FACTORS INFLUENCING THE INTENTION TO USE EDUCATIONAL MANAGEMENT INFORMATION SYSTEMS (EMIS) IN THE UAE'S PRIVATE UNIVERSITIES

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by

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Before anything else, I am grateful to Allah, the Almighty God, for providing me with the opportunity to further my studies to this level, as well as for rewarding me in every step of my journey through life. Moreover, I would not have been able to write this doctoral thesis without the assistance and support of the nice individuals around me, only a few of whom deserve special recognition here.

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LIST OF SYMBOLS

A	Number of PLS or PCA components in the model.
B	PLS regression coefficient.
C_p	Pooled covariance matrix for the two classes.
B	Path coefficients in terms of direct, indirect.
R^2	Moderation effects, Coefficient of determination.
f^2	Effect size.
Q^2	Predictive relevance.

LIST OF ABBREVIATIONS

EMIS   Educational Management Information Systems

IQ   Information Quality

Int to Use EMIS Intention to Use EMIS

PEOU   Perceived Ease of Use

PI   Personal Innovativeness

PU   Perceived Usefulness

SE   Self-Efficacy

SI   Social Influence

SQ   System Quality

TaskC   Task Characteristics

TC   Technology Characteristics

P Trust   Perceived Trust

LIST OF APPENDICES

FAKTOR-FAKTOR YANG MEMPENGARUHI NIAT UNTUK MENGGUNAKAN SISTEM MAKLUMAT PENGURUSAN PENDIDIKAN (EMIS) DALAM UNIVERSITI-UNIVERSITI SWASTA DI UAE

ABSTRAK

Kajian ini mengenal pasti faktor yang mempengaruhi niat untuk menggunakan sistem maklumat pengurusan pendidikan (EMIS): pandangan daripada universiti swasta di UAE. Tambahan lagi, penyelidikan ini bertujuan menganalisis perkaitan antara faktor dan TAM, TTF, D&M, dan P Trust. Universiti swasta di UAE menghadapi masalah besar dalam mengurus sistem maklumat mereka. EMIS ialah penyelesaian yang boleh meningkatkan kecekapan membuat keputusan dan operasi dalam sektor pendidikan. Walau bagaimanapun, terdapat faktor yang menyebabkan pengurus peringkat eksekutif menolak penggunaan EMIS. Pemodelan persamaan struktur digunakan untuk menganalisis data yang dikumpul dan mengesahkan 25 hipotesis dalam kajian ini yang terdiri daripada tinjauan dalam talian ke atas 314 orang pengurus peringkat eksekutif yang bekerja di universiti swasta di UAE. Tiga model asas dipilih dengan pemboleh ubah baharu menggunakan teknologi (UTAUT), Teori Penyebaran Inovasi (IDT), dan pemboleh ubah pengantara daripada kajian psikologi (PSY). Kajian ini memberikan pandangan berguna yang boleh membantu pengurus peringkat eksekutif mempelajari tentang penggunaan sistem maklumat pengurusan pendidikan. Berdasarkan bukti empirikal, niat untuk menggunakan EMIS di universiti swasta UAE dipengaruhi secara ketara dan langsung oleh kecekapan diri, ciri teknologi, kualiti sistem dan perkaitannya dengan kemudahan penggunaan yang dirasakan. Selain itu, ciri teknologi, ciri tugasan, kualiti sistem, kualiti maklumat dan perkaitannya dengan teknologi tugasan adalah sesuai. Tambahan lagi, persepsi kebergunaan dan kualiti sistem serta perkaitannya dengan perceived usefulness; Selain

itu, kepercayaan yang dirasakan, perceived usefulness, kesesuaian teknologi tugas dan perkaitan mereka dengan niat untuk menggunakan EMIS. Akhir sekali, persepsi kemudahan penggunaan dan hubungannya dengan persepsi kegunaan. Namun begitu, perceived easy of use dan perkaitannya dengan kecekapan kendiri, inovasi peribadi, ciri teknologi, kualiti sistem, kualiti maklumat dan ciri tugas tidak disokong. Selain itu, perceived of use dan perkaitannya dengan inovasi peribadi, kualiti maklumat, ciri tugas dan niat untuk menggunakan EMIS tidak disokong. Akhir sekali , kualiti maklumat dan kepercayaan yang dilihat, serta pengaruh sosial dan niat untuk menggunakan EMIS, juga tidak disokong. Berdasarkan keputusan, kajian perbandingan merentasi pelbagai negara atau konteks budaya akan memberi manfaat. Selain itu, untuk meningkatkan kebolehgunaan dan kebolehgeneralisasian dapatan, penyelidikan masa depan harus melihat melangkaui universiti swasta di UAE. Maka, menyiasat niat EMIS di universiti awam di UAE serta institusi pendidikan di negara lain akan memberikan pemahaman yang lebih komprehensif tentang penggunaan sistem dalam pelbagai persekitaran pendidikan.

FACTORS INFLUENCING THE INTENTION TO USE EDUCATIONAL MANAGEMENT INFORMATION SYSTEMS (EMIS) IN THE UAE'S PRIVATE UNIVERSITIES

ABSTRACT

The study investigates the factors that influence the intention to use educational management information systems (EMIS): insights from private universities in the UAE. Furthermore, the research aims to analyze the relationship between the factors and TAM, TTF, D&M, and P Trust. Private universities in the UAE are facing a huge problem managing their information systems. EMIS is the solution that can improve decision-making and operational efficiency in the education sector. Nevertheless, there are reasons why executive-level managers resist the use of EMIS. Structural equation modeling is utilized to analyze the gathered data and validate 25 hypotheses in this study, which comprises an online survey of 314 executive-level managers working in private universities in the UAE. Three fundamental models were selected with a new variable from use of technology (UTAUT), Innovation Diffusion Theory (IDT), and a mediator variable from psychology studies (PSY). This study provides valuable insights that could help executive-level managers learn about the use of educational management information systems. According to empirical evidence, the intentions to use EMIS in UAE private universities are significantly and directly influenced by self-efficiency, technology characteristics, system quality, and their relationship with perceived ease of use. Moreover, technology characteristics, task characteristics, system quality, information quality, and their relationships with task technology fit. Furthermore, perceived usefulness and system quality and their relationships with perceived trust; Additionally, perceived trust, perceived usefulness, task technology fit, and their relationships with intentions to use EMIS. Lastly, perceived ease of use

and its relationships with perceived usefulness. Nevertheless, perceived usefulness and its relationship with self-efficiency, personal innovativeness, technology characteristics, system quality, information quality, and task characteristics are not supported. Furthermore, the perceived ease of use and its relationship with personal innovativeness, information quality, task characteristics, and intentions to use EMIS are not supported. Last but not least, information quality, perceived trust, social influence, and intentions to use EMIS are also not supported. Comparative studies across various countries or cultural contexts would be beneficial, based on the results. Moreover, to enhance the applicability and generalizability of the findings, future research should look beyond private universities in the UAE. Last, investigating EMIS intentions in public universities within the UAE as well as educational institutions in other countries would provide a more comprehensive understanding of the system's usage in varied educational environments.

CHAPTER 1

INTRODUCTION

1.1   Background of the Study

In order to educate students about chemical principles, Microsoft Corporation released "Minecraft Education: Chemical Reactions," a new learning module inside the Minecraft environment, in February 2023 (Shinde, 2024). This program demonstrates Microsoft's continued efforts to combine gaming and education by giving students an interactive and interesting platform to study difficult subjects.

In March 2023, Google LLC launched "Applied Digital Skills," an extensive, no-cost online course meant to give students the fundamentals of digital literacy (Shinde, 2024). This initiative is a component of Google's larger goal to provide equitable access to digital education, with a focus on problem-solving, critical thinking, and the useful application of digital resources.

Google and Microsoft have started educational initiatives aimed at teaching students digital literacy and chemistry concepts. Microsoft's "Minecraft Education: Chemical Reactions" module blends education and gameplay, whereas Google's "Applied Digital Skills" course concentrates on applying digital resources, problem-solving, and critical thinking. The number of innovative technology providers in educational institutions is increasing. One of these is the Educational Management Information System.

Education planners at local, state, and international organizations may now make data-driven decisions, organize activities, and create policies to guarantee that kids can receive a high-quality education even in the face of resource limitations. Therefore, in order to use data and transform it into useful information that helps educational planners take the appropriate decisions, an Educational Management

Information System (EMIS) has become a well-known instrument (De Leon et al., 2023).

Paraforos et al. (2016) define an educational management information system (EMIS) as a system that combines human interaction with software and a computer network to gather, process, and store data. Moreover, according to the International Institute for Educational Planning (UNESCO), EMIS is a collection of tools that aid administrators, executive-level managers, policy analysts, and decision-makers in their work via the collection, integration, and processing of data and information (UNESCO, 2008, p. 101).

In addition, as Sarumpaet and Firdaus (2024) pointed out, it is essential for elementary, middle, and high schools, among other educational institutions, to improve operational efficiency and effectiveness through the use of EMIS. Furthermore, it is critical to consider the needs of all individuals who use the information while creating an EMIS. Examples include the state ministry, national ministries, donors, and regional and district education officials.

As a result, the country's government and educational institutions rely on EMIS. The primary function of EMIS is to generate timely and appropriately formatted information to be sent to the institute's executive management in order to achieve its intended benefits. To conclude, the researcher has designed figure 1.1 as shown down below:
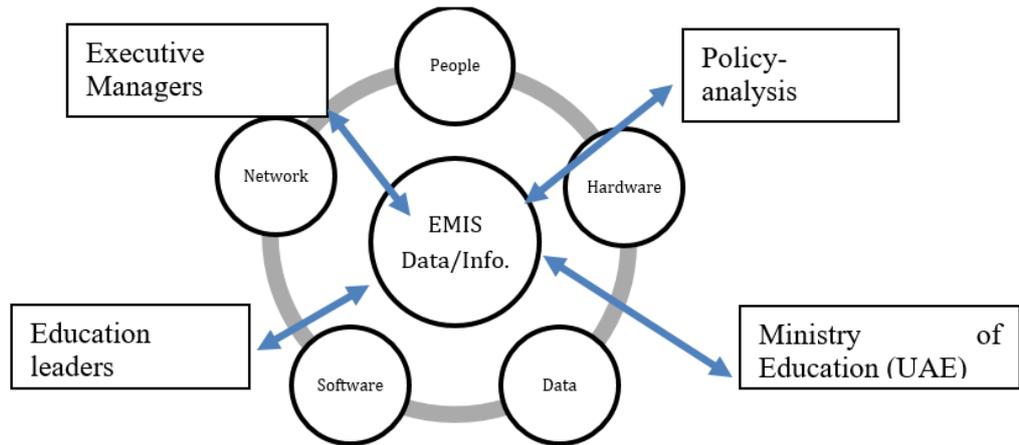
Figure 1.1   Educational Management Information Systems

EMIS is essential for administering and optimizing colleges and universities. EMIS assists in arranging and making use of a variety of resources and components. For example, it supports a wide range of people, including executive managers, policy analysts, education leaders, instructors, students, and parents.

EMIS enables employees to access and organize data or information relevant to their responsibilities. Moreover, executive managers can use EMIS to produce reports and make decisions based on data. Furthermore, instructors can monitor student progress and attendance by using EMIS.

The use of network infrastructure to promote data exchange and communication is one of the things that EMIS relies on. Networks connect various parts of the system, enabling users to reach out to EMIS from several locations. This process is crucial for collaboration among employees and real-time updates.

For a system to run smoothly and remain up and running without interruptions, reliable hardware is essential. Servers, computers, and other devices store and process data in EMIS. EMIS software and databases are hosted on servers, while end-user devices (such as computers, tablets, and smartphones) allow users to interact with the system.

Furthermore, a variety of tools and functionalities make managing educational data with EMIS software possible. The system includes modules for managing student information, tracking attendance, grading, scheduling, and reporting. As a result of the software's integration of various features, administrative tasks can be simplified and efficiency can be improved.

EMIS relies heavily on data. The system stores, processes, and collects data about students, teachers, courses, and institutional performance. Accurate reporting, well-informed decision-making, and improved educational results are all made possible by efficient data management. EMIS makes sure that information is safe, arranged, and easily accessible.

In conclusion, EMIS unifies these elements to form a unified framework that facilitates effective management and operation of educational establishments. People, networks, hardware, software, and data are effectively used. EMIS improves decision-making and operational efficiency in the education sector.

EMIS, mobile learning devices, learning management systems, and student information systems are some of the e-learning industry's more common technologies. The UK is expected to earn the most in the education sector by 2025, with a predicted income of US$80.6 billion, surpassing that of any other country in 2021. An indication of the education sector's overall economic performance is the number of significant enterprises operating within it. These businesses not only create jobs for the community, but they also succeed in international markets, adding to its worth (Calma et al., 2024).

There are many benefits and drawbacks to implementing Educational Management Information Systems (EMIS) globally. EMIS improves education quality through better data management, parental involvement, and operational efficiency.

Effective implementation, however, might be limited by issues including poor infrastructure, a lack of skills, and opposition to change. There is insufficient hardware, software, and internet access in many parts of the world, especially in isolated places (Mengistu et al., 2024).

In the United Arab Emirates (UAE) Ministry of Education licenses all UAE higher education organizations to use EMIS, while the rules and regulations vary by department and administrative unit (Ministry of Education, 2022). Student Information Management Systems, for example, assist the Admissions Department in carrying out its duties. In addition, from the time an applicant applies to enroll in a course until they receive their diploma, the Registration and Examinations department uses the same system to track their application, tests, and grades. Furthermore, the Student Affairs Information Systems are being used by the Department of Student Affairs to create an ideal learning environment and foster the growth of students' abilities and enthusiasms. Moreover, to handle issues raised by students, provide them the tools they need to complete assignments, track their progress toward their goals, and keep an eye on how the system is being used.

Finally, HRM uses the Human Resource Information System to plan human resources, recruit capable individuals to work for the organization, assist with their professional development, and handle various administrative duties such as wage and health insurance planning. Likewise, the Purchasing and Supply Department is using procurement and supply information systems to help in providing materials to the institute, as well as books, printings, storing curricula, and distributing them to the institute's remote departments. At last, Table 1.1 shows the types of data that would be enclosed in an EMIS.

Table 1.1   Data Coverage

Administrative data	Financial data	Human resources data	Learning outcomes
• Enrollment rates, including access and drop-out rates. • Ratios, including student to teacher, school to student. • Other rates, including completion, progression, and survival rates. • Behavioral data, including absenteeism and late arrivals for both teachers and students. • Special-needs population data. • Administrative indicators such as efficiency, school development plans, teacher qualifications (e.g.,age, agenda, etc.). • Financial assistance data such as school-feeding programs (and Title Iin the United States). • School improvement program data. • Service delivery indicators.	• Budget Expenditure. • School fees. • Supply-side items such as textbooks, teaching materials, desks, paper, and writing Instruments.	• Salaries for teaching and non-teaching staff, including administrative, management, security, janitorial, and transportation staff. • Information about who is working at the school and who assists in transporting students to school. • Conditional cash transfer data. • Professional development data. • Number of years of experience for teachers. • Development courses, training, certifications, and allowances for teaching and non-teaching staff. • Ministry of Finance data regarding human resources (if applicable).	• Grades • National Assessment • Classroom Assessments.

To support the many administrative and instructional tasks inside an institute, Educational Management Information Systems (EMIS) incorporate a broad variety of data types. An EMIS typically contains administrative data such as enrollment rates, access, and drop-out rates. Moreover, it provides financial data such as budget expenditures, school fees, and supply items. Finally, EMIS presents learning outcomes. For example, information on enrollment, course completions, grades, transcripts, and academic background.

Through the management and integration of these various data types, EMIS facilitates effective management, improves learning outcomes, and provides insightful information for planning and decision-making in higher education.

Since the first institute of higher education that was established in 1976 was related to Abu Dhabi, all the licensed institutes by the Ministry of Education in the UAE may not be capable of transferring from the old method of handling information systems into educational management information systems. Poor IT infrastructure is a problem for many institutions, which has an impact on how well EMIS functions. As the research on Learning Management Systems (LMS) in Dubai showed, this involves problems with systems and information quality (Allam et al., 2024).

Currently, the UAE is home to seventy-four private colleges and universities. A portion of EMIS is used by each of these private colleges and universities to carry out daily operations and to communicate data with the UAE government, such as the total number of students enrolled in undergraduate, master's, and doctoral programs. In addition, there was a rise in enrolment from 80,296 to 159,553 students between 2007 and 2016.

According to a report released by UNESCO in 2016, a huge number of students were enrolled at the undergraduate level, but out of this number, only 13.6% of the

students studied at the master's level and only 1% at the doctoral level (Lucas, 2018). According to Medaković and Marić (2018), the presence of EMIS in different educational institutions is highly valued because it enables organizations to carry out their responsibilities effectively and efficiently.

In order to keep tabs on students' day-to-day activities, monitor and assess their performance, and preserve vital data, including personal information, facts about their hostel and library, and exam records, the EMIS for executive managers of student registration can be utilized (Alsharari, 2018). As compared to the legacy database for students, EMIS is a comprehensive approach. The legacy database is not capable of providing what is required by the institution for early decision-making.

Additionally, private universities that utilize EMIS have a great deal of responsibility to educate and research while also actively participating in the economic, social, and cultural spheres (Alblooshi & Hamid, 2019).

The UAE government invests heavily in the education sector. Nevertheless, private universities are slacking off when it comes to funding research and development in technology, particularly when it comes to implementing EMIS. If private universities continued in this way, then incorrect data, errors, and lower quality information would be produced for the UAE government. To overcome these problems, figure 1.2 shows the dimensions of integration in EMIS. According to Ujomor (2016), an EMIS can be understood and integrated in terms of six principles:

1. Requirements of users or producers.
2. Information and data.
3. A database.
4. Data Retrieval.
5. Manual User Procedures.

6. Collaboration among EMIS departments or centers.
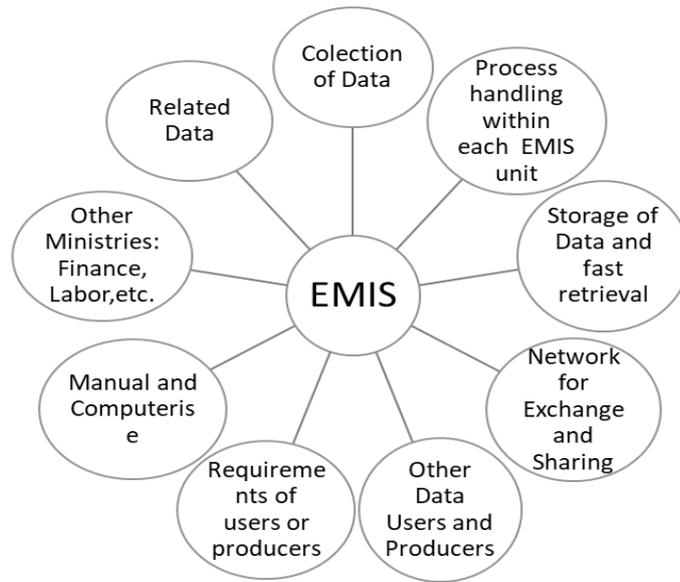
Figure 1.2   Dimensions of integration in EMIS.

According to Case and Sudan (2021), defining and meeting the requirements and expectations of those who use or produce data within the EMIS is the main goal of the first step. An EMIS must meet the needs of administrators, educators, students, and other stakeholders in order to be effective. This entails knowing their requirements for functionality, usability, and data accessibility.

Moreover, in the second step, the significance of controlling the data and information handled by the EMIS is highlighted. For example, student records, academic performance, attendance records, and administrative information are just a few of the many types of data that an EMIS must efficiently gather, store, analyze, and manage. Ensuring the relevance and accuracy of data is essential to the system's performance.

The third step underlines the function of databases in EMIS for arranging and storing data. Effective data management requires a well-organized database. It should facilitate systematic information retrieval and modification by supporting data security, accessibility, and integrity.

Furthermore, in the fourth step, data retrieval refers to the capacity to obtain and make use of data from the EMIS. The system needs to have reliable methods in place for data extraction and querying. To assist decision-making and operational requirements, this involves producing reports, gaining access to historical records, and facilitating data analysis.

The fifth step focuses on manual user methods. When users engage with the EMIS, they follow manual procedures and processes. There should be clear policies and processes in place for how users input, update, and manage data within the system. It's frequently required to provide training and documentation to make sure users can interact with the EMIS in an efficient manner.

Finally, coordination and communication across multiple departments, including IT, administrative, and academic groups, are necessary for effective EMIS integration. Working together guarantees that the system satisfies cross-functional requirements and unifies data from many departments within the organization.

These guidelines offer a framework for comprehending and putting into practice an EMIS, guaranteeing that it satisfies user requirements, efficiently handles data, and fosters organizational cooperation.

The researcher stated that the government is investing a lot of money in the education sector. Figure 1.3 explains the last six years' budget allocation by the UAE government. There is an increase of 7.1 billion from 2018 until 2023.
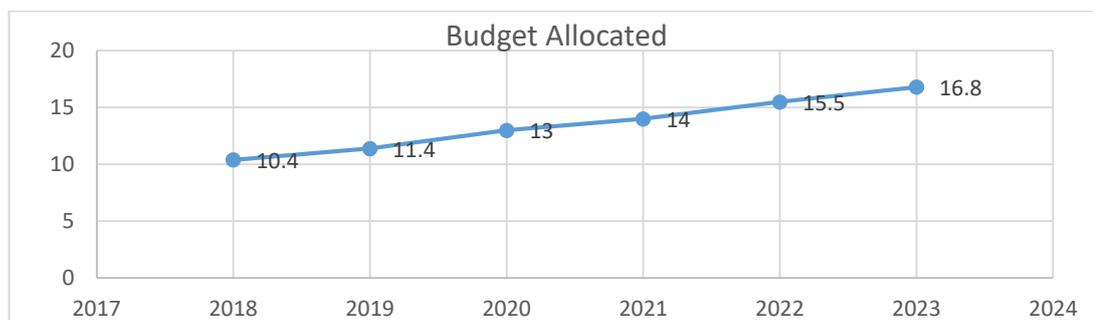
Figure 1.3   Budget Allocation to Education.

The UAE government's financial allocation for education during the last six years indicates the country's dedication to improving educational facilities, quality, and accessibility. Here's a breakdown of the trends and essential data surrounding the UAE's education budget allocations.

In 2018, the allocation was approximately 10.4 billion dirhams. Significant investment has been made to improve educational quality, including the construction of new schools and the renovation of old facilities. There was also a focus on incorporating technology into education and promoting educational projects in both public and private institutions.

For 2019, the estimated allocation was 11.4 billion dirhams. The funding increase aimed to encourage innovation in the education industry and raise educational achievements. New instructional technologies and educational program extensions were among the investments made. A major priority was to improve the quality of instruction and learning opportunities.

For 2020, the budget was 13 billion dirhams. The COVID-19 pandemic's effects led to a significant increase in the budget. Digital infrastructure, remote learning programs, and school health and safety protocols were given top priority by the government. Large amounts of resources were set aside to facilitate remote learning and ensure that education continued throughout the pandemic.

In 2021, 14 billion dirhams were allocated. focused, ongoing support for the digital transformation of education, including the growth of e-learning networks and technological advancements. Through investments in mental health assistance and improved educational resources, the budget also addressed the need for educational recovery and resilience following the pandemic.

In 2022, the allocation was 15.5 billion dirhams. Increasing emphasis on educational innovation and sustainability. The budget included funding for the creation of new educational programs, research efforts, and school-based sustainability projects. There was also an emphasis on improving educational outcomes and incorporating STEM (Science, Technology, Engineering, and Mathematics) education.

The budget for 2023 was around 16.8 billion dirhams. The highest budget allocation growth for this time period indicates a strong commitment to education. The budget provided funding for important infrastructure projects such as new school buildings and facility upgrades. Investments also focused on educational equity, including programs to help underrepresented and disadvantaged groups, as well as improving vocational training and higher education.

The UAE's dedication to enhancing the standard and accessibility of education is shown in the education budget's steady rise. The education industry has benefited from large expenditures on digital solutions and technology integration.In response to COVID-19, more money was allocated for digital infrastructure and distance education in order to maintain educational continuity.

Moreover, continuous investment in the construction and renovation of educational facilities is needed to improve learning environments and handle burgeoning student numbers. Furthermore, the focus is on cutting-edge teaching methods, such as STEM education and environmental projects. The UAE government's budgetary expenditures for education over the last six years show a deliberate emphasis on improving educational quality, incorporating technology, and addressing new concerns.

In the United Arab Emirates, the private universities are still ahead of the curve on a national, regional, and international scale. Since they occupy a distinguished position in the ranks of advanced universities at the regional level, Khalifa University (KU) ranked at the top in the UAE and 183rd worldwide in the QS world university rankings 2022, followed by the public university of the UAE, which came in second with a ranking of 288.

Moreover, according to Bhayani (2014), four emirates' universities were ranked among the top in the Arab world. For example, Khalifa University is in the second rank, compared to nine Egyptian universities and five universities in Saudi Arabia (Stephenson et al., 2018). These rankings show that the universities in the UAE are committed to providing their community members with an excellent education and are striving for academic excellence in research, teaching, and the student experience (Batini & Scannapieco, 2016).

In addition, according to Ahmad and Hussain (2017), 37% of students choose the United Arab Emirates as their first choice for higher education, 23% rank cost, and 75% rank the quality of the classroom experience and the school's reputation. EMIS is part of the learning environment that helps private universities smooth their operations and make the right decisions based on accurate information. Because of their responsibility for investing, procuring, and selecting the appropriate system for private universities, executive-level managers must make or hear the demand to modify the current approach to information technology.

In the UAE, data is the lifeline of every licensed institution. Student turnover rate, financial records—every part of the information associated with college provides a path for the development of the system. As the size of private universities grows, the volume of data becomes a huge challenge to manage (Martins et al., 2019).

EMIS stands for "educational management information system," and it was developed with the school system's unique requirements in mind. Additionally, it oversees the allocation and distribution of educational resources.

The researcher is investigating what factors impact the intent of executive-level managers of private institutions in the United Arab Emirates to use the EMIS. To achieve this, the researcher uses the technology acceptance model (TAM), the Delone and Mclean model (D&M), task technology fit (TTF), and P Trust to analyze the relationship between the factors.

Moreover, according to Simkus (2022), investigators can form purposive sampling based on geographical area. Therefore, the researcher has applied purposive sampling, and the sample is based on demographic parameters such as the location of the institutions, which would give the researcher a hint of the usage of EMIS by the executive levels of the private university. Table 1.2 lists the eighteen private universities identified by the UAE Ministry of Education.

Table 1.2   Private universities in UAE.

No	The Organizations' Names	Place	Executive Levels in Total
01.	Abu Dhabi University	Abu Dhabi	20
02.	Al Ain University	Abu Dhabi	25
03.	American University of Sharjah	Sharjah	20
04.	Khalifa University	Abu Dhabi	30
05.	University of Sharjah	Abu Dhabi	15
06.	American University in Dubai	Dubai	21
07.	Ajman University	Ajman	13
08.	Al Qasimiya University	Sharjah	10
09.	Fatima College of Health Sciences	Abu Dhabi	12
10.	University of Wollongong in Dubai	Dubai	20

Table: 1.2   (continued).

11.	University of Fujairah	Fujairah	15
12.	University of Dubai	Dubai	20
13.	New York University	Abu Dhabi	20
14.	Canadian University	Dubai	15
15.	British University in Dubai	Dubai	23
16.	Hamdan Bin Mohammed Smart University	Dubai	20
17.	American University in the Emirates	Dubai	22
18.	American University of Ras Al-Khaimah	Ras Alkhaimah	20

EMIS serves both the government of the UAE and private universities in the country. From a government perspective, investment in EMIS is one of the main drivers for enhancing productivity and competitiveness (UAE Vision, 2023).

The UAE government needs to improve educational quality to ensure accurate information about taxes, projects, number of students, teachers, undergraduate programs, master programs, and PhD programs. For private universities in the UAE, EMIS should be the tool for managing their operations and bringing in more students.

EMIS helps both sides of the equation: the UAE government and the private universities. Figure 1.4 shows the nature of the EMIS system. Moreover, it identifies informational connections within the education system.
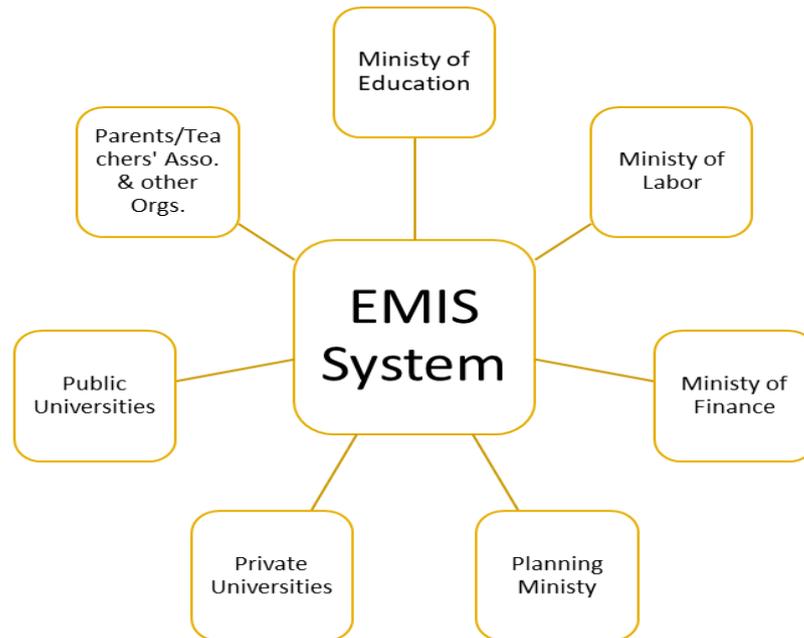
Figure 1.4   Relationship of Agencies.

There are a number of fundamental characteristics that determine the function and role of an EMIS in a learning environment. First, EMIS is an integrated system that combines the different parts and operations of a learning institution into a single, cohesive system. This includes student information, academic records, attendance, finances, and administrative procedures. The benefit of an integrated system is that it guarantees smooth data transfer between various departments and procedures; this integration improves operational coherence and efficiency overall (UNESCO, 2008: 101).

Second, EMIS focuses on gathering, storing, managing, and analyzing educational data. This contains financial data, attendance records, academic performance, and personal information about students and staff. By centralizing data, EMIS facilitates enhanced management of educational resources, data-driven insights, and better decision-making. Third, the EMIS has been built to meet the needs of multiple users, such as administrators, instructors, students, and parents. This approach

is known as a user-centric description. For every user group, the system offers customized functionality. Adapting for various user roles guarantees that every user has access to pertinent data and resources, enhancing usability and contentment (Adam & Mitchell, 2024; Van & Crouch, 2020).

Further, a number of EMIS activities, including report generation, grade computation, and attendance monitoring, are automated. Automation speeds up administrative work, decreases errors, and reduces the amount of human labor, freeing up staff time for more strategic endeavors (UNESCO, 2008: 101).

Fifth, the EMIS systems are engineered to be scalable, which implies that as the organization expands, they are able to manage growing volumes of information and users. As the institution grows or its needs change, scalability guarantees that the system continues to function effectively and efficiently (Van & Crouch, 2020).

Sixth, EMIS can be tailored to meet a university's specific requirements and operational procedures. Modules, reports, and interface configuration fall under this category. By customizing the system to meet their own needs, organizations can increase its efficacy and relevance.

Seventh, EMIS generally offers users real-time access to data and reports, enabling them to base their choices on the most recent knowledge. Improved responsiveness and operational efficiency are achieved through quick updates and interventions enabled by real-time access (UNESCO, 2008: 101).

Eighth, security is an essential component of EMIS, with protections in place to keep private data safe from breaches and unwanted access. Ensuring data security

and privacy facilitates maintaining trust and regulatory compliance are facilitated by ensuring data security and privacy.

Ninth, to make data entry and navigation simple, EMIS frequently includes interactive tools and user-friendly interfaces. An intuitive interface enhances the user experience and facilitates more effective task performance for users (Adam & Mitchell, 2024; Van & Crouch, 2020).

Tenth, EMIS offers analytical tools and reports, including performance analysis, trend detection, and resource allocation, to facilitate strategic decision-making. Educational leaders can make better decisions to enhance institutional performance by utilizing EMIS's insights and data analytics.

Eleventh, EMIS offers analytical tools and reports, including performance analysis, trend detection, and resource allocation to facilitate strategic decision-making. As a result, educational leaders can make better decisions to enhance institutional performance by utilizing EMIS's insights and data analytics.

Twelveth, by offering a common platform for communication and data sharing, EMIS helps different departments and stakeholders collaborate. The benefits of better coordination and efficiency across various institutional roles are achieved through increased collaboration (Adam & Mitchell, 2024; Van & Crouch, 2020).

In conclusion, an EMIS's characteristics include its function as an integrated, data-centric, and user-focused system that streamlines operations, facilitates decision-making, and automates procedures in educational establishments. It is a novel and calculated move for private universities in the United Arab Emirates to implement Educational Management Information Systems (EMIS). Because it can assure smooth

data transfer between various departments and procedures, and this integration improves operational coherence and efficiency. Moreover, having an effective EMIS is in line with the country's educational goals. With an emphasis on innovation, high-quality education, and creating a knowledge-based economy, the UAE government has been actively trying to improve the country's education system in accordance with its Vision 2021 and beyond (Abo-Khalil, 2024). Through better data management, easier decision-making, and increased institutional efficiency, EMIS integration at private universities can help achieve these objectives.

Digital transformation is important for education in the United Arab Emirates, according to a number of research and policy documents. To guarantee that universities meet international standards, the UAE Ministry of Education, for instance, has been pressuring them to implement cutting-edge technology solutions. The UAE's National Innovation Strategy, which emphasizes the use of technology to enhance educational outcomes, further demonstrates the country's dedication to creating an excellent educational system (Habbal et al., 2024).

Conducting this research will help to identify the factors that influence the desire to use EMIS at the executive level of private institutions in the UAE. By doing so, we can easily analyze the components' relationship with TAM, D&M, TTF, and P Trust.

1.2   Problem Statement

In 2022, the United Arab Emirates set aside 16.3 billion dirhams, or about $4.4 billion USD, to fund higher education (Morgan & Ibrahim, 2019). Moreover, in 2023, the government resolved to allocate a budget of 16.8 billion dirhams. The highest

budget allocation growth for this time period indicates a strong commitment to education. The United Arab Emirates' policy places a premium on investments in research and development (R&D) as a means to boost productivity and competitiveness (UAE Vision, 2021). According to Spranga and John (2016), the higher education system in the UAE consists of 116 authorized educational institutions that together enroll about 116,912 students in 644 academic programs.

Moreover, there are three major national universities. The UAE University, Higher Colleges of Technology, and Zayed University. Additionally, several overseas branch campuses make up the educational landscape (Schoepp 2015). Nevertheless, a portion of the EMIS is widely used by several private universities in the UAE as a tool to manage their information.

As per the HR manager in charge of monitoring systems, who has been in this position for three years, the interview questions are attached in Appendix A. The issue at university 'A' revolved around the integration of the educational management information systems and the students' information systems.

Furthermore, the second interview was with the information technology manager, who has been in this position for ten years. The interview questions are attached in Appendix B. The interview questions pointed to the financial management, accounting, asset management, project management, supply chain management, accounting, and procurement departments' failure to integrate under EMIS as the root cause of the problem.

The goal of the study is not to generalize findings across all universities but to analyze specific patterns, barriers, or resistance factors influencing the adoption of

EMIS. According to Creswell and Poth (2018) the depth of understanding gained from even a small number of cases can be helpful in qualitative research when finding themes and pressing problems. The benefit of an integrated system is guaranteeing smooth data transfer between various departments and procedures; this integration improves operational coherence and efficiency overall (UNESCO, 2008: 101). Likewise, Musti (2020) illustrated that the need for integrated EMIS occurs as long as the university anticipates staying alive in a changing and developed work environment, efficient in directing, organizing, and budgeting all its activities, in order to reach the results that it aims to achieve.

It is very critical for private universities to manage the information's via integrated EMIS. If the university is able to develop the necessary skills to acquire, distribute, generate, and utilize knowledge, it has the potential to foster innovation. Many experts in administration agree that the university sector needs an integrated EMIS in order to effectively coordinate its operations and achieve the many goals of its administrative divisions. This system would enable efficient planning and supervision duties (Manuhutu et al., 2018).

Additionally, according to Darmalaksana et al. (2018), universities can benefit from integrated EMIS since it helps them keep track of the information different departments need for administrative tasks. Furthermore, for every user group, the system offers customized functionality. Adapting for various user roles guarantees that every user has access to pertinent data and resources, enhancing usability and contentment (Adam & Mitchell, 2024; Van & Crouch, 2020).

Moreover, one of the activities that EMIS offers is automation, which speeds up administrative work, decreases errors, and reduces the amount of human labor,

freeing up staff time for more strategic endeavors (UNESCO, 2008: 101). Additionally, by offering a common platform for communication and data sharing, EMIS helps different departments and stakeholders collaborate (Adam & Mitchell, 2024; Van & Crouch, 2020). Although many executive-level managers do not see the benefits of EMIS, information is still a vital asset for private universities' competitive advantage.

Executive-level managers at private universities in the UAE are failing to adequately fund EMIS integration as part of their employees. They are facing a complex problem when it comes to resistance to implementing Educational Management Information Systems (EMIS). As a result, the EMIS integration presents a significant challenge to private universities.

The concerns about why executive levels in educational institutions refrain from using EMIS have been explored in several studies (Shwedeh et al., 2024). These studies often highlight issues related to user adoption and system complexity. For example, Musti (2020) said that one of the key reasons for opposition is the perceived complexity of EMIS. Executive-level managers may find the system unnecessarily difficult, making them reluctant to use it. This perception may stem from a lack of understanding of the technology, as well as concerns about the time and effort required to learn and properly use the system.

According to Adam and Mitchell (2024), another important consideration is a lack of trust in the EMIS. Executive-level managers may question the system's dependability and correctness, worrying that it would lead to errors or inefficiencies in their job. This lack of confidence might be worsened by earlier experiences with

other technology systems that failed to match expectations, providing a challenge to adoption.

Furthermore, Luo et al. (2024) revealed that resistance is also driven by a perceived imbalance between the EMIS and the users' tasks. If the technology is not suited to the specific needs of executive-level managers and staff, they may find it ineffective or even detrimental to their workflow. This imbalance might cause dissatisfaction and a reluctance to use the system.

Social variables, such as SI and corporate culture, play an important role in resistance. If significant members of the institution are opposed to the EMIS, the attitude can spread, resulting in a collective reluctance to implement the system (Ennajeh & Najar, 2024).

Moreover, if the university culture is hostile to change or innovation, it might stymie the adoption process (Solarz & Adamek, 2023). Furthermore, the EMIS's SQ and IQ are strong predictors of resistance. Executive managers are less inclined to accept a system that is poor in quality, whether in terms of user interface, functionality, or support. Ensuring that the EMIS fulfills high quality requirements is consequently critical to overcoming resistance (Giang & Nga, 2024).

This issue is mostly caused by the inability to keep up with contemporary technical advancements, as well as the lack of quality and use of the data in EMIS (Ashour, 2019). Similarly, Tezcan-Unal (2019) showed that faults in the IQ process from EMIS input to EMIS output can occur in the absence of integration, leading to a decline in the provision of reliable information to the UAE government.

According to Tariq (2024), the apparent insufficiency of the infrastructure to allow such integration, fear of change, and worries about the system's complexity are common causes of resistance. Moreover, he points out that to reduce resistance, for example, one can increase the system's PU and PEOU, make sure the technology supports the tasks it is supposed to, and build user trust in the system.

The potential disruption of established workflows and the substantial resources needed for installation and training may cause executives to raise their voices. Moreover, for the UAE government and private university decision-makers to have access to comprehensive, accurate, and cost-effective data, these systems must be connected. In order for educational institutions to function efficiently, it is essential that EMIS be integrated.

Figure 1.5　　　Integrated EMIS.

According to Ennajeh and Najar (2024), it is a prerequisite for the executive level to understand the role of integrated EMIS. Moreover, in the UAE, the private universities need to realize the importance of the integrated EMIS as an essential part of shaping the country's future and achieving social and economic developments.

Valackiene et al. (2021) highlighted that universities engaged in integration efforts are encountering challenges related to workers' perceptions of safety and stability. Multiple studies have indicated that people are exhibiting resistance or