KNOWLEDGE MANAGEMENT SYSTEMS ADOPTION FRAMEWORK FOR EFFECTIVE DECISION MAKING IN LIBYAN HIGHER LEARNING INSTITUTIONS

By

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Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

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DEDICATION

This thesis is dedicated to

MY BELOVED FAMILY

The pure soul of my father, Mohamed Muftah

My mother, Turkia Bayad

My husband, Abubaker Altohami

My father- in- law Basheer Altohami

My mother- in - law Mannubia Ibrahim

The pure soul of my grandmother Nuwara Hussein

My son, Ahmed Abubaker

My daughters, Shahd, Linah, Ola and Dania Abubaker

My brothers and sisters

My friends

Hanan M M Oumran

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Knowledge management system (KMS) plays a crucial role in Higher Learning Institutions (HLI) in their overall performance. KMS can hold the key to HLI progress for the institutions to make management or administration decision. KMS should be adopted by HLIs and organizations looking for quality in their services. Previous studies on KMS frameworks, particularly in the developing countries, were devoid of competitiveness pressure, big data and cloud computing factors from environmental context change management, organization readiness for the organizational context and information technology (IT) infrastructure factor in terms of technology context. This study seeks to analyze the applicability of the existing factors associated with KMS adoption that might aid to decision making in HLIs. The KMS plays significant role in providing information that will lead to improve the decision making which in return will improve effectiveness and efficiency of HLI operations. A conceptual framework need to be proposed to examine the effects of factors on KMS adoption that impact decision making among HLIs in Libya, which is a developing country. The framework needs to be comprehensive that includes necessary factors and based on solid theories. Thus, this study identifies the necessary factors that could influence the KMS adoption in HLI, construct, and propose a framework for the adoption of KMS to support the decision-making in HLIs using the Unified Theory of Acceptance and Use of Technology (UTAUT) and the theory of Technology, Organization, and Environment (TOE). Mixed methods approach of quantitative and qualitative are used for data collection. A survey instrument validated by five experts and pilot test with 50 respondents as preliminary technique before actual data collection. A total of 500 questionnaires were distributed through e-mail, and 306 were returned. The quantitative collected data were analyzed using Structural Equation Modelling (SEM) and Smart PLS 3 software to validate the proposed framework. The results showed that the framework index fitness is appropriate. The study revealed that technology, organization, and environment, which are second order factors, were significant and positively influenced the adoption of KMS. The study also showed that KMS is essential and has substantial relation with the decision-making

in HLI. The quantitative approach was then succeeded by a qualitative study to verify the KMS adoption framework and to attest the applicability of the framework. The results confirmed the findings obtained from the quantitative study and contributed to enriching the understanding of the adoption of KMS in HLI. This study could help shape the direction of both theoretical and empirical studies on KMS, specifically on adoption, to support decision-making. The study could also help HLI in a proper and effective adoption through the verified proposed framework. The proposed framework provides insight into how KMS adoption can eventually lead to an enhanced HLI decision-making for management or administrative uses. In essence, the study practically contributes to the running of institutions, organizations, and the decisions making by policymakers.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

KERANGKA KERJA PENERIMAAN SISTEM PENGURUSAN PENGETAHUAN BAGI PEMBUATAN KEPUTUSAN BERKESAN DI INSTITUSI PENGAJIAN TINGGI LIBYA

Oleh

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Sistem Pengurusan Pengetahuan (KMS) memainkan peranan penting dalam Institusi Pengajian Tinggi (IPT) bagi prestasi keseluruhan. KMS boleh menjadi kunci kepada kemajuan IPT bagi institusi membuat keputusan pengurusan mahu pun pentadbiran. KMS sepatutnya diterima pakai oleh IPT dan organisasi yang menekankan kualiti dalam perkhidmatan mereka. Kajian terdahulu mengenai kerangka kerja KMS, terutamanya di negara-negara membangun, tidak menekankan daya saing kompetitif, data raya dan faktor pengkomputeran awan dari sudut konteks pengurusan perubahan persekitaran, kesediaan organisasi dalam konteks organisasi dan faktor prasarana teknologi maklumat (IT) dari konteks teknologi. Kajian ini bertujuan untuk menganalisis kebolehgunaan faktor-faktor sedia ada yang berkaitan dengan pengadaptasian KMS yang mungkin membantu pembuatan keputusan di IPT. KMS memainkan peranan penting dalam menyediakan maklumat yang akan menjurus kepada penambahbaikan pembuatan keputusan yang menatijahkan kepada meningkatkan keberkesanan dan kecekapan operasi IPT. Kerangka kerja konseptual baharu adalah perlu dicadangkan bagi mengkaji kesan faktor terhadap pengadaptasian KMS bagi pembuatan keputusan IPT di Libya, yang merupakan salah sebuah negara membangun. Kerangka kerja ini perlu komprehensif yang merangkumi faktor-faktor yang diperlukan dan berdasarkan teori-teori yang kukuh. Oleh itu, kajian ini mengenal pasti faktor-faktor diperlukan yang boleh mempengaruhi pengadaptasian KMS dalam IPT, membina, dan mencadangkan satu kerangka kerja untuk penerimaan KMS bagi menyokong pembuatan keputusan dalam IPT menggunakan Teori Bersepadu Penerimaan dan Penggunaan Teknologi (UTAUT) dan teori Teknologi, Organisasi, dan Alam Sekitar (TOE). Kaedah campuran pendekatan kuantitatif dan kualitatif digunakan untuk pengumpulan data. Instrumen kaji selidik yang disahkan oleh lima orang pakar dan kajian awal menggunakan 50 responden sebagai teknik awalan sebelum pengumpulan data sebenar. Sejumlah 500 soal selidik telah diedarkan melalui e-mel, dan 306 telah dikembalikan. Data kuantitatif yang dikumpul dianalisis menggunakan perisian Pemodelan Persamaan Struktur (SEM) dan Smart PLS 3 untuk mengesahkan kerangka kerja yang dicadangkan. Keputusan menunjukkan

bahawa indeks kelayakan kerangka kerja adalah bersesuaian. Kajian itu mendedahkan bahawa teknologi, organisasi, dan persekitaran, yang merupakan faktor taraf kedua, adalah signifikan dan mempengaruhi secara positif bagi adaptasi KMS. Kajian ini juga menunjukkan bahawa KMS adalah penting dan mempunyai hubungan yang besar dengan pembuatan keputusan di IPT. Pendekatan kuantitatif kemudiannya diikuti oleh kajian kualitatif bagi mengesahkan kerangka kerja adaptasian KMS dan juga bagi memperakui kebolehlaksanaan kerangka kerja tersebut. Keputusan mengesahkan penemuan yang diperolehi daripada kajian kuantitatif dan menyumbang kepada pemerkayaan pemahaman adaptasian KMS dalam IPT. Kajian ini dapat membantu membentuk arah kedua-dua kajian teori dan empirikal KMS, khususnya mengenai pengadaptasian, bagi menyokong pembuatan keputusan. Kajian ini juga mampu membantu IPT bagi pengadaptasian yang bagus dan berkesan melalui kerangka kerja sah yang dicadangkan. Kerangka kerja yang dicadangkan memberikan gambaran tentang bagaimana penerimaan KMS akhirnya boleh membawa kepada pembuatan keputusan IPT yang dipertingkatkan untuk kegunaan pengurusan atau pentadbiran. Pada dasarnya, kajian ini secara praktikal menyumbang kepada pengendalian institusi, organisasi, dan pembuatan keputusan oleh pembuat dasar.

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This thesis was submitted to the Senate of the Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
BGD	Big data
BHV	Behavioral intention to adopt.
CFA	Confirmatory Factor Analyses
CSFs	Critical Success Factors
CHG	Change Management
CLD	Cloud Computing
CMP	Competitiveness Pressure
CR	Composite Reliability
DSM	Decision Making
DMS	Decision Making Speed
DOI	Diffusion of Innovation
DSSs	Decisions Support Systems
DTPB	Decomposed Theory of Planned Behavior
EFA	Exploratory Factor Analyses
FSP	Financial Support
GFI	Goodness-of-Fit Statistic
HLI	Higher Learning Institutions
IS	Information System
IT	Information Technology
ITE	IT Infrastructure
KMO	Kaiser-Meyer-Olkin
KM	Knowledge Management
KMS	Knowledge Management System
ORD	Organization Readiness

PCA	Principle Component Analysis
PEE	Effort Expectancy
PFI	Parsimony Fit Indices
PGFI	Parsimony Goodness-of-Fit Index
PIS	Problem Identification Speed
PLS	Partial Least Squares
PNFI	Parsimonious Normed Fit Index
PPE	Performance Expectancy
QA	Quality Assessment
QR	Quality Criteria
R2	Coefficient of Determinations
RMR	Root Mean Square Residual
RMSEA	Root Mean Square Error of Approximation
SEM	Structural Equation Modeling
SLR	Systematic Literature Review
SPSS	Statistical Package For Social Science
SRMR	Standardized Root Mean Square Residual
TAM	Technology Acceptance Model
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
TRN	Training
TOE	Technology Organization Environment
UTAUT	Unified Theory of Acceptance and Use of Technology

CHAPTER 1

INTRODUCTION

1.1 Background

In essence, data is a fundamental component of both knowledge and information. Analysis enables the identification, storage, retrieval, and further processing of both knowledge and information. Knowledge can be transmitted in the form of information, and information can be transformed into knowledge. A person's gained awareness or comprehension of a subject through education or experience is referred to as knowledge. Information is simply a refined form of facts that facilitates comprehension of its significance. In contrast, knowledge is the pertinent and objective information that facilitates conclusion-drawing. Thus, the difference between knowledge and wisdom is the capacity to use that knowledge in a profound manner. Thus, knowledge is a component, whereas wisdom is the entire. In addition to absorbing information, wisdom involves making sense of those truths (Cooper, P., 2014, 2017).

Organizations generally strive towards achieving effective and timely strategies and management of information as relevant information is core to their decision-making and knowledge. Information significance has affected most organizations in both developing or Less developed countries (or emerging markets) that have a lower GDP than industrialized countries since they have a younger and less established economy) and developed nations such as the United Kingdom and the United States of America. Those countries are investing in information management budgeting to ensure that they remain to sustain to the law and regulations. In the context of developing nations, the shift to a knowledge-based economy from an agriculture-based is underway, with information increasingly accepted as a resource that directly affects the development and productivity of the nation, and its use can contribute to the nation as a whole (Mukred, Yusof, Noor, Kayode, & Al-Duais, 2019).

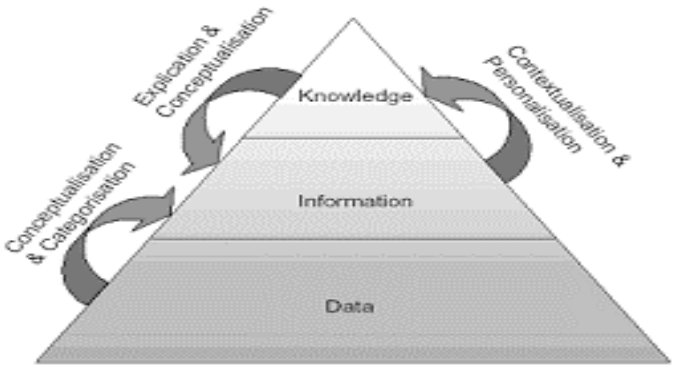

Figure 1.1 : The Illustration for data, knowledge, and Information

Figure 1.1 shows the illustration of knowledge, information and data. There are three fundamental forms of knowledge: explicit (recorded information), implicit (applicable information), and tacit (understood information). Together, these various sorts of knowledge create the spectrum of how humans share information, learn, and develop (Duan et al., 2022). Explicit knowledge is knowledge that can be easily communicated, written, and passed down from one person to the next. Tacit Knowledge is knowledge gained through personal experience that is difficult to describe using words or visuals. Practical experience as well as in-depth study, observation, and fact-finding (Santos, Oliveira, & Curado, 2021).

Knowledge Management (KM) is described as a collection of processes that creates, disseminates, and uses knowledge to achieve the organization's objectives. The domain that highly need to be addressed when studying knowledge management and its adoption are such as public sector, a functioning entity at the federal, country, state, municipal, and local government levels.

Previous researches have delved into issues of KM in regards to challenges, and opportunities based on specific context domain of interest, but the education sector remains largely untouched. Notwithstanding the substance of public sector firms, they are less likely to leverage the KM benefits than their private counterparts. However, they have begun to acknowledge KM significance in operational restructuring and decision-making (DM). A thorough review of the literature shows that KM does exist in the sector of education (such as Veer Ramjeawon and Rowley (2017), Mohammad, Abdullah, Jabar, Haizan, and Rahman (2018), and Naser, Al Shobaki, and Amuna (2016), yet many more can be added.

Knowledge Management System (KMS) refers to an information system that functions to bring about development and the maintenance of KM processes that involve the creation, storage, recovery, dissemination, and use of knowledge in and outside the organization. However, the analysis of literature findings concerning KMS adoption shows that despite its crucial role in Information Technology (IT) systems application and other resources handling tactical knowledge efficiently and methodically throughout organizations, the KMS has remained less researched (Inkinen, 2016).

The majority of studies in the literature conclude that knowledge is a source of competitive advantage and a crucial element in organizations in the present global and international markets, as mentioned by Cepeda-Carrion, Martelo-Landroguez, Leal-Rodríguez, and Leal-Millán (2017) and Ribeiro, Soares, Jurza, and Ziviani (2018).

The current period of the knowledge economy, coupled with the extension of the knowledge society, has urged organizations to search for novel strategies to use to leverage and share knowledge for making strategic decisions. In Abdelrahman, M., Ph.D. (2019) study, the author indicated that KM initiatives could bring about the effective acquisition, coding, and sharing of knowledge in organizations and boost

informed decision-making (DSM). Furthermore, the author emphasized the importance of integrating the KM paradigm into the processes to help knowledge workers effectively and efficiently reach informed decisions. In fact, in today's ever-changing economic landscape, the challenge lies in the management of organizations' knowledge so that knowledge employees are enabled to use knowledge in their day-to-day tasks.

In the education sector, technology has a significant role in expanding the traditional face- to- face learning, teaching models and enabling easy access to students' information, with academic achievement evidence especially during pandemics and new ways of online teaching era.

In addition to the above, technology can be utilized for information generation in order to bring about the decision-making, within which the issues are generally rooted in several areas especially the educational management. The majority of decisions in the education sector stem from conjectural viewpoints or using minimal information. In actual situations, decisions taken to resolve issues are frequently of the utmost seriousness, and thus, it is required that information is evaluated thoroughly.

In the past several years, universities have been largely dependent on information gathering, storage, and processing, with decision-makers, constantly searching for strategies to apply new tools to convert information into decision-making data that could resolve the issue of management. In this regard, effective decisions stem from the use of software tools supporting the process of decision-making in the hopes of heightening the universities' performance and mitigating the issues' negative effects (Mukred et al., 2021; Şuşnea, 2013). During the current pandemic era studies with unprecedented threats, KMS is invaluable for learning, competitiveness, accountability, and transparency. Abdelrahman, M., Ph.D. (2019) studies confirmed that KMS plays a vital role in guaranteeing the continuity of HLIs and helps in promoting a well-informed decision for all employees.

Information System (IS) is a formal, organizational system designed to collect, process, store, and distribute information for beneficiaries. IS triggered consistent studies to examine the factors that influence individuals' acceptance and use of technology. In this background, globalization has led to the necessity of determining how managers make decisions all over the globe and how different KMSs support such decision-making. Moreover, such systems enable the flow of individuals who hold the knowledge to those who need such knowledge across organizational departments and units. Educational institutes are advised to develop and support their IT departments to an efficiently and effective knowledge accessibility (Charles & Nawe, 2017).

This study proposed an additional effort to provide deeper insight and contribute to the education with empirical findings concerning HLIs and KMS adoption. The topic is crucial for educational institutions as, within such institutions, KMS is a new tool used to relate the instructors and students in different channels. The majority of organizations

face challenges in KMS's successful implementation, and the educational institutions are no exception. This is evidenced by how the majority of technologies adopted in organizations fail to positively affect the transference and sharing of knowledge (Kamaruzzaman, Zawawi, Shafie, & Mohd Noor, 2016).

Examining the effects of relevant drivers of KM adoption for a well informed decision (WID) will allow the management, system designers as well as system developers to comprehend the perception of users about system usage. In prior studies, Decisions Support Systems (DSSs) and KMSs have largely ignored their combination and interconnection, and thus, little knowledge is known about the same. In the context of higher education institutions, services and systems that support decision-making have a major role to play towards effective performance evaluate. The WID throughout the higher education sector in the developing nations is rife with complexity, with sound decisions elusive owing to the certain disconnection between the functional divisions and stakeholders. Decision-making is confined to those in charge and experienced in the area, who are largely dependent on their personal skills knowledge as highlighted by previous works (Abdelrahman, M., Ph.D., 2019; Mukred et al., 2021; Pazol et al., 2018).

The educational institution, need to leverage the KMS advantages as it is pertinent to use technology to accept and determine the acceptance or resistance to adopting technology among workers paves the way to enhancing investments in IT applications for their satisfactory return especially during the difficult time.

The knowledge era or knowledge economy development has created knowledge-based economies, which are a vital resource for enterprises and society. Knowledge is one of the most competitive aspect in knowledge economy. Knowledge use, storage, and knowledge sharing lead to systems and techniques to transform and share tacit and explicit knowledge. Knowledge management has become part of organizations in order to successfully utilizing their resources. Knowledge-sharing culture is necessary when considering creating knowledge management efforts in certain organizations (Al-Kurdi, El-Haddadeh, & Eldabi, 2020; Khalil, Marouf, & Khalil, 2021).

The adoption of KMS must consider several influencing factors (Salami & Suhaimi, 2019). Quiet, an extensive study has been performed in the business and corporate sector about KMS efforts and adoption. The primary objective is to implement a successful system that would assist each organization's capacity to flourish (Jackson, Shen, Nikolic, & Xia, 2020). However, it was determined from the literature that there was a dearth of study on factors influencing KMS for higher education institutions (Jackson et al., 2020; Khalil et al., 2021; Upadhyay & Kumar, 2020).

HLI and academic institutions role are to develop their talents dissiminate information and inculcate good culture. They are now constantly faced with increased demands on their abilities to share quality resources and knowledge in education and research skills to assure their survival and success in the global arena (Veer-Ramjeawon & Rowley,

2020). The significant knowledge of HLI is an academic experience, and it may be claimed that this is the leading competitive resource of such institutions.

The main focus of this research is to find impact of factors on behaviors correlated with KMS, which contribute to the decision-making of an institution of higher education. Factors are apparent and vital for the development of any framework. Technological, organizational, and environmental research to be examined in this research. KMS can be defined as an acquisition and exchange knowledge management process, which is necessary both through informal and formal channels and through technical facilities and systems. This process takes place through interactions between individuals and groups to build and create new knowledge which benefits the organisation (Abubakar, F., MSc., 2017; Salami & Suhaimi, 2019; Shaw & Liu, 2016).

Studying KMS and decision-making requires various factors that may contribute to the successful adoption. In this regard, the three dimensions are often cited as a dominant determinant of behavioral intention toward the KMS adoption in the HLI. Indeed, researchers have identified different factors that technological characteristics, management support, change management, the organization's structure, and its infrastructure in big data and cloud computing as major factors involved in the failure to adopt KMS (Chatterjee, Ghosh, & Chaudhuri, 2020; Jackson et al., 2020; Jha & Sahoo, 2021). In this regard, the influence of the technological, organizational, and environmental on behavioral intention may also be a factor in the failure to adopt KMS effectively, as a considerable amount of research in different countries and within many organizations has identified. However, only a minimal number of research studies have addressed the role of KMS in improving the decision-making.

Due to its relevance, various research has therefore been performed at many KMS organizations. However, many researchers (Al-Kurdi et al., 2020; Salami & Suhaimi, 2019) discovered that KMS in academic institutions was still overlooked in the literature, as only a few studies had addressed academic staff perceptions and attitudes toward knowledge sharing; furthermore, the majority of research in this field was conducted in Asia, Australia, and the West (Gaviria-Marin, Merigó, & Baier-Fuentes, 2019; Hussinki, Kianto, Vanhala, & Ritala, 2017).

In the Arabic nations, in order to understand the challenges that academics confront in implementing knowledge-sharing efforts in their institutions, there was only very little published research on managing knowledge and identifying barriers to knowledge sharing and development in higher education (Abu-Shanab & Shehabat, 2018; Ghasemi, Nejad, & Bagzibagli, 2017).

Because of this lack of comprehensive published research regarding KMS in public higher education institutions in the Arabic world, it was necessary to identify the relevance of the adoption of KMS in a Libyan public higher education institution as an example. Therefore, the research aims to identify different factors that will lead to

adopting KMS successfully and adequately. In addition, the research also examined the perceived role of KMS adoption in enhancing the decision-making of HLI.

1.2 Problem Statement

According to Zwain, Lim, and Othman (2012), teaching, learning, and research are the top drivers behind HLI, as highlighted in their mission statements. The core of institutions is knowledge dissemination and transfer at different levels. Accordingly, Brewer and Brewer (2010) contended that HLI is a knowledge-based entity involved in developing knowledge workers in different professions.

In the present dynamic and competitive business environment, it appears that HLI largely depends on knowledge quality, transfer, and development (Zwain et al., 2012), which is where the stress for the facilitation of the right environment with the proper knowledge flow stems from (Oztok, 2014; Witherspoon, Bergner, Cockrell, & Stone, 2013). In other words, the facilitation of an environment characterized as enabling tacit knowledge may be viewed as the most invaluable component of the competitive advantage of HLI (Charles & Nawe, 2017; Witherspoon et al., 2013).

In prior studies there are limited focus on the factors influencing KMS adoption. There are some technological and organizational factors have been examined, without the environmental factors, although the latter is also significant based on the KMS characteristics (Baharuddin, Izhar, Mohamad, & Hasnol, 2016). In organizations, especially in education environment, the lack of awareness and understanding of what KMS can positively bring to performance appear to be the top barrier towards KMS adoption, followed closely by the lack of knowledge on the suitable factors to achieve the adoption challenge (van Zyl, Henning, & van der Poll, 2018). Concerning this, the theory/model application in a cultural context may differ in another culture, with some variables varying in importance among cultures (Venkatesh, Thong, & Xu, 2016). Therefore, in the present study, the factors influencing the adoption of KMS in HLIs are examined.

The issue with effective and efficient KMS from the information generated to assist HLIs in planning and reaching wise decisions with which their competencies need to be enhanced. Evidently, literature has plenty of evidence as to the support of KMS of the WID (Zhang, Zhou, Bai, Lu, & Chang, 2018), implying that KMS is a tool that could avoid the negative impact of issues revolving around the management of information and knowledge (Şuşnea, 2013). Information should be available for the students at any time required to assist with the tools they need to achieve their academic goals (Mukred et al., 2021). That's why KMS is necessary to generate information for this purpose. Therefore, in the present work, the KMS's role in supporting WID in HLI is investigated.

In a related study, Cowan (2018) claimed that the current global scene is characterized by dynamic technology changes that have led to the transformation of the whole globe into a small village, thanks to globalization, the revolution of communication technology and IT (Fu, Bao, Xie, & Fu, 2021; Thrift & Amin, 2017). Traditional management practices that preceded automation have led to the failure of organizations (Argyris, 2017; Duong et al., 2020). In the Arab world context, like Libya, practices adopted from the West are rampant that are mostly inconsistent with the characteristics present in the country. In HLIs, the administrative and managerial practices lack specific KMS adoption frameworks for successful adoption. In addition to that, in the educational sector administrators are lacking KMS initiatives cannot be adopted without a proper framework (Abdullah, R. & Alsharaei, 2016; Arpaci, 2017; Demir, Budur, Omer, & Heshmati, 2021; Dneprovskaya & Shevtsova, 2018; Mohammad et al., 2018; Wang, Y.-M. & Wang, 2016), as without such framework, there would be lack of guiding technology implementation and adoption to be followed. Thus, this study aims to develop a framework for KMS adoption in the HLIs to promote WID.

1.3 Research Questions

The prior enumerated objectives were established to determine the answers to the following research questions.

1. What are the factors that influence KMS adoption?
2. What is the significance of KMS to the decision-making?
3. What will be appropriate development strategies for KMS adoption framework?
4. What will be appropriate validation strategies for KMS adoption framework?

1.4 Research Objectives

This research mainly aimed in developing and implementing KMS adoption initiative framework that supports the decision-making.

The objectives of the research are:

1. To identify the factors influencing the KMS adoption in HLIs in developing countries.
2. To examine the relationship between KMS and the well informed decision-in HLIs.
3. To develop KMS adoption framework to support the decision-making in HLIs in developing countries.
4. To validate a framework of KMS adoption to support the decision-making in HLIs.

In order to produce a clear picture, the mapping of the research problem with the questions and objectives is presented in Table 1.1.

Table 1.1 : Mapping process based on the research questions

Issue in the Problem Statement	Research Questions	Research Objectives
The current adoption of KMS is still lagging behind.	RQ1 What are the factors that influence KMS adoption?	RO1: To identify the factors influencing the KMS adoption in HLI in developing countries
The absence of empirical studies on the relationships between KMS and decision making	RQ2: What is the significance of KMS to the decision-making?	RO2: To examine the relationship between KMS and the decision-making in HLI
Lack distinct frameworks of adoption of KMS towards well informed decision.	RQ3: What will be appropriate development strategies for KMS adoption framework?	RO3: To develop a framework of KMS adoption to support the decision-making in HLI
	RQ4: What will be appropriate validation strategies for KMS adoption framework?	RO3: To validate a framework of KMS adoption to support the decision-making in HLI

As depicted in Table 1.1, the systematic mapping intended to differentiate this study with other previous studies in terms of effectiveness and efficiency.

1.5 Research Scope

A KMS framework is brought forward in this study based on a thorough review of the KMS adoption literature findings. The study related valid instrument since literature to the popular KMS theories to develop the fundamental dimensions of KMS adoption taxonomy. The factors are obtained from literature as backed and supported by experts categorized under technological, organizational, and environmental aspects. These are the complementary phases in the causal chain of KMS adoption beliefs.

The study uses the theory of UTAUT by Venkatesh, Thong, and Xu (2012b), with the inclusion of additional factors from literature and the TOE framework to supplement the theoretical dimensions.

The factors examined in this study will be covering technological factors, organizational factors, and environmental factors (exogenous variables), intention towards KMS adoption (endogenous variable) and decision-making (dependent variable).

The main study of practice for KMS adoption framework to improve the decision-making of HLI in Libya will be the study sample, constituting the respondents of the

research, are the HLI program administrators and academic staff under the Ministry of Higher Education of Libya.

The well-informed decision making purposed together the adoption of KMS in Libyan HLIs will be the focus of the study.

The study adopts a quantitative approach, using the survey questionnaire as the primary data collection tool. This approach was adopted as it is aligned with the study objective to gather numerical data for the statistical testing of the independent-dependent variables relationships. The study also made use of qualitative approach with interviewing 10 experts to validate the applicability of the KMS framework.

1.6 Organization of Chapters

This study is organized in the standard thesis format, in that its contents are divided within six chapters, which are detailed as follows.

Chapter 1 is about the research introduction, background, problem statement, research objectives, research questions, research significance and scope, and thesis organization are enumerated and explained.

Chapter 2 is about prior literature on KMS is reviewed thoroughly, particularly those pertaining to the factors that could influence the adoption of KMS.

Chapter 3 is about present the conceptual model and framework of the study and the development of hypotheses, dimensions selection, and the rationale behind the proposed relationships within the research model.

Chapter 4 is about the study provides the research methodology phases and details that are pertinent to the achievement of the objectives. These encapsulate data collection and data analysis strategies.

Chapter 5 is about which the research analysis outcomes are presented and discussed. It's also about reiterates the research findings, with detailed discussions.

Chapter 6 is about dedicated to providing the study conclusion, the study's contributions to theory and practice, study implications, study limitations, and recommendations for future avenues of work.

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