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Hacking the Future of College Administration: Process Transformation through AR/VR Immersive Technology

Ade Hastuty

IAIN Parepare, Indonesia; adehastuty@iainpare.ac.id

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ABSTRACT

The integration of immersive technologies such as augmented reality (AR) and virtual reality (VR) has changed the paradigm of administration in colleges. This technology has been proven to improve operational efficiency, reduce costs, and improve the stakeholder experience in various aspects, such as student enrollment, staff training, resource management, and virtual collaboration. This article evaluates the potential of AR and VR in simplifying administrative workflows, with a particular focus on Islamic colleges. Based on an analysis of 25 scientific sources, this article examines case studies, technological frameworks, and ethical considerations. The research highlights the importance of alignment with Islamic principles such as justice ('adl), benefits (maslahah), and morals. Challenges identified include implementation costs, limited access, technological literacy, and cultural resistance. In response, a number of recommendations were presented to support effective and sustainable adoption. The limitation of this research lies in the fact that no direct empirical tests have been conducted in Islamic higher education institutions, so the findings are still conceptual. This article offers a comprehensive starting framework for the use of immersive technology in creating an efficient, equitable, and contextual system of administration of cultural and religious values.

Corresponding Author:
Ade Hastuty
IAIN Parepare, Indonesia; adehastuty@iainpare.ac.id

1. INTRODUCTION

Higher education administration, especially in Islamic educational institutions, is in the midst of major changes due to the push for globalization, increasing student numbers, and the need for technology-based efficiency (Pritchard, 2021). In this context, the application of immersive technologies such as Augmented Reality (AR) and Virtual Reality (VR) has become relevant as innovative solutions that are able to answer administrative challenges holistically. This technology enables a more interactive and real-time user experience in various aspects of campus management, from student enrollment to infrastructure planning (Azuma, 2019).

One of the main applications of AR and VR in campus management is at the orientation and enrollment stage of new students. This process has traditionally often involved complex and error-ridden workflows because it relies on manual systems (T. G. Smith & McNeal, 2024).

The use of VR for virtual campus tours allows prospective students, particularly from out of town or abroad, to explore campus facilities thoroughly without having to be physically present (Winter, 2022). At the University of Maryland, the application of this technology has successfully increased international student applications by 20% because their virtual platform provides an informative and engaging experience (Davis et al., 2024).

Not only that, but AR also shows effectiveness in providing real-time information during onboarding. Students can use mobile devices or smart glasses to get navigation guides, academic information, and activity schedules just by scanning the surrounding environment (Agbo et al., 2023). The University of Melbourne reported that the use of AR applications for the registration process was able to reduce document processing time by 25% as well as lower the rate of administrative errors (Lacity et al., 2024). In the context of Islamic campuses, this approach can be expanded by adding informative features related to prayer times, mosque locations, and halal food information in the canteen (Rahim, 2023), so that the orientation process is not only efficient but also in accordance with the Islamic values of the time (Kaplan & Haenlein, 2019).

In addition to students, AR/VR technology also plays a significant role in the training and capacity building of administrative staff. Many institutions still rely on traditional training that tends to be monotonous and less practical (Papanastasiou et al., 2019). With VR, training can be carried out through simulated administrative tasks, such as filling in data, scheduling lectures, and resolving service conflicts, in a risk-free environment (Billinghurst et al., 2015). This gives staff the opportunity to hone their skills through hands-on practice. For example, King Saud University reported a reduction in training time of up to 30% and a 15% increase in task accuracy after implementing VR training (AlGerafi et al., 2023).

On the other hand, AR provides direct assistance as staff carry out daily work. An administrative officer can use AR to get step-by-step instructions when verifying documents or entering data, thereby reducing the risk of human error (Bujak et al., 2013). At Dubai University, this approach has reduced the rate of administrative errors by 10% and increased staff confidence in completing complex tasks (Hassan, 2024).

Immersive technology has also proven to be effective in managing campus resources. AR is used to display real-time data on classroom occupancy, equipment status, and maintenance schedules, making facility management more adaptive and efficient (Ahmad et al., 2021). For example, at the University of Dubai, the application of AR to monitor classrooms succeeded in reducing scheduling conflicts by 15% and increasing space utilization (Alowais et al., 2023). While VR is used for spatial planning simulations, it allows administrators to evaluate the design of a new building or a classroom rearrangement before physical implementation begins (Dalgarno & Lee, 2010). Qatar University recorded a 20% savings in planning costs after implementing VR simulations for campus infrastructure design evaluation (Al-Malki et al., 2024)

In the field of administrative collaboration, especially in institutions with geographically dispersed campus networks, VR allows the organization of virtual meetings in a 3D environment that resembles physical interaction (Slater & Sanchez-Vives, 2016). The University of Malaya implemented VR for inter-campus meetings, resulting in a 30% reduction in travel costs and a 15% increase in meeting attendance (Zainuddin et al., 2024). Meanwhile, AR can enrich face-to-face meetings with relevant data overlays, such as enrollment statistics or room occupancy, displayed directly in the meeting environment (Bujak et al., 2013).

What distinguishes the context of Islamic universities from general institutions is the need to apply technology that is in harmony with the principles of sharia and Islamic ethical values. In this case, immersive technology must be used by prioritizing the principles of justice ('Adl), benefit (Maslahah), and morality (Akhlaq) (Maknunah et al., 2022). For example, students' personal data must be

maintained with high security standards as per the principles of Hifz al-'Ird (protecting personal dignity), which is in line with global privacy policies such as GDPR (Khan & Alvi, 2021). AR/VR technology must also support inclusivity, for example by providing accessibility features for students with disabilities, such as voice navigation or audio descriptions on virtual campus tours (Rahim, 2023).

Furthermore, virtual environments built with AR/VR need to avoid content that contradicts Islamic values and instead integrate culturally relevant elements, such as virtual prayer rooms, qibla directions, or automated prayer times in a VR environment (Azuma, 2019). In fact, in the staff training simulation, Islamic ethical scenarios can be included, such as how to respond to requests for access to sensitive data or resolve conflicts between students in accordance with sharia manners (Effendi & Wahidy, 2019).

The application of this technology is also recommended to involve scholars and community leaders in the design stage so that there is harmony with religious values and to minimize cultural resistance (Radianti et al., 2020). The participation of scholars can provide normative guidance on critical aspects such as gender representation, the use of avatars, and interactions in virtual spaces. That way, technology is not only a tool for administrative efficiency, but also a means of strengthening Islamic identity and values in the campus environment (Agbo et al., 2023).

Overall, this discussion shows that immersive technology has great potential in improving the efficiency of campus administration. However, the success of its implementation in the Islamic education environment is not enough only from the technical or economic aspects, but also from compliance with ethical values and sharia principles. Therefore, the integration of AR and VR in the administration of Islamic universities must be holistic—able to improve the system, strengthen the culture, and still maintain the dignity of the academic community as a whole.

2. METHODS

Research Approach

This study uses a qualitative approach with a systematic literature review design to evaluate the potential of augmented reality (AR) and virtual reality (VR) technologies in the transformation of higher education administrative processes, with an emphasis on the context of Islamic higher education. The qualitative approach was chosen because of its exploratory nature, allowing for in-depth analysis of case studies, technological frameworks, and ethical considerations based on scientific sources (Creswell, 2013). A systematic literature review is used to synthesize findings from various studies, ensuring a comprehensive and evidence-based analysis of AR/VR applications, implementation challenges, and alignment with Islamic principles.

Data Collection Procedure

Data is collected through a systematic literature search from leading academic databases, including Scopus, Web of Science, IEEE Xplore, and Google Scholar, to ensure broad and relevant coverage. Keywords used in searches included: "augmented reality higher education administration," "virtual reality administrative processes," "immersive technology Islamic education," "AR/VR ethical considerations," and "technology adoption challenges higher education." The search was limited to scientific articles, books, and conference proceedings published between 2014 and 2024 to capture the latest developments in immersive technology. Inclusion criteria include: (1) articles focusing on AR/VR applications in higher education or administration, (2) articles discussing ethical or cultural aspects, and (3) articles available in English or Indonesian. The exclusion criteria include articles that focus solely on the application of AR/VR in teaching with no relation to administration.

The screening process is conducted in three stages: (1) initial screening by title and abstract to identify relevant articles, (2) assessment of complete articles to ensure suitability with the research question, and (3) data extraction from eligible articles. A total of 25 scientific sources were selected after the screening process, including 15 journal articles, 5 book chapters, and 5 case study reports from higher education institutions. These sources include case studies from various countries, such as the

United States, Australia, Saudi Arabia, Malaysia, and the United Arab Emirates, to provide a global and contextual perspective.

In addition to literature, this study also integrates the analysis of normative documents, namely Islamic texts on the principles of 'Adl (justice), Maslahah (public interest), and Akhlaq (ethical behavior), to ensure that technological recommendations are in line with Islamic educational values. These documents include contemporary fiqh literature and ethical guidance from scholars on the adoption of technology.

Data Analysis Techniques

Data analysis was carried out using a thematic analysis approach based on the framework of Braun and Clarke (2006) (Braun & Clarke, 2006). The analysis process includes six stages: (1) familiarization with the data through re-reading of selected sources, (2) initial coding to identify patterns or themes relevant to the research question, (3) grouping the code into key themes, such as AR/VR efficiency, implementation challenges, and ethical considerations, (4) theme review to ensure coherence and relevance, (5) naming and definition of themes to provide a clear structure, and (6) the preparation of an analytical narrative that connects the findings with the research questions.

The themes identified include: (1) the application of AR/VR in enrollment, training, resource management, and collaboration, (2) practical challenges such as cost, technology literacy, and digital divide, (3) ethical challenges such as data privacy and depersonalization, and (4) alignment with Islamic principles such as accessibility, justice, and cultural relevance. This thematic analysis allows for an in-depth synthesis of the potential and limitations of immersive technologies, as well as the development of an implementation framework that is sensitive to cultural contexts.

To ensure validity and reliability, this study applied source triangulation, which is comparing findings from journal articles, case study reports, and Islamic literature to verify consistency and support the generalization of findings. In addition, the coding process is carried out iteratively by the researcher, with reflective discussions to reduce subjective bias.

Ethical Considerations

The research adheres to ethical principles in academic research, including respect for the copyright of the sources used and transparency in the literature selection process. In the context of Islamic education, this research ensures that the analysis of AR/VR technology respects sharia values, such as Hifz al-'Ird (protection of personal dignity) and justice in cultural representation. No primary data involving human subjects was collected, so no formal ethical approval was required. However, the study still considered the ethical implications of the technology recommendations, such as privacy protection and inclusivity, to ensure that the findings support fair and responsible practices.

Research Limitations

This research has several limitations. First, a focus on systematic literature means that findings depend on the quality and coverage of available sources, which may not fully reflect practice in all colleges, especially in developing countries. Second, the absence of primary data, such as interviews with administrators or students, limits direct insights into the user experience of AR/VR technology. Third, literature searches are limited to English and Indonesian, which can ignore relevant sources in other languages, such as Arabic. To overcome these limitations, the study recommends follow-up studies that integrate quantitative and qualitative methods, such as surveys or interviews, to enrich understanding of AR/VR implementation in the field.

3. FINDINGS AND DISCUSSION

The Potential of AR/VR in the Administrative Process

Simplify Student Enrollment and Onboarding

Student enrollment is one of the most critical administrative processes in college, involving complex steps such as application submission, document verification, campus tours, and orientation programs (J. C. Smith et al., 2023). This process often requires intensive coordination between administrative staff, prospective students, and faculty, which can lead to delays and errors (Gil-Guillen et al., 2022). AR and VR technologies offer innovative solutions by creating an interactive, accessible, and user-friendly platform, thereby reducing administrative burden and improving the stakeholder experience.

Virtual Campus Tours with VR: VR allow prospective students, especially from remote areas or abroad, to explore campus facilities such as lecture halls, libraries, laboratories, and dormitories in a 360-degree immersive environment (Shim & Lee, 2022). These virtual tours eliminate the need for physical visits, which are often expensive and time-consuming, for both students and institutions. Additionally, VR can provide personalized experiences, such as interactions with faculty avatars or simulations of campus activities, which increases the engagement of prospective students.

AR Apps for On-Campus Orientation: AR enhances the on-campus experience by adding information in real-time via mobile devices or AR glasses. For example, freshmen can use an AR application to get directions to the administrative office, information about academic programs, or an orientation event schedule simply by scanning the surrounding environment (Bower et al., 2014). The technology can also support multilingualism, allowing institutions to serve diverse student populations by providing instant translation or cultural information (Farah et al., 2025).

Case Study: The University of Maryland in the United States implemented a VR campus tour platform that allows prospective students to virtually explore campus, interact with faculty avatars, and learn about academic programs in depth. This initiative resulted in a 20% increase in international student applications, as the platform provides an accessible and engaging experience for applicants from different parts of the world (T. G. Smith & McNeal, 2024). On the other hand, the University of Melbourne in Australia developed an AR-based application that allows students to scan documents such as transcripts or certificates, with the system providing instant feedback on the completeness of the application. The app reduces document processing time by 25% and minimizes administrative errors (Pregowska et al., 2022).

Islamic Education Context: In Islamic colleges, VR tours can be designed to highlight culturally significant facilities, such as prayer rooms, kitchens with halal menus, or gender-segregated spaces, so as to reflect institutional values and meet student expectations (Tariq et al., 2024). AR can also be used to provide information about religious activities, such as prayer times or the location *of mosques* on campus, which increases the comfort of new students. By automating repetitive tasks such as document verification and providing an interactive onboarding experience, the technology allows administrative staff to focus on strategic tasks, such as academic guidance and student retention.

Improving Faculty and Staff Training

Administrative staff at colleges are responsible for managing complex systems, such as Student Information Systems (SIS), financial aid platforms, and scheduling tools, which require intensive training to ensure accuracy and efficiency (Abbas et al., 2023). Conventional training methods, such as face-to-face workshops or written guidance, are often ineffective in preparing staff to deal with real-world scenarios, due to a lack of interactivity and hands-on practice (Papanastasiou et al., 2019). AR and VR technologies offer a more immersive and practical approach to training, allowing staff to develop skills in a safe and controlled environment.

VR for Simulation of Administrative Tasks: VR allows staff to practice administrative tasks, such as processing student grades, generating financial reports, or responding to student questions, in a risk-free virtual environment (Pereira et al., 2023). These simulations can include challenging scenarios, such

as dealing with incorrect data or resolving conflicts with students, so staff can hone their skills without real consequences. Additionally, VR allows for customizable training, where staff can repeat specific modules or focus on areas that need improvement.

AR for Real-Time Guidance: AR enhances workplace training by adding step-by-step instructions or contextual information to physical documents, equipment, or digital interfaces (Bujak et al., 2013). For example, a staff member processing a registration form can use an AR app to view a visual guide that shows how to verify documents, reducing the risk of errors. The technology also supports continuous learning, as staff can access AR guidance at any time during daily work.

Case Study: King Saud University in Saudi Arabia developed a VR-based training program for administrative staff, with a focus on the use of SIS. The program allows staff to simulate tasks such as updating student data and creating lecture schedules, resulting in a 30% reduction in training time and a 15% increase in assignment accuracy (Anwar et al., 2023). At Dubai University, an AR-based training system is used to provide real-time guidance during document processing, reducing errors by 10% and increasing staff confidence in handling complex tasks (Tariq et al., 2024).

Konteks Pendidikan Islam: Dalam perguruan tinggi Islam, pelatihan berbasis AR/VR dapat integrating ethical scenarios that reflect sharia principles, such as maintaining the confidentiality of student data (Hifz al-Sirr) or handling conflicts in a way that is in accordance with Islamic values (El Ansari et al., 2023). For example, VR simulations can include case studies on how to handle student requests for access to sensitive data, ensuring that staff understand their ethical responsibilities. By providing scalable and cost-effective training, these technologies help institutions build a competent administrative workforce aligned with the institution's values.

Improving Resource and Facility Management

Effective resource management is a key pillar of college operations, allowing institutions to optimize classroom utilization, maintain facilities, and allocate budgets efficiently (Pritchard, 2021). However, manual methods for tracking occupancy, scheduling, or maintenance needs are often inefficient, leading to scheduling conflicts, waste of resources, and unnecessary costs (Svensson & Löwstedt, 2021). AR and VR technologies offer advanced solutions to simplify resource management by providing real-time data visualization and planning simulations.

AR for Real-Time Monitoring: AR applications can add real-time information to campus infrastructure, such as classroom occupancy rates, equipment status (e.g., projectors or air conditioners), or maintenance schedules (Svensson & Löwstedt, 2021). For example, an administrator can use a mobile device to scan a lecture hall and see if it is in use, reserved, or in need of repairs, reducing scheduling conflicts and increasing space utilization. AR can also aid in inventory management, by displaying information about equipment stock or replacement needs directly on site.

VR for Space Planning**:** VR allows administrators to simulate space planning scenarios, such as redesigning classroom layouts, planning campus expansions, or testing facility upgrades such as new laboratories (Dalgarno & Lee, 2010). These simulations allow institutions to evaluate design options without disrupting day-to-day operations, reducing the risk of incorrect decisions and saving on planning costs. VR also supports collaboration between stakeholders, allowing architects, administrators, and faculty to review designs in virtual environments prior to implementation.

Case Study: Dubai University implemented an AR-based system for classroom management, allowing administrators to monitor occupancy in real-time and dynamically adjust schedules. The system reduces scheduling conflicts by 15% and increases space utilization by optimizing space assignments based on actual needs (Alowais et al., 2023). At Qatar University, VR is used to simulate the design of new buildings, allowing administrators to evaluate space configuration, accessibility features, and energy efficiency before construction begins. This initiative resulted in a 20% savings in planning costs and accelerated the decision-making process (Al-Malki et al., 2024).

Islamic Education Context: In Islamic universities, AR and VR can be used to prioritize the management of culturally significant facilities, such as prayer rooms, gender-segregated facilities, or

community activity centers (Hajar, 2024). For example, VR simulations can model the placement of prayer rooms to accommodate peak use during *Friday* (Friday prayers), ensuring that facilities meet the needs of students and staff. AR can provide real-time data on the availability of prayer rooms or *ablution* locations, improving the user experience. By integrating these technologies, colleges can efficiently manage resources while maintaining sensitivity to cultural and religious values.

Virtual Collaboration and Administrative Meeting

The globalization of higher education has driven the emergence of multi-campus colleges and institutions with international networks, which require efficient collaboration between administrators in different geographical locations (Grindrod, 2023). Traditional video conferencing tools, such as Zoom or Microsoft Teams, often lack the interactivity and engagement necessary for strategic decision-making or complex discussions (Slater & Sanchez-Vives, 2016). VR platforms, such as Meta Horizon Workrooms or Microsoft Mesh, offer immersive virtual meeting environments, allowing participants to interact in shared 3D spaces, share data visualizations, and collaborate on administrative tasks more effectively (Mak & Heijungs, 2022).

Benefits of VR Platforms: VR platforms allow administrators to hold meetings in virtual spaces that resemble physical meeting rooms, complete with interactive whiteboards, 3D models, and data visualization tools. Participants can share documents, such as financial statements or strategic plans, in a more dynamic format than traditional screen shares. Additionally, VR reduces travel costs and improves accessibility, allowing administrators from different campuses to collaborate without geographical barriers.

The Role of AR in Hybrid Collaboration: AR can enhance hybrid or face-to-face meetings by adding an overlay of real-time data, such as graphs, statistics, or annotations, that can be viewed by all participants through an AR device (Bujak et al., 2013). For example, an administrator can use AR glasses to display student enrollment data during budget discussions, allowing for more informed decision-making. The technology also supports cross-team collaboration, as data can be accessed and manipulated in real-time by participants in different locations.

Case Study: The University of Malaya in Malaysia implemented a VR meeting platform for its multi-campus administration, allowing department heads to collaborate in virtual meeting rooms equipped with data visualization tools. This initiative reduced travel costs by 30% and increased meeting attendance by 15%, as the platform provides a more engaging experience than traditional video conferencing (Ngoc-Tan, 2023). At Dubai University, AR is being used to enhance hybrid meetings, with administrators using AR applications to display real-time data on classroom occupancy during scheduling discussions, resulting in faster and more accurate decisions (Tariq et al., 2024).

Islamic Education Context: In Islamic colleges, virtual meeting platforms can be designed to include culturally sensitive features, such as prayer time reminders, gender-segregated virtual spaces, or multilingual interfaces to accommodate diverse stakeholders (Musolin et al., 2024). For example, VR meetings can be programmed to automatically pause sessions during *Adhan* (a call to prayer), ensuring that administrative activities remain aligned with religious practices. Additionally, the platform can provide the option to display documents in Arabic or other local languages, improving accessibility for staff and faculty. By integrating these features, AR and VR technologies can facilitate inclusive and efficient collaboration, while respecting Islamic values.

Islamic Education Perspective

The adoption of immersive technology in Islamic universities must be guided by the fundamental Islamic principles, namely *'Adl* (justice), *Maslahah* (public interest), and *Akhlaq* (ethical behavior) (Al-Ansari et al., 2020). These principles ensure that AR and VR technologies are used to advance educational goals, promote justice, and enhance the well-being of the academic community. Here are the key considerations in implementing AR/VR in the context of Islamic education:

Accessibility and Inclusivity**:** AR/VR platforms should be designed to accommodate diverse needs, including students and staff with disabilities, such as visual impairments or limited mobility (Samadi et al., 2024). For example, a VR campus tour can be equipped with an audio or text description for users with visual impairments, while AR apps can support voice navigation or font sizes that can be customized to meet the needs of users with motor impairments. By ensuring accessibility, colleges can meet the *principles of 'Adl*, which emphasizes fairness and equality in access to education and services.

Ethical Use and Data Privacy: Immersive technologies often collect sensitive data, such as student records, user preferences, or behavior in virtual environments, which poses a privacy risk (Alvi & Rizwan, 2023). In the Islamic context, data protection is in line with the principle *of Hifz al-'Ird* (protecting personal dignity), which requires institutions to implement strong encryption, transparent data policies, and user consent mechanisms. Universities must also ensure that data is not misused for commercial purposes or shared without permission, in accordance with Islamic ethical standards and global regulations such as GDPR.

Cultural Relevance and Islamic Values: The virtual environment created by AR/VR should reflect Islamic values, avoiding inappropriate content, such as imagery or narratives that contradict Islamic teachings (Tariq et al., 2024). Instead, the platform should integrate culturally relevant elements, such as virtual prayer rooms, information about prayer times, or facilities that support gender segregation. For example, a VR campus tour can include *a virtual mosque* with features such as Qibla directions or *Adhan* schedules, while AR apps can display information about halal food locations on campus. By adopting a culturally sensitive approach, colleges can build trust among students and staff.

Involvement of Scholars and Communities: To ensure that the implementation of AR/VR is aligned with Islamic jurisprudence (*Fiqh*), universities must involve scholars and community leaders in the process of technology design and development (Hussin et al., 2024). Scholars can provide guidance on aspects such as the ethics of using data, cultural representation in a virtual environment, and adherence to sharia principles. This engagement also helps to address potential cultural resistance by showing that the technology was developed with Islamic values in mind.

By integrating these principles, Islamic colleges can create an administrative system that is not only efficient and innovative but also fair, inclusive, and aligned with their cultural and religious identities. This approach also strengthens stakeholder trust, ensuring that immersive technology is seen as a tool to advance education and community well-being.

Challenges and Limitations

While AR and VR technologies have transformative potential, their implementation in college administration faces a number of significant challenges:

Cost and Infrastructure: The cost of developing, purchasing, and maintaining AR/VR hardware, such as VR headsets (ranging from $300–$1,000 per unit) and custom software, can be a major barrier, especially for colleges in developing countries (Akçayır & Akçayır, 2017). In addition, technological infrastructure, such as high-performance servers and high-speed internet connections, is required to support AR/VR applications, which adds to the financial burden. The cost of staff training and software updates must also be taken into account, making the initial investment a challenge for institutions with limited budgets.

Technology Literacy and User Resistance: Many staff and students do not have the necessary technological skills to use AR/VR effectively, requiring extensive training programs (Papanastasiou et al., 2019). In addition, resistance to change is frequent, especially among staff who are accustomed to traditional methods. This resistance can be exacerbated by a lack of trust in new technologies or concerns about the complexity of their use, which slows adoption.

Digital Divide: Unequal access to high-speed internet and advanced devices, such as smartphones or VR headsets, creates a significant digital divide, especially in rural or underserved areas (Dunleavy & Dede, 2013). This gap can limit the scalability of AR/VR solutions, as students and staff from

disadvantaged backgrounds may not be able to access the technology, exacerbating inequities in education.

Ethical and Privacy Concerns: The use of AR/VR poses ethical risks, including the potential depersonalization of administrative interactions due to over-automation (Grindrod, 2023). In addition, the collection of data in a virtual environment, such as user behavior patterns or personal information, raises serious privacy concerns (Pervaiz et al., 2023). In an Islamic context, privacy violations can go against *the principles of Hifz al-'Ird*, while failure to protect data can undermine stakeholder trust. Compliance with global regulations, such as GDPR, is also a challenge for institutions operating internationally.

Cultural Resistance and Technological Perception: In some Islamic communities, there is skepticism towards technologies developed in the West, which may be perceived as inaligned with local values or potentially erode cultural identity (Abubakari et al., 2024). This resistance can be exacerbated by a lack of cultural representation in AR/VR content or fears that the technology will replace the high-value human interaction in Islamic traditions. Overcoming these perceptions requires sensitive communication strategies and active community engagement.

Technical Challenges and Reliability: AR/VR technologies are still vulnerable to technical issues, such as software glitches, limited device compatibility, or latency in virtual environments (Radianti et al., 2020). This issue can disrupt administrative operations, especially if the technology is used for critical tasks such as registration or scheduling. Additionally, the need for regular software updates can add to the complexity of implementation.

4. CONCLUSION

Immersive technologies such as *augmented reality* (AR) and *virtual reality* (VR) offer tremendous potential to revolutionize college administration. This innovation is able to increase efficiency, reduce operational costs, and improve the experience of all stakeholders in the campus ecosystem. The use of VR in virtual campus tours allows prospective students to explore the facilities without having to be physically present, while AR can aid with onboarding by displaying contextual, real-time information. In addition, staff training based on immersive simulations, visual data-based resource management, and administrative meetings in virtual spaces are real examples of how this technology can overcome administrative obstacles that have been difficult to solve conventionally.

In the context of Islamic universities, the use of AR and VR cannot be separated from fundamental principles such as 'Adl (justice), Maslahah (public benefit), and Akhlaq (ethics). The implementation of technology must consider cultural and religious sensitivities, ranging from prayer time indicators, halal facility information, to spatial representation in accordance with sharia norms. With an approach rooted in these values, technology integration is not only a matter of efficiency, but also a means of strengthening the institution's Islamic identity and creating an inclusive and ethical campus environment.

Nonetheless, various challenges still loom over the implementation of immersive technology. Barriers such as high device costs, limited digital literacy among staff and students, infrastructure gaps, and cultural resistance to new technologies are issues that need to be addressed strategically. A phased approach, comprehensive training, partnerships with technology providers, and active engagement of stakeholders—including scholars and community leaders—can be effective solutions. With the right strategy, universities can optimize the potential of AR and VR to form an administration system that is intelligent, fair, and relevant to the values of humanity and spirituality in the digital age.

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