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Title of Report: Research Report on User Experience of Microsoft Teams for Educational

Purposes among Students

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Lecture Section: FCI1

Lecturer: Madam Nor Azlah Binti Abu Bakar

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PLAGIARISM STATEMENT

We acknowledge that this assignment is our own original work, and no part of it was plagiarised. We

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Research on User Experience of Microsoft Teams for Educational Purposes among Students

Microsoft

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Abstract

This research report analyzes the user experience of Microsoft Team among students in educational aspect where it provides few key features that help user in classroom management, assignments and feedback, virtual meetings, and engagement. These features are crucial for organizing, managing, and facilitating online learning which have been directly impacting students' academic performance and satisfaction. While Microsoft Teams is widely used, there is a research gap in understanding how its specific features align with students' needs. By collecting feedback from students at MMU, this study aims to assess how the platform supports their learning effectively and where improvements can be made. The research question discovers how features like classroom management and feedback mechanisms influence student satisfaction and learning outcomes. Using an approach which is a survey that had been given out to several students, the findings show that while students appreciate collaboration and virtual meeting tools, they face some challenges with feature complexity. Overall, the study addresses the need for continual improvement in user-centered design, ensuring platforms like Microsoft Teams evolve to better support student engagement and learning success.

Acknowledgement

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List of Abbreviation
MMU – Multimedia University

QR – Quick Response

UI – User interface

UX – User experience

1.0 Introduction

1.1 Background

The increasing integration of digital technologies in education has led to the widespread adoption of various platforms that facilitate online learning and collaboration. Among these, Microsoft Teams has emerged as a leading tool, offering a comprehensive suite of features designed to support both synchronous and asynchronous learning. As educational institutions strive to enhance learning outcomes through digital means, understanding the UX and UI of these platforms becomes increasingly important, especially from the perspective of students who are the primary users.

Microsoft Teams has played a significant role in education by providing tools for virtual classrooms, assignment management, and real-time communication with its features such as chat, meet, call, and collaborate on projects and assignments (Microsoft, 2023). However, the effectiveness of Microsoft Teams in an educational context hinges on its usability and the overall experience it provides to students. In this case, difficult to navigate or lack of intuitive features can create barriers to learning, potentially diminishing student engagement, and academic performance.

Based on our research in information on educational technology, it has highlighted the importance of user-centered design in enhancing the effectiveness of digital learning tools. Studies have shown that platforms that are easy to use, reliable, and well-integrated with other educational resources tend to have higher levels of student satisfaction and engagement (Microsoft, 2021). However, while there is extensive literature on the general benefits of e-learning platforms, there is a relative lack of focused research on the specific user experiences of students using Microsoft Teams.

Hence, understanding the user experience of Microsoft Teams is crucial for several reasons. Firstly, it can provide insights into how students interact with the platform, what challenges they face, and how these challenges impact their learning. Secondly, it can inform the development of features and functionalities that better align with student needs, ultimately leading to improved educational outcomes (Tholfsen, 2023). In addition, by conducting such research educators and administrators can guide in selecting and optimizing digital tools that enhance the learning experience.

This study aims to fill the gap in the current literature by examining the user experience of

Microsoft Teams from the perspective of students. By analyzing factors such as usability, accessibility, and overall satisfaction, this study seeks to provide actionable recommendations for improving the platform's effectiveness in educational settings. The findings of this research will be valuable to educators, developers, and policymakers who are committed to leveraging digital tools to support and enhance student learning.

1.2 Terms of Reference

The purpose of this report is to perform research on the user experience of Microsoft Teams for educational purposes among students, as requested by Satya Nadella, CEO of Microsoft on the 28 August 2024. These findings will be used to assist the company better by understanding consumer behavior, including students' need to use Microsoft Teams, as well as an analysis of the functionality and satisfaction of using Microsoft Teams for educational purposes. The written report is submitted on 27 September 2024.

The personnel involved in this research are:
1. Vaarindran A/L Nyanasegran, Manager (Group Leader)
2. Tengku Alyssa Sabrina Binti Tengku Erwin Martino, Assistant Manager
3. Chan Kar Kin, Assistant Manager
4. Michelle Yong Ting Ting, Assistant Manager
5. NurFatin Aina Binti Rizal, Assistant Manager
6. Azizah Maisarah Binti Haja Mohaideen, Assistant Manager

1.3 Purpose and Scope

As a collaboration and communication platform, it is crucial for Microsoft Corporation to understand students' experiences and motivations when using Microsoft Teams for educational purposes since it is a vital tool for online learning. Gaining insights into these experiences can help to optimize the platform's use in educational settings, increase user satisfaction, and increase the platform's effectiveness.

The aims/objectives of this study are:
1. To evaluate students' satisfaction with the user interface design of Microsoft Teams.
2. To examine students' experience of navigating and using key features.
3. To improve the UI/UX of Microsoft Teams for better usability.

1.4 Methodology

Two approaches were involved in this research to gather and analyze data on students' experience with Microsoft Teams for educational activities. With clarification, it allows us to ask meaningful questions surveys in helping us meet our objective and gather valuable insights from user. Besides, online research is essential for us to gain deeper understanding of the subject.

The methods involved are as follows:

1. *Survey (refer to Appendix A)*

   We conducted an online survey among MMU students from various faculties. The survey included 10 closed-ended questions designed to evaluate student satisfaction with Microsoft Teams' features and identify any usability issues that might hinder their learning activities. By identifying students' needs and preferences in using Microsoft Teams for their learning activities, we can have a better focus on improving the platform in the future. The survey link was distributed to MMU students via QR codes and social media platforms such as WhatsApp and Instagram, ensuring convenience and accessibility. After achieving the desired number of responses, the form survey link was closed to maintain data consistency and avoid variability that could affect the accuracy of the results.

2. *Online Library Research*

   The second approach involved carrying out digital library research to review existing literature on the use of Microsoft Teams as a learning platform among students. Through the digital library research, we gained a deeper understanding into students' experiences with Microsoft Teams and identified existing research gaps that could inform future enhancements.

2.0 Findings

This study aimed to identify the impression of MMU students on their use of Microsoft Teams as their learning management tool and inform its optimization to better serve their needs. A Google Form survey comprising of 10 questions was administered among a random sample of MMU students, yielding 49 responses. The following are the general findings of the study:
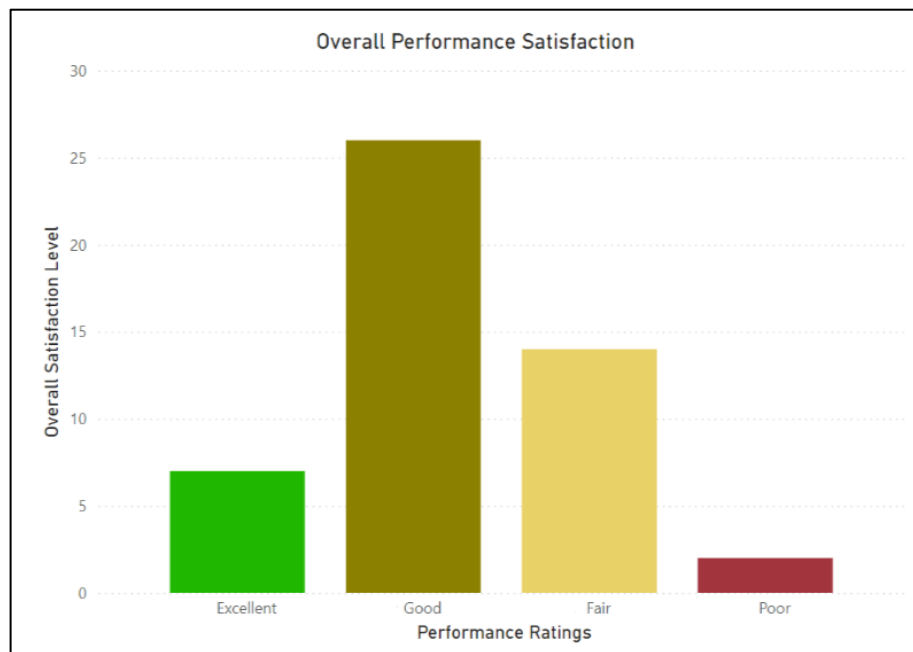
Figure 1

MMU's performance assessments of Microsoft Teams are shown in Figure 1 together with overall student satisfaction, where performance is evaluated as Excellent, Good, Fair, Poor, or Very Poor, alongside a satisfaction scale from Very Satisfied to Very Dissatisfied. Many students ranked the platform as Good, showing a mainly efficient experience with small problems. The major group of participants was found in the Satisfied and Very Satisfied categories, which shows that minor challenges did not greatly obstruct their complete experience. The second largest group rated performance as only Fair, a result of slower performance and minimal serious discontent. The assessment of Excellent by a smaller subset indicates they experienced uninterrupted usage with substantial satisfaction. Accompanying their evaluations, three students marked the platform Poor, associating with Dissatisfied or Very Dissatisfied opinions. Importantly, every student graded performance above Very Poor, showing that even though a few struggled with problems, no one experienced a total platform collapse. While students, on the whole, seem satisfied, improvement is still necessary, particularly for those who rated performance as Fair or Poor.
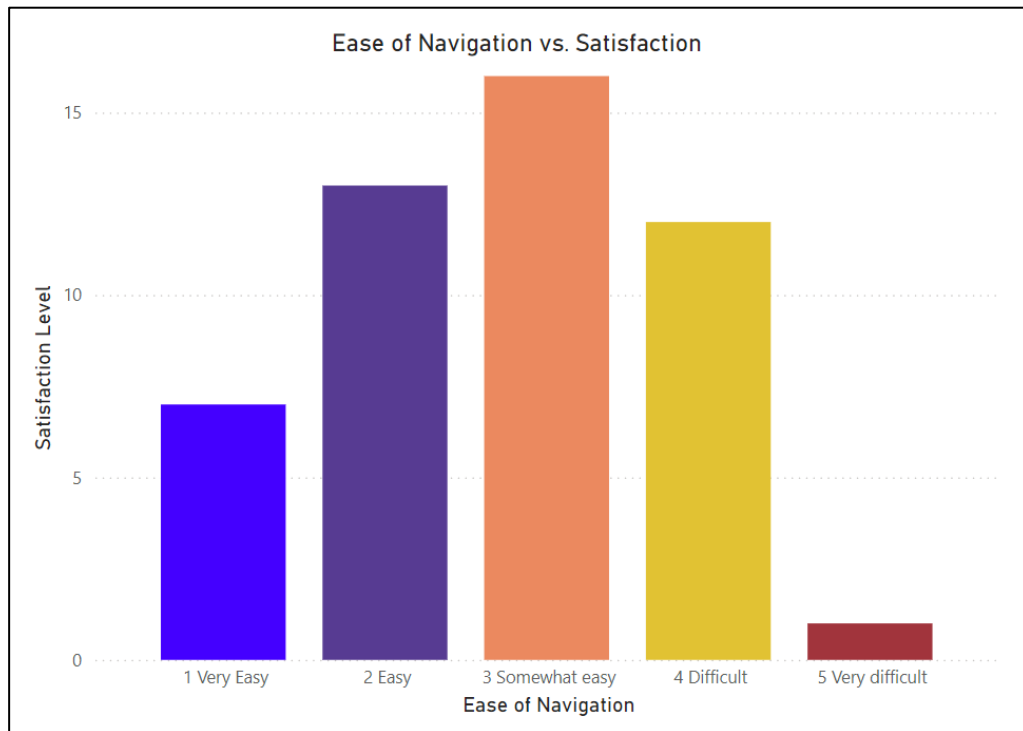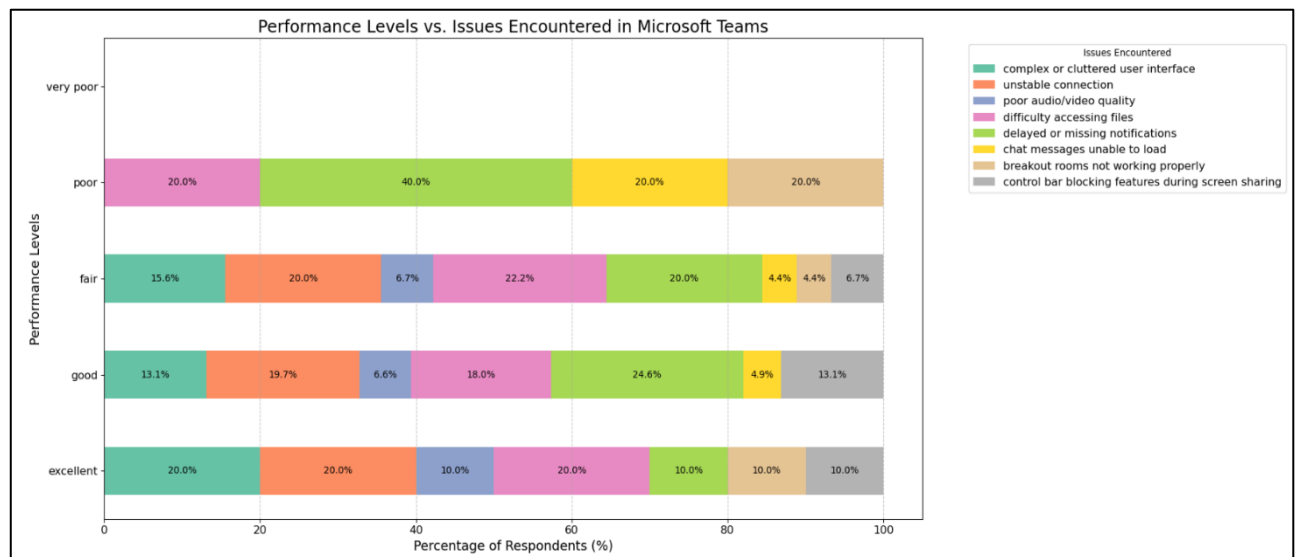
Figure 2

     The bar graph in Figure 2 illustrates an extensive investigation of the link between student navigation simplicity and their contentment with Microsoft Teams as a digital platform for online instruction. The system groups ease of navigation into the tiers Very Difficult to Somewhat Easy and records satisfaction scores from 0 to 15, which accurately reflects the wide range of student experience. The data reveals a clear positive correlation: Those students who find Microsoft Teams navigation Very Difficult experience the poorest satisfaction, which shows that challenges in navigation greatly lower their overall satisfaction. Inversely, as students find it simpler to navigate, their satisfaction increases considerably, with participants who identify their experience as Somewhat Easy showing the greatest satisfaction. This suggests the possibility that a practical degree of simplicity might contribute to greater satisfaction. Also, students who characterize their experience as Easy or Difficult report high satisfaction rates, which emphasizes the importance of navigability in forming their opinions. Ultimately, the graph shows that enriching navigation within Microsoft Teams can markedly improve student fulfillment, which makes it an important domain for attention in future platform refinements.
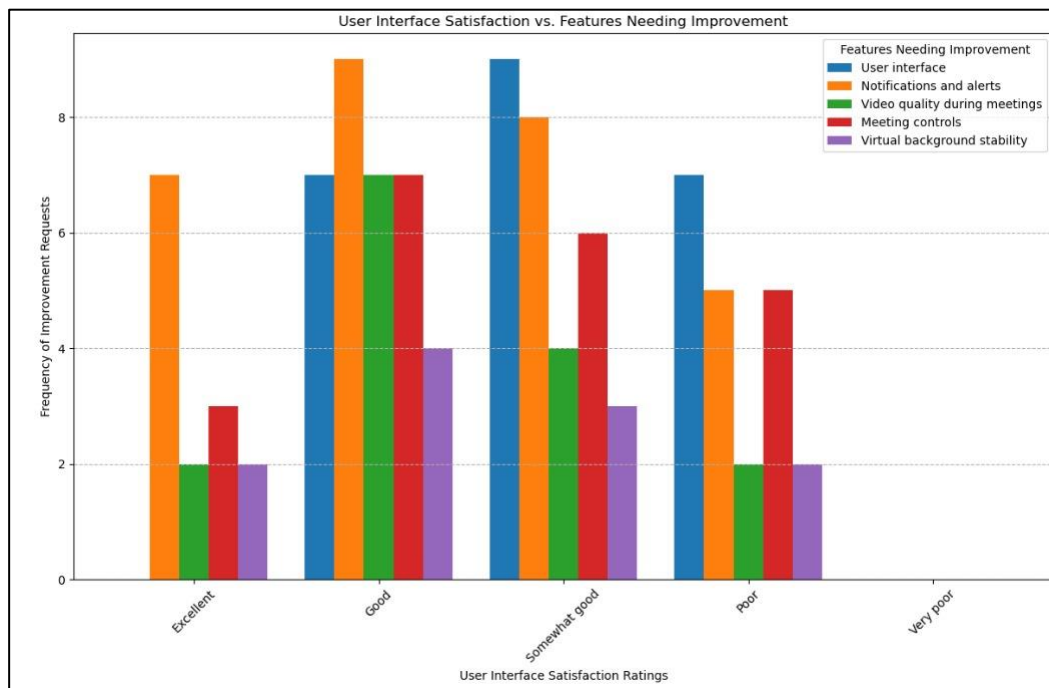
Figure 3

Figure 3 illustrates the relationship between student satisfaction with the user interface of Microsoft Teams and the frequency of requests for feature changes. Students who rated their satisfaction as excellent primarily wish to improve notifications and alerts, followed by meeting controls, video quality during meetings, and virtual background stability, all receiving the same number of requests. Notably, this group did not express any requests regarding the user interface. In contrast, students with good satisfaction indicated that their top requests for change also include notifications and alerts, followed by the user interface, video quality during meetings, and meeting controls, with virtual background stability receiving the least requests. Among those with somewhat good satisfaction, the most requested changes focus on the user interface, followed closely by notifications and alerts, a pattern that mirrors the responses of students with poor satisfaction. For both groups, the third-highest request pertains to meeting controls; however, those with somewhat good satisfaction prioritize changes to video quality during meetings over virtual background stability. In contrast, students with poor satisfaction express equal requests for changes to video quality and virtual background stability. Importantly, there are no students who rated their satisfaction with the user interface of Microsoft Teams as very poor. In conclusion, notifications and alerts emerge as the most frequent request for change across all student groups, ranking either first or second in terms of demand, while the user interface also garners significant requests from the good, somewhat good, and poor satisfaction groups, ranking highest or second highest in their preferences.

Figure 4

Figure 4 shows how the performance of Microsoft Teams correlates with the problems that students have encountered. Results reveal that students who assessed the performance as fair, good, and excellent all dealt with alike difficulties, including a complicated or cluttered user interface, unstable connections, mediocre audio/video quality, problems accessing files, delayed or lost notifications, and the control bar hidden features during screen sharing. Students who found the performance to be low reported reduced problems, explicitly melting down entries, delayed or absent notifications, chat messages not loading, and issues with breakout rooms. This analysis points out that although perceptions of performance may change, the core problems impacting user experience tend to be alike among most students, pointing to opportunities to advance the effectiveness of Microsoft Teams in educational settings.
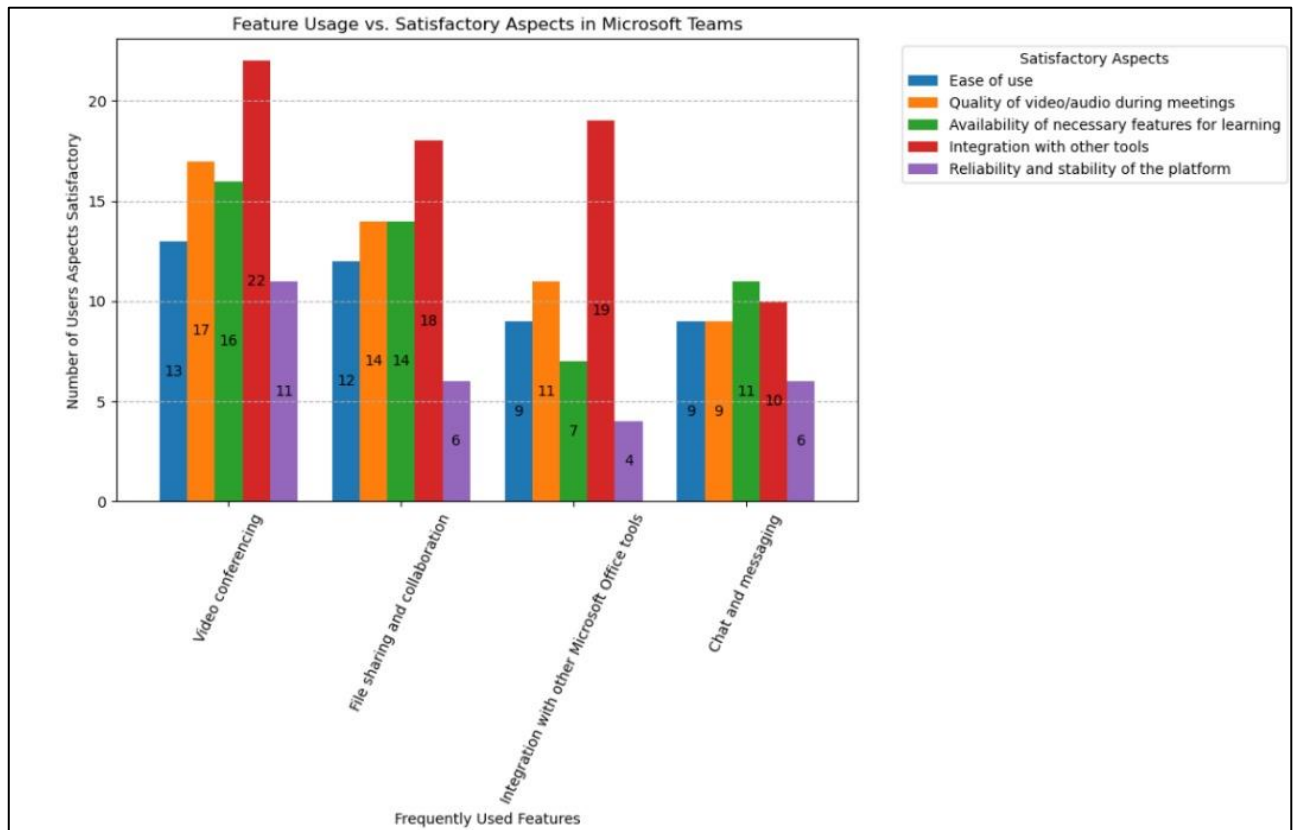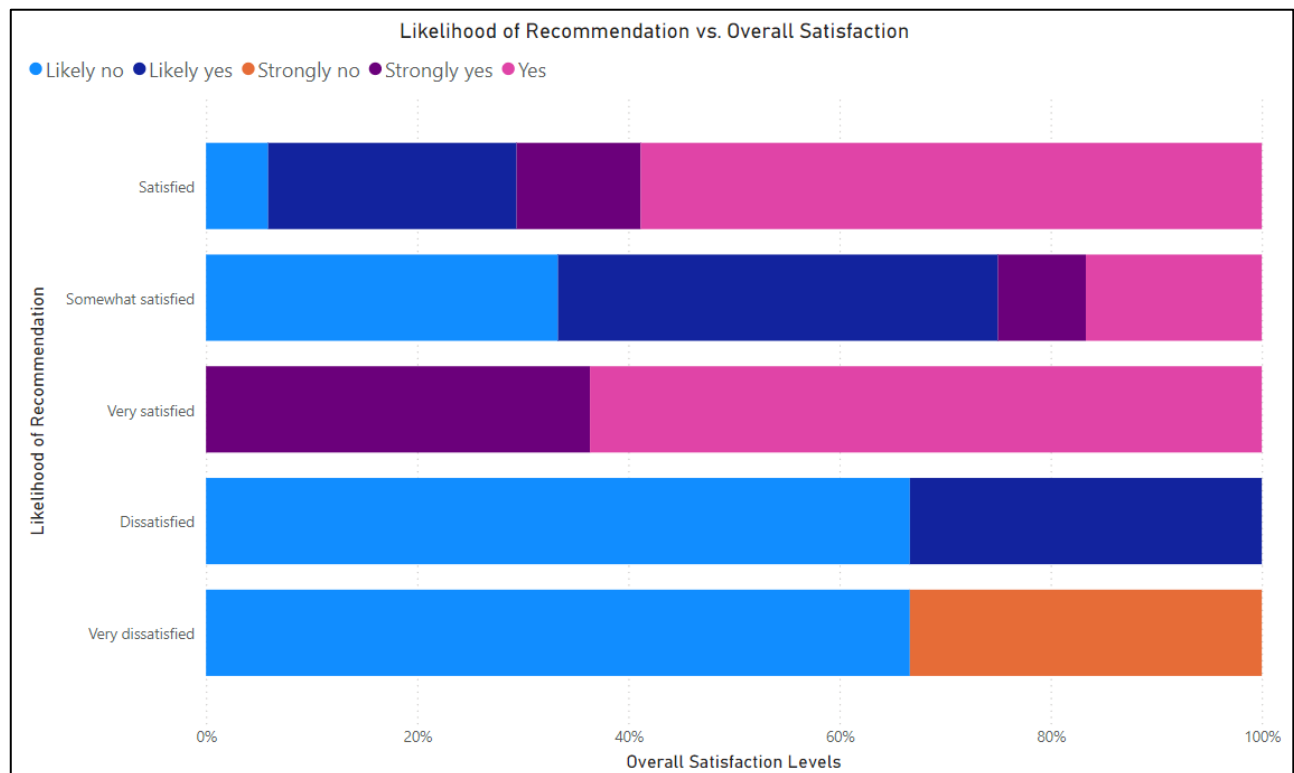
Figure 5

The relationship between the features commonly implemented by students using Microsoft Teams and their degrees of satisfaction with different platform aspects is shown in Figure 5. Different elements of the bars demonstrate a range of features, including video conferencing and file sharing, and colors communicate user satisfaction with variables such as simplicity of use, interoperability with other tools, and video/audio quality. All the features of Microsoft Teams are, according to the analysis, in use by students. Students who employed video conferencing, file sharing, and collaboration tools stated the greatest satisfaction with respect to platform integration capabilities. Alternatively, students engaging with chat and messaging functions appreciated the availability of important tools for learning as their number one priority, with the quality of video/audio during meetings ranking second; this ranking changes for all three features. Participants rated their satisfaction with file sharing and collaboration tools as equally distributed between their opinions on video/audio quality and the availability of important tools for learning. The outcome shows that students evaluate the platform's performance as the least engaging, this suggests it is imperative to respond to these needs to improve their satisfaction levels.

Figure 6

As seen in Figure 6, it shows the level of satisfaction students have with Microsoft Teams for online classes, alongside their probability of suggesting it to others. The categorization on each bar illustrates the reply distribution based on satisfaction and recommendation; diversity extends from an emphatic 'Yes' to a strong 'No'. Satisfied students with Microsoft Teams are very likely to suggest it to others, as seen through significant responses in the affirmative 'Yes' and 'Strongly Yes' sections, whereas a minuscule proportion indicates 'Likely No.' Those slightly satisfied with the platform commonly show a mixed response of "Likely Yes" and "Likely No." In comparison, very delighted students often suggest Microsoft Teams, mostly clicking on "Strongly Yes" and "Yes" options. Unlike what other students might say, dissatisfied students are unwilling to suggest the platform, as evidenced by many responses of 'Likely Yes' and 'Likely No.' The statistics reveal that those who are extremely displeased with Microsoft Teams are much more unlikely to endorse it, featuring a variety of choices for 'Likely Yes' along with powerful backing for 'No.' Overall, the figure shows a connection between satisfaction and the chance of making a recommendation for Microsoft Teams, which underlines the crucial importance of fixing current user problems to better both satisfaction and backing for the platform.

3.0 Conclusion

To conclude, this study aimed to assess MMU students' user experience with Microsoft Teams as a learning platform. By surveying 49 students, we have explored factors such as platform performance, ease of navigation, satisfaction with the user interface, and common requests for feature improvements. The findings

reveal that most students rated Microsoft Teams as "Good" and expressed overall satisfaction with its features, particularly when it comes to collaboration and video conferencing. However, there were some challenges remaining, notably regarding complex navigation and performance issues, which affected a number of users. There is a clear positive correlation that was found between ease of navigation and user satisfaction. Students who found Microsoft Teams easier to navigate generally reported higher satisfaction levels, while those who struggled with the platform's interface or complexity tended to be less satisfied. In terms of feature requests, students most frequently pointed to improvements needed in notifications, alerts, and the user interface, with these issues ranking as top priorities for future platform updates. Furthermore, performance-related concerns such as unstable connections, mediocre audio and video quality, and hidden controls during screen sharing were reported across different satisfaction levels. This shows that while the core functionalities of Microsoft Teams are widely appreciated, there are consistent technical issues that need to be addressed to optimize the user experience. The survey also highlighted a strong connection between students' satisfaction and their likelihood of recommending Microsoft Teams. Those who were highly satisfied were more inclined to suggest the platform to others, while students who experienced more challenges with the system were less likely to do so. This emphasizes the importance of resolving the identified issues to improve both student engagement and the platform's overall effectiveness in supporting online learning. In conclusion, while Microsoft Teams is generally seen as a useful tool for educational purposes, there is a clear need for continued improvements to better meet students' expectations. Addressing the challenges related to navigation, performance, and feature requests can significantly enhance student satisfaction and ensure the platform's success in an educational context.

4.0 Recommendations

1. **Improve Platform Navigation and User Interface Simplicity:**
   Since navigation was associated with lower satisfaction levels, it is suggested that Microsoft Teams enhance its interface by considering the concept of 'less is more'. This may include making the pop-up or tab menus less complicated, decluttering the screen and offering easy access to features that might be commonly used. A feature where both students and teachers are given the option to change the layouts of their wish could enhance the comfortableness of the use of this web application.

2. **Enhance Notification and Alert Systems**:
   Since notifications and alerts were the most requested feature improvements, Microsoft Teams should focus on refining the reliability and visibility of these functions. Implementing real-time alerts that are more visible and persistent could help ensure students do not miss important updates such as assignment deadlines, meeting reminders, and

messages. Additionally, customizable notification settings should be expanded to allow users to control the type and frequency of alerts they receive.

3. **Address Performance-Related Issues**:
   To improve the platform's performance, especially concerning unstable connections and poor video and audio quality, Microsoft Teams should work on optimizing its servers for better bandwidth management during peak hours. One of the potential solutions would be to offer a "light mode" for lower specification devices or regions with slower internet speeds, ensuring that video calls and file sharing can still run smoothly without consuming too much bandwidth.

4. **Introduce More Training and Support Materials**:
   Students who struggle with navigating or using Microsoft Teams features could benefit from additional tutorials, training sessions, or an in-app help guide by providing easily accessible video tutorials, quick start guides, and step-by-step instructions for key features, such as setting up virtual meetings or using collaboration tools that would assist students in utilizing the platform more effectively.

5. **Focus on User-Centered Feedback for Future Updates**:
   Regular surveys and feedback sessions should be conducted to gather insights directly from students about the improvements they wish to see in Microsoft Teams. This continuous feedback loop would allow Microsoft to address user concerns in a timely manner and ensure that future updates align with the actual needs of students and educators.

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Appendices

Appendix A: Survey Form

User Experience of Microsoft Teams for Educational Purposes among Students

Objective 1: To evaluate students' satisfaction with the user interface design of Microsoft Teams.

1. How would you describe the performance of the Microsoft Teams?
   o Excellent (Very smooth with no issues)
   o Good (Generally smooth with occasional minor issues)
   o Fair (Some issues or slowdowns that moderately impact usage)
   o Poor (Frequent issues that significantly hinder usage)
   o Very poor (Constant issues that severely disrupt usage)

2. How would you rate the user interface of Microsoft Teams (eg: layout, color scheme, icons)?
   o Excellent
   o Good

- o Somewhat good
- o Poor
- o Very poor

3. How satisfied are you with Microsoft Teams as a platform for your online classes?
    - o Very satisfied
    - o Satisfied
    - o Somewhat satisfied
    - o Dissatisfied
    - o Very dissatisfied

Objective 2: To examine students' experience of navigating and using key features.

4. How easy is it for you to navigate through Microsoft Teams?
    - o Very easy
    - o Easy
    - o Somewhat easy
    - o Difficult
    - o Very difficult

5. What features do you use in Microsoft Teams? (Choose all that apply)
    - o Video conferencing
    - o File sharing and collaboration
    - o Integration with other Microsoft Office tools (e.g., Word, Excel, PowerPoint)
    - o Chat and messaging

6. Have you encountered any issues while using Microsoft Teams for your educational activities? (Choose all that apply)
    - o Complex or cluttered user interface
    - o Unstable connection
    - o Poor audio/video quality
    - o Difficulty accessing files
    - o Delayed or missing notifications
    - o Chat messages unable to load

- o Breakout rooms not working properly
- o Control bar blocking features during screen sharing

7. Which aspect of Microsoft Teams do you find satisfactory? (Choose all that apply)
    - o Ease of use
    - o Quality of video/audio during meetings
    - o Availability of necessary features for learning
    - o Integration with other tools (e.g., Office 365)
    - o Reliability and stability of the platform

Objective 3: To improve UI/UX of Microsoft teams for better usability.

8. Which features of Microsoft Teams do you think need improvement to better support your educational activities? (Choose all that apply)
    - o User interface
    - o Notifications and alerts
    - o Video quality during meetings
    - o Meeting controls
    - o Virtual background stability
    - o File sharing controls
    - o Mobile app functionality
    - o Meeting recordings and transcriptions

9. What additional features would you like to see in Microsoft Teams to enhance your learning experience? (Choose all that apply)
    - o Archive one-to-one chat
    - o Simplified access to classes
    - o Reduce data usage for meetings
    - o Resize window to any size
    - o Share multiple screens during meetings
    - o Capture and save annotations on screen during meetings
    - o Notifications for file updates or in shared documents
    - o Able to chat in Teams channels instead of creating posts

10. Would you recommend Microsoft Teams to other students for educational purposes?

o   Strongly yes

o   Yes

o   Likely yes

o   Likely no

o   Strongly no

Appendix B. Work Schedule

Due Date/ Tasks	Survey Questions	Proposal of Report	Data Gathering	Body of report: Introduction	Body of report: Findings	Body of report: Conclusion and Recommendation	Front Matter & End Matter
Week 1 -3	Michelle Yong Ting Ting, Azizah Maisarah	Vaarindran, Tengku Alyssa Sabrina, Chan Kar Kin, NurFatin Aina					
Week 4			Chan Kar Kin, Michelle Yong Ting Ting	NurFatin Aina, Azizah Maisarah			
Week 5					All members		
Week 6						Vaarindran, Tengku Alyssa Sabrina	Vaarindran, Tengku Alyssa Sabrina
Week 7	Compile & Edit report - All members						