Enhancing KMUKM Financial Management: Transition from Physical Document to Online System
(Meningkatkan Pengurusan Kewangan KMUKM: Peralihan daripada Dokumen Fizikal kepada Sistem Dalam Talian)

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ABSTRACT

This study investigates the implementation of an online system for managing the financial operations of the Student Union at the National University of Malaysia (KMUKM), replacing the traditional hardcopy submission process. Traditionally, students faced significant time and logistical challenges, especially from distant campuses, Kuala Lumpur and Cheras campuses with up to 200 hardcopy applications weekly during peak periods. To address these issues, an online fund management system, "Sistem Pengurusan & Permohonan Dana KMUKM," was developed. A survey of 150 students revealed that over 90% found the new system more efficient, convenient, and environmentally friendly. The findings show that the digital transition not only streamlines administrative processes but also advances environmental sustainability efforts, aligning with Sustainable Development Goal (SDG) 9. This study contributes to best practices for digital transformation in student administrative services.

Keywords: Online system, Financial management, Student Union of the National University of Malaysia (KMUKM), Technological advancements, Sustainable Development Goal (SDG)

ABSTRAK

Kajian ini bertujuan untuk mengkaji keberkesanan dan keperluan pelaksanaan sistem dalam talian untuk menguruskan operasi kewangan Kesatuan Mahasiswa Universiti Kebangsaan Malaysia (KMUKM), menggantikan proses penyerahan salinan cetak tradisional. Secara tradisinya, pelajar menghadapi cabaran masa dan logistik yang ketara, terutamanya dari Kampus Kuala Lumpur dan Cheras yang jauh, dengan sehingga 200 permohonan salinan keras setiap minggu semasa tempoh puncak. Untuk menangani isu ini, sistem pengurusan dana dalam talian, "Sistem Pengurusan & Permohonan Dana KMUKM," telah dibangunkan. Tinjauan terhadap 150 pelajar mendedahkan bahawa lebih 90% mendapati sistem baharu itu lebih cekap, mudah dan mesra alam. Penemuan menunjukkan bahawa peralihan digital bukan sahaja memperkemas proses pentadbiran tetapi juga memajukan usaha kelestarian alam sekitar, sejajar dengan Matlamat Pembangunan Lestari (SDG) 9. Kajian ini menyumbang kepada amalan terbaik untuk transformasi digital dalam perkhidmatan pentadbiran pelajar.

Kata kunci: Sistem dalam talian, Pengurusan kewangan, Kesatuan Mahasiswa Universiti Kebangsaan Malaysia (KMUKM), Kemajuan teknologi, Matlamat Pembangunan Lestari (SDG)

INTRODUCTION

The rapid evolution of technology has led to the digitization of management within an administration. This is seen as very important because it reflects the competency of an administration in keeping up with current global developments. Furthermore, the use of technology in daily operations undeniably facilitates and accelerates all processes involved. Among the most notable and evident implementations of technology nowadays is the digitization of traditional systems such as the management of physical documents to online systems. For example, the School Management System (SPS) introduced by the Ministry of Education Malaysia (KPM), which functions for Year 1 registration, updating student profile information, and monitoring student attendance, has not only expedited processes related to these matters but has also reduced paper usage, thereby contributing to environmental sustainability.

Therefore, it is clear that the use of technology in administrative affairs is extremely important and should be utilised at every level of administration, from the smallest administration at the school level to the highest administration in a country. This emphasis on technology reflects its indispensable role in modern administrative processes, which is not limited to speeding up procedures but also includes enhancing overall efficiency and transparency. The reduction in the use of physical resources, such as paper, also underscores the environmental benefits of such digital transitions.

This study focuses on administration at the university level, specifically National University (UKM), which is striving to harness technological advancements in the financial management of student activities. By shifting from traditional hardcopy document methods to an online system, the university aims to streamline financial processes, improve accuracy, and facilitate easier access to financial information. The transition to a digital system is expected to bring about a more efficient and effective way of handling financial matters, thereby supporting the overall development and management of student activities. The study will explore the various aspects of this digital transformation, including the challenges and benefits, to provide a comprehensive understanding of how technology can enhance financial management in higher education institutions.

Conventional and Long-standing Method of KMUKM financial management

In any administration or operation of any organisation, including student bodies in universities, robust and solid financial management is crucial to ensure the well-being of the administration. This is because good financial management can enhance the quality of activities or programs conducted. At universities, each student body has its own financial management, handled by individuals holding portfolios such as Treasurer, Financial Executive, Finance Unit, or any other terms that encompass similar duties. Additionally, at several public universities in Malaysia with full financial autonomy granted to students, the highest student body at the university, namely the Student Representative Council (MPP) or Student Union, is qualified to manage and allocate student activity funds to all students who wish to conduct or participate in any student programs or activities throughout their study

FIGURE 1.0

period at the university.

At UKM, the highest student body responsible for managing student activity funds is the UKM Student Union (KMUKM). In each KMUKM administration session, over MYR 1,000,000.00 is managed and allocated by them, specifically the Honorary Treasurer of KMUKM, to various programs or activities conducted or participated in by students. In the 2021/2022 session, KMUKM approved MYR 719,466.00 out of MYR 1,202,815.31 in applications received for 332 programs. In the following session, 2022/2023, KMUKM approved MYR 1,386,614.26 out of MYR 2,492,527.75 in fund applications received for 730 programs. This shows a sharp increase in fund applications from year to year, averaging +45%. This clearly indicates the need for empowerment and strengthening in the fund management of KMUKM so that fund allocation can be done more systematically, efficiently, and transparently.

Conventionally, for students to apply for funding from KMUKM, they must prepare five types of documents: the iSTAR Proposal, the iSTAR Approval Letter, the KMUKM Funding Application Form, the Undertaking Letter, and the Detailed Budget. All five documents must be submitted to KMUKM in physical copies. Students are required to print all these documents themselves and deliver them to the KMUKM Office located on the 5th Floor of Pusanika, UKM. Each month, KMUKM receives at least 30 funding applications, which can increase to up to 200 applications during peak seasons of student program and activity execution. Figure 1.0 shows the stack of physical documents received by KMUKM in a week during peak season.

This has been the method of applying for funding that has been implemented and used for many years. It is clearly an inconvenient method, not environmentally friendly, and not in line with technological advancements and usage.

Technological Advancement in KMUKM Financial Management

To address the challenges of the conventional funding application process, an initiative to transition from a physical document method to an online system has been undertaken by the students of UKM themselves. Wan Aleeya Fitriah binti Wan Shamshol, a Bachelor of Software Engineering (Multimedia Systems Development) with Honours student from the Faculty of Technology and Information Science (FTSM) at UKM, developed the "Sistem Pengurusan & Permohonan Dana KMUKM." This online system aims to simplify and expedite the funding application process, enhance efficiency, keep pace with technological advancements, and promote campus sustainability. It replaces the outdated method of handling physical documents, aligning with modern practices for a more environmentally friendly and streamlined approach.

Figures 1.1, 1.2, 1.3, and 1.4 show snapshots of the system interface. Some of the main features include the digital application form (Figure 1.2), where students only need to fill in the empty fields, and after submitting the application, an automatically generated form with the filled-in details will be produced. Additionally, students can view their application status by checking the timeline (Figure 1.3). Traditionally, they needed to manually inquire about their application status through WhatsApp.

FIGURE 1.1 Login Interface
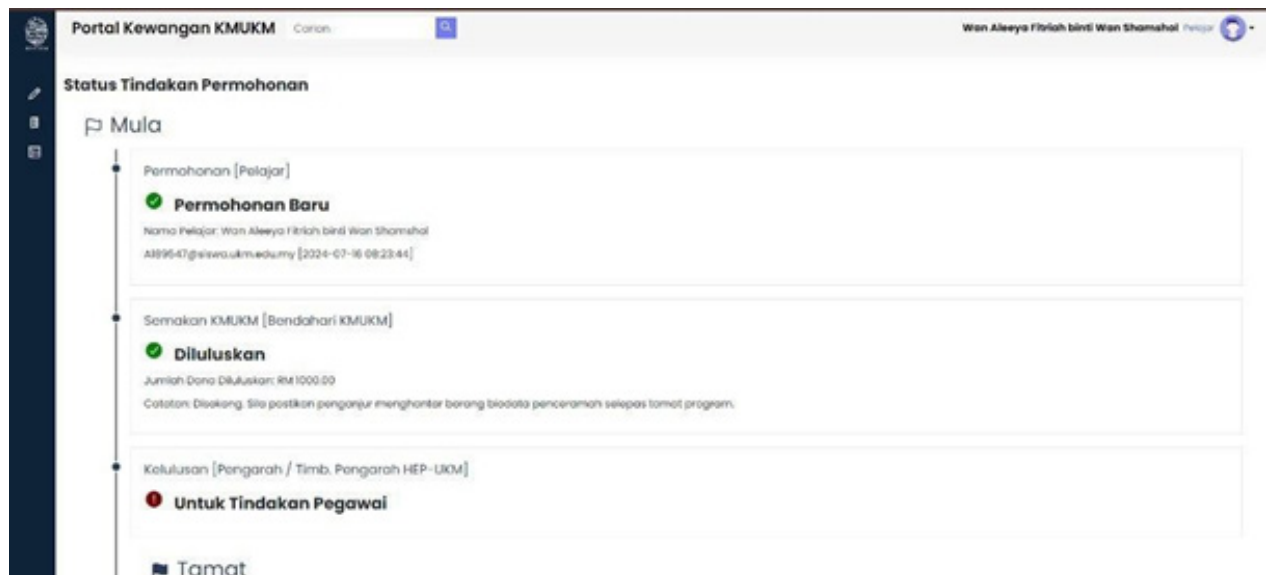
FIGURE 1.2 Application Form Interface

FIGURE 1.3 Application Status Timeline Interface

Research Objectives

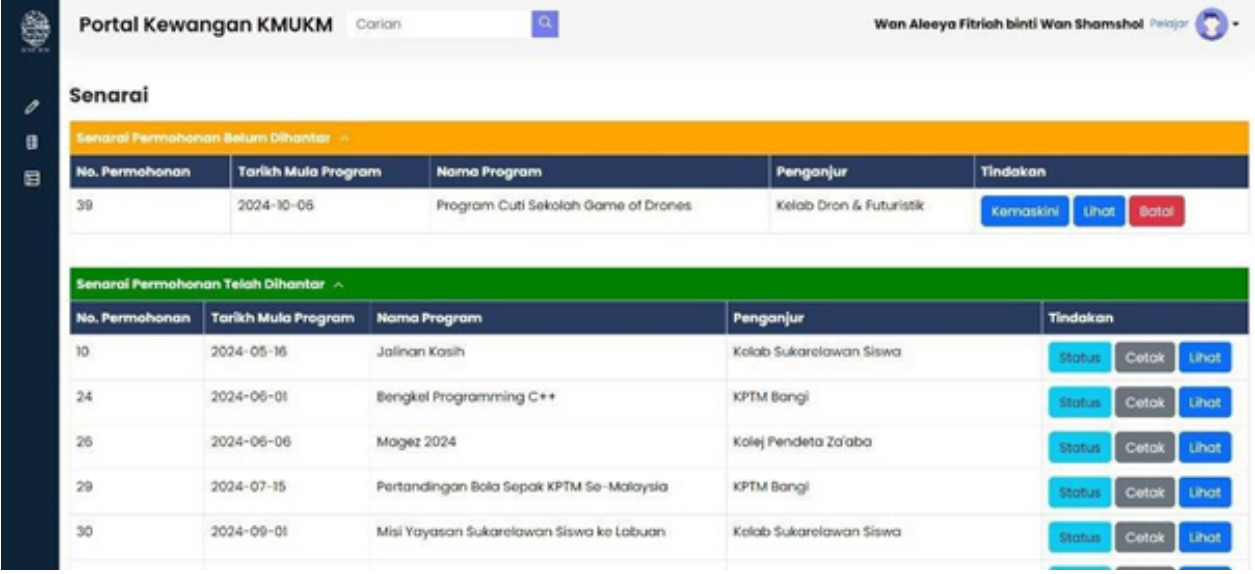This study is guided by the following research objectives:

i.   To evaluate the challenges associated with the traditional hardcopy-based KMUKM funding application process.
ii. To assess the usability, efficiency, and user satisfaction levels associated with the new online system.
iii. To investigate the impact of digitalisation on administrative sustainability within a university context.
iv. To provide recommendations for future improvements in the digital management of student financial activities.

By critically examining the transition from manual to digital processes within KMUKM, this study aims to offer insights that may inform broader strategies for administrative digital transformation in higher education institutions.

FIGURE 1.4 List of Application (Homepage) Interface

LITERATURE REVIEW

Impact of Management Information Systems (MIS) on School Administration

The integration of information technology into educational management has significantly evolved over the past decades. Initially, management information systems (MIS) were primarily employed to enhance the efficiency of school office operations by storing student and personnel data (Visscher, 1996a). However, with advancements in technology, the role of MIS has expanded to encompass data analysis and strategic decision-making.

Research indicates a profound influence of MIS on school administration. These systems have proven instrumental in improving efficiency and time management by automating routine tasks and reducing administrative burdens (Condie et al., 2007; Cunningham et al., 2004). Moreover, MIS has enhanced access to information, enabling faster and more informed decision-making (Christopher, 2003). By facilitating communication and collaboration among staff members, MIS has also contributed to a more connected and efficient school environment (Bober, 2001). Effective resource utilisation is another area where MIS has demonstrated its value. Schools can track and optimise resource allocation through these systems (Zain et al., 2004). Additionally, MIS has facilitated the generation of high-quality reports for both internal and external stakeholders, improving accountability and transparency (Visscher & Wild, 1997).

Despite the numerous benefits, challenges and inhibitors to MIS adoption persist. Lack of training and technical skills among staff, insufficient technical support, and time constraints have hindered the full potential of MIS in many schools (Demir, 2006; Kirkman, 2000; Mumtaz, 2000).

Furthermore, the absence of data analysis skills among school administrators has limited the ability to extract meaningful insights from the available data (Carnoy, 2004). Resistance to change has also been identified as a factor impeding MIS implementation (Kennewell et al., 2000).

To fully realise the potential of MIS in education, future research should focus on several key areas. Developing user-friendly data analysis tools and investigating the relationship between MIS and student outcomes are essential next steps (Passey, 2002; Carnoy, 2004). Moreover, tailoring MIS to the specific needs of individual schools is crucial for effective implementation (Fulmer, 1995).

In conclusion, MIS has emerged as a valuable tool for enhancing school administration and management. While challenges remain, the positive impact of these systems on efficiency, decision-making, and resource utilisation is evident. By addressing the identified challenges and investing in further research and development, schools can maximise the benefits of MIS and create more effective and responsive learning environments.

Enhancing Student Engagement through Technology Integration

As the education system evolves, the integration of technology into the curriculum has become increasingly important for enhancing student engagement and academic success. This shift aligns with the broader trend of digital transformation, where technology plays a pivotal role in shaping learning environments. The study by Al-Said (2015) explores the implementation of educational technologies, specifically focusing on Edmodo, and its impact on student engagement and achievement. This discussion is pertinent to evaluating and developing digital systems such as the KMUKM fund application.

The integration of technology in education offers numerous advantages. For instance, platforms such as Edmodo facilitate collaborative learning and enhance student engagement by providing a space for students to interact with peers and instructors outside of traditional classroom settings (Purnawarman et al., 2016). This platform allows students to maintain a continuous connection with their learning environment, thus promoting a sense of community and engagement. By leveraging such technological tools, educators can create a more dynamic and interactive learning experience that aligns with modern educational needs.

Technology's role in education extends beyond mere facilitation of content delivery. It supports higher-order thinking processes, creative exploration, and inquiry-based learning. According to the research, students benefit from the opportunity to synthesise information from various sources and engage in activities that promote deeper understanding (Schindler et al., 2017). For example, Edmodo provides features that support these processes, such as collaborative tools and resources that students can access from any device (Al-Said, 2015). This aligns with the principles of connectivism, which emphasise the importance of maintaining connections and engaging with diverse perspectives to foster continuous learning (Wang, Chen, & Anderson, 2014).

Incorporating technology into the curriculum also supports the development of cognitive competencies and enhances student autonomy. The shift towards a more student-centred learning environment allows students to take control of their learning experiences, which can lead to increased motivation and academic success (Hillman, 2014). The benefits of such integration are evident in improved student performance and engagement, as students report higher levels of satisfaction and achievement when technology is effectively used in the classroom

(Mistler-Jackson & Songer, 2000).

However, challenges remain in the effective implementation of technology in education. Barriers such as limited technical skills, insufficient time for training, and inadequate resources can impact the successful integration of digital tools (Sun et al., 2016). Despite these challenges, the positive impact of technology on student engagement and academic success cannot be understated. Educators who are equipped with the right training and resources can overcome these barriers and effectively integrate technology into their teaching practices (Kirkscey, 2012).

In the context of developing and evaluating digital systems for educational purposes, such as the KMUKM fund application process, the insights from Al-Said's study highlight the importance of user-centred design and continuous engagement. By incorporating features that facilitate interaction, collaboration, and ongoing support, digital systems can enhance user experience and satisfaction. Understanding how technology can be leveraged to meet educational goals provides valuable guidance for designing digital solutions that effectively address user needs and expectations.

In conclusion, integrating technology into education offers significant benefits for student engagement and academic success. The insights from Al-Said's research emphasise the importance of creating interactive and supportive learning environments through technological tools. These findings are highly relevant for developing digital systems in education, underscoring the need for thoughtful design and implementation to enhance user experience and achieve desired outcomes.

Digital Transformation for Environmental Sustainability

The escalating global concern over environmental sustainability has prompted a critical examination of human activities and their impact on the planet. One significant area of focus is energy consumption, driven largely by transportation, industrial processes, and building operations. Within the realm of organisational operations, the traditional workplace model, characterised by centralised offices and daily commutes, has contributed substantially to this environmental challenge. In response to these pressures, the concept of the digital workplace has emerged as a potential solution. This paradigm shift involves a transition from physical office spaces to virtual environments, enabling employees to work remotely or flexibly.

A critical component of the digital workplace is the shift towards paperless operations. The elimination of paper-based processes, such as document management, communication, and approval workflows, offers substantial environmental benefits. Studies have demonstrated that paper production consumes significant amounts of energy and water, contributes to deforestation, and generates substantial waste. By adopting digital alternatives, organisations can significantly reduce their carbon footprint. Furthermore, the digital workplace facilitates the implementation of green procurement practices. By sourcing environmentally friendly products and services, organisations can minimise the environmental impact of their operations. For instance, the use of recycled paper, energy-efficient equipment, and sustainable furniture can contribute to overall sustainability goals.

While the potential benefits of digital workplaces are evident, it is essential to acknowledge potential challenges. Issues such as job security, employee disengagement, and the digital divide require careful consideration and mitigation strategies. Moreover, the environmental impact of the technology infrastructure supporting digital workplaces should be assessed to ensure overall sustainability.

In conclusion, the transition to digital workplaces presents a promising avenue for addressing environmental challenges. By reducing commuting, minimising paper usage, and adopting green procurement practices, organisations can contribute to a more sustainable future. However, a comprehensive approach that considers both the environmental and social implications of digital transformation is essential for realising its full potential.

METHODOLOGY

This study adopts a quantitative research approach to evaluate user perceptions of the KMUKM financial management system transition—from a traditional hardcopy submission process to a newly developed online system. The primary objective of the methodology is to collect structured feedback on the usability, efficiency, and user satisfaction with both the conventional and online fund application methods.

Research Design

A structured questionnaire survey was employed to collect data from students and administrators at Universiti Kebangsaan Malaysia (UKM). The questionnaire design was informed by two established usability evaluation frameworks: the Computer System Usability Questionnaire (CSUQ) and the System Usability Scale (SUS). These frameworks were selected due to their reliability and validity in assessing system usability, user satisfaction, and ease of use.

According to Lewis (2018), despite differences in item content and format, the CSUQ and SUS frameworks largely measure the same construct of perceived usability, showing a high correlation between their scores. Thus, the integration of these frameworks provided a comprehensive basis for evaluating user experiences with the KMUKM financial management systems.

Sampling and Participants

The survey targeted a sample of 150 UKM students from various faculties and campuses, including Bangi, Kuala Lumpur, and Cheras branches. Participants were selected using a purposive sampling technique, focusing on students who had previous experience with the KMUKM funding application process or were actively involved in student activities. This ensured that feedback was collected from individuals with relevant insights and familiarity with the system.

Data Collection Procedure

The data collection process involved two phases:

i. Experience with the Conventional System: Participants were asked to reflect on their previous experiences with the traditional hardcopy submission process. Questions in this section focused on efficiency, convenience, environmental concerns, and difficulties encountered.

ii. Evaluation of the Online System: Participants were introduced to the new "Sistem Pengurusan & Permohonan Dana KMUKM" through access to the live platform, a user manual, and a demonstration video. They were then invited to interact with the system before providing their feedback. This experiential approach ensured that participants could offer informed responses based on direct engagement with the online system.

The survey was structured into four main sections:

- Respondent Profile (demographic data, experience with KMUKM funding)
- Evaluation of Hardcopy Submission

System
- Evaluation of   Online Submission System
- User Experience and System Usability Feedback

Participants rated various statements using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Open-ended questions were also included to allow respondents to suggest improvements and provide additional comments.

TABLE 1.0 Respondent Profile

Section 1 : Respondent Profile

Question	Answer Options	Frequency	Percentage (%)
Sex	Male	40	26
	Female	114	74
Year of Study	Year 1	45	29.2
	Year 2	36	23.4
	Year 3	58	37.7
	Year 4	14	9.1
	Year 5	0	0
	Alumni	1	0.6
Faculty	FTSM	42	27.3
	FSSK	17	11
	FEP	15	9.7
	FKAB	7	5.4
	FPI	15	9.7
	FPEND	4	2.6
	FST	19	12.3
	FSK	13	8.4
	FPER	5	3.2
	FGG	7	3.2
	FFAR	1	0.6
	FUU PPCU	5	3.2
		4	2.6
UKM Branch	Bangi	128	83.1
	Cheras	6	3.9
	Kuala Lumpur	20	13
Have you ever applied for KMUKM fundingbefore?	Yes	107	69.5
	No	47	30.5
How actively are you involved in student activities inside/outside UKM?	Not Active At All	3	1.9
	Slightly Active	27	17.5
	Moderately Active	55	35.7
	Very Active	54	35.1
	Extremely Active	15	9.7

Data Analysis

The collected data were analysed using descriptive statistical methods. Frequencies, mean scores, and standard deviations were calculated to summarise user perceptions. To enhance the clarity of the findings, key results were visualised through tables and graphs, enabling easy comparison between the traditional and online systems.

Ethical Considerations

Participation in the study was voluntary, and informed consent was obtained from all respondents. Anonymity and confidentiality of participants' information were assured throughout the research process, in compliance with ethical research standards at UKM.

Table 1.0 presents a comprehensive analysis of the respondent profile to provide insights into the demographics and engagement levels of participants. The data, categorised by sex, year of study, faculty, UKM branch, previous application for KMUKM funding, and involvement in student activities, reveals significant trends and patterns that contribute to a deeper understanding of the respondent base.

TABLE 1.1 User Feedback on the KMUKM Hardcopy Fund Application System

Section 2 : KMUKM Current Fund Application System (Hardcopy Submission)

Question	Frequency					Mean	Standard Deviation
	1	2	3	4	5		
I like the system of submitting KMUKM funding documents in hardcopy.	54	48	32	11	9	2.18	1.16
I find the system of delivering documents in hardcopy to be efficient and convenient.	47	52	29	14	12	2.30	1.21
I feel concerned seeing stacks of hardcopy documents because of the environmentally unfriendly and unsafe ways they may impact the Earth.	4	2	21	52	75	4.25	0.92
I find it difficult to know the status update of my KMUKM funding application due to the inefficient information delivery platform.	2	7	15	47	83	4.31	0.92
I once chose not to apply for funding from KMUKM because the method of sending hardcopy documents was very inconvenient.	12	17	43	35	47	3.57	1.25
I have experienced difficulties in sending hardcopy documents due to unavoidable problems.	4	14	30	47	59	3.93	1.08

In examining the effectiveness and user perceptions of the KMUKM current fund application system, which relies on hardcopy submissions, several key aspects have been assessed. The data provided, as illustrated in Table 1.1, offers insights into various dimensions of the hardcopy submission process, including user satisfaction, efficiency, and environmental concerns.

Table 1.2 presents the results of user feedback on the KMUKM online fund application system. The table includes frequency distributions, mean scores, and standard deviations for various aspects of the online system, providing a comprehensive overview of user perceptions and experiences.

TABLE 1.2 User Feedback on the KMUKM Online Fund Application System

Section 3: Sistem Pengurusan dan Permohonan Dana KMUKM" (Online System)

Question	Frequency					Mean	Standard Deviation
	1	2	3	4	5		
The online system is very efficient and facilitates the process for all people involved.	1	3	10	45	95	4.49	0.76
Transitioning from a hardcopy document method to an online system is a very good initiative.	0	1	5	30	118	4.72	0.56
I think that the development of this online system should have been implemented long ago.	0	1	5	34	114	4.69	0.56
The timeline feature indicating the current status of student funding applications is very helpful and informative.	0	1	7	41	105	4.62	0.60
The online system saves my time to apply for funding from KMUKM.	0	1	5	34	114	4.69	0.56
The online system is convenient for me to apply for funding from KMUKM.	0	1	4	33	116	4.71	0.54
I feel that there are still things that need to be improved in this developed online system.	1	3	32	46	72	4.2	0.88

Table 1.3 presents the results of user feedback on various aspects of the KMUKM online system, focusing on user experience and satisfaction.

DISCUSSION

Demographic Trends and Engagement Levels

The analysis of respondent demographics indicates a pronounced predominance of female participants, with 74% identifying as female compared to 26% identifying as male. This disparity highlights a potentially higher level of engagement or interest among female students in the survey, which could reflect broader institutional trends or specific aspects of the survey's focus. This gender imbalance warrants further investigation to understand the underlying reasons and to ensure that the needs and preferences of both male and female students are adequately addressed. Tailoring interventions and support mechanisms to accommodate these differences can enhance the effectiveness of the financial management system and ensure that it meets the diverse needs of all students.

The distribution of respondents across academic years shows that Year 3 students constitute the largest group at 37.7%, followed by Year 1 and Year 2 students at 29.2% and 23.4%, respectively. The absence of Year 5 students and the minimal representation of alumni (0.6%) suggest a strong presence of mid-level students in the survey sample. This distribution might be influenced by several factors, such as the timing of the survey or varying levels of engagement among students at different stages of their academic journey. Understanding these patterns can provide insights into the engagement levels and preferences of students at various academic stages, allowing for more targeted and effective financial management strategies.

Faculty Representation and Geographical Concentration

The diverse representation across faculties shows that the Faculty of Technology and Information Systems (FTSM) has the highest number of respondents at 27.3%. This may reflect either a larger student

TABLE 1.3 User Experience Feedback on the KMUKM Online System

Section 4: User Experience Feedback

Question	Frequency					Mean	Standard Deviation
	1	2	3	4	5		
I think this system is not complicated and very easy to use.	0	2	13	54	85	4.44	0.50
I am able to complete my work quickly using this system.	0	3	8	50	93	4.51	0.47
The system gives error messages that clearly tell me how to fix problems.	1	4	23	52	74	4.26	0.85
Whenever I make a mistake using the system, I recover easily and quickly.	0	3	18	53	80	4.36	0.76
The information (such as online help, on-screen messages, and other documentation) provided with this system is clear.	0	1	16	50	87	4.45	0.70
The information is effective in helping me complete the tasks and scenarios.	0	1	11	50	92	4.51	0.43
The organisation of information on the system screens is clear.	0	2	12	46	94	4.51	0.69
The interface of this system is pleasant.	0	1	13	49	91	4.49	0.69
I like using the interface of this system.	0	1	12	49	92	4.51	0.67
This system has all the functions and capabilities I expect it to have.	0	1	17	50	86	4.43	0.71
Overall, I am satisfied with this system.	0	1	13	39	101	4.56	1.16

population within this faculty or higher engagement with the survey. Conversely, faculties such as Pharmacy (FFAR) and Law (FUU) have lower representation, which could be attributed to smaller student populations or varying levels of interest in the survey. This diversity in faculty representation highlights the need to consider the unique characteristics and engagement levels of different academic departments when evaluating and improving the financial management system.

Geographically, the majority of respondents are from the Bangi branch (83.1%), with significantly fewer from the Cheras branch (3.9%) and Kuala Lumpur branch (13%). This concentration suggests that the Bangi branch may have a higher participation rate or a greater focus within the survey's scope. Understanding the geographical distribution of respondents can provide valuable insights into regional engagement patterns and inform strategies to increase participation from less represented branches.

Financial Management and Funding Application Trends

A substantial majority of respondents (69.5%) have previously applied for KMUKM funding, indicating a high level of familiarity with the funding process. This experienced respondent base provides a valuable perspective on the strengths and weaknesses of the current system. The high proportion of experienced applicants suggests that feedback from these individuals is informed by a solid understanding of the funding process, which can be crucial for identifying areas for improvement and enhancing the overall efficiency of the system.

The data on involvement in student activities reveals that a significant portion of respondents are actively engaged in campus life, with 35.7% categorised as moderately active and 35.1% as very active. This high level of engagement suggests that respondents are likely to have substantial insights into the impact of the financial management system on student activities. Understanding their perspectives can help in refining the system to better support and facilitate student involvement in various programs and initiatives.

User Satisfaction with the Hard Copy Submission System

The feedback on the hardcopy submission system reveals clear dissatisfaction among respondents. The mean score for user satisfaction is 2.18, indicating general dissatisfaction with the current system. The high standard deviation of 1.16 suggests significant variability in responses, reflecting a wide range of opinions and experiences. This dissatisfaction is further highlighted by low mean scores for efficiency and convenience (2.30), emphasising the perceived inefficiency and inconvenience of the hardcopy submission process.

Environmental concerns are a major issue, with a high mean score of 4.25 indicating strong consensus on the negative environmental impact of handling large volumes of paper. The lower standard deviation of 0.92 reflects a general agreement among participants regarding these environmental concerns. Additionally, difficulties in tracking the status of funding applications and the overall inconvenience of the hardcopy process were significant concerns, with high mean scores (4.31) and moderate standard deviations.

Positive Reception of the Online Fund Application System

In contrast, the KMUKM online fund application system received a generally positive reception. High mean scores for statements about the system's efficiency (4.49) and the beneficial transition from hardcopy to online (4.72) indicate strong approval of the online system. Respondents appreciate the timeliness of the system's implementation (4.69) and the effectiveness of the timeline feature (4.62), which provides clear and timely status updates on funding applications.

The online system is also recognized for its time-saving benefits, with a mean score of 4.69, and its convenience, with a mean score of 4.71. These high scores suggest that the online system is widely regarded as an improvement over the hardcopy process. However, respondents also acknowledged that there are areas for improvement within the system, as indicated by the mean score of 4.20 for the need for further enhancements. This recognition of potential improvements highlights the importance of ongoing refinement to fully meet user expectations and enhance the system's effectiveness.

User Experience and System Usability

The feedback on various aspects of the KMUKM online system demonstrates high user satisfaction with its usability and effectiveness. High mean scores for the system's user-friendliness (4.44), efficiency in task completion (4.51), and clarity of information provided (4.45) indicate strong agreement among users on these positive attributes. The system's interface is also well-regarded, with high scores for its visual appeal (4.49) and user preference (4.51).

However, some areas for improvement were identified, particularly regarding error messages and the system's recovery process.

The mean score of 4.26 for the clarity of error messages and 4.36 for the ease of recovery from mistakes suggest that while most users find these aspects helpful, there is some variability in experiences. The data on the organisation of information (4.51) and the system's functionality (4.43) reflect overall satisfaction, but also indicate that there is room for further refinement.

CONCLUSION

This study investigated the transition from a conventional hardcopy submission process to a digital online system for managing the financial activities of the Student Union at Universiti Kebangsaan Malaysia (KMUKM). The findings reveal widespread dissatisfaction with the traditional method due to inefficiencies, logistical challenges, and environmental concerns. In contrast, the newly developed online system, "Sistem Pengurusan & Permohonan Dana KMUKM," received overwhelmingly positive feedback from users, who appreciated its efficiency, convenience, clarity, and environmentally sustainable design.

The results from the survey, involving 150 UKM students, showed that more than 90% of respondents found the online system to be more time-saving, user-friendly, and better aligned with modern administrative expectations. The shift to a digital platform not only optimised operational processes but also supported the university's broader environmental

goals, contributing meaningfully to Sustainable Development Goal (SDG) 9: Industry, Innovation, and Infrastructure.

This study contributes to the growing body of research on digital transformation in higher education administration by providing empirical evidence on how online systems can enhance student services while promoting sustainability. It demonstrates that well-designed digital platforms can significantly improve user satisfaction and operational efficiency within university settings.

However, the study is not without its limitations. It focused solely on short-term user perceptions at a single institution, and the long- term impact of the system on administrative outcomes was not evaluated. Additionally, user feedback was collected soon after the system's introduction, meaning further refinements are likely necessary as usage patterns evolve. Future research should explore longitudinal effects of such digital transitions, comparative studies across multiple universities, and the integration of additional features to further enhance system usability.

In conclusion, the digitalisation of KMUKM's financial management processes presents a strong model for other student administrative systems aiming to modernise, optimise services, and foster sustainable practices. Continued investment in digital innovation, combined with ongoing user feedback and system enhancement, will be crucial for sustaining this positive momentum and ensuring that student needs continue to be effectively met in an increasingly digital environment.

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