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Challenges in Discord Application Among Quantity Surveying Students

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Abstract

The global epidemic continues to have a significant impact on the world due to the recent and unexpected COVID-19 pandemic. Even the education industry has been severely disrupted and affected. All universities have been forced to change their learning methods from face-to-face to e-learning. Hence, it is necessary to utilize technological aids such as Discord as it can naturally capture the attention of students. On top of that, the features of Discord, especially the integration of text chat, voice call and screen sharing can fulfil most of the students' requirements during online learning. This paper aims to explore the challenges associated with the Discord application among QS students. Through the use of a quantitative method, a set of questionnaires is distributed to the TARUMT students enrolled in the Quantity Surveying course (year 1 to year 4). Out of 200 questionnaires, 87 responses have been received and were analyzed using frequency statistics, Cronbach's Alpha analysis, and Descriptive analysis. The results revealed several challenges, including limitation of upload size, disconnected discord application, random audio cut offs, privacy issues and engaging in harassment. In conclusion, the results identified the most and the least significant issues that may affect students' use of Discord applications. This data is valuable in shaping appropriate strategies for Quantity Surveying education.

Keywords

Discord, technological aids, online learning, higher education institutions (HEIs)

Introduction

The global epidemic continues to have a tremendous influence on the world due to the recent and unexpected COVID-19 pandemic. Even the education industry has been severely disrupted and impacted regardless of either secondary, primary or higher education institutions (HEIs) (Norazmi Fadilah et al, 2023). The wide transition can be observed from three years ago when many HEIs were urged to change the mode of learning from physical class (F2F) to online learning (or so-called e-learning), to accommodate the learning process among learners. As a result, both lecturers

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and learners faced numerous challenges to interact effectively since there is a new transition in teaching mode. In fact, it has become more difficult, particularly during the early years of the pandemic, for both parties due to various reasons.

Literally, the term "e-learning" refers to learning situations that utilize technological aids, such as the internet, web platforms, or applications (Koshyk, 2021). E-learning, which is also referred as electronic learning, is defined as a teaching and learning method based on the use of electronic media and devices as tools (Sangra et al., 2012). The tools used vary as some lecturers choose to use applications such as *Google Meet, Google Classroom, WhatsApp,* and *Zoom* to assist their teaching activities during the MCO (Movement Control Order) period (Koshyk, 2021). This introduction of e-learning aims to boost learners' motivation since motivation in learning remains an important element of their success (Gute & Wainman, 2019).

Undeniably, lecturers need to have a better strategy to engage them interactively, especially through student-centered learning in an online environment. This statement is supported by Selvi (2010), which indicates that most of the learners agree that their participation in online classes has been influenced by their lecturers. Online participation can develop a learning environment that enhances students' motivation (Widjaja and Chen, 2017).

Students can be motivated by the flexibility, deliverability, freedom and independence of learning (Selvi, 2010). In the students' reflections on the motivation factors in online courses, they rate the features of online learning environment as one of the influencing factors. The availability of freedom of access classes from everywhere, easy accessibility to the classroom activities through the internet, and participation in class activities can be facilitated by various online platforms designed by the lecturers. These are sub-factors that fall under the factor of the online learning environment, which increases their intrinsic motivation and enriches learning experience (Selvi, 2010).

The application of Discord is believed to improve students' engagement in class and has gradually been used in education due to various advantages. Discord is a social media platform that primarily functions as a Voice over Internet Protocol, instant messaging platform, and digital distribution. It is a free chat application that provides text chat, voice calls, and video call services for users to communicate (Schwartz, 2021). Initially, Discord was designed for gamers to communicate with each other. Through Discord, chatting becomes simpler allowing gamers to chat directly via voice, video, or text. They can also join servers where bigger groups of people can interact with each other. It also has a search function that may assist the players in finding one another and enable them to generate friends' list for quick communication. Therefore, it has become one of the most widely used apps with over 350 million users, as reported in the year 2021 (Hornshaw, 2021).

Given the increase of users brought on by the pandemic, Jason Citron, the owner of Discord, made the decision to change its main focus from video games to a more inclusive, multi-purpose chat and communication software for variety of purposes. The website has been further modified to enhance the user experience. The capacity, reliability, and privacy of the server has been fully considered and improved. Discord combines multiple functions such as servers, voice channels, text channels, and communities into a single, easy-to-use app, making it unique and

attractive to students and faculty (Samuel, 2021). Despite being primarily a platform supporting gaming, Discord is currently being used as a communication platform for learning purposes. As it was initially designed to facilitate communication among gamers, enabling them to formulate strategies and have fun while playing online games, students are likewise expected to have the same experience with Discord throughout their educational activities. Hence, to fully understand the benefits brought by Discord to students, it is important to investigate the role of Discord in online learning (Arifianto & Izzudin, 2021).

Based on Ramadhan and Albaekani (2021), Discord is convenient for students to share learning materials and discuss assignments. It offers students an opportunity to improve their communication, collaboration, and teamwork through its communication-enabling features which include text chat, voice channels as well as video calls. Realizing its usefulness in education, a detailed study on this aspect needs to be carried out. The study's outcome should be able to discover the performance of Discord in online learning and help to increase the enthusiasm and interest of students in the study (Arifianto & Izzudin, 2021). Discord is a famous group-chatting tool that was originally created to provide a space for the game players to form communities known as 'servers' and communicate with one another (Delfino and Dean, 2021). Each server is filled with text channels and voice channels where users can share images, videos, music, links, and more with one another (Ghazali, 2021). Typically, every server has numerous channels that are each dedicated to a separate topic or have their own set of rules (Delfino and Dean, 2021). Like other messaging applications, Discord allows users to directly message each other and communicate through voice or video. Additionally, it supports streaming services, allowing users to share their screen in the voice channel with up to 50 people (Delfino and Dean, 2021). Besides the share screen function, Discord now provides video calls services comparable to Google Meet and Zoom. However, the video calls function in Discord is limited to 25 participants, which is sufficient for the small study groups or gaming group meetings (Andronico, 2022).

Discord is one of the apps that meet the requirements in the upper context, and there are several factors influencing its usage. Firstly, its advantages lie in its origins as a platform for online games, naturally attracting students who can easily use it for discussions on their studies. (Hornshaw, 2021). Secondly, it is a free chat platform that combines video, voice, and text features. Students can discuss their tasks directly in the voice channels and use text chat to share learning materials with each other. For quantity surveying students, the share screen function in Discord can be particularly useful when discussing the quantity take-off tasks among friends. It allows the students to display and explain their drawings, facilitating collaborative work and communication during the measurement task discussion. Thirdly, compared to any other applications we use daily such as Netflix, YouTube, and even basic internet browsing, Discord has relatively low data consumption. According to Branko (2022), the total data usage of Discord did not exceed 200 MB after continuous communication in voice chat within 24-hour and with limited file sharing. Lastly, in research conducted by Arifianto and Izzudin (2021), many college students used Discord to socialize with each other during the movement control order period. Discord proves to be very useful for students to share learning materials and engage in group revision during study week. Additionally, it serves as a platform for students to connect and share aspects of their lives outside of academics, including games, animations and hobbies. This enhances the sense of community and fosters a supportive environment among students beyond their campus lives. Discord, which was created to facilitate video games, has now surprisingly found utility as

a communication tool for educational purposes. Its features and functionalities that were initially intended for gamers to interact and collaborate have proven to be adaptable and valuable in an educational setting. The integration of Discord into educational activities seeks to harness students' existing familiarity and engagement with video games to boost their motivation and passion for learning. By incorporating elements of video game culture and utilizing interactive features, Discord offers a unique and engaging learning medium that resonates with students. It is anticipated that the use of Discord in learning activities will ignite students' interest and excitement, leading to a more immersive and enjoyable learning experience (Jesika, 2021).

While Discord has proven beneficial for students' learning activities, there are still some problems or weaknesses in its use. The challenges faced by students include limited file sharing, limitations on upload size, and security or privacy issues. Students may encounter difficulties in sending construction drawings or large files, but Discord has a limitation in doing so. In such cases, they are forced to use alternative applications to share the files with their team members effectively (Wahyuningsih and Baidi, 2021). Then, one of the common issues reported by the students is the Discord app frequently disconnecting. While numerous users throughout the world have reported the same problem, Discord has not provided an official solution because the problem could be caused by a variety of factors, such as poor internet connectivity or the use of proxy servers. Another common issue is the intermittent loss of audio while using Discord, particularly when the internet connection is unstable. This situation can be easily solved by the students themselves, but it still wastes some time in fixing it and affects the mood of students in learning. (Vijay, 2021).

With an aim to encourage the use of the Discord application among students, this paper attempts to close these gaps (as discussed previously) by exploring the common challenges from the point of view of QS students from Tunku Abdul Rahman University of Management and Technology (TARUMT). Hence, better strategies related to QS education can be effectively developed.

Methodology

Quantitative data is applied for this research. The purposive sampling method is used to ensure that the respondents are knowledgeable on the research topic. 150 students in the Quantity Surveying course from Tunku Abdul Rahman University of Management and Technology (TARUMT) are chosen as the respondents from year 1 to year 4 of their study. Since they are having online learning during the Covid-19 pandemic, therefore, they would be very aware of the challenges of using Discord. The questionnaires were sent to the respondents using Google Forms and distributed via email, WhatsApp, and Facebook. 87 sets of questionnaires or 58% were returned within a month.

Results and Discussion

Table 1 shows the gender frequency for students who studied at TARUMT. Out of 87 respondents, most of the respondents are female, with 30 responses (57.5%), whereas the minority is coming from the male group with 42.5%. As for the age range, the frequency table showed that the age group can be categorized into three categories, namely (18-20 years), (21 to 23 years), and (24 to

26 years). The aged majority is between 21-23 at 67.8%. This is followed by 24 to 26 at 19.5% and 18 to 20 at 12.6%. It can be seen that the group of respondents can also be categorized into two, with majority of them from bachelor's degree at 79.3% and Diploma at 20.7%. For the years of study, there are four groups of respondents responded to the questionnaire. The highest percentage is Year 4 with 46 responses (52.9%). This is followed by Year 2 with 19 responses (21.8%), Year 3 with 18 responses (20.7%), and Year 1 with 4 responses (4.6%). Meanwhile, about 50.6% of the responses rarely used Discord and 49.4.7% of the responses are regular Discord users.

Table 1. Profile of the respondents

Characteristics	Number	Percentage
Gender		
Male	37	42.5
Female	50	57.5
Age		
18-20	11	12.6
21-23	59	67.8
24-26	17	19.5
Level of study		
Diploma	18	20.7
Bachelor Degree	69	79.3
Years of study		
Year 1	4	4.6
Year 2	19	21.8
Year 3	18	20.7
Year 4	46	52.9
Frequency of using Discord		
Always	25	49.4
Rarely	44	50.6
Total	87	100

A reliability test was carried out, and Table 2 shows that the Cronbach alpha coefficient of the challenges involved in the Discord application is 0.829, which indicated a high internal consistency. Therefore, it shows that section C of the questionnaire is reliable.

Table 2. Reliability statistics for the challenges involved in the Discord application.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.829	.828	5

Among a total of 87 respondents, the most significant challenge faced by students while using Discord is the limitation of file upload size as stated in statement 1. It got the highest mean score of 3.82. This statement is supported by Alisa (2021) who mentioned that the maximum upload size of Discord is only 8 MB, it is small compared to other applications such as WhatsApp, WeChat, Facebook, and others. Statement 4 'Security and privacy issue' is the second agreed challenge with a mean score of 3.66. According to Asad (2021), Discord has control over the data and access, but it often ignores user privacy just like any other freeware applications. The mean

score of Statement 2 ‘Discord app keeps disconnecting’ is closer to Statement 4, which is 3.61. The previous study conducted by Josna (2021) stated that Discord will keep disconnecting if there have poor internet connectivity or the use of proxy servers. Then, it is followed by ’Statement 3 ‘audio cut off randomly’ with a mean score of 3.57. Statement 5 on ‘Harassment issue’ has the lowest mean score among all statements under section C with a mean score of 3.29. The ranking for the challenges involved in the Discord application is arranged based on the mean scores as shown in Table 3.

Table 3. Ranking on the challenges involved in the Discord application.

	N	Mean	Rank
Limitation of upload size	87	3.82	1
The Discord app keeps disconnecting	87	3.61	2
Audio cut off randomly	87	3.57	3
Security or privacy issues	87	3.66	4
Engaging in harassment	87	3.29	5

Conclusion

The challenges involved in the Discord application were identified in the findings which are limitation of upload file, keep disconnecting of Discord app, disabled voice services, security and privacy issue, and harassment issue. These challenges have been used to gather data through questionnaire surveys and analyzed by using the SPSS software. According to the descriptive analysis, the highest mean score will be the most agreed challenges that involved in Discord and the lowest mean score will be the least agreed factor that challenges involved in Discord.

Based on the quantitative data collected from the questionnaire, it shows that the ‘Limitation of upload file’ is the most agreed challenge involved in Discord. The maximum upload size is only 8 MB, it is difficult for the QS student to upload the drawings. The second challenge faced by the students is the ‘Security and privacy issue’. It is worrying for the students because there are too many scams and fraud cases happening online. The third agreed challenge faced by the students is the ‘Discord app keeps connecting’. It is annoying as Discord has not provided an official solution because the problem could be caused by a variety of factors such as poor internet connectivity or the use of proxy servers. Next, it is followed by the ‘Disabled voice services’, the Discord audio usually stops working if there have numerous devices connected to one network or if the internet connection of the students is slow. ‘Harassment issue’ is the least agreed challenge faced by the students.

All these challenges remain useful to be identified as it might affect students in many areas, namely (i) motivation to learn, (ii) contribute to the minimum participation during the live session (iii) students trust about the tools (iv) students remains passive in learning environment. It is recommended that HEIs, especially IT experts from IT department should be aware on the challenges shared, find other alternative ways to upload the files, upgrade and improving the security system and stability of the networking. It is believed that this platform or tool is relevant for technical students in terms of improving their engagement among lecturers and peers. This is due to the reasons that these tools promote better communication skills among peers, better

emotions (i.e., happiness, comfortable and relaxation) and better management for lecturers as they can monitor all students from remote at their convenient time.

For future research, this paper suggests that the application of Discord can be used extensively among QS students either in private or public institutions. This is a good alternative for students to explore various educational tools for their learning and encourage them to maximize their usage.

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