

Expanding Campus Engagement: A Study on the User Acceptance of a Virtual Reality-Enhanced Campus Tour in an Open University

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Abstract: The increasing popularity of immersive technologies, such as virtual reality (VR), is gaining recognition among online learning advocates and practitioners for its potential to enhance educational experiences. Online universities leverage VR-enhanced campus tours to broaden their reach and engage a wider audience. Recognizing the potential of VR, UP Open University (UPOU) has embarked on the learning innovation of developing the UPOU Virtual Campus Tour as part of the university's contribution to the sustainable development goal for inclusive and equitable education and the promotion of lifelong learning opportunities for all. This study evaluates the experiences and user acceptance of UPOU staff and students who have experienced the UPOU VR campus tour. The outcomes of this study aim to provide valuable insights and enhance the understanding of users' experiences during an immersive virtual reality campus tour within an open university setting. Additionally, the findings seek to contribute to the growing body of knowledge by exploring the experiences of diverse user groups and incorporating objective measures, especially in the context of Asian environments, for future research endeavors.

Keywords: Virtual Reality, Online learning, User acceptance, UPOU Virtual Campus Tour, User experience

INTRODUCTION

In this era defined by digital innovation and global connectivity, the landscape of higher education is undergoing a profound transformation as universities strive to adapt to changing student demographics and evolving technological trends.

The traditional methods of campus tours, which have long been recognized as pivotal in offering a firsthand glimpse into the university experiences, are being reimagined worldwide. Traditional campus visits were also observed

as resource-intensive and may pose logistical challenges (Thahir & Chithrakumar, 2024). In recent years, emerging technologies such as immersive virtual reality (IVR) and Metaverse are pointing to new directions for the future of education (Wei & Yuan, 2023). At the forefront of this evolution lies virtual tours, offering an immersive and interactive experience that transcends the limitations of physical proximity. Virtual reality (VR) is a new technology that has applications in a variety of sectors, including education (AL-Oudat & Altamimi, 2022).

The virtual tour is defined as a simulation of a real place that often includes multimedia such as images, text, sound effects, and video clips, a reproduction of the actual location with the help of consecutive still images that can help in renewing a realistic presentation of reality, thus, offering new opportunities for educators and students (Bakre et al., 2017; Alenazi & Demir, 2019, Coban et al, 2022). Virtual tours mimic the real world with computer-generated environments and increase users' engagement with enhanced Virtual Reality technology. VR tours have become a popular way of traveling through space or time, providing an alternative way for potential students and parents to conveniently tour the campus without coming to the physical building of the university, in cases such as when touring the campus becomes difficult due to inclement weather conditions or lack of time or financial means (Rohizan et al., 2020, Salah, et al, 2023). By offering comprehensive views and detailed information about campus facilities and programs, exploring the campuses from afar for those unable to visit physically is possible through virtual campus tours.

Recent studies have shown that, with the advent of technology, virtual tours have emerged as a compelling alternative, complementing traditional methods and expanding the reach of campus exploration, further emphasizing the potential of immersive web-based tours in higher education and aims to bridge the divide between virtual exploration and physical visits. By offering an immersive virtual campus experience, this innovative tool has the potential to revolutionize university marketing strategies, increase student engagement, and transform campus visit approaches (Samala, et al, 2024). Universities worldwide embrace virtual tours as a strategic tool to broaden their outreach and cater to diverse audiences. Having the ability for a student to explore the buildings and locations on a university campus is a crucial part of convincing them to enroll in classes (Hendricks & Kim, 2021). Virtual tours allow users to visualize and explore the campus environment better, significantly impacting their final decision about which campus to pursue their studies (Suwarno & Murnaka, 2020).

Preliminary findings in a pilot project utilizing a VR photo-based tour as an alternative to International Christian University (ICU)'s traditional physical campus tours indicate that spatial presence in the virtual tour caused participants to feel more interested in the university and in actually visiting the campus (Figueroa et al., 2020). A study by Suwarno and Munarka (2020) revealed that virtual reality provides another alternative as a campus promotion media by providing an in-depth experience for users to quickly get around the campus without visiting the physical building of Bina Nusantara University in Indonesia.

Considering the vast potential of virtual campus tours, it is critical to examine user experience and acceptance of the UPOU VR campus tour among users to ensure the successful implementation of this technology. User experience and acceptance play an essential role in the success of virtual tours because the platforms should deliver services that satisfy users in terms of user-friendliness and ease of navigation (Rohizan et al., 2020).

This study aims to determine the user acceptance and perceptions of students and staff of UPOU on the use of the UPOU Virtual Reality Campus Tour as an innovative tool for showcasing the programs and services of the university.

THE UPOU VIRTUAL REALITY (VR) CAMPUS TOURS

The University of the Philippines Open University (UPOU) is one of the constituent units of the country's national university and the leading provider of distance education in the Philippines.

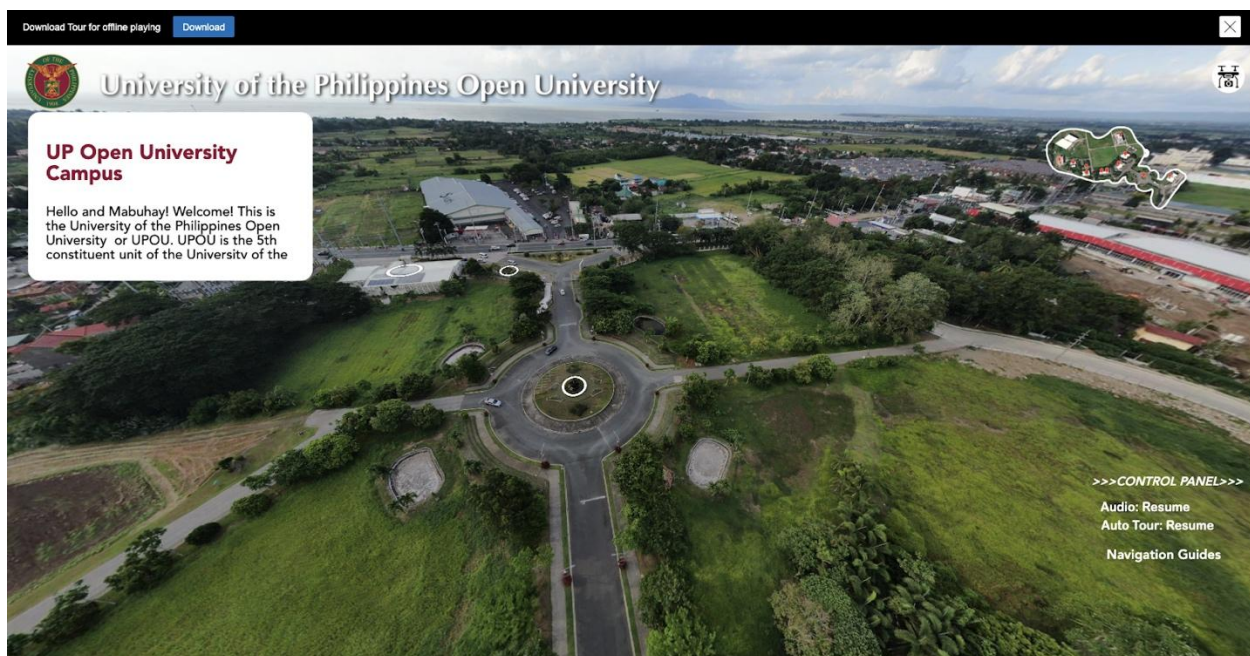
The UPOU VR Campus Tour is one of the university's initiatives designed to explore the concept of immersive learning environments and integrate cutting-edge technologies to disseminate information to UPOU stakeholders and the broader public. Through the UPOU VR Campus Tour, the university hopes to promote further lifelong learning opportunities and reach a more expansive range of audiences in the Philippines and worldwide.

The UPOU VR Campus Tour is a project initiated by the UPOU Office of Public Affairs (OPA) in coordination with the UPOU Center for Open and Digital Teaching and Learning (CODTL). The VR campus tour was developed in-house using the 3D Vista Virtual Tour software by the Open and Digital Learning Research team headed by Dr. Roberto Figueroa, Jr., and Mr. Hiroshi Tanaguchi, as part of the university's Immersive Open Pedagogies (IOP) program to provide an alternative way to promote the university's programs and initiatives, irrespective of geographical constraints (see Figure 1).

The UPOU VR campus tour served as a vital component of the university's public service endeavors in facilitating benchmark meetings, in-person visits of institutions, training, and educational exhibits as part of the university's commitment and dedication to inclusive and equitable education. The Virtual Reality (VR) Campus Tour is accessible across various devices, including computers, smartphones, and tablets, and can be accessed online via this URL: <https://iop.upou.edu.ph/vrtours/upouvr/alpha/>. The UPOU VR Campus tour can also be used as a stand-alone application and downloaded for offline use, facilitating offline access for individuals seeking to explore the UPOU campus at their convenience. This feature ensures convenient access for individuals who wish to explore the UPOU campus without requiring an internet connection.

Figure 1

Screenshot of the UPOU VR Campus Tour (Source: <https://iop.upou.edu.ph/vrtours/upouvr/alpha/>.)



BASIC FEATURES OF THE CAMPUS TOUR

The UPOU VR Campus tour provides an immersive, interactive experience that allows prospective students, parents, and other visitors to explore the university online through the navigation guides (see Figure 2). Here are some of the basic features of the UPOU VR Campus tour:

1. Interactive Map

It provides a detailed, zoomable campus map with clickable hotspots or markers to highlight key locations in the university, such as academic buildings, academic residences, recreational facilities, parking areas, landmarks, and more.

2. 360-Degree Views

The UPOU VR Campus tour provides a panoramic view of campus areas, providing a realistic, immersive experience to allow users to navigate and look around as if they were physically present.

3. Guided Voice Narration

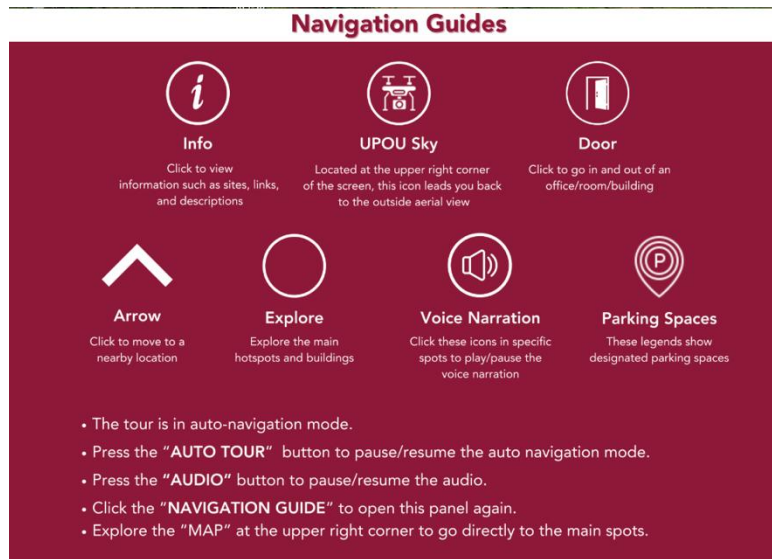
Guided voice narrations are provided to explain the significance of specific areas.

4. Informational Pop-Ups

The VR campus tour provides an on-screen text or pop-up with important information and details about the facilities.

Figure 2

Screenshot of the Navigation Guides of the UPOU VR Campus Tour (Source: <https://iop.upou.edu.ph/vrtours/upouvr/alpha/>.)



LIMITATIONS OF THE STUDY

The study took place at the University of the Philippines Open University (UPOU) in Los Baños, Laguna, with respondents consisting of staff and student assistants of UPOU who are 18 years old and above. Data will be gathered through an online questionnaire adapted from the Technology Acceptance Model (TAM) research instrument.

One area for improvement of the study is its sample size, which is restricted to the UPOU community, making the findings non-generalizable to populations outside this group. Additionally, the study focuses exclusively on the UPOU Virtual Reality Campus Tour, meaning results may differ for other VR experiences regarding technology acceptance.

Despite these limitations, the study is expected to contribute significantly to understanding user acceptance of a virtual reality-enhanced campus tour. It will also provide valuable insights into the sense of presence experienced by women using the UPOU Virtual Reality Campus Tour. Future research could build on this work by examining the long-term effects of VR tours, exploring the experiences of diverse user groups, and utilizing objective methods to evaluate user acceptance.

RESEARCH OBJECTIVES

This study aims to determine the user acceptance and perceptions of students and staff of UPOU on the use of the UPOU Virtual Reality Campus Tour as an innovative tool for showcasing the programs and services of the university.

Specifically, this study aimed to answer the following questions:

1. How acceptable is the UPOU VR Campus Tour in terms of its usefulness and ease of use among the respondents?
2. How do the respondents intend to use the UPOU VR Campus Tour?
3. What are the respondents' perceived best and least qualities of the UPOU VR Campus tour?
4. What are the respondents' perceived benefits and advantages of using the UPOU VR Campus tour?

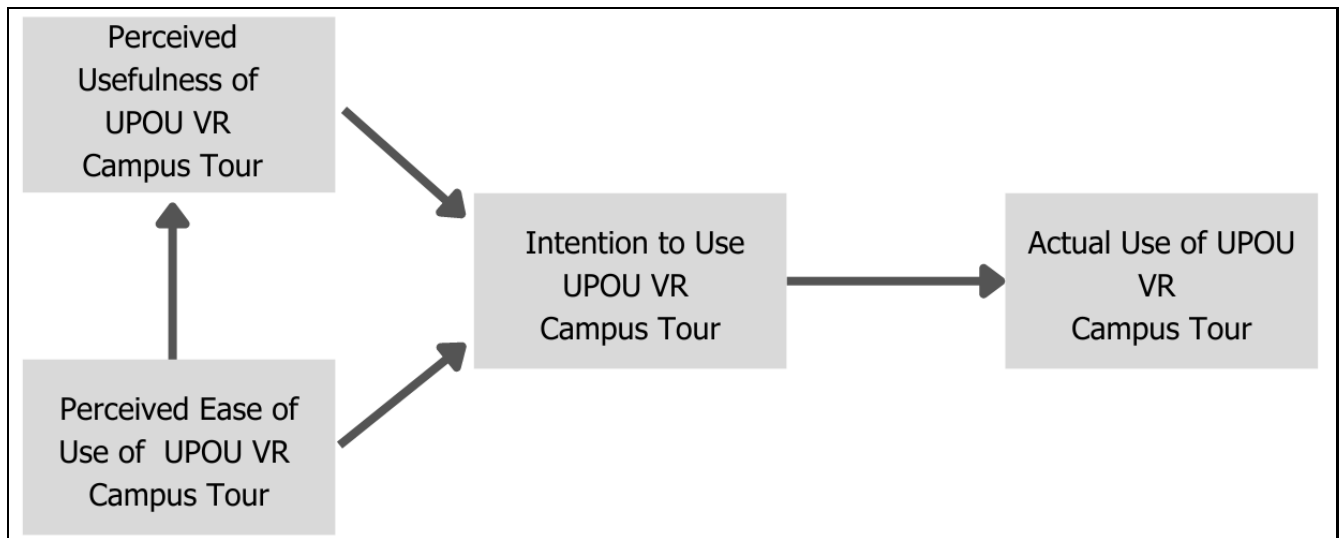
CONCEPTUAL FRAMEWORK

The Technology Acceptance Model (TAM), based on the Theory of Reasoned Action (TRA), is one of the most frequently used models to determine the users' acceptance or rejection of a particular technology. TAM has received great recognition through the various research conducted on determining users' acceptance of relevant technology innovation in education (Fussell & Truong, 2022, Puiu & Udriștioiu 2024, Al-Adwan, et al, 2023, AL-Oudat & Altamimi, 2022). User acceptance is often the pivotal factor determining the success or failure of an information system project (Davis, 1993). TAM "provides an informative representation of the mechanisms by which design choices influence user acceptance, and should therefore be helpful in applied contexts for forecasting and evaluating user acceptance of information technology (Davis, 1993)". Furthermore, Davis (1993) specifies the causal relationships between systems design features, perceived usefulness, perceived ease of use, intent of use, and actual usage behavior.

Davis (1993) mentioned two important determinants that may influence the user to use a particular system. These two variables are the perceived usefulness and the perceived ease of use. Perceived usefulness (PU) is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1993). On the other hand, perceived ease-of-use (PEOU) is defined as "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1993). This study will use the framework based on TAM (see Figure 3) to explore how UPOU staff and students perceived the use of the VR campus Tour as an innovative tool in showcasing the programs and services of the university.

Figure 3

Theoretical Framework on the Use of UPOU VR Campus Tour



RESEARCH DESIGN & METHODS

This study used the survey research method to determine the experience and perceptions of students and staff of UPOU in using the UPOU VR Campus Tour. UPOU staff and student assistants based at the UPOU main campus were invited to try the alpha version of the UPOU Campus VR Tour using a head-mounted device, specifically the Oculus.

The primary gathering tool was an online questionnaire based on the Technology Acceptance Model (TAM). This questionnaire measures the usefulness, ease of use, and intent of UPOU students and staff to use the UPOU VR Campus Tour.

In addition, respondents were given another set of open-ended questions to enumerate what they liked best and least about the VR campus tour. The questionnaire also included questions on the respondents' perceived benefits and advantages of using VR-enhanced campus tours.

PARTICIPANTS

A total of 65 respondents were included in this study. Many respondents (63.1%) are 18-30 years old, and more than half (52.3%) are male. Among the respondents, sixty-three percent (63%) have prior experience in using VR tours. More than half (55.38%) experienced cybersickness (dizziness, headache, eye, fatigue) while navigating the VR tour.

RESULTS AND DISCUSSION

PERCEIVED USEFULNESS

The scores for the four statements (Q1 to Q4) were recorded and measured to determine the respondents' perception of the usefulness of VR campus tours. Results in Table 1 showed that most of the respondents agreed that using virtual reality (VR) technology to conduct campus tours “would improve my ability to showcase the campus to prospective students effectively”(90.77 percent), “would allow me to provide a more immersive and engaging experience for prospective students” (86.15 percent), “would help me better to highlight the unique features and offerings of our campus.” (95.38 percent), and “would make it easier for me to answer questions from prospective students about the campus” (87.69 percent). On the other hand, very few (3.08 percent) respondents disagree that “VR technology would help me better to highlight the unique features and offerings of our campus.”

Table 1

Perceived Usefulness of UPOU VR CAMPUS TOUR

Questions	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean
Q1. Using virtual reality (VR) technology to conduct campus tours would improve my ability to effectively showcase the campus to prospective students.	0.00%	1.54%	7.69%	35.38%	55.38%	4.45
Q2. Using VR technology would allow me to provide a more immersive and engaging experience for prospective students.	0.00%	1.54%	12.31%	33.85%	52.31%	4.37
Q3. Using VR technology would help me better highlight our campus's unique features and offerings better.	0.00%	3.08%	1.54%	41.54%	53.85%	4.46
Q4. Using VR technology would make it easier for me to answer questions from prospective students about the campus.	0.00%	1.54%	10.77%	38.56%	49.23%	4.35

The results in Table 1 indicated in Q1 that most respondents believe using virtual reality (VR) technology to conduct campus tours will improve their ability to showcase the campus to prospective students effectively. Expressly, 55.38% of the respondents strongly agreed, and 35.38% agreed, for a total of 90.77%. A small portion of respondents, 7.69%, were neutral, while 1.54% disagreed with the statement.

In Q2, 52.31% of respondents strongly agreed, and 33.85% agreed. The results indicated that most respondents believed that using VR technology would allow them to provide a more immersive and engaging

experience for prospective students. Of the 86.15% who agreed, 12.31% were neutral, and 1.54% disagreed with the statement.

For Q3, 53.85% of the respondents strongly agreed, and 41.54% agreed that using VR technology would help them better highlight our campus's unique features and offerings, totaling 95.38%. About 1.54% of the respondents answered neutral, while 3.08% expressed disagreement with the assertion.

Results in Q4 indicated that 49.23% of respondents strongly agreed and 38.56% agreed that using VR technology would make it easier for them to answer questions from prospective students about the campus," totaling 87.69%. While 10.77% of them are neutral, 1.54% of respondents disagree with the statement.

PERCEIVED EASE OF USE

To determine the respondents' perception of the ease of use of VR campus tours, the scores for the four statements (Q5 to Q8) were recorded and measured. Results in Table 2 showed that most of the respondents agreed that "virtual reality (VR) technology easy to understand and use" (92.31 percent), respondents were able to "easily navigate through the VR campus tour environment" (89.23 percent), "VR campus tour controls were intuitive and easy to use" (90.77 percent), and respondent "was able to quickly learn how to use the VR technology to explore the campus" (93.85 percent). On the other hand, very few (1.54 percent) respondents disagree that respondents "were able to quickly learn how to use the VR technology to explore the campus."

Table 2

Perceived Ease of Use of UPOU VR Campus Tour

Questions	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean
Q5. I found the virtual reality (VR) technology easy to understand and use.	0.00%	0.00%	7.69%	43.08%	49.23%	4.42
Q6. I was able to navigate through the VR campus tour environment easily.	0.00%	0.00%	10.77%	38.46%	50.77%	4.40
Q7. The VR campus tour controls were intuitive and easy to use.	0.00%	0.00%	9.23%	38.46%	52.31%	4.43
Q8. I quickly learned how to use VR technology to explore the campus.	0.00%	1.54%	4.62%	35.38%	58.46%	4.51

Table 2 results indicated in Q5 that a significant majority of respondents, 92.31%, found virtual reality (VR) technology easy to understand and use. Specifically, 49.23% of the respondents strongly agreed, and 43.08% agreed. A small portion of respondents, 7.69%, were neutral.

For Q6, 50.77% of the respondents strongly agreed, and 43.08% agreed that they could easily navigate the VR campus tour environment, up to 92.31%. About 10.77% of them answered neutral.

In Q7, 52.31% of the respondents strongly agreed, and 38.46% agreed that the VR Campus Tour controls were intuitive and easy to use, for a total of 90.77%. The remaining 9.23% answered neutral.

Results in Q8 showed that the majority of the respondents, 58.46%, strongly agreed, followed by 35.38% who agreed that they could quickly learn how to use VR technology to explore the campus. The total number of those who agreed totaled 93.84%. Meanwhile, 4.62% of the respondents answered neutrally, while the remaining 1.54% disagreed with the statement.

INTENT TO USE

To determine the respondents' intention to use the VR campus tours, the scores for the statement (Q9) were recorded and measured. Results in Table 3 showed that most respondents agreed that they "intend to use VR Tour to serve as a valuable resource for the UPOU Community" (92.31 percent). Results in Table 3 showed that most respondents strongly agreed that they intend to use VR Tour as a valuable resource for the UPOU Community, with 49.23% and 43.08%, respectively. The remaining 7.69% of the respondents answered neutral. These results indicated a firm agreement on the intent to use the Virtual Reality Campus Tour in the UP Open University.

Table 3

Intent to use the UPOU VR Campus Tour

Questions	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean
Q9. I presently intend to use VR Tour to serve as a valuable resource for the UPOU Community.	0.00%	0.00%	7.69%	27.69%	64.62%	4.57

Furthermore, the respondents were also given three open-ended questions to gain more insights into their experience navigating the tour. These questions specifically aim to know what the participants like best, like least, and the benefits and advantages of the VR Tour.

PERCEIVED QUALITIES OF THE UPOU VR CAMPUS TOUR

Using open-ended questions, respondents were asked to identify what they think are the qualities of the UPOU VR Campus Tour. Respondents who were asked the question, “What do you like best about the UPOU VR Campus Tour?” answered the following:

- Sense of Presence**
 Many respondents emphasized the immersive nature of the VR experience, highlighting how it allowed them to feel as though they were physically present on campus. This suggests that the VR tour successfully leveraged its technology to create a realistic and engaging experience, a critical factor in achieving user satisfaction. This also included their mention of realistic graphics and images, which significantly enhanced the overall experience. High-quality visuals are integral to creating a convincing virtual environment.
- Showcase of Facilities**
 Participants mentioned the possibility of exploring and viewing campus facilities, indicating that the VR tour effectively communicated the unique offerings of the campus, meeting a key goal of the virtual tour.
- Ease of Use**
 Another highlight was the ease of navigating the application, which suggests that the VR interface is user-friendly and accessible, which is essential for encouraging diverse users to adopt it.
- Interactivity, Easy Navigation, and Exploration**
 The interactive features of the VR tour were also well-received, implying that engaging, hands-on elements are important for holding users' attention and making the experience more dynamic. The ability to easily explore the campus suggests that the design of the VR application facilitated intuitive movement, contributing to a smooth and enjoyable user experience.
- Immersion and Realism**
 The intense focus on creating a sense of presence and realistic visuals resonates with users' expectations of VR technology and showcases its potential to enhance remote experiences.
- Functionality**
 The emphasis on ease of use and navigation indicates that the technical design successfully addressed common challenges in VR usability, making the tour accessible even to first-time users.
- Utility for Prospective Students**
 The ability to showcase facilities and provide easy exploration aligns well with the needs of prospective students, who seek comprehensive insights into campus life without needing to visit in person.

Overall, the responses suggest that the UPOU VR Campus Tour met its objectives by combining immersive technology with intuitive design, creating a positive and impactful user experience. This feedback can be used to refine further and expand features to maintain and enhance user satisfaction.

The responses to the question, “What do you like least about the UPOU VR Campus Tour?” provide valuable insights into the aspects of the VR experience that may be improved to address user needs and concerns.

- **Dizziness and Eye Fatigue**
Some users experience physical discomfort, which is a common issue associated with a person's condition and prolonged use of the gadget. This suggests that the application may need adjustments to minimize these side effects, such as optimizing frame rates, reducing motion sickness triggers, or providing usage guidelines.
- **Problem with the Controller**
Issues with the controller indicate potential challenges in the application's interactivity or hardware functionality. This could disrupt the user experience, emphasizing the need for more proper controls and reliable device performance.
- **Getting Lost**
Respondents mentioned difficulties with navigation, which suggests that the application's interface or guidance system might need improvements to help users orient themselves within the virtual environment.
- **Angle and Quality of Images**
Respondents mentioned their concerns about the image angles and quality point to areas where the visual representation could be enhanced to improve realism and engagement.
- **Fear of Heights**
This response indicates that certain design elements, such as perspectives from high vantage points, could be triggering for some users. Providing options to adjust or bypass such features could improve accessibility.

While the UPOU VR Campus Tour has several strengths, the feedback points to critical areas for improvement. Enhancing user comfort, refining navigation, improving visual quality, and accommodating diverse user preferences will be key to maximizing the effectiveness and appeal of the VR tour. Proactively addressing these concerns can help create a more seamless and enjoyable user experience.

PERCEIVED BENEFITS AND ADVANTAGES

For the second question, respondents were asked, "What do you think are the benefits and advantages of using UPOU VR Campus Tour?". The responses below highlight its accessibility, practicality, and emotional impact.

- **Remote Accessibility**
Several responses, such as "Exploring campus without going on the campus physically" and "Students from other places can access and visit the campus," emphasize the ability to experience the campus virtually without needing to travel. This indicates the VR tour's potential to overcome geographical and logistical barriers, making it accessible to a broader audience.
- **Familiarity Before an Actual Visit**
Responses like "Familiarity with the campus before the actual visit" and "Getting to know the location of each office on the campus" suggest that users value the VR tour as a preparatory tool. This benefit can be beneficial for prospective students or visitors planning to navigate the campus in person.
- **Scalable for Large Groups**
The mention of "It can be used in campus tours, especially for a big crowd" reflects the practicality of using VR for group activities. This reduces the logistical challenges of managing large numbers of visitors and ensures everyone can have a consistent experience.
- **Enhanced Exploration**
Responses such as "Exploring the whole campus in a better way" point to the comprehensive nature of the VR tour. It allows users to explore the campus more thoroughly than traditional tours might allow.
- **Engagement and Emotional Connection**
Descriptions like "New and fun experience" and "It makes students feel that they belong to a campus" highlight the VR tour's engaging and emotionally resonant aspects. These features can help build a stronger sense of community and belonging among prospective and current students.

The respondents recognize the UPOU VR Campus Tour as an accessible, practical, and engaging tool that can reach a diverse audience while fostering familiarity and emotional connection. These benefits highlight its

potential to enhance the university's outreach and improve prospective students' experiences, making it a valuable addition to its engagement strategies.

CONCLUSION

A VR campus tour in a university opens new opportunities and ways to expand campus engagement by enabling students and prospective students to explore the campus and eliminate geographical barriers through immersive technologies.

The findings of the study revealed that most of the staff and students who experienced using the UPOU VR campus tour agreed that virtual reality (VR) technology is "easy to understand and use" and can be "easily navigated through the VR campus tour environment," that "VR campus tour controls were intuitive and easy to use," and that the respondent "was able to quickly learn how to use the VR technology to explore the campus."

In terms of ease of use, results showed that most of the respondents agreed that "virtual reality (VR) technology easy to understand and use," VR can be "easily navigated through the VR campus tour environment," "VR campus tour controls were intuitive and easy to use," and respondents were "able to quickly learn how to use the VR technology to explore the campus." Participants appear to value the ability of VR to simulate realistic environments, offering an engaging and informative perspective on campus life, facilities, and overall atmosphere.

Most respondents have high acceptance scores regarding the UPOU VR campus tour's usefulness and ease of use. Moreover, respondents indicated that they intend to use it as a valuable resource to showcase the university's programs and services. The result of this study will be further used to improve the UPOU VR campus tour.

The results also noted the respondents' perceptions of the best and least characteristics and the benefits of using the VR campus tour. Overall, the responses suggest that the UPOU VR Campus Tour met its objectives by combining immersive technology with intuitive design, creating a positive and impactful user experience. This feedback can be used to refine further and expand features to maintain and enhance user satisfaction.

While the UPOU VR Campus Tour has several strengths, the feedback points to critical areas for improvement. Enhancing user comfort, refining navigation, improving visual quality, and accommodating diverse user preferences will be key to maximizing the effectiveness and appeal of the VR tour. Proactively addressing these concerns can help create a more seamless and enjoyable user experience.

Regarding the benefits and advantages of the virtual campus tour, respondents recognized the UPOU VR Campus Tour as an accessible, practical, and engaging tool that can reach a diverse audience while fostering familiarity and emotional connection. These benefits highlight its potential to enhance the university's outreach and improve prospective students' experiences, making it a valuable addition to its engagement strategies.

In general, the study results indicate a strong consensus among participants regarding the acceptance of the UPOU VR Campus Tour as an innovative tool for showcasing the programs and services of the university.

For future studies, other UPOU stakeholders and potential clients must be included as survey participants to gain broader insights and a wider range of perspectives. Technology enhancements based on the results must also be considered to enhance further and maximize the potential of the campus tour experience in terms of its navigation, accessibility, and interactive features.

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