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E-UIDM SYSTEM (EMS) FOR POLYTECHNIC COMMUNITY

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ABSTRACT

e-UIDM System (EMS) serves as a comprehensive solution addressing the challenges faced by the Unit for Instructional Development & Multimedia (UIDM), Politeknik Ungku Omar (PUO) in managing multimedia requests. The primary objectives of the EMS are; to notify user on their request status through email and notify UIDM staff (PIC) on their assigned task; to develop a system that can make MAROs work easier by identifying work weight of PICs before assigning them and to create a service/equipment requesting system that can make head of unit and Multimedia and Resources Officer (MARO) view the current status of the request. By enhancing the multimedia request process, it not only streamlines operations but also endeavours to create an organized, transparent, and responsive workflow for the staff at Politeknik Ungku Omar.

1. Introduction

In today's fast-paced digital landscape, software applications play a vital role in enhancing productivity, streamlining operations, and solving real-world problems (Assres et al., 2025). EMS is one of the application systems at Politeknik Ungku Omar (PUO) to assist user apply the services from Unit Pembangunan Instruksional dan Multimedia (UIDM) Service Application Form. There are some services offered by UIDM such as digital photography, artwork design, audio and visual, videography and online streaming. These services will be assisted by eight officers at UIDM which each of them is dedicated in their own job scope. Previously, UIDM only use manual form to collect the application from users to request for services. Then, they move to google form. But still the approval and some monitoring still cannot handle by the google form. Hence, this study is to improve the workflow of the UIDM application by introducing the EMS.

2. Materials and Methods

To gain the information about this study, survey question was distributed among the officer and user who involve in EMS such as lecturers and staff. There are three main group of respondents targeted to answer the survey questions which are; UIDM staff, Head of Unit (UIDM), Multimedia Officer (MARO), PUO lecturers and all PUO staff. Table 1 depicts the questions that distributed the respondents.

Table 1: The items in question survey

No	Item
1	How easy is it to navigate and use the system?
2	Is the system's interface clear and intuitive?
3	Can users easily find the features they need?
4	How satisfied are users with the overall usability?
5	How responsive is the system?
6	How reliable is the system under load?
7	How well does the system handle multitasking function?
8	Do the available features adequately meet the users' requirements?
9	Does the system offer any unique or innovative features?
10	What improvements or additional features would users like to see?
11	How satisfied are users with the system overall?

Some of this question are using likert scale (Tichy et al., 1995)to measure the respondent and some measure by interview method (Jasmi, 2012). Both methods are being evaluated to measure the study objectives. From the respondent's feedback in Table 2, cumulatively 15 respondents tested the system.

Table 2: The Respondents Feedback

Unit/Department	Number of Respondents
UIDM	9
JTMK	4
Administration	2

3. Results

Here's the pie chart showing the number of respondents by unit/department. UIDM had the highest participation, followed by JTMK and Administration.

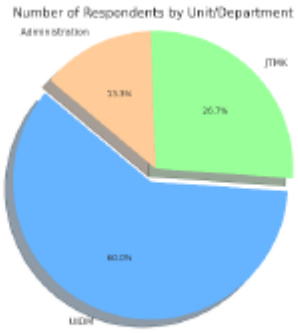

Figure 1: Pie Chart Showing the Number of Respondents by Unit/Department

3.1 Discussion about testing

The pie chart illustrates the distribution of survey respondents from three different units or departments within the organization: UIDM, JTMK, and Administration. The total number of respondents is 15, and the chart visually breaks down their contributions as follows:

i. UIDM (Unit Pembangunan Instruksional dan Multimedia)

a) Number of Respondents: 9
b) Percentage: 60%
c) This unit had the highest number of respondents, making up the majority of the total responses. The high participation rate may indicate strong engagement with the EMS system or a greater interest in its evaluation and improvement, possibly due to UIDM being directly involved in the service delivery managed by EMS.

ii. JTMK (Jabatan Teknologi Maklumat dan Komunikasi)

a) Number of Respondents: 4
b) Percentage: Approximately 26.7%
c) JTMK also had a notable contribution to the feedback. As a department that often deals with digital infrastructure and systems, their input could provide valuable technical insights into the EMS's functionality and integration potential.

iii. Administration

a) Number of Respondents: 2
b) Percentage: Approximately 13.3%
c) This department had the lowest number of responses. While fewer in number, feedback from administrative staff is still essential, as they might interact with EMS in terms of workflow approvals or documentation.

The pie chart highlights the active participation of UIDM, which is consistent with their role in delivering services supported by the EMS system. The data suggests that any improvements or updates to the EMS should heavily consider UIDM's user experience. This respond might not be covering the large respondent number because of the system development still in progress stage while taking input from respondents to improve the system flow. Hence the post-survey will be executed after the system progress more.

3.2 Evaluation of the Response

From Figure 2, the result shows that majority Strongly Agree for each of the 10 survey items, most respondents (between 11–14 out of 15) selected "Strongly Agree". Remaining respondents selected "Agree", showing that 100% of participants had a positive perception (no negative or neutral responses recorded). Strongest areas (93% Strongly Agree) are for the item system responsiveness and overall satisfaction (but still strong) about 73% Strongly Agree for ease of finding features and multitasking capability.

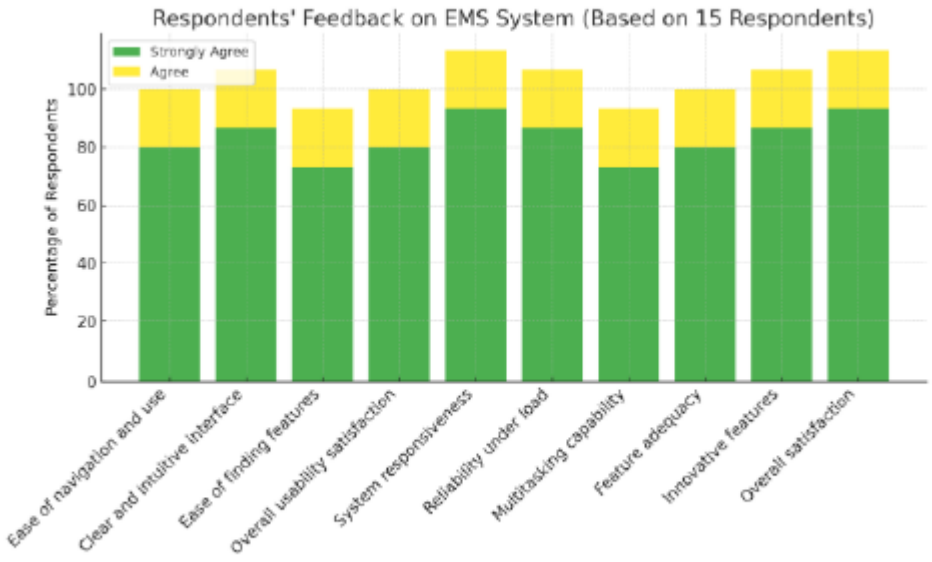

Figure 2: Result of the Survey

Hence, from the evaluation, it can be concluded that the EMS system is well-received overall. Areas like responsiveness and user satisfaction are standout strengths. Minor attention may be given to feature discoverability and multitasking performance, even though ratings are still high.

4. Discussion

The overwhelmingly positive feedback affirms that EMS is a well-developed and effective application, successfully supporting the operational needs of users from various departments. To maintain and further improve user satisfaction, it would be beneficial to conduct usability testing focused on feature discoverability, explore small enhancements to support multitasking or concurrent processes and such continuous improvements will help ensure the EMS remains a reliable, user-centric system that evolves with user needs.

5. Conclusion

The e-UIDM System (EMS) demonstrates strong potential for implementation at PUO and can be widely adopted across polytechnics and community colleges to support sustainable and efficient service management.

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