983). Within the context of this competition, an innovation is defined as a novel idea or object that is perceived as new by the "individual or entity of adoption." Additionally, this procedure reduces the level of uncertainty associated with the innovation (AL-Madhagy, 2018). According to the findings of Harfoushi et al. (2016), the technological factor exerted the greatest influence on the intention to adopt Cloud-based computing. Cloud computing plays a crucial role in enabling the training and deployment of AI models (Baali et al., 2023). With the vast computing resources available in the cloud, organizations can accelerate the training process by distributing computations across multiple machines (Algailani et al., 2023). This significantly reduces the time required to train complex AI models (Abualrajal et al., 2022). Additionally, cloud platforms provide a convenient environment for deploying and running AI applications (Al-Sharafi et al., 2021). Organizations can deploy their AI models on virtual machines or containers, taking advantage of the scalability and flexibility offered by the cloud (Ali et al., 2023). This allows for efficient scaling of AI workloads based on demand, ensuring optimal performance and cost-effectiveness (Alrifai et al., 2023). Furthermore, cloud-based AI deployments enable easy integration with other cloud services and APIs, allowing organizations to leverage additional functionalities and data sources to enhance their AI applications (Al-Emran et al., 2022). Overall, cloud computing provides the necessary infrastructure, scalability, and flexibility for organizations to effectively develop, train, and deploy AI models, unlocking the full potential of artificial intelligence in various domains (Ali et al., 2023).

LITERATURE REVIEW

The association between Technological Factors and Cloud-based HRMS

The Diffusion of Innovation theory (DOI) is a widely utilized model in the field of information technology and innovative systems research, as proposed by Rogers (1983). Furthermore, according to the findings of Davis (2015), the factors of ease of use and perceived usefulness have a significant impact on individuals' intention to adopt and utilize technology. According to the proposal put forth by Hung, Shin-Yuan, and Ku et al. (2003), the perceived usefulness of innovations plays a critical role in their adoption. According to Shin (2014), there exists a positive association between ease of use and functional utility in the context of cloud computing. Additionally, ease of use was found to have a significant impact on the intention to adopt and utilize cloud computing services. Due to its constant accessibility, the cloud demonstrates a higher level of reliability. In certain instances, employees have the option to contact the cloud center instead of relying solely on the internal IT personnel (Ankeny, 2011). Cloud storage solutions incorporate data redundancy to ensure continuous availability of files, even in the event of power failures, network downtime, and similar circumstances (Devaki, 2011). The reliability of cloud services holds significant importance for small and medium-sized enterprises (SMEs) (Sultan, 2011). Sultan emphasizes the significance of data portability for end-users, particularly in the event of primary cloud provider failure. Cloud computing provides several distinct benefits when viewed from this standpoint. These advantages encompass flexibility, mobility, and resource sharing, ultimately leading to enhanced employee performance (Harfoushi et al., 2016). The concept of mobility enables employees to conveniently access and engage with their documents from any location across the globe, contingent upon the availability of computer resources and an Internet connection. According to Ibrahim (2014), the utilization of mobility has the potential to yield benefits in terms of both time and cost savings. For instance, the utilization of new technology can lead to cost and time reductions as users are not required to dismantle an expensive infrastructure (Harfoushi et al., 2016). Technological advancements have revolutionized the way employees access information and resources, which has a direct impact on performance. Employees no longer need to rely on manual processes or physical documents to retrieve information (Obaid et al., 2022). Instead, they can access data, documents, and resources instantaneously through digital platforms and databases. This accessibility enables employees to make informed decisions, solve problems more efficiently, and complete tasks in a timely manner (Ghaleb, 2021). Moreover, technology allows for real-time updates and notifications, ensuring employees stay up-to-date with the latest information and changes, further enhancing their performance. Additionally, technology enables employees to leverage online learning platforms and resources, enhancing their knowledge and skills (Obaid et al., 2023). This continuous learning and professional development contribute to improved performance, as employees are equipped with the necessary tools and knowledge to excel in their roles. Overall, technological factors play a crucial role in empowering employees with the information, resources, and skills necessary to perform at their best (Al-Sharafi & Shaalan, 2022).

In this context, the following hypotheses are posited

H1: Perceived Usefulness has a significant impact on the intention to adopt Cloud-based HRMS.

H2: Ease Of Use has a significant impact on the intention to adopt Cloud-based HRMS.

H3: Reliability has a significant impact on the intention to adopt Cloud-based HRMS.

Cloud-based HRMS and Innovation Behaviour

Innovation behavior pertains to the manner in which an employee engages in the implementation of novel concepts, procedures, products, technology, and their contribution to the organizational structure (Yuan & Marquardt, 2015). The cultivation of an employee's capacity for innovative behavior holds significant importance for an organization, as it necessitates the ability to effectively respond to heightened competition and advancements in technology. According to Bourini (2021), the presence of innovation is crucial for the mere survival of organizations, as well as for their ability to remain competitive and achieve long-term success. Prior research has indicated a positive association between innovative behavior and employee task performance (Dorner, Gassmann, & Morhart, 2012; Chan & Rasli, 2014). In accordance with the research conducted by Ying Zhang, Zhang, Forest, and Chen (2018), it is evident that engaging in innovative behaviors can result in favorable outcomes, specifically in terms of enhancing employee job performance. According to Chan and Rasli (2014), the adoption of innovative behavior roles can lead to a more rapid development of an individual's mindset, ultimately resulting in improved employee performance. The cultivation of an employee's capacity for innovative behavior holds significant importance for an organization, as it necessitates the ability to effectively respond to heightened competition and advancements in technology. Prior research has established a significant association between the adoption of technology and the manifestation of innovative behaviors (Al-Khattab & Saeed, 2016). According to the study conducted by Litwin (2011), the integration of new technologies presents a significant opportunity for companies to enhance their performance in the field of Human Resource Management (HRM). Numerous studies have established a correlation between Human Resource Management (HRM) and innovation (Messersmith & Guthrie, 2010; Bos-Nehles et al., 2017). The field of Human Resource Management (HRM) plays a significant role in shaping the attitudes, behaviors, and knowledge of individuals. Extensive research has established a connection between HRM practices and their impact on organizational innovation. However, it is important to note that individual innovative behavior plays a crucial role in enhancing the capacity for innovation within organizations. This is primarily due to the fact that individuals serve as the cornerstone of every innovative endeavor (Nassoura and Hassan, 2021). A cloud-based HRIS offers numerous advantages when it comes to managing employee performance. By providing a centralized and accessible platform, it enables organizations to set and track goals, provide continuous feedback, conduct performance reviews, and facilitate skill development (Ali et al., 2022). The system promotes open communication between managers and employees, fosters a culture of growth and development, and ensures that performance-related data is captured and analyzed effectively. With its data analytics capabilities, organizations can gain valuable insights into performance trends, identify areas for improvement, and make informed decisions to enhance overall employee performance (Al-Kabi & Shaalan, 2021). Additionally, the accessibility and collaboration features of a cloud-based HRIS support remote work arrangements and enable effective teamwork across geographically dispersed teams. In summary, a cloud-based HRIS optimizes performance management processes, enhances employee engagement, and empowers organizations to make data-driven decisions to drive success (Ali et al., 2023).

In this context, the following hypotheses are posited:

H4: Cloud-based HRMS has a significant impact on innovative behaviour.

The Mediating Role of the Intention to adopt Cloud-based HRMS

Previous studies have explored the factors that impact the intention to adopt cloud computing, with a focus on technological aspects such as perceived usefulness, reliability, and perceived ease of use (Raut et al., 2017; Nassoura & Hassan, 2021). Harfoushi et al. (2016) found that the technological factor had the most significant influence on the inclination to embrace cloud-based computing. In line with this research, the present study investigates the factors of perceived usefulness, reliability, and perceived ease of use as determinants that could potentially influence the intention to adopt cloud-based Human Resource Management Systems (HRMS). The study aims to examine how these factors relate to the mediating variable, which is the intention to adopt cloud-based HRMS, and how this, in turn, influences innovation behavior as the dependent variable. By examining these relationships, the study seeks to understand the impact of technological factors on the adoption of cloud-based HRMS and how this adoption influences innovation behavior within organizations. The findings of this study can contribute to our understanding of the drivers and outcomes of adopting cloud-based HRMS, providing insights for organizations looking to enhance their HR processes and foster a culture of innovation. It is worth noting that the specific details and methodologies of the study are not provided in the given context. However, the study's focus on exploring the relationships between technological factors, intention to adopt cloud-based HRMS, and innovation behavior can shed light on the potential benefits and implications of adopting cloud-based HRMS in driving innovation within organizations.

In this context, the following hypotheses are posited:

H5: Cloud-based HRMS significantly mediates the relationship between Perceived Usefulness and innovative behaviour.

H6: Cloud-based HRMS significantly mediates the relationship between Ease of Use and innovative behaviour.

H7: Cloud-based HRMS significantly mediates the relationship between Reliability and innovative behaviour.

METHODOLOGY

The study utilizes a quantitative research methodology, following the approach described by Bougie and Sekaran (2019), in order to achieve the research objectives. The current study utilizes structural equation modeling (SEM-PLS) to analyze the interconnectedness between the constructs described in the conceptual framework, as illustrated in Figure 1. This study aims to examine the potential impact of Technological Factors on the intention to adopt cloud-based HRMS, and its subsequent influence on innovative behavior. Additionally, the study explores the moderating effect of leadership support on this relationship. The present study utilizes structural equation modeling (SEM-PLS) to examine the interrelationships between the constructs outlined in the conceptual model, as depicted in Figure 1.



Figure 1. Conceptual framework of this study.

Population and sample

The unit of analysis employed in this study was at the individual level. The individuals encompassed in this category consist of employees specializing in human resource management as well as IT staff members who possess knowledge and expertise in the field of cloud computing services (Tarhini et al., 2017). The manufacturing sector was chosen from an official database maintained by the Department of Statistics in Jordan. Organizations have the ability to procure and effectively employ novel systems due to the necessity for contemporary approaches in managing their workforce in a professional manner (Saleh, 2014). The present study encompassed organizations operating within the Information and Communication sector, specifically those with a workforce size of fewer than 100 individuals on a full-time basis. According to the Department of Statistics (2018), the Amman Manufacturing sector comprised a total of 9569 medium and small companies. A total of 298 surveys were made accessible for the purpose of analysis.

Partial least square (PLS-SEM)

In order to examine the proposed model, the researchers employed Partial Least Squares Structural Equation Modeling (PLS-SEM) to forecast the construct and interrelationships among constructs, as suggested by Hair et al. (2013) and Reinartz et al. (2009). According to the findings of Hair, Ringle, and Sarstedt (2011), the Partial Least Squares (PLS) approach is considered a versatile tool that is well-suited for constructing a statistical model. Path modeling, also known as structural equation modeling, is a statistical technique that allows for the simultaneous estimation of associations between constructs in a structural model and the relationships among indicators and their corresponding latent constructs in a measurement model (Duarte & Raposo, 2010). This technique is considered powerful in the field of statistics (Tabachnick & Fidel, 2007).

Collinearity analysis

A thorough collinearity evaluation technique was used, which allowed for the identification of a common method bias (CMB) for PLS-SEM (Kock, 2015). According to Kock (2015), the values of the variance inflation factor (VIF) should be less than the threshold of 3.3. As a consequence, the findings demonstrate that the model is devoid of any typical procedure. Variation in which every single build has an inner VIF value that is lower than 3.3.

Assessment of Measurement Model

Formative and reflective measuring models are both included in the category of outer models employed in this research. It is necessary to use a variety of standards and approaches in order to evaluate their level of quality (Chin, 2010; Hair et al., 2011; Hair et al., 2013). This study examined the most critical elements that influence the adoption of cloud computing in HRMS, so the effects of the IV on DV are important and have been examined in this research. Therefore, the stage for assessing the measurement model

consisted of two stages of analysis: 1) An evaluation of the constructs' combined reliability and validity, followed by 2) an examination of the R square and the effect size. Composite reliability (CR) and average variance extracted (AVE) are two important characteristics that should be considered when doing a reliability and validity analysis using the reflective measurement paradigm (Chin, 2010; Hair et al., 2013). These criteria can be found in Table 1 of (Chin, 2010; Hair et al., 2013)..

Table 1

Results of the measurement model for first-order constructs.

	Items	Factor loading	AVE	CR	Cronbach's alpha
UL	UL 1	0.802	0.652	0.885	0.835
	UL 2	0.753			
	UL 3	0.835			
	UL 4	0.838			
EoU	EoU 1	0.873	0.701	0.913	0.853
	EoU 2	0.753			
	EoU 3	0.894			
	EoU 4	0.821			
Re	Re 1	0.893	0.468	0.782	0.807
	Re 2	0.581			
	Re 3	0.592			
	Re 4	0.618			
IA	IA 1	0.762	0.707	0.945	0.932
	IA 2	0.859			
	IA 3	0.865			
	IA 4	0.888			
IN	IN 1	0.767	0.645	0.925	0.908
	IN 2	0.801			
	IN 3	0.866			
	IN 4	0.873			
	IN 5	0.725			
	IN 6	0.818			
	IN 7	0.752			

Conducting studies on indicator reliability and construct reliability is required in order to do a reliability analysis of the reflected measurement model used for SEM. Checking the loading of each indicator on its related latent construct is one of the steps that has to be taken in order to evaluate the reliability of the indicators (Chin, 2010; Hair et al., 2011). In most cases, both the CR and the more prevalent Cronbach's alpha coefficients are taken into account (Bagozzi and Yi, 1988; Gotz et al., 2010; Chin, 2010). According to Hair et al. (2011), PLS-SEM is a better use for CR. Table 1 demonstrates that the CR for all latent variables attained a value greater than 0.782, indicating that the construct had successfully met the criterion for its level of dependability. Also, Table 1 shows that the values of AVE (more than 0.5) indicated that the model had attained adequate convergent validity (Anderson and Gerbing, 1988).

According to Chin (1998) and Hair et al. (2013), the concept of discriminant validity refers to the degree to which one construct is actually unique from the other constructs in the model. In order to verify the discriminant validity, there are two measurements that need to be examined. The AVE of each construct should be higher than the highest squared correlation of the construct with any other LV in the model, and an indicator's loading with its associated LV must be higher than its loading with other LVs (Fornell & Larcker, 1981; Hair et al., 2011; Chin, 2010). In addition, the results may be seen in Table 2. A comparison of the square root of the AVE of each construct with the correlation of the other construct reveals that the discriminant validity is acceptable for all of the constructs, and the square root of the AVE is larger than the correlation between these and other constructs. The measuring model that consisted of the constructs was shown to have extremely acceptable levels of reliability, convergent validity, discriminant validity, and complete collinearity (see Tables 2).

Table 2

The Discriminant Validity Index Summary.

	EoU	RE	IN	IA	UL
EoU	0.837				
RE	0.627	0.833			
IN	0.482	0.554	0.803		
IA	0.754	0.614	0.553	0.842	
UL	0.724	0.679	0.569	0.761	0.808

Assessment of Structural Model

In accordance with the stated objectives of this study, it is recommended that two iterations of evaluation be conducted on the structural model. The assessment of the relationships between the constructs and Innovative Behavior has been conducted. To obtain an initial evaluation of the structural model (inner model), two criteria should be assessed: The R-square (R²) measure of endogenous constructs and the path coefficients have been discussed in previous studies (Hair et al., 2011; Chin, 2010). Significance of the path coefficients is a crucial requirement, while the determination coefficient (R²) exhibits a high level of dependence on the specific research domain. According to Chin (1998), R² values of 0.67, 0.33, and 0.19 are proposed as benchmarks for determining substantial, moderate, and weak levels of association, respectively. Hair et al. (2013) have suggested that an R² value of 0.20 is regarded as high within the domain of consumer behaviour. The current study yielded an R² value of 0.509 for the endogenous construct of Innovative Behaviour. Hence, the observed value was deemed satisfactory. The results presented in Table 3 indicate that all path coefficients were found to be statistically significant. Thus, all hypothetical relationships exhibited statistical significance and received empirical support. In order to assess the effect size (f²), an additional criterion is employed to determine the magnitude of the effects represented by path coefficients, categorizing them as either high, moderate, or low. According to Cohen (1988), the values of 0.02, 0.15, and 0.35 for the variable f² correspond to low, moderate, and high effects, respectively. The effect size is a measure that indicates the magnitude of the impact of a particular independent latent variable (LV) on a dependent LV, as stated by Chin (2010). It is determined by calculating the difference in the R² of the dependent LV when the independent variable is included or excluded from the model. Table 3 presents the findings indicating that the relationships observed in the model exhibit moderate and low effects, ranging from 0.010 to 0.090. The effect size of the relationship between Relative Advantage and Intention to Adopt cloud-system HRMS is found to be the highest.

After establishing the validity of the structural model, the subsequent task involves evaluating the path of the proposed structural model. Table 3 presents the structural model and the corresponding analytical findings. Each pathway corresponds to each hypothesized proposition in this thesis. The examination of the sign, magnitude, and statistical significance of the path coefficient between the latent variable and its dependent variables is utilized to conduct the test for each hypothesis. A positive correlation exists between the magnitude of the path coefficient and the strength of the influence exerted by latent variables on the dependent variable. The majority of the proposed relationships demonstrate statistical significance at a significance level of p<0.01. These entities lack significance. Table 3 presents a comprehensive summary of the outcomes derived from the hypotheses testing pertaining to the examination of relationships and effects, as per the conducted tests.

The results pertaining to the direct effect associations in the present study are presented in Table 3. The determination of the direct effect hypothesis is contingent upon the assessment of the probability value (p-value). The regression coefficient quantifies the impact of an exogenous variable on its corresponding endogenous variable. In relation to this matter, the representation of a causal effect between an exogenous construct and its corresponding endogenous construct is symbolized by a unidirectional arrow (Afthanorhan et al., 2019; Asnawi et al., 2019; Awang, 2015; Awang et al., 2018; Kashif et al., 2015, 2016; Mohd Azli et al., 2017)..

Table 3

Results of path coefficients and hypotheses testing for the model

Hypotheses	Path coefficient	T-value	P-value	F ²	Supported
Ease of Ues → Intention to Adopt cloud- baesd HRMS	0.161	2.986	0.003	0.037	Yes
Reliability → Intention to Adopt cloud- baesd HRMS	0.083	2.033	0.002	0.010	Yes
Uesfulness → Intention to Adopt cloud- baesd HRMS	0.257	4.183	0.000	0.090	Yes
Intention to Adopt cloud-system HRMS → Innovative Behavior	0.172	2.722	0.006	0.033	Yes
Ease of Ues → Intention to Adopt cloud-baesd HRMS → Innovative Behavior	0.027	2.328	0.021	N/A	Yes
Reliability → Intention to Adopt cloud- baesd HRMS → Innovative Behavior	0.014	2.856	0.031	N/A	Yes
Uesfulness → Intention to Adopt cloud-baesd HRMS → Innovative Behavior	0.044	2.355	0.018	N/A	Yes

Discussion

The findings of this research are generally consistent with prior studies pertaining to the utilization and acceptance of technology. The main objective of this study was to propose and evaluate an enhanced model that investigates the factors that could potentially impact the technological aspects of intention to adopt cloud-based HRMS in the manufacturing sector. The findings of our study reveal an intriguing aspect, namely, that a significant number of companies did not acknowledge the potential impact of ease of use and usefulness on their willingness to adopt new technologies. Furthermore, a crucial factor to consider is the reliability of utilizing novel technologies. When organizations contemplate the adoption of new technologies, it is imperative for them to assess whether these innovations will result in the creation of additional job opportunities and confer competitive advantages over other small and medium-sized enterprises (SMEs). Therefore, drawing upon the preceding discourse, the present investigation proposes the following recommendation: Enhancing the applicability of cloud-based Human Resource Management Systems (HRMS) for Small and Medium Enterprises (SMEs) by facilitating the procurement or leasing of software solutions that effectively address the specific requirements of these organizations. Enhancing the reliability and security of cloud-based Human Resource Management Systems (HRMS) for companies and institutions. Undoubtedly, the benefits of Cloud-based HRMS are perceived as manifold. The benefits encompass various aspects, including potential financial savings, enhanced security measures, prompt software upgrades, enhanced mobility, increased flexibility, scalability, improved collaboration, effective quality control, the possibility of disaster recovery, automatic software updates, availability and sustainability, as well as competitive advantages (Salesforce, 2021; IBM, 2021). Furthermore, the psychological capital dimensions (self-efficacy, hope, optimism, and resilience) on liquidity and production efficiency indicators in Gaza Strip Governorates. Financial flexibility and individual productivity indicators showed no significant

effect. Financial performance during 2014-2016 was low. Resilience had a significant effect based on age, while other dimensions (self-efficacy, hope, and optimism) had no significant effect based on controllable variables (age, qualification, experience, and current job). Strategies like job satisfaction, incentives, work environment, and equity improved financial performance in Gaza Strip Governorates (Ismail, 2020). Cloud-based Human Resource Management Systems (HRMS) have the potential to reduce initial expenses for businesses, granting them immediate access to hardware resources without significant upfront investments. This technology also diminishes obstacles to innovation and enables organizations to expand their services as they progress (Avram, 2014; ECPI, 2021; Martins, 2020). The results of the study also demonstrated a significant correlation between the inclination to implement cloud-based HRMS and the display of innovative behavior. The presence of innovative behavior has been found to be linked to human competence, thereby generating advantageous prospects and advantages for both the organization and the individual (Shaan, 2022). It's important to note certain constraints of the study (Baali et al., 2023). The research scope was limited to SMEs in the manufacturing sector in Jordan, and data collection relied on subject matter experts (SMEs) from a specific region in Jordan, which may limit generalizations to other contexts (Algailani et al., 2023). Additionally, the study adopted a cross-sectional survey methodology within a limited timeframe, which could have introduced response bias (Abualrajal et al., 2022). The cultivation of innovative employee behavior has the potential to assist small and medium-sized enterprises (SMEs) in achieving market competitiveness, as well as enhancing overall performance and productivity. The present investigation exhibits certain constraints. The scope of this study was constrained, focusing solely on small and medium-sized enterprises (SMEs) in Jordan and exclusively within the manufacturing sector. Furthermore, an additional constraint of the study was the utilization of subject matter experts (SMEs) solely from a specific region in Jordan for the purpose of data collection. This approach may hinder the ability to make generalizations beyond this particular region. Furthermore, this study employed a cross-sectional survey methodology to gather data within a limited timeframe. The data collected in this study may have been influenced by response bias due to the utilization of a cross-sectional design. The study emphasizes the need for organizations to recognize the potential benefits of cloud-based HRMS, address specific requirements, enhance reliability and security, and foster innovative behavior. Understanding these factors can support successful adoption and utilization of cloud-based HRMS, leading to improved performance and competitiveness in the manufacturing sector.

References

- Aldammagh, Z., Abdeljawad, R., & Obaid, T. (2021). Predicting mobile banking adoption: An integration of TAM and TPB with trust and perceived risk. *Financial Internet Quarterly*, 17(3), 35-46.
- Almasri, A., Obaid, T., Abumandil, M. S., Eneizan, B., Mahmoud, A. Y., & Abu-Naser, S. S. (2022, October). Mining Educational Data to Improve Teachers' Performance. In *International Conference on Information Systems and Intelligent Applications: ICISIA 2022* (pp. 243-255). Cham: Springer International Publishing.
- Alrifai, K., Obaid, T., Ali, A. A. A., Abulehia, A. F., Abualrejal, H. M. E., & Nassoura, M. B. A. R. (2022, October). The Role of Artificial Intelligence in Project Performance in Construction Companies in Palestine. In *International Conference on Information Systems and Intelligent Applications: ICISIA 2022* (pp. 71-82). Cham: Springer International Publishing.
- Eneizan, B., Obaid, T., Abumandil, M. S., Mahmoud, A. Y., Abu-Naser, S. S., Arif, K., & Abulehia, A. F. (2022, October). Acceptance of Mobile Banking in the Era of COVID-19. In *International Conference on Information Systems and Intelligent Applications: ICISIA 2022* (pp. 29-42). Cham: Springer International Publishing.
- Obaid, T., Eneizan, B., Naser, S. S. A., Alsheikh, G., Ali, A. A. A., Abualrejal, H. M. E., & Gazem, N. A. (2022). Factors contributing to an effective e-government adoption in Palestine. In *Advances on Intelligent Informatics and Computing: Health Informatics, Intelligent Systems, Data Science and Smart Computing* (pp. 663-676). Cham: Springer International Publishing.
- Obaid, T. (2021). Predicting Mobile Banking Adoption: An Integration of TAM and TPB with Trust and Perceived Risk. Available at SSRN 3761669.
- Jouda, H., Abu Jarad, A., Obaid, T., Abu Mdallalah, S., & Awaja, A. (2020). Mobile Banking Adoption: Decomposed Theory of Planned Behavior with Perceived Trust. Available at SSRN 3660403.
- Obaid, T., Abdaljawad, R., & Mdallalah, S. A. (2020). Factors Driving E-Learning Adoption In Palestine: An Integration of Technology Acceptance Model And IS Success Model. Available at SSRN 3686490.
- Obaid, T. F., & Eneizan, B. M. (2016). Transfer of training and post-training on job performance in Middle Eastern countries. *Review of Public Administration and Management*, 400(3786), 1-11.
- Obaid, T. F., Zainon, M. S., Eneizan, P. D. B. M., & Wahab, K. A. Transfer Of Training And Post-Training On Job Performance In Middle Eastern Countries.
- Obaid, T. (2018). Determine process training key factors and job performance in higher education sector. *International Journal of Engineering & Technology*, 7(4.15), 477-480.
- Obaid, T. et al. (2022). Factors Contributing to an Effective E- Government Adoption in Palestine. In: Saeed, F., Mohammed, F., Ghaleb, F. (eds) *Advances on Intelligent Informatics and Computing, IRICT 2021. Lecture Notes on Data Engineering and Communications Technologies*, vol 127. Springer, Cham. https://doi.org/10.1007/978-3-030-98741-1_55
- Obaid, T., Eneizan, B., Abumandil, M. S., Mahmoud, A. Y., Abu-Naser, S. S., Ali, A. A. A. (2023). Factors Affecting Students' Adoption of E-Learning Systems During COVID-19 Pandemic: A Structural Equation Modeling Approach. In: Al-Emran, M., Al-Sharafi, M. A., Shaalan, K. (eds) *International Conference on Information Systems and Intelligent Applications. ICISIA 2022. Lecture Notes in Networks and Systems*, vol 550. Springer, Cham. https://doi.org/10.1007/978-3-031-16865-9_19
- Abu Amuna, Y. M., et al. (2017). "Strategic Environmental Scanning: an Approach for Crises Management." *International Journal of Information Technology and Electrical Engineering* 6(3): 28-34.
- Elsharif, A. A. and S. S. Abu-Naser (2019). "An Expert System for Diagnosing Sugarcane Diseases." *International Journal of Academic Engineering Research (IJAER)* 3(3): 19-27.
- Abu Naser, S. S., et al. (2016). "Measuring knowledge management maturity at HEI to enhance performance-an empirical study at Al-Azhar University in Palestine." *International Journal of Commerce and Management Research* 2(5): 55-62.
- Abu-Saqer, M. M. and S. S. Abu-Naser (2019). "Developing an Expert System for Papaya Plant Disease Diagnosis." *International Journal of Academic Engineering Research (IJAER)* 3(4): 14-21.
- Alajrami, M. A. and S. S. Abu-Naser (2018). "Onion Rule Based System for Disorders Diagnosis and Treatment." *International Journal of Academic Pedagogical Research (IJAPR)* 2(8): 1-9.
- Almurshidi, S. H. and S. S. Abu Naser (2017). "Design and Development of Diabetes Intelligent Tutoring System." *EUROPEAN ACADEMIC RESEARCH* 6(9): 8117-8128.
- Nasser, I. M., et al. (2019). "Artificial Neural Network for Diagnose Autism Spectrum Disorder." *International Journal of Academic Information Systems Research (IJAIRS)* 3(2): 27-32.
- Masri, N., et al. (2019). "Survey of Rule-Based Systems." *International Journal of Academic Information Systems Research (IJAIRS)* 3(7): 1-23.
- Al Shobaki, M. J., et al. (2016). "The impact of top management support for strategic planning on crisis management: Case study on UNRWA-Gaza Strip." *International Journal of Academic Research and Development* 1(10): 20-25.
- Hilles, M. M. and S. S. Abu Naser (2017). "Knowledge-based Intelligent Tutoring System for Teaching Mongo Database." *EUROPEAN ACADEMIC RESEARCH* 6(10): 8783-8794.
- AlFierjany, A. A. M., et al. (2018). "The Relationship between Correcting Deviations in Measuring Performance and Achieving the Objectives of Control-The Islamic University as a Model." *International Journal of Engineering and Information Systems (IJEAIS)* 2(1): 74-89.
- Alshawwa, I. A., et al. (2020). "Analyzing Types of Cherry Using Deep Learning." *International Journal of Academic Engineering Research (IJAER)* 4(1): 1-5.
- El Talla, S. A., et al. (2018). "Organizational Structure and its Relation to the Prevailing Pattern of Communication in Palestinian Universities." *International Journal of Engineering and Information Systems (IJEAIS)* 2(5): 22-43.
- Abu Amuna, Y. M., et al. (2017). "Understanding Critical Variables for Customer Relationship Management in Higher Education Institution from Employees Perspective." *International Journal of Information Technology and Electrical Engineering* 6(1): 10-16.
- Al Shobaki, M. J. and S. S. Abu Naser (2016). "Decision support systems and its role in developing the universities strategic management: Islamic university in Gaza as a case study." *International Journal of Advanced Research and Development* 1(10): 33-47.
- Barhoom, A. M. and S. S. Abu-Naser (2018). "Black Pepper Expert System." *International Journal of Academic Information Systems Research (IJAIRS)* 2(8): 9-16.
- Sultan, Y. S. A., et al. (2018). "The Style of Leadership and Its Role in Determining the Pattern of Administrative Communication in Universities-Islamic University of Gaza as a Model" *International Journal of Academic Management Science Research (IJAMSR)* 2(6): 26-42.
- Abu Naser, S. S. and M. J. Al Shobaki (2016). The Impact of Management Requirements and Operations of Computerized Management Information Systems to Improve Performance (Practical Study on the employees of the company of Gaza Electricity Distribution). *First Scientific Conference for Community Development*.
- Abu Naser, S. S. (2006). "Intelligent tutoring system for teaching database to sophomore students in Gaza and its effect on their performance." *Information Technology Journal* 5(5): 916-922.
- Mettleq, A. S. A. and S. S. Abu-Naser (2019). "A Rule Based System for the Diagnosis of Coffee Diseases." *International Journal of Academic Information Systems Research (IJAIRS)* 3(3): 1-8.
- Al Shobaki, M., et al. (2018). "Performance Reality of Administrative Staff in Palestinian Universities." *International Journal of Academic Information Systems Research (IJAIRS)* 2(4): 1-17.
- Salama, A. A., et al. (2018). "The Role of Administrative Procedures and Regulations in Enhancing the Performance of The Educational Institutions-The Islamic University in Gaza is A Model." *International Journal of Academic Multidisciplinary Research (IJAMR)* 2(2): 14-27.
- Taha, A. M., et al. (2022). "Gender Prediction from Retinal Fundus Using Deep Learning." *International Journal of Academic Information Systems Research (IJAIRS)* 6(5): 57-63.
- Abulehia, A. F. S., Khairudin, N., Sharif, M. H. M. (2023). Factors Influencing the Intention to Adopt Big Data in Small Medium Enterprises. In: Al-Emran, M., Al-Sharafi, M. A., Shaalan, K. (eds) *International Conference on Information Systems and Intelligent Applications. ICISIA 2022. Lecture Notes in Networks and Systems*, vol 550. Springer, Cham. https://doi.org/10.1007/978-3-031-16865-9_12
- Nassoura, M. B., & Hassan, S. (2021). Factors Affecting the Adoption of Cloud-Based Human Resource Management on Innovation Behaviour among SMEs in Jordan. *Global Business Management Review (GBMR)*, 13(2), 1-17.
- Nassoura, M. B., & Hassan, S. (2021). IMPACT OF INTENTION TO ADOPT CLOUD-BASED HUMAN RESOURCE MANAGEMENT ON INNOVATION BEHAVIOUR: THE MEDIATING ROLE OF LEADERSHIP SUPPORT IN SMES IN JORDAN. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(09), 1380-1395.
- Nassoura, M. B., & Hassan, S. (2021). Impact of intention to adopt cloud-based human resource management on innovation behaviour: the mediating role of leadership support in smes in Jordan. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(09), 1380-1395.
- Abualrejal, H. M., Aloudah, A. Z., Ali, A. A. A., Saoula, O., AlOrmuza, T. K. (2022). University Parcel Centre Services Quality and Users' Satisfaction in Higher Education Institutions: A Case of Universiti Utara Malaysia. In: Al-Emran, M., Al-Sharafi, M. A., Al-Kabi, M. N., Shaalan, K. (eds) *Proceedings of International Conference on Emerging Technologies and Intelligent Systems. ICETIS 2021. Lecture Notes in Networks and Systems*, vol 322. Springer, Cham. https://doi.org/10.1007/978-3-030-85990-9_70
- Afthanorhan, A., Awang, Z., Salleh, F., Ghazali, P., & Rashid, N. J. M. S. L. (2018). The effect of product quality, medical price and staff skills on patient loyalty via cultural impact in medical tourism. *Management Science Letters*, 8(12), 1421-1424.

- Ahmad, N. (2015). Cloud computing, human resource management (Unpublished master's thesis). De Montfort University, Leicester, United Kingdom. Retrieved from <https://www.researchgate.net/publication/285599136>
- Al Khater, N. R. (2017). A model of a private sector organisation's intention to adopt cloud computing in the Kingdom of Saudi Arabia (Unpublished doctoral dissertation). The University of Southampton. Retrieved from https://eprints.soton.ac.uk/415856/1/Final_Thesis.pdf
- AL-Awamleh, H. K. (2020). The Relationship between Transformational Leadership and Administrative Creativity: The Jordanian Potash Company's Field Study. *International Journal of Management*, 11(4).
- Al-Emran, M., Al-Sharafi, M. A., Al-Kabi, M. N., Shaalan, K. (eds) *Proceedings of International Conference on Emerging Technologies and Intelligent Systems. ICETIS 2021. Lecture Notes in Networks and Systems*, vol 299. Springer, Cham. https://doi.org/10.1007/978-3-030-82616-1_53
- Al-Emran, M., Al-Sharafi, M. A., Shaalan, K. (eds) *International Conference on Information Systems and Intelligent Applications. ICISIA 2022. Lecture Notes in Networks and Systems*, vol 550. Springer, Cham. https://doi.org/10.1007/978-3-031-16865-9_19
- Al-Emran, M., Al-Sharafi, M. A., Shaalan, K. (eds) *International Conference on Information Systems and Intelligent Applications. ICISIA 2022. Lecture Notes in Networks and Systems*, vol 550. Springer, Cham. https://doi.org/10.1007/978-3-031-16865-9_2
- Algaillani, H. M., Al-Nassar, S. I., Mahmoud, A. K., & Ali, A. A. (2023). Synthesis of bio-nanocomposite coating (silver-multi wall carbon nano tubes) by electroless plating method. *Materials Today: Proceedings*. <https://doi.org/10.1016/j.matpr.2023.02.017>
- Ali, A. A., Udin, Z. M., & Abualrejal, H. M. E. (2023). The Impact of Humanitarian Supply Chain on Non-Government Organizations Performance Moderated by Organisation Culture. *International Journal of Sustainable Development and Planning*, 18(3), 763–772. <https://doi.org/10.18280/ijisd.180312>
- Ali, A. A., Udin, Z. M., & Abualrejal, H. M. E. (2023). The Impact of It Alignment and Supply Chain Resilience on the Companies Quality of Performance: The Moderating Role of Trust. *resmilitaris*, 13(2), 156-169.
- Ali, A. A., Abualrejal, H. M. E., Mohamed Udin, Z. B., Shtawi, H. O., Alqudah, A. Z. (2022). The Role of Supply Chain Integration on Project Management Success in Jordanian Engineering Companies. In:
- Ali, A. A., Udin, Z. B. M., Abualrejal, H. M. E. (2023). The Impact of Artificial Intelligence and Supply Chain Resilience on the Companies Supply Chains Performance: The Moderating Role of Supply Chain Dynamism. In:
- Ali, O. M. S. H. (2016). The perceived benefits of cloud computing technology for regional municipal governments and barriers to adoption (Doctoral dissertation, University of Southern Queensland).
- Al-Khattab, M. A. O. & Saeed, M. S. (2016). Understanding the Relationship Between Use of Innovative Technology and Employee Performance: A Case of the Bank of Jordan. *Journal of Resources Development and Management*, 9, 99-106.
- Al-Madhay, T. H. G. (2018). Acceptance model of SaaS cloud computing at northern Malaysian main campus public universities (Doctoral dissertation, Universiti Utara Malaysia).
- Alnidawi, A. A. B., Alshemerv, A. S. H., & Abdulrahman, M. (2017). Competitive advantage based on human capital and its impact on organizational Sustainability: Applied study in Jordanian telecommunications sector. *Journal of Management and Sustainability*, 7(1), 64. doi:10.5539/jms.v7n1p64
- Alnidawi, A. B. & Omran, F. M. (2018). The impact of thinking strategies on the employees' creative behavior in insurance companies in Jordan. *IJER*, 9(6), 10-22.
- Alrifai, K., Obaid, T., Ali, A. A., Abulehia, A. F. S., Abualrejal, H. M. E., Nassoura, M. B. A. R. (2023). The Role of Artificial Intelligence in Project Performance in Construction Companies in Palestine. In: Al-Emran, M., Al-Sharafi, M. A., Shaalan, K. (eds) *International Conference on Information Systems and Intelligent Applications. ICISIA 2022. Lecture Notes in Networks and Systems*, vol 550. Springer, Cham. https://doi.org/10.1007/978-3-031-16865-9_6
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411.
- Aremu, A. Y., Shahzad, A., & Hassan, S. (2018). Determinants of Enterprise Resource Planning adoption on organizations' performance among medium enterprises. *LoeForum*, 14(2)
- Aremu, A. Y., Shahzad, A., & Hassan, S. (2021). Examining factors affecting success of enterprise resource planning system adoption on organisation performance among medium-sized enterprises sector. *International Journal of Business and Systems Research*, 15(2), 200-213.
- Asnawi, A., Awang, Z., Afthanorhan, A., Mohamad, M., & Karim, F. (2019). The influence of hospital image and service quality on patients' satisfaction and loyalty. *Management Science Letters*, 9(6), 911-920
- Avram, M. G. (2014). Advantages and challenges of adopting cloud computing from an enterprise perspective. *Procedia Technology*, 12, 529 – 534.
- Azim, M. T., L. Fan, M. A. Uddin, M. M. Abdul Kader Jilani and S. Begum (2019). Linking transformational leadership with employees' engagement in the creative process. *Management Research Review*, 42(7), 837–858.
- Baali, M., Havashi, T., Mubarak, H., Maiti, S., Watanabe, S., El-Hajj, W., & Ali, A. (2023). Unsupervised Data Selection for TTS: Using Arabic Broadcast News as a Case Study. <https://arxiv.org/abs/2301.09099v2>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16(1), 74-94.
- Bos-Nehles, A., Renkema, M., & Janssen, M. (2017). HRM and innovative work behaviour: a systematic literature review. *Personnel Review*, 46(7), 1228–1253. doi:10.1108/pr-09-2016-0257
- Bourini, I. (2021). The Effect of Supportive Leader on Employees' absorptive Capacity Towards Innovative Behaviour. *International Journal of Innovation Management*, 25(01), 2150008.
- Carter, L., & Bélanger, F. (2005). The utilization of e-government services: citizen trust, innovation and acceptance factors. *Information systems journal*, 15(1), 5-25.
- Celaya, T. A. (2015). Cloud-based computing and human resource management performance: a Delphi study (Unpublished doctoral dissertation). The University of Phoenix. Retrieved from <https://pqdopen.proquest.com/doc/1761630245.html?FMT=AI>
- Chang, Y.-Y., & Shih, H.-Y. (2018). Work curiosity: A new lens for understanding employee creativity. *Human Resource Management Review*, 29(4). doi:10.1016/j.hrmr.2018.10.005
- Chin, W. W. (1998). The partial least squares approach for structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research. Methodology for business and management*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Chin, W. W. (2010). How to Write Up and Report PLS Analyses. In V. E. Vinzi, W. W. Chin, J. Henseler and H. Wang (Eds.), *Handbook of Partial Least Squares*. London, New York: Springer.
- Dörner, N., Gassmann, O., & Morhart, F. (2012). innovative work behavior: the roles of employee expectations and effects on job performance (Doctoral dissertation).
- Duarte, P. A. O., & Raposo, M. L. B. (2010). A PLS model to study brand preference: An application to the mobile phone market. In *Handbook of partial least squares* (pp. 449-485). Berlin, Heidelberg: Springer, Berlin, Heidelberg.
- Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*, 19(4), 440-452.
- Gangwar, H., Date, H., & Ramaswamy, R. (2015). Understanding determinants of cloud computing adoption using an integrated TAM-TOE model. *Journal of Enterprise Information Management*, 28(1), 107–130. doi:10.1108/jeim-08-2013-0065
- Gill, A. A., Shahzad, A., & Ramalu, S. S. (2018). Examine the influence of enterprise resource planning quality dimensions on organizational performance mediated through business process change capability. *Global Business Management Review*, 10(2), 41-57.
- Gotz, O., Liehr-Gobbers, K., and Krafft, M. (2010). Evaluation of Structural Equation Models Using the Partial Least Squares (PLS) Approach. In V. E. Vinzi, W. W. Chin, J. Henseler and H. Wang (Eds.), *Handbook of Partial Least Squares*. London, New York.
- Hair, J. F., Ringle, C. M., and Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Hair, J. F., Sarstedt, M., Ringle, C. M., and Mena, J. A. (2012). An Assessment of the Use of Partial Least Squares Structural Equation Modeling in Marketing Research. *Journal of the Academy of Marketing Science*, 40, 414-433.
- Hair, Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2013). *A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE Publications, Incorporated.
- Harfoushi, O., Akhorrshaidhe, A. H., Aqaad, N., Al Janini, M., Obiedat, R. (2016). Factors affecting the intention of adopting cloud computing in Jordanian hospitals. *Communications and Network*, 8(2), 88-101. <http://dx.doi.org/10.4236/cn.2016.82010>
- Hossain, M. D., Moon, J., Kim, J. K., & Choe, Y. C. (2011). Impacts of organizational assimilation of e-government systems on business value creation: A structuration theory approach. *Electronic Commerce Research and Applications*, 10(5), 576–594. doi:10.1016/j.elerap.2010.12.003
- Inmor, S., & Suwannahong, R. (2017). The acceptance of cloud computing for IT workers in Thailand. *Procedia Computer Science*, 121, 1039-1046.
- Ismail, I. (2020). The Effect of Psychological Capital on the Financial Performance of Local Governorates in Gaza Strip. *Journal of Economics and Sustainable Development*, 11(24), 101-109. DOI: 10.7176/JEP/11-24-09
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (ijec)*, 11(4), 1-10.
- Kock, N., & Lynn, G. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for information Systems*, 13(7).
- Kong, H. T. (2018). Information system adoption among small medium enterprises in the Malaysian printing industry (Unpublished doctoral dissertation). Universiti Utara Malaysia.

- Krejcie, R.V., & Morgan, D.W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610
- Litwin, A. S. (2011). Technological change at work: The impact of employee involvement on the effectiveness of health information technology. *ILR Review*, 64(5), 863-888
- Low, C., Chen, Y., & Wu, M. (2011). Understanding the determinants of cloud computing adoption. *Industrial Management & Data Systems*, 111(7), 1006-1023. doi:10.1108/02635571111161262
- Martins, A. (2020, November 6). Cloud computing: A small business guide. *Business News Daily*. Retrieved January 27, 2021, from <https://www.businessnewsdaily.com/4427-cloud-computing-small-business.html>
- Messersmith, J. G., & Guthrie, J. P. (2010). High performance work systems in emergent organizations: Implications for firm performance. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, 49(2), 241-264
- Mjlae, S. A., Mohamad, Z., & Survani, W. (2019). Impact factors of IT flexibility within cloud technology on various aspects of IT effectiveness. *International Journal of Advanced Computer Science and Applications*, 10(4), 479-489. doi: 10.14569/IJACSA.2019.0100460
- Momani, A. M., & Jamous, M. (2017). The evolution of technology acceptance theories. *International Journal of Contemporary Computer Research (IJCCR)*, 1(1), 51-58.
- Oliveira, T., Thomas, M., & Esradanal, M. (2014). Assessing the determinants of cloud computing adoption: An analysis of the manufacturing and services sectors. *Information & Management*, 51(5), 497-510. doi:10.1016/j.im.2014.03.006
- RashmiBhadani. (2014, July 1). A new dimension in HRM: Cloud computing. *International Journal of Business and Management Invention*, 3(7), 13-15. Retrieved from [http://www.ijbmi.org/papers/Vol\(3\)7/C037013015.pdf](http://www.ijbmi.org/papers/Vol(3)7/C037013015.pdf)
- Ratten, V. (2015). Service innovations in cloud computing: A study of top management leadership, absorptive capacity, government support, and learning orientation. *Journal of the Knowledge Economy*, 7(4), 935-946. doi:10.1007/s13132-015-0319-7
- Raut, R., Privadarshinee, P., & Jha, M. (2017). Understanding the Mediation Effect of Cloud Computing Adoption in Indian Organization. *International Journal of Service Science, Management, Engineering, and Technology*, 8(3), 40-59. doi:10.4018/iissmet.2017070103
- Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of research in Marketing*, 26(4), 332-344.
- Rogers, E. M. (1983). *Diffusion of innovations*. New York, NY: Free Press.
- Rogers, E. M. (2003). *Diffusion of innovations*. New York: Free Press.
- Saeed, F., Mohammed, F., Ghaleb, F. (eds) *Advances on Intelligent Informatics and Computing*. IRICT 2021. Lecture Notes on Data Engineering and Communications Technologies, vol 127. Springer, Cham. https://doi.org/10.1007/978-3-030-98741-1_55
- Saleh, M.M.I. (2014). Factors affecting the acceptance of electronic human resource system in Palestinian service sector (Unpublished doctoral dissertation). An-Najah National University, Nablus, Palestine. Retrieved from <https://repository.najah.edu/bitstream/handle/20.500.11888/7634/Maha%20Mohammed%20Ibrahim%20Saleh.pdf?sequence=1>
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behaviour: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580-607. doi:10.2307/256701
- Sekaran, U., & Bougie, R. (2019). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Shih, Y. Y., & Fang, K. (2004). The use of a decomposed theory of planned behavior to study Internet banking in Taiwan. *Internet research*.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston, MA: Allyn & Bacon/Pearson Education.
- Tarhini, A., Masa'deh, R., Al-Badi, A., Almaiahi, M., & Alrabayah, S. H. (2017). Factors influencing employees' intention to use cloud computing. *Journal of Management and Strategy*, 8(2), 47-62. doi:10.5430/jms.v8n2p47
- Tornatzky, L. G., & Klein, K. J. (1982). Innovation characteristics and innovation adoption-implementation: A meta-analysis of findings. *IEEE Transactions on engineering management*, 1(1), 28-45.
- Torres, F.C, JC Espinosa, U Dornberger and YAC Acosta (2017). Leadership and employees' innovative work behaviour: Test of a mediation and moderation model. *Asian Social Science*, 13(9), 9.
- Vithayathil, J. (2018). Will cloud computing make the Information Technology (IT) department obsolete?. *Information Systems Journal*, 28(4), 634-649.
- Vvas Yameshnath, J., & Junare Shankarrao, O (2020). HRMS-A Key Strategic HRM Partner for Organization Business Growth.
- Yaseen, S. G., Al-Janavdab, S., & Alc, N. A. (2018). Leadership styles, absorptive capacity and firm's innovation. *International Journal of Knowledge Management*, 14(3), 82-100. doi:10.4018/ijkm.2018070106
- Yuan, F., & Marquardt, D. J. (2015). Innovative behaviour. doi: 10.1093/obo/9780199846740-0054