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FACTORS INFLUENCING INTENT TO USE AN EDUCATIONAL MANAGEMENT INFORMATION SYSTEM (EMIS): INSIGHTS FROM PRIVATE UNIVERSITIES OF THE UNITED ARAB EMIRATES

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Abstract

The purpose of this study is to look at the Factors Influencing the Intention to Use Educational Management Information Systems (EMIS): Insights from Private Universities in the UAE. Since then, private universities in the UAE have struggled to manage their information systems. The research seeks to examine the factors influencing executive levels of private universities in the UAE toward the intention to use EMIS so that the relationship between the factors and TAM, TTF, D&M, and Trust can be easily analyzed. Furthermore, the study intends to assess the relationships between the TAM, TTF, D&M, and Trust and the intention of executive levels of private institutions to use EMIS. For this study, three key models were chosen: Technology Acceptance Model (TAM), Task Technology Fit (TTF), and For this study, three core models were chosen: Technology Acceptance Model (TAM), Task Technology Fit (TTF), and Delone Mclean Model (D&M), along with a new variable from technology usage (UTAUT), Innovation Diffusion Theory (IDT), and a mediator variable from psychology studies (PSY). The most popular method of correlational research, quantitative, will be used in this study, combined with a survey. The proposed model is empirically evaluated by gathering related data through developed questionnaires based on a 5 likert and 7 likert scale to reduce common variance method issue, then non-probability sampling is chosen as a sample from the study population based on a desire, idea, or chance rather than reason. Furthermore, for data analysis, this study made use of two significant and widely used software packages, IBM SPSS.25, for example, and Partial Least Squares (PLS) with Smart PLS 3.2.7. This study provides important insights that could help senior level managers understand how Educational Management Information Systems are used.

Keywords: EMIS, Systems Quality, Information Quality, Task Characteristics, Technology Characteristics, Social Influence, Personal Innovativeness, Self-Efficacy, Enjoyment, Subjective Norms.

INTRODUCTION

Educational Management Information Systems (EMIS) are a network of computers, software, and human that interact to collect, process, and store data. UNESCO defines EMIS as a system used to support decision-makers, managers, policy-analyzers, and education leaders. Pingel (2010) revealed that when designing EMIS, it is essential to reflect the desire of all individuals that will rely on the information. EMIS is an important system for colleges, universities, and the government of the country, as it produces information at the right time and in a suitable form and size to distribute it to the executive management of the institute.

The use of EMIS in higher education institutions in the UAE is different from one department to another and from administrative units. For example, the Department of Admission is using Student Information Management Systems to help carry out work, while Registration and Examinations is using the same system to receive applications for enrolment, exams and grades. The Department of Students Affairs is using Student Affairs Information Systems to provide the right educational environment, address

student problems, enable them to carry out activities, follow up on aid, and monitor the applications of the system. Last, Human Resource Management and the Department of Procurement and Supply are using Human Resource Information Systems to plan human resources, provide qualified human resources, train and develop employees, prepare wages, health insurance, and other tasks.

The first institute of higher education in the UAE was established in 1976, but the Ministry of Education may not be able to transition to Integrated Educational Management Information Systems. Currently, 74 private universities in the UAE use EMIS to share their data with the government. The number of students has increased from 2007 to 2016, with only 13.6 % studying master's and 1% studying doctoral level. This has made the presence of EMIS in colleges and universities highly appreciated, as it helps organizations to perform their duties efficiently (Medaković & Marić, 2018).

EMIS is a comprehensive approach to student registration that can store personal data, hostel and library details, and exam records, track daily activities, monitor and analyze performance, and track students over time. It is not as comprehensive as the legacy database for early decision making (Alsharari, 2018). Private universities in the UAE are expected to conduct research and education and play an active role in economic, social, and cultural areas. However, they are not investing in the field of technological development, leading to incorrect data, errors, and less information quality (Alblooshi & Hamid, 2019). EMIS can be integrated into six principles: user requirements, data and information, database, retrieval data, users' manual procedures, and networking (Ujomor, 2016). The private universities of the UAE are still in advance at the local, regional, and global levels. In the QS world university rankings 2022, Khalifa University of Science and Technology is ranked first in the UAE and 183rd globally, followed by the public University of the United Arab Emirates. The Arab World University Ranking includes four emirates' universities. (Bhayani, 2014).

The Emirati universities are committed to achieving academic excellence in teaching, student experience, and scientific research. Hussain et al. (2017) found that 37% of students prioritize the UAE as a preferred destination for education, 23% prioritize cost. Integrated EMIS to help private universities make the right decisions. Executive levels must be responsible for investing, purchasing, and choosing the right system for the institute. EMIS is an integrated educational management information system designed to manage the distribution and allocation of educational resources for licensed institutions in the UAE. It takes into account the specific education needs of the education system and manages the distribution and allocation of educational resources. The researcher is examining the factors influencing executive levels of private universities in the UAE to use EMIS. The study has used TAM, D&M, TTF, and Trust to analyze the relationship between the factors. There are 74 private universities in the UAE, and Cluster sampling will be used to sample based on demographic parameters such as location, size, or ranking. Table 1.1 shows the eighteen private universities in the UAE according to the Ministry of Education.

Table 1.1: Private universities in UAE

No	Name of the Institutions	Location	Total No. of Executive Levels
1	American University of Sharjah	Sharjah	25
2	Khalifa University of Science and Technology	Abu Dhabi	15
3	University of Sharjah	Sharjah	25
4	American University in Dubai	Dubai	20
5	Abu Dhabi University	Abu Dhabi	13
6	Ajman University	Ajman	10
7	Al Qasimiya University	Sharjah	12
8	Fatima College of Health Sciences	Abu Dhabi	9
9	University of Wollongong In Dubai	Dubai	16
10	University of Fujairah	Fujairah	13
11	University of Dubai	Dubai	12
12	New York University	Abu Dhabi	10
13	Al Ain University of Sciences & Technology	Abu Dhabi	18
14	Hamdan Bin Mohammed Smart University	Abu Dhabi	13
15	Canadian University Dubai	Dubai	19
16	British University In Dubai	Dubai	11
17	American University of Ras Al Khaimah	Ras Alkhaimah	12
18	American University in the Emirates	Dubai	10

Note: Adapted from Ministry of Education, 2022.

EMIS serves both the government and private universities in the UAE. Investment in EMIS is essential for enhancing productivity and competitiveness. Government needs to improve educational quality, while private universities need EMIS to manage their business and attract more students. Both sides of the equation will benefit. This study examines the factors influencing executive levels of private universities in the UAE towards the intention to use Educational Management Information Systems (EMIS) to analyze the relationship between these factors and TAM, D&M, TTF and Trust. It will also examine how to ease the use of EMIS between the government and private universities in the UAE.

This research aims to examine the factors influencing executive levels of private universities in the UAE towards the intention to use EMIS. It will evaluate the relationships between TAM, TTF, D&M and Trust, and provide ways to improve the intention to use EMIS. This research will take various theoretical models, such as IS Success model, Model Acceptance Technology, Technology Acceptance Model (TAM), Task Technology Fit Model, and the unified theory of acceptance and the use of technology (UTAUT). It will include independent variables such as subjective norm, self-efficacy, Enjoyment, Personal innovativeness, Technology Characteristics, System Quality, Information Quality, Task Characteristics, and Social Influence. The intention to use EMIS is the dependent variable, while the mediating variable is Trust.

THE EMERGING PROBLEMS

The UAE allocated 16.3 billion dirhams for higher education in 2022, which equals 4.4 billion in USA dollars. Private universities in the UAE are facing a problem in managing their information systems due to lack of investment in science and technology, R&D, and EMIS integration. The vision of the UAE considers investment in science and technology, R&D, and EMIS as the main drivers of productivity and competitiveness.

The integration of the EMIS in many private universities in the UAE is a major problem. According to an interview with the Manager of Human Resources Management Systems, the problem was the integration of the management information systems and students' information system. On the other hand, the Manager of Information Technology also reported the same problem of integration of financial management, HR, asset management, supply chain management, project management, accounting and procurement under EMIS. Therefore, the management of these universities is focusing on increasing the business by increasing the number of students and not focusing on the integration of the EMIS to ensure smooth operation of the institution.

The problem with not integrating EMIS in private universities lies in a weak activation and improper implementation. This is due to the lack of expertise and specialized training programs in EMIS, as well as the need for accurate and relevant education data in crisis context. Without the integration of EMIS, accurate and relevant data will not be distributed to decision makers. Furthermore, Tezcan-Unal (2019) and Faccia et al. (2019) found that without integration, errors in the information's quality process from EMIS input to EMIS output could lead to a decrease in providing accurate information to the government of UAE. Additionally, the multiplicity of the information systems in the UAE universities has caused an overlap in the information provided and cost increase, leading to a significant impact on the national economy and competitiveness of the UAE. Therefore, it is essential for educational institutions to integrate EMIS to provide complete, accurate and inexpensive information to decision makers and the government of the UAE.

Private universities need integrated EMIS to manage their information and achieve competencies to acquire, share, create, and apply knowledge. Musti (2020) and Darmalaksana et al. (2018) both agree that the university sector needs integrated EMIS to coordinate its effectiveness and carry out planning and oversight functions effectively. Nonetheless, Wang et al. (2020) showed that one of the most difficult issues that information system providers have is keeping the intention to use a system. Furthermore, Valackiene et al. (2021) pointed out that universities undertaking integration are facing problems such as workers' sense of security. Finally, Darmalaksana et al. (2018) explain that integrated EMIS can be useful in providing information about universities needs in various departments to practice administrative operations.

This study examines the factors influencing executive levels of private universities in the UAE towards the intention to use the integrated EMIS. Several studies have reported that users are not accepting or adapting a new system or technology. To achieve the vision of the government of UAE to transfer the traditional way of handling information system, it is important to know about the point of view for executive levels of private universities about the integration of EMIS.

BACKGROUND

This study was built on Delone and Mclean's IS Success model, TAM, Task Technology Fit Model, and UTAUT model. It covers all aspects of the problem in UAE and is proportional to the university sector. All independent, mediating, and dependent variables are closely related to these theories.

First, D&M has been used in several articles related to EMIS/MIS/IS and IT as the theoretical basis. Liébana-Cabanillas et al. (2014, 2017a, 2017c) used TAM model to

analyze users' acceptance of mobile payment systems. Mohammadi (2015) examined the integration of D&M and TAM to explore users' point view on e-learning in Iran and concluded that intention and user satisfaction has a positive relationship with the actual use of e-learning. System quality and information quality were the main drivers of users' intentions and satisfaction with the use of e-learning, while perceived usefulness was mediating ease of use and users' intentions. Moreover, Hossain (2016) investigated the use of Mobile health in Bangladesh and found that the continuance intention of m-Health services is determined by perceived value and user satisfaction. Furthermore, Tam and Oliveira (2016) used Delone and Mclean Model along with the Task Technology Fit (TTF) model to assess the impact of m-banking on individual performance in Portugal. They found a positive relationship between system quality, information quality, service quality and user satisfaction and concluded that understanding the importance of m-banking situations on individual performance gives an insight to m-banking managers to apply short and long plans to retain users or the engagement of potential adopters. In addition, Alruwaie et al. (2020) and Gurendrawati et al. (2022) used DeLone and McLean as a way of integration with Social Cognitive Theory, Expectation Confirmation Theory and E-S-QUAL to examine the factors influencing citizens' continuous e-Government services in the UK. They found that prior experience, satisfaction, social influence, service quality, information quality, and personal outcome regulated through citizen's self-efficacy. Finally, Gurendrawati et al. (2022) found that there was a positive effect between system quality and service quality on user satisfaction, and that there was an essential need for the development of the present system to be evaluated using FAST.

Second, the Technology Acceptance Model (TAM) is a powerful and effective model in the field of studying the behavior of individuals towards the acceptance of online shopping in general. It has been suggested that user acceptance of the technology can be explained by three factors: expected benefit, ease of use, and behavioral tendency to use. The expected benefit is the degree to which users believes that using the system will improve their job, and the ease of use is the degree to which users believe that the use of a particular system is done with little effort. TAM is a powerful and effective model in the field of studying the behavior of individuals towards the acceptance of online shopping in general and plays an important role in discovering and understanding the factors affecting the adoption of social media platforms. It is assumed that the expected benefit and ease of use are the primary determinants of the adoption of online shopping among consumers. TAM has been used in numerous academic journals related to EMIS/MIS/IS and IT as the theoretical basis. Bhatti (2007) used an extended technology acceptance model with innovation diffusion theory (IDT) to determine user acceptance of Mobile Commerce. Scott and Walczak (2009) used TAM to examine the impact of computer self-efficacy. Thompson (2010) developed an extended technology acceptance model and used structural equation modeling to examine the impact of the individual’s intention to use IT. Kim et al. (2010) used TAM to examine the adoption behaviors of mobile payment users. Terzis et al. (2011) used TAM, Theory of Planned Behavior (TPB) and UTAUT to build a model that determines the factors affecting the behavioral intention to use computer-based assessment by students. Findings indicated that both PU and PEOU have a positive effect on CBA.

Kim and Jang (2020) and Van and Doanh (2022) both found that teachers' skills and abilities could sustain the integration of technology in a smart classroom. They also built in four factors to assess the teachers' views of the technology integration: student

change, frequency of technology integration, work toward in educational practices, and continuance intention. The results of the study showed that perceived usefulness and ease of use were significantly influencing the intention to use ECEs by farmers in the Covid-19 pandemic.

Third, the UTAUT model is used to explain the intention of a user to use an information system and the behavior of the usage. It is based on a user's perceived usefulness and ease of use, which can predict the behavioral intention of someone to use the technology. However, if the employed technology does not fit with the user requirements, the utilization will not increase productivity. The UTAUT model is used to explain the intention of the user to use an information system and the behavior of the usage. Gender, voluntariness of use, experience, and age act as moderators. Performance expectancy, effort expectancy, social factors, and facilitating conditions are four major determinants for the behavioral intention of the user.

Oliveira et al. (2016) used UTAUT2 with innovation characteristic of the diffusion of innovation to identify the main factors of mobile payment acceptance. De Sena al et. (2016) targeted to assess the intention of adoption of mobile payment from the point of view of the Brazilian customers of a telecommunications company in southeastern Brazil. The results of the study help members of the payments market to improve mobile services and to have attached to it a good performance, security, and supporting of a fair price to individual. Hsu et al. (2017) used the UTAUT model to investigate the factors affecting users' adoption of electronic books. Findings revealed that social influence, performance expectancy, facilitating conditions and effort expectancy have a positive relationship with the intention to use e-books. Singh and Srivastava (2018) used an integration model of TAM and UTAUT to find out factors affecting the adoption of mobile banking in India. Giovanis et al. (2019) proposed the Unified Theory of Acceptance and Use of Technology model to classify the causes influencing the adoption of mobile self-service retail banking technologies in Greece. The results of the study indicated that the technical factors of mobile banking were expected performance and social influence. Moreover, the channel factors towards mobile banking were trust and perceived risk. Finally, the service experience was acting as a moderating variable and showed a difference in the influences of perceived trust and social influence on adoption intention among partial service experience and possible users. Wang et al. (2020) and Al- Kaila et al. (2020) examined the UTAUT model by integrating it with Task-Technology Fit (TTF) to recognize how customers accept healthcare wearable devices in China. The findings of the study indicated that task-technology fit, social influence, facilitating conditions, effort expectancy, and performance expectancy positively influenced customers' behavioral intention to use healthcare wearable devices. Additionally, Ayaz & Yanartas (2020) aimed to understand the causes that influence the intention of use of Electronic Document Management System (EDMS) in Bartin University in Turkey. The results of the study showed that both social influence and performance expectancy have a positive relation to the intention to use EDMS. Finally, Raffaghelli et al. (2022) assessed the use of UTAUT theory to explain the acceptance of students to an early warning system in Higher Education of Saudi Arabia.

Fourth, Task-Technology fit (TTF) is the degree to which technology supports a user in a set of tasks. The TTF model considers that technology gives value by acting as an instrument or in some task or group of tasks; the user will reflect its value in the evaluation of the technology. The concept of the profile is important when discussing

the concept of task technology fit and deviation in fit as a profile. The construct of task technology fit is normative and is a reflection of the user, which is made by evaluating the correspondence of the technology capabilities and task requirements to support their task. The Task Technology Fit (TTF) model has been used in numerous educational papers related to EMIS/MIS/IS and IT as the theoretical basis. Tam and Oliveira (2016) found that user satisfaction and use are the influence effects of TTF. Khan et al. (2018) investigated the factors that influence the adoption of Massive Open Online Courses (MOOCs) in Pakistan by using an integrated model of task-technology fit, social motivation, and self-determination. The results of the study presented the important contribution of task technology fit in influencing behavioral intentions. Three factors were influencing the behavioral intentions of students, which were perceived relatedness, social recognition, and perceived competence. The results of the study can be used as a source of information for future researchers, students, and professionals to improve the understanding of open online courses in Asia. Rai and Selnes (2019) used the technology task fit model and social model within the TAM framework to theorize the integration processes of new digital learning of technology. The results showed that social norms influenced motivation to adopt digital textbook services. Isaac et al. (2019) examined the usage of TTF and found that users' satisfaction and actual use were influencing TTF. Yamin and Alyoubi (2020) examined the behavior of individuals towards adopting telemedicine application during COVID-19 using task technology fit model along with a unified theory of acceptance and use of technology, self-efficacy and awareness. The results of the study indicated that the application of wireless sensors was determined by self-efficacy, awareness, task technology fit, facilitating condition, effort expectancy, social influence, and performance expectancy. Both facilitating conditions and task technology fit were the main factors of determining user intention to adopt the application. Finally, the study is useful for managers who are working in clinical management via a virtual environment and could guide them to design user-friendly applications.

Cheng (2020) and Wang et al. (2020) have found that the use of TTF, DeLone and McLean, and the expectation confirmation model have resulted in a positive relation of factors of quality with perceived usefulness, perceived TTF, and confirmation. Yang & Chen (2022) used the integration of TAM and TTF to examine the intention to use the services of Robo-advisor. The findings showed that perceived risk, perceived usefulness, and perceived ease of use have an influence on the attitude, while technical characteristics and task characteristics are the predictors of task-technology fit. TTF served as the forecaster of attitudes.This study examines the factors influencing Perceived Ease of Use, Perceived Usefulness, TTF and Trust toward the intention to use EMIS. It focuses on the combination of TAM, TTF and D&M, which can explain the factors influencing intention to use EMIS. The target population is the executive levels of private universities in UAE, and the unit of analysis is individual and the survey will be conducted on 18 private universities. The researcher has introduced new variables, such as Personal innovativeness, Social Influence, and Trust, to help in clarifying the factors influencing executive levels' intention to use EMIS. This research is characterized by its modernity, taking into account the developments that have occurred in the university sector and the behavior of the sample members. The models that are being used in the literature are explaining D&M, TTF, and TAM. Moreover, the researcher has added personal innovativeness, Social Influence, and Trust. Also discusses the intention to use EMIS therefore the most suitable model for our research objectives is the combinations of the above models,

which has not been included in the previous researches. This research mainly aims to clarify the intention the use EMIS. The main purpose of the studies is to find out about the factors influencing executive levels of private universities in UAE toward the intention to use EMIS. To examine the relationship between these factors and TAM, D&M, TTF and Trust toward the usage of EMIS. Moreover, to evaluate the relationship between these mediators and the intention to use EMIS. Down below is figure 1.1 of the proposed research model.

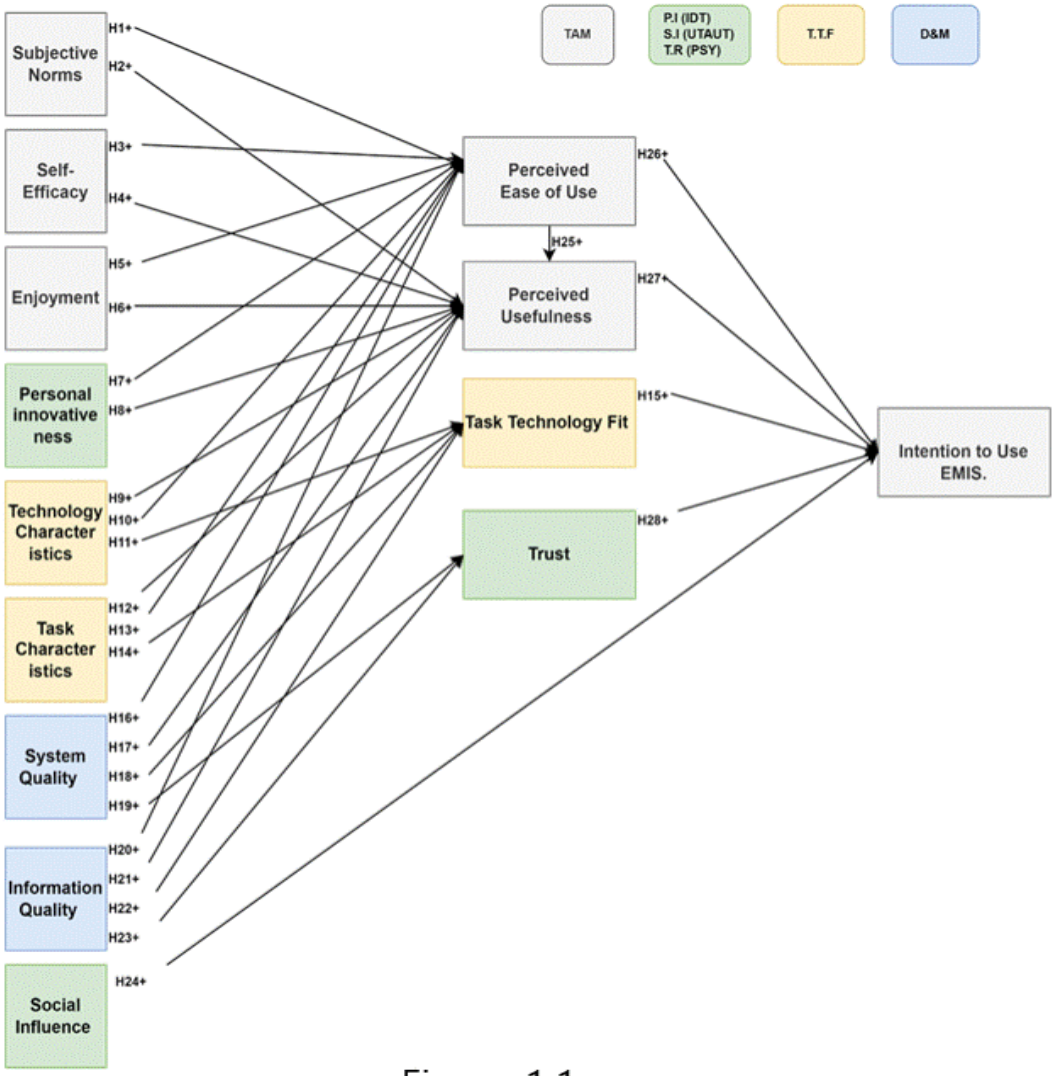

Figure 1.1

RESEARCH HYPOTHESIS

In the section of Research Model, the researcher has identified the factors that influence the intention to use EMIS. Nevertheless, in this section the main concerned is to develop the hypothesis between these factors according to the studies related. Therefore, the first factor is Subjective Norm. Subjective Norm (SN) is the degree that employees` point view of the social pressure the influence of managers, teachers and friends in the performance of their intention to use (Venkatesh et al., 2003). Specific employee is possible to behave in a matter, which his or her managers, teachers or friends are expected from him when using the system. Thus, the employee is advised

to meet the point views of the referents. Moreover, Jiang et al., (2016) in earlier study has confirmed that subjective norms can change according to the nature of the behavior. For example, in the imposed behavior, the behavioral intentions have a direct causal effect done by subjective norms to meet certain expectations. Alternatively, in the voluntary behavior, the role of subjective norms on behavioral intentions is caused by customers` views of the technology (Venkatesh and Davis, 2000). As a result of that, subjective norms were influenced with perceived of usefulness and perceived ease of use within the situation of voluntary usage of a new technology and EMIS (Liébana-Cabanillas et al. (2015) subjective norms is one of the important variables in the research study of IT technology and payment banking technology (Shaikh & Karjaluoto, 2015b). Al-Kaila et al. (2020) discovered that subjective norms was one of the factors that influence students to use e-learning systems during COVID-19 in Jordan. Nevertheless, Bhatti (2007) stated on the study of factors influencing the adoption of e mobile commerce that subjective norms have a relation with both, Perceived usefulness and Perceived ease of use. Liébana-Cabanillas et al. (2014, 2017a, 2017c) in the study of mobile payment acceptance investigations found that subjective norms has a direct influence on Perceived usefulness and Perceived ease of use. Zhang et al. (2012) on the study of m-commerce adoption revealed that subjective norms have a significant influence on Perceived usefulness. Teo (2010) and Yuen et al. (2008) have resulted that perceived usefulness was influenced by subjective norm. As a result, the below hypothesis proposed:

H1: Subjective Norm positively influences Perceived Ease of Use towards intention to use EMIS.

H2: Subjective Norm positively influences Perceived Usefulness towards intention to use EMIS.

Self-efficacy (SE) is the users' judgments of their abilities to manage, execute, or organize the steps of actions required to succeed in a specific situation. According to Thompson (2010) and Cheng (2011), self-efficacy is a significant part in learning and teaching settings and has enhanced the results of learning when applied. Computer self-efficacy is part of the factors that define usefulness of the latest technology and plays as an important part when it comes to the influence of PU and PEOU of the system. Studies have revealed the importance of computer self-efficacy especially in technology adoption and intention to use. Scott et al. (2009) and Terzis et al. (2011) have specified that computer self-efficacy has a positive relation with PEOU in intention to use a new technology.

Hu & Zhang (2016) used an integrated model of DeLone and McLean model, TAM, the theory of planned behavior, and social cognitive theory to investigate behavior intention of students toward mobile library application in a Chinese university and to explore the factors of their views of the mobile library. Abdullah et al. (2016) found that Experience is the first predictor of student's PEU, followed by Self-Efficacy, Enjoyment, and Subjective Norm. Self-efficacy also affects Perceived Ease of use. Thus, the next hypothesis stated as:

H3: Self-Efficacy positively influence Perceived Ease of Use towards intention to use EMIS.

H4: Self-Efficacy positively influence Perceived Usefulness towards intention to use EMIS.

The third factor in e-learning adoption and EMIS usage is Enjoyment. Studies have shown that if employees find EMIS enjoyable to use, they are more likely to have a positive relation with ease of use and usefulness of the system. Additionally, Abdullah et al. (2016) showed that Enjoyment was a predictor of student's PEU. Furthermore, many investigations stated that Enjoyment positively influenced students' PEOU (Zare & Yazdanparast, 2013; Al-Aulamie et al., 2012; Shyu & Huang, 2011). Additionally, other studies stated that Enjoyment positively influenced PU of EMIS (Guo et al,. 2007; Chen et al,. 2013; Wu & Gao, 2011). Hence, the hypothesis of the study proposed as:

H5: Enjoyment positively influences Perceived Ease of Use towards intention to use EMIS.

H6: Enjoyment positively influences Perceived Usefulness towards intention to use EMIS.

The fourth factor is Personal innovativeness, which is defined as the willingness of an employee to try to use a new system. Previous results on the effect of Personal innovativeness were inconsistent. Zarmpou et al. (2012) revealed that Personal innovativeness was a predictor of Perceived usefulness and Perceived ease of use, Leog et al. (2013) discovered the same findings, Lu (2014) found from the study of continuance intention towards mobile commerce that Personal innovativeness has a significant influence on Perceived ease of use, Ramos et al. (2016) reported the same result from the investigations of NFC mobile payment, Oliveira et al. (2016) examined the UTAUT model and stated that Personal innovativeness was a predictor of Effort expectancy (equivalent of Perceived ease of use), and Kim et al. (2010) informed from the study of mobile payment that Personal innovativeness has no relationship with Perceived ease of use. Bhatti (2007) revealed no relation between Personal innovativeness and both, Perceived usefulness and Perceived ease of use. To resolve this concern, the researcher proposed the hypothesis below:

H7: Personal innovativeness positively affects Perceived ease of use towards intention to use EMIS.

H8: Personal innovativeness positively affects Perceived usefulness towards intention to use EMIS.

The fifth factor is Task Technology Fit (TTF), which is the degree of support that technology provides to the task for which it is designed. Wu and Chen (2017) defined TTF as the model of evaluating how information technology turnout to the performance by measuring the contest between technology and task characteristics. Lee and Lehto (2013) revealed that TTF is the way to explain the relation between task and technology characteristics and its effect on technology use outcomes. Dishaw and Strong (1999) was among the first studies to announce the integration of TAM and TTF, which resulted on a relationship between TTF and perceived usefulness. Many studies have suggested that both task and technology characteristics positively affect PEOU and PU. Tam, D. (2010) used the TAM model and TTF model to determine the users' intention to adopt wireless technology. Wang et al. (2020) examined the UTAUT model by integrating it with Task-Technology Fit (TTF) and found that technology characteristics and task characteristics were important factors in the determination of task-technology fit. Yang and Chen (2022) showed that technical characteristics and task characteristics are the predictors of task-technology fit. The fifth factor is Task Technology Fit (TTF), which is the degree of support that technology provides to the task for which it is designed. Wu and Chen (2017) defined TTF as the model of

evaluating how information technology turnout to the performance by measuring the contest between technology and task characteristics.

Lee and Lehto (2013) revealed that TTF is the way to explain the relation between task and technology characteristics and its effect on technology use outcomes. Dishaw and Strong (1999) was among the first studies to announce the integration of TAM and TTF, which resulted on a relationship between TTF and perceived usefulness. Many studies have suggested that both task and technology characteristics positively affect PEOU and PU. Tam, D. (2010) used the TAM model and TTF model to determine the users' intention to adopt wireless technology. Wang et al. (2020) examined the UTAUT model by integrating it with Task-Technology Fit (TTF) and found that technology characteristics and task characteristics were important factors in the determination of task-technology fit.

Yang and Chen (2022) showed that technical characteristics and task characteristics are the predictors of task-technology fit. Last, it is evident from the research of Yamin and Alyoubi (2020) that Technology Characteristics and Task Characteristics positively influence the task technology fit which is the influencing factor of user intention to use the EMIS. Hence, the hypothesis is as followed:

H9: Technology Characteristics positively influence Perceived Ease of Use towards intention to use EMIS.

H10: Technology Characteristics positively influence Perceived Usefulness towards intention to use EMIS.

H11: Technology Characteristics positively influence TTF towards intention to use EMIS.

H12: Task Characteristics positively influence Perceived Usefulness towards intention to use EMIS

H13: Task Characteristics positively influence Perceived Ease of Use towards intention to use EMIS.

H14: Task Characteristics positively influence TTF towards intention to use EMIS.

H15: TTF positively influence intention to use EMIS.

The sixth factor in e-government implementation is system quality, which is defined as a system structure or features from the perspective of the end-user. Information quality is the most used form in evaluating the outputs of EMIS. Gupta et al. (2020) used the D&M model to understand the role of access convenience of common service centers in shaping the continuance intentions of citizens who used e-government services in India. Gurendrawati et al. (2022) examined the use of DeLone and McLean model at Universitas Negeri Jakarta and found that there was a positive effect between systems Quality on user satisfaction. Nulhusna et al. (2017) aim to provide an answer to one of the major challenges in e-government implementation using intention and electronic word of mouth (eWoM) in Indonesia. The results of the study showed that system quality and information quality have a positive relationship with trust. Hu and Zhang (2016) used both TAM and TPB and revealed that System Quality and Information Quality positively affect the students' point views of the usefulness of the m-library application. Wang et al. (2019) and Carlos et al. (2016) have combined the IS model with TTF to understand the impact of m-banking on individual performance. Cheng (2020) used multiple models such as updated DeLone and McLean, expectation

confirmation model, and task-technology fit model to confirm that system quality and information quality have a positive relationship with perceived usefulness, TTF and Trust. As a result, the hypothesis is as indicated:

H16: System Quality positively influences Perceived Ease of Use towards intention to use EMIS.

H17: System Quality positively influences Perceived Usefulness towards intention to use EMIS.

H18: System Quality positively influences TTF towards intention to use EMIS.

H19: System Quality positively influences Trust towards intention to use EMIS.

H20: Information Quality positively influences Perceived Ease of Use towards intention to use EMIS.

H21: Information Quality positively influences Perceived Usefulness towards intention to use EMIS.

H22: Information Quality positively influences TTF towards intention to use EMIS.

H23: Information Quality positively influences Trust towards intention to use EMIS.

The seventh factor is PEOU. It defines as the degree to which a person believes that using technology or a specific system would be very easy (Kulal and Nayak, 2020). On the other hand, the eighth factor is PU, which is the degree to which a person has the belief that using technology, or a system specifically can increase the performance on the job (Code et al., 2020). Abdullah et al. (2016) tested the TAM model to identify what influences the student to agree on accepting e-portfolios. The results of the study showed Perceived Ease of Use tracked by Enjoyment was the forecaster of student`s Perceived Usefulness. Likewise, according to Mohammadi (2015) the use of an integrated model of IS success model and TAM to examine the Behavioral Intention of users about e-learning systems revealed that PU has a positive relationship on e-learning usage intention. Tam, D. (2010) used the TAM model and TTF model to determine the users` intention to adopt wireless technology. They have used variables from TAM such as Behavioral Intention, Perceived Ease of Use, and Perceived Usefulness. The results of the studies showed that both Perceived Ease of Use and Perceived Usefulness influence users` intention to use wireless technology. Furthermore, Abdullah and Ahmed (2016) have used TAM to improve students` learning via the engagement with electronic portfolios in the United Kingdom. The results of the study have shown that the prediction of student`s Behavioral Intention to use the electronic portfolio was by Perceived Usefulness and Perceived Ease of use. Moreover, Singh and Srivastava (2018) have used an integration model of TAM and UTAUT to find out factors affecting the adoption of mobile banking in India and to explain the behavioral aspect to use mobile banking. The findings of the study showed that the influence-affecting customer`s intention to adopt mobile banking was coming from the perceived ease of use. Liebana-Cabanillas et al. (2018) have done using TAM to predict the factors of cellphone payment acceptance in Spain. To validate their study, they have performed an online survey on the users of mobile payment in Spain. The results of the study have shown that perceived usefulness was significantly affecting the intention to use m-payment. Terzis et al. (2011) used TAM, Theory of Planned Behavior (TPB) and UTAUT to build a model that determines the factors affecting the behavioral intention to use computer-based assessment by students.

Likewise, Al-Gahtani, (2016) related the study to TAM3 model to define the factors influencing the student`s intention to use e-learning. The results of the study confirmed that PU, PEOU, predict Behavioral Intention. Furthermore, according to Davis (1989) the perceived high level of benefit and ease of use foreshadows a positive trend towards perceived usefulness, and hence the intentions of its use, so the actual users` use of any technology is directly or indirectly affected by their behavioral intentions, direction, perceived benefit, and perceived usability. Finally, Van and Doanh (2022) found that perceived usefulness and perceived ease of use were significantly influencing the intention to use ECEs by farmers in Covid- 19 pandemic. As a result, the hypothesis is as indicated:

H24: PEOU positively influences PU towards intention to use EMIS.

H25: PEOU positively influences intention to use EMIS.

H26: PU positively influence intention to use EMIS.

The ninth factor is social influence. It is defined as the social circle in which the attitudes and beliefs of the people that changed due to the existence of other peoples with different socio-cultural values. It has strong relation with Attitude because at early-stage educators, staff, and students will feel more insecure and sensitive to other`s opinion (Naveed et al., 2020). Social Influence is the inspiration of close relatives, friends, family, and important people in the university about the decision of the executive levels to use EMIS (Venkatesh et al., 2003; Camilleri, 2019). It has found that Social Influence is positively associated to up-to-date technologies such as EMIS (Venkatesh et al., 2003; Camilleri, 2019). Kaium et al.(2020) showed that social influence has a positive relation to continuance usage intention. Likewise, Ayaz and Yanartas (2020) revealed that both social influence and performance expectancy has a positive relation to the intention to use Electronic Document Management System (EDMS). Similarly, Yamin, & Alyoubi, (2020) indicated that the application of wireless sensors was determining social influence Moreover, Lallmahomed et al. (2017) found that researchers have used Social Influence as a moderating role connected to the e-service adoption. Furthermore, Kurfali et al.(2017) reveled that Social Influence is the measurement of the effect of the Attitude on the individual in the social environment. According to both Mensah et al. (2020) and Kurfali et al. (2017) Social Influence is stated as an important factor when employees make a decision to use EMIS. Previous studies indicated that there is a positive influence of Social Influence on the intention to use EMIS (Camilleri, 2019; Kurfali et al., 2017; Mensah et al., 2020). Additional studies resulted that factor such social influence can disturb the intention to use the system. When using models such as Technology Acceptance Model, Delone & Mclean, Task Technology Fit (TTF), and use of technology (UTAUT). (Hu & Zhang, 2016; Abdullah & Ahmed, 2016, Oliveira et al., 2016).

To resolve this concern, the proposed hypothesis is as below:

H27: Social influence positively influences the intention to use EMIS.

At last, this study measured the mediating role of Trust in examining factors influencing the Intention to Use EMIS. Previous studies have revealed that Trust is the tool that clarifies the relation between system quality and information quality. Lee and Rao (2005) found that system quality is the way to combine quality of information and services delivered. Xiao et al. (2010) explained that EMIS managers feel satisfied about the characteristics provided by the system, and then they are likely to agree on

the service provider. Nulhusna et al. (2017) found an answer to one of the major challenges in e-government implementation using intention and electronic word of mouth (eWoM). The results of the study showed that Trust is the mediator of system quality and information quality on intention to use e-government. Therefore, the hypothesis is as followed.

H28: Trust mediates the effect of system quality, and information quality on intention to use EMIS.

FUTURE RESEARCH DIRECTION

The importance and necessity for this study has emerged to be one of the steps towards consolidating the culture of management evaluation and identify the true role of this system in supporting and improving administration performance. Within the last few years, several universities focused on the use of EMIS due to the significance and movement of developing software's and procedures for managing information, which is fundamentally concerned with the route of collecting, processing, and storing, yet evidence of using EMIS is still missing as an integrated system in the private universities of UAE. As a result, this study proposed a theoretical framework to give the future researchers a clue to empirically test the factors influencing the use of EMIS among the executive level management of private universities in UAE. However, besides private institutions, there is a need to conduct a similar research in other public-sector universities due to their contextual differences and organizational structure. Consequently, since the EMIS is a new system in the UAE context it would be importance to conduct similar researches in future until the system is generally accepted in a government organization. Also, it would be interesting if future researchers would focus on different factors that were not included in this research.

CONCLUSION

At the moment, there is no evidence of documented literature on EMIS in the UAE context, especially in private institutions. Therefore, this study investigated the factors influencing the use of EMIS in private universities of UAE. The research was conducted based on previous technology adoption research within and outside UAE to identify the possible factors that could influence the intention to use the EMIS among the executive level of managements in private universities of UAE. The study used D&M, Technology Acceptance Model, and TTF. Plus, a new variable from use of technology (UTAUT), Innovation Diffusion Theory (IDT) and a mediator variable from Psychology studies (PSY). The study would contribute to existing literature on the application and the theory in the educational management information system in private institutions in UAE. The study emphasises self-efficacy, subjective norms, enjoyment, information quality, system quality, personal innovativeness, social influence and trust as important factors in the use of EMIS in private institutions inUAE. In terms of practical contribution, connecting relevant data for backing up the management of processing institutes, as EMIS is largely described as a shared system that offers information to the management, backup processes, and tactical tasks in a company. Thus, the use of EMIS depends essentially on improving organizational performance through the way it distributes information that is required to take superior decision-making concerning current issues on the organization regarding human capital, physical resources, and its software. Moreover, if an organization needs to increase its performance it must receive the required information to rely on as a supply

within the procedures that are essential through the EMIS system. Thus, the success of any organization determines mostly by available information and partially on the tasks that are the combination of consistent processes. Additionally, successful managers and employees depend on the achievement and usage of its information, especially when it comes to effective decision maker that leads to improve the usage of organizational performance. IT affordances result in a positive relationship with organizational capabilities, innovation, and virtue ethics. Furthermore, the researchers pointed out that successful organizations rely mainly on human capital, skills, and talent to succeed in improving their performance that is derived by the sufficient detailed information, which is the result of using EMIS. Thus, gaining information, processing, and storing it, is an important stage in improving efficiency and functionality that are related to the internal aspects of the organization.

Likewise, Stakeholders valued the use of well-made EMIS, which shows a connection with organizational performance and competitiveness. Additionally, he added that it is essential to include a variety of stakeholders to improve its design. Moreover, EMIS is crucial for internal and external facets of the organization; as a result, the executive managers of the organization must choose an internal or external strategy to increase its organizational performance and competitiveness. EMIS is an effective communication tool to increase job satisfaction, employee loyalty, and motivation between executive management and employees.

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