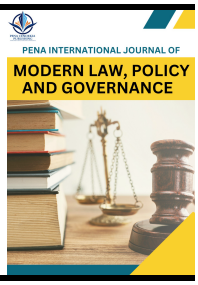
PENA CENDEKIA PUBLISHING
NURTURING IDEAS, ENRICHING KNOWLEDGE

Pena International Journal of Modern Law, Policy and Governance

Journal homepage:
https://penacendekia.com.my/index.php/pijmlpg/index
ISSN: XXXX-XXXX



The Metaverse as a Learning Hub: Innovating Legal Education for Tomorrow in Malaysia

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ARTICLE INFO

Article history:
Received 12 July 2025
Received in revised form 18 August 2025
Accepted 24 August 2025
Available online 1 September 2025

Keywords:
Innovating; legal education; Malaysia; Metaverse

ABSTRACT

Rapid changes in technology and shifting societal demands are reshaping the legal education landscape. The Metaverse is among the most exciting innovations in legal education. This article examines the current state of legal education in the country, the challenges it faces, the potential of the metaverse as a learning hub, and explores how the Metaverse can revolutionise legal education in Malaysia by exploring relevant examples and case studies to illustrate the transformative potential of this technology. This article also explores the challenges in implementing Metaverse in legal education. The researchers applied doctrinal research by focusing on analysing current legislation, relevant court decisions, and reliable sources on a certain topic in both primary and secondary resources. The findings reveal that metaverse can produce interesting educational opportunities where students can explore and engage with customised virtual worlds. Even if this is new, it is necessary to embrace the new use of technology. In the end, the Meta environment can be helpful if we concentrate on creating a Metaverse that is accessible and welcoming to law school staff. It is argued that law schools can take advantage of virtual worlds' collaborative features, which include the ability to facilitate virtual client conferences and meetings, practice advocacy techniques through simulations, and use virtual libraries interactively for legal research and knowledge enhancement.

1. Introduction

Science fiction is no longer the only genre to use the idea of the Metaverse, a collective virtual shared place made possible by the combination of the internet, augmented reality (AR), and virtually improved physical reality [1]. It is rapidly becoming a tangible reality, with applications spanning various sectors, including education. The Metaverse offers an unparalleled chance to transform the way legal knowledge is taught and assimilated in Malaysia, where the legal education system is always changing to satisfy the needs of a changing global environment [2]. Moreover, an examination of the international landscape reveals that various educational systems across the globe are

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https://doi.org/10.37934/pijmlpg.1.1.2942

beginning to adopt Metaverse applications. Institutions in countries such as the United States, Australia, and the United Kingdom are exploring the integration of virtual reality (VR) and augmented reality (AR) into their curricula to enhance experiential learning [3]. These innovative practices provide valuable insights into how Malaysian legal education can leverage similar technologies to enrich learning outcomes. The comparative study of global educational applications of the Metaverse can serve as a blueprint for Malaysian institutions to consider best practices and avoid potential pitfalls in their implementation strategies.

Malaysia's current laws, like the Communications and Multimedia Act 1998 and Personal Data Protection Act 2010, aren't equipped to handle the unique problems of the Metaverse. Issues like jurisdictional disputes in virtual worlds, intellectual property rights for AI-created legal content, and accountability for virtual harassment (e.g., through avatars) are arising because there's a lack of research proposing legal updates to address these gaps. While corporate initiatives like CelcomDigi Metaversity highlight investment in Metaverse education, further research is needed to understand sustainable university-tech provider partnerships. These partnerships must balance commercial goals with maintaining pedagogical integrity and integrating industry tools, such as XR robotics, into core curricula (e.g., legal studies) [4]. The Western-centric nature of most Metaverse platforms presents challenges for Malaysia. Localizing virtual environments requires careful consideration of the country's multicultural legal system, the preservation of traditional teaching methods (like Socratic methods) in digital formats, and the overcoming of language barriers in multilingual simulations. Notwithstanding recent innovations in Metaverse technology, fundamental discrepancies, such as the divergence between legal theory and practice observed in pre-pandemic research, continue to exist.

2. Methodology

This paper employs a doctrinal legal approach by using the qualitative data to understand the potential of the Metaverse used in learning hubs, especially in legal education. By gathering data from surveys and case studies, the study seeks to provide a comprehensive analysis of the effectiveness of Metaverse applications in enhancing legal education in Malaysia. Through this investigation, the findings contribute to the broader discourse on the role of technological innovation in education. While the potential of the Metaverse is substantial, it is not without its challenges. Issues such as accessibility, equity, and the need for robust digital infrastructure must be critically examined to ensure that the benefits of Metaverse-based learning are available to all students. Furthermore, educators must receive adequate training and resources to effectively utilize these technologies in their teaching. In conclusion, the study of the Metaverse in legal education presents a timely opportunity to address the emerging needs of legal practitioners in Malaysia [5]. By exploring its potential applications and assessing the effectiveness of its integration into legal education frameworks, this research aims to contribute to the development of innovative pedagogies that can better prepare law graduates for the complexities and demands of the 21st-century legal landscape. The implications of this study extend beyond the confines of Malaysian legal education, as it seeks to inform global conversations about the future of legal training in an increasingly digital world. This exploration sets the stage for a comprehensive analysis of the Metaverse’s capacity to innovate legal education, ultimately fostering a more prepared and adaptable legal workforce in the years to come. A comparison of in-person learning, screen-based remote learning, and metaverse-based learning is presented in Table 1 below [6]:

Table 1
Comparisons of in-person classroom learning, screen-based remote learning, and metaverse-based learning

Factor	In-person classroom learning	Screen-based remote learning	Metaverse-based learning
The time and location for learners to participate in class	At a fixed time in accordance with the class schedule and school timetable in the real classroom	Available only when a teacher opens a meeting on the video-conferencing platform	Without being limited by either time or location
Learner identity	Real identity	Real identity	Customized and dynamic digital identity (avatar)
The people learners interact with	Real teachers and peers	Real teachers and peers	Real teachers and peers in the form of avatar, or virtual teachers and peers in the form of intelligent NPC
Learning scene	Real learning scenes	Real learning scenes	simulated learning scenes
Learning resource	Mainly printed or multimedia learning resources that learners usually cannot interact with	Mainly multimedia or online learning resources that learners usually cannot interact with	Mainly visualized or decentralized learning resources that allow learners to interact
Learning activity	Primarily based on lectures from teachers Allows learners to participate in a series of learning activities, except in the pandemic era Allow learners to collaborate with peers, except in the pandemic era	Primarily based on lectures from teachers Cannot easily allow learners to participate in some complex learning activities Cannot easily allow learners to collaborate with peers	Primarily a series of contextualized learning activities in 3D learning scenes Allow learners to participate in a series of learning activities virtually, Can support remote collaboration Initiate activities more like inquiry-based or problem-solving tasks Facilitate creative learning activities
Learning experience	Mainly based on face-to-face communication	Mainly based on online communication with video and audio	Mainly based on multi-sensory and embodied participation
Learning objective	Mainly aims to develop low-order cognitions	Mainly aims to develop low-order cognitions	More easily to develop high-order cognitions Mainly aims to achieve more comprehensive learning objectives
Learning assessment	Focus on learning results Based on summative data	Focus on learning results Based on summative data	Combine with formative and summative data Pay more attention to learners' growth

3. Legal Education in Malaysia

Legal education in Malaysia has traditionally been structured around a combination of academic study and practical training [7]. The journey to becoming a qualified lawyer typically involves completing a law degree from a recognized institution, followed by the Certificate in Legal Practice (CLP) or the Bar Professional Training Course (BPTC), and finally, a pupillage or chambering period. The intersection between technology and education is an evolving landscape that raises significant questions about the future of teaching methodologies [8]. With the advent of the Metaverse—a collective virtual shared space created by the convergence of virtually enhanced physical reality and physically persistent virtual reality—the potential for transformative educational experiences is being realized across various disciplines. This concept of the Metaverse is particularly relevant in the context of legal education, where traditional pedagogical approaches often struggle to keep pace with the rapid evolution of legal practices and the complexities of a digital age [9]. As legal professionals increasingly navigate a world influenced by technology, including artificial intelligence and blockchain, there arises a pressing need to adapt legal education frameworks to prepare future lawyers for the challenges and opportunities presented by this new landscape. The significance of exploring the Metaverse's potential in legal education cannot be overstated. In Malaysia, the legal education system has been largely influenced by conventional methods, which may not adequately equip students with the necessary skills to thrive in a technology-driven environment.

4. Challenges in Legal Education

Legal education has long been rooted in traditional methods such as lectures, casebooks, and moot court competitions. Traditional legal education often emphasizes theoretical knowledge over practical skills. Students may graduate with a strong understanding of legal principles but lack the hands-on experience needed to navigate real-world legal scenarios. One of the primary challenges of traditional legal education is the limited opportunity for students to gain practical, hands-on experience. In traditional education, students rarely experience real-world legal situations in a controlled, experiential environment [10]. Although internships and clerkships provide some exposure to legal practice, they can be limited in scope and may not allow students to engage with complex legal problems. Similarly, while moot courts simulate real courtroom experiences, they are

still artificial and often oversimplified. The lack of immersive environments means that students might not develop an adequate understanding of how complex legal procedures work in the real world [11].

In addition to that, traditional legal education is often criticized for being too lecture-based and theory-heavy. While understanding the law's principles is essential, the traditional approach doesn't always foster active learning or critical thinking skills in the same way that more interactive methods, such as those provided by the Metaverse [12]. In many cases, students are passive recipients of information, absorbing content through lectures and reading assignments. This passive learning style can hinder critical thinking, collaboration, and deeper engagement with the material.

While the traditional methods have served the profession well, they come with several challenges, especially in an ever-evolving global and technological landscape. The absence of advanced immersive technologies, like the metaverse, in legal education creates certain limitations in preparing students for the complexities and practicalities of modern legal practice.

5. The Metaverse: A New Frontier for Legal Education

5.1 What is the Metaverse?

The metaverse is a collective virtual shared space that merges physical, augmented, and virtual reality. It is a fully immersive digital environment where users can interact with each other and digital objects in real-time. The metaverse is not a single entity but a network of interconnected virtual worlds, each with its own rules, economies, and social structures [13].

The metaverse concept was first introduced by Neal Stephenson in his 1992 science fiction novel Snow Crash [14]. In the novel, the metaverse refers to a virtual reality space where users, represented by avatars, interact with each other and the digital environment through a shared 3D space. This fictional depiction laid the foundation for what would later become a key focus in the realms of technology and digital interaction. According to Stephenson, original notion of the Metaverse presented a fully immersive digital world where individuals could escape from the physical world into a virtual one. This idea later inspired the development of virtual platforms that could support large-scale interactions and simulations. The idea of users inhabiting a virtual world through avatars, interacting with each other in real-time, is a central component that continues to define the Metaverse. While Stephenson's portrayal was speculative, it laid the groundwork for contemporary visions of the Metaverse as a fully immersive, interactive virtual world [15].

In more recent years, various definitions of the Metaverse have emerged, often linked to technological advancements and their integration into social, educational, and business contexts. These definitions often focus on specific components such as virtual reality (VR), augmented reality (AR), and digital spaces that allow for interaction and collaboration. According to Shahper [16], the Metaverse can be seen as a virtual universe where users can engage in real-time interactions with others, create content, and perform tasks within a 3D immersive environment. This definition emphasizes the interactivity between users and digital environments. Scholz defines the Metaverse as a decentralized network of interconnected virtual worlds that offer users the ability to navigate, interact, and participate in various activities. This view expands the definition from individual virtual spaces to interconnected networks that mimic the real world but in a digital format [17].

Meanwhile, many researchers including Muruganatham et al., [.] focus on the technological dimensions of the Metaverse, stressing the role of immersive technologies such as VR and AR [18]. These technologies facilitate the creation of digital spaces where users can interact not only with digital elements but also with other individuals, often using avatars. Some scholars, such as Tapscott, discuss the Metaverse in connection with blockchain technologies. Blockchain can provide

decentralized and secure transactions, allowing for digital ownership within virtual worlds [19]. This perspective links the Metaverse to cryptocurrencies and non-fungible tokens (NFTs), suggesting that these technologies could play a crucial role in creating a Metaverse economy where users own virtual assets.

While the Metaverse is still in its infancy, its potential applications in fields such as education, business, and entertainment are clear. The concept's evolution continues to be influenced by technological advancements and the ways in which users and industries embrace virtual spaces [20].

5.2 Metaverse and Its Potential in Legal Education

The metaverse offers a plethora of opportunities to address the challenges faced by legal education in Malaysia. Here are some ways in which the metaverse can serve as a learning hub for legal education:

1. Simulating Real-World Legal Scenarios

The metaverse offers exciting new possibilities for transforming how legal education is delivered, especially in simulating real-world legal scenarios. In traditional legal education, students primarily learn through textbooks, lectures, and limited hands-on experience in courtrooms or internships. However, these methods can be insufficient for preparing students for the practical, real-world challenges they will face in their legal careers. The Metaverse, with its immersive virtual environments, can offer a dynamic and realistic space for students to engage with various legal scenarios, from courtroom trials to negotiations and client consultations [21].

Metaverse simulates real-world legal scenarios and revolutionizes legal education through many ways. For example, during the virtual courtroom simulations, the metaverse will simulate real-world legal scenarios is by creating fully interactive virtual courtrooms. In these simulations, students can role-play as lawyers, judges, or witnesses in a realistic courtroom setting. Students can participate in mock trials within a virtual courtroom. They can present arguments, cross-examine witnesses, and make legal submissions to a virtual judge and jury. The virtual environment can mimic a real courtroom with features like courtroom seating, legal documents, and even the judge's bench. Students can interact in real-time with other participants through avatars, allowing them to experience the courtroom dynamics as they would in the physical world. Similarly, these simulations can cover various legal fields, such as criminal law, civil litigation, or international law, allowing students to explore diverse cases. They can also practice handling complex scenarios such as legal arguments in high-profile cases, providing exposure to situations that might be rare in real-life internships [22].

In addition, the Metaverse can also simulate investigative processes such as legal research, evidence gathering, and document review [23]. These skills are vital in legal practice, and students often learn these techniques through internships or traditional classroom exercises. Students can engage in virtual crime scenes or legal case environments where they need to conduct investigations, gather evidence, and assess legal documents. These simulations can involve digital recreations of accidents, crime scenes, or corporate fraud scenarios, allowing students to observe, interact, and analyse evidence from various perspectives. The Metaverse can also house digital versions of legal documents, such as contracts, property deeds, or court rulings, which students must examine to build their case. These documents can be searchable and fully interactive, helping students to navigate legal paperwork efficiently. Students can also collaborate with peers in real-time to conduct legal

research or analyse evidence, helping them develop teamwork skills while simulating the collaborative nature of legal practice as shown in Figure 1 below [24].

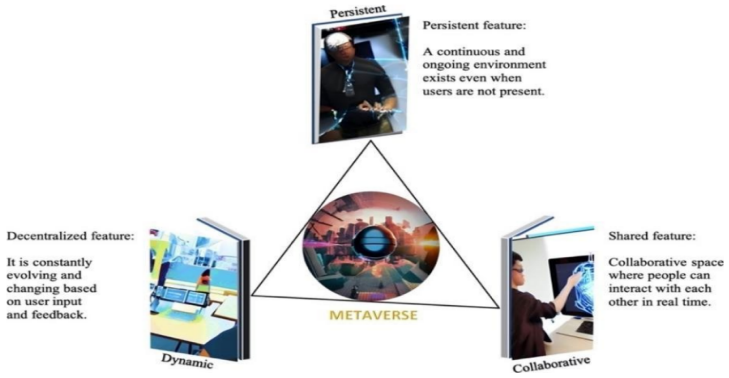

Fig. 1: Metaverse feature

Thus, students can gain practical experience in collecting and analysing evidence, conducting research, and managing cases in a controlled virtual space.

2. Flexible Learning Opportunities

The metaverse offers flexible learning opportunities, allowing students to attend virtual classes, participate in discussions, and complete assignments at their own pace. This can be particularly beneficial for students in rural areas or those with financial constraints. The virtual courtrooms enable students to practice their skills in a safe, controlled environment without the high stakes of a real trial. This helps students develop confidence in their abilities. Besides, **s**tudents can receive immediate feedback from instructors or virtual mentors about their performance, which helps them improve their legal skills. Similarly, unlike physical trials, virtual trials can be repeated, thus allowing students to refine their skills over time. They can practice the same scenario multiple times, adjusting their arguments, refining their techniques, and understanding the nuances of legal procedures [25].

3. Immersive Learning Environment and Real Time Collaboration

The metaverse creates immersive learning environments where students can engage in realistic legal scenarios. For example, by having metaverse, students can engage in mock negotiations with fellow students, clients, or even AI-driven avatars, simulating real-world settlement talks or contract negotiations. Students can participate in virtual negotiations related to contracts, dispute resolutions, or settlements. The simulation might include a range of real-world situations like business mergers, divorce settlements, or real estate deals. Students could also role-play either as a lawyer, a mediator, or a client. The virtual environment can simulate negotiation scenarios with real-time reactions, emotions, and changing dynamics, offering students an interactive learning experience. Students can also engage in simulated consultations with virtual clients. These clients, powered by AI or programmed scenarios, can ask questions, express concerns, or provide new information that challenges students to adjust their legal advice and strategies on the fly [26].

Thus, students can improve their negotiation tactics, strategy, and conflict resolution skills in an interactive setting. This prepares them for real-life negotiations, where circumstances often change unexpectedly. The Metaverse offers students the freedom to test different negotiation approaches

and strategies without the fear of real-world consequences, helping them refine their techniques. Through virtual client interaction, students can gain experience in managing client relationships, understanding client needs, and providing appropriate legal advice in a virtual setting that mirrors real-world interactions [27].

For client consultation and legal advice, the metaverse enables students to practice client consultations by interacting with virtual clients or even real clients in a controlled, safe environment [28]. This helps students develop soft skills like communication, empathy, and ethical decision-making while providing legal advice. Law schools can create virtual legal clinics where students engage with avatars representing clients who have specific legal issues.

4. Access to Global Resources

The metaverse provides students with access to a wealth of global legal resources, including virtual libraries, legal databases, and international legal experts. This can help bridge the resource gap faced by many Malaysian law schools. As the world becomes more interconnected, law students are increasingly required to handle cross-border legal issues, such as international contracts, human rights law, and international trade law. The Metaverse provides a global platform where students can simulate these international legal scenarios. Students can participate in virtual legal cases involving international laws, treaties, and regulations. They can engage with peers or experts from different jurisdictions to solve complex international legal problems. Similarly, virtual interactions in the metaverse could involve cross-cultural legal negotiations, where students work with others from different countries, learning about the nuances of international law and diplomacy [29].

Thus, law students shall gain exposure to international legal systems and perspectives, helping them understand the challenges and opportunities of practicing law in a globalized world as the virtual nature of the metaverse allows students to collaborate with peers from all over the world, which can be invaluable for their future legal careers.

5. Interactive and Engaging Learning

The Metaverse is rapidly transforming the educational landscape by providing immersive, interactive experiences that traditional learning environments cannot offer. By incorporating gamification, virtual reality (VR) simulations, and augmented reality (AR) experiences, the Metaverse creates a dynamic learning environment that encourages deeper engagement, better retention, and more enjoyable learning experiences. Through VR or AR, students can experience face-to-face consultations in an immersive, realistic environment, where they can practice interviewing clients, explaining legal concepts, and advising clients on possible legal strategies [30].

VR allows for experiential learning, where students actively participate in their education. A student studying law might attend a virtual trial as a lawyer or witness, gaining practical knowledge and skills without the pressure of real-world consequences. Meanwhile, in an AR-enhanced classroom, students can point their devices at objects in the real world to receive instant, interactive content. This allows students to explore environments or objects that are difficult to visit or observe in person. For example, law students could take a virtual tour of the United Nations or the International Criminal Court, gaining insights into global legal processes through a more interactive, hands-on approach.

5.2 Implementation of Metaverse in Learning Hub: A Case Study

The integration of the Metaverse into educational environments represents a significant shift in how education can be delivered, particularly for higher learning institutions. Recently, several learning hubs utilize the Metaverse to provide an innovative, immersive, and collaborative platform for students to engage with their coursework, faculty, and peers [31]. This case study will focus on the potential benefits and challenges of implementing the Metaverse in the context of legal education.

Example 1: Virtual Courtrooms and Mock Trials

One of the most promising applications of the metaverse in legal education is the creation of virtual courtrooms and mock trials. In Malaysia, the University of Malaya (UM) has already begun experimenting with virtual reality (VR) to simulate court proceedings. Students can don VR headsets and enter a virtual courtroom where they can practice their advocacy skills, examine witnesses, and present arguments before a virtual judge [32].

This immersive experience allows students to gain practical exposure to courtroom procedures and etiquette, which is often lacking in traditional legal education. Moreover, the virtual environment can be customized to simulate different types of cases, from criminal trials to civil disputes, providing students with a well-rounded understanding of the legal process.

Example 2: Virtual Legal Clinics

Another innovative application of the metaverse is the establishment of virtual legal clinics. In Malaysia, the International Islamic University Malaysia (IIUM) has launched a pilot project where law students provide legal advice to clients in a virtual environment [33]. Clients can interact with students through avatars, discuss their legal issues, and receive guidance on matters such as family law, employment disputes, and consumer rights.

This initiative not only provides students with practical experience but also addresses the access-to-justice gap in Malaysia. Many individuals, particularly those in rural areas, face difficulties accessing legal services due to geographical and financial barriers. Virtual legal clinics can help bridge this gap by providing free or low-cost legal advice to underserved communities.

Example 3: Collaborative Learning Platforms

The metaverse also serves as a platform for collaborative learning, where students from different law schools in Malaysia and around the world can come together to discuss legal issues, share insights, and work on joint projects. For instance, the Asia-Pacific Legal Education Network (APLEN) has launched a virtual campus in the metaverse where students and lecturers from member institutions can collaborate on research, participate in virtual moot court competitions, and attend guest lectures by international legal experts [34].

This collaborative approach not only enriches the learning experience but also fosters a sense of global citizenship among students. By interacting with peers from different legal systems and cultural backgrounds, students can develop a broader perspective on legal issues and enhance their cross-cultural communication skills.

Example 4: Gamification of Legal Education

Gamification is another exciting application of the metaverse in legal education. In Malaysia, Taylor's University has introduced a gamified learning module where students can earn points, badges, and rewards for completing legal challenges and quizzes in a virtual environment. For example, students may be tasked with solving a legal puzzle, drafting a contract, or negotiating a settlement within a set time frame.

This gamified approach not only makes learning more engaging but also encourages healthy competition among students. By incorporating elements of play, students are more likely to retain information and develop critical thinking and problem-solving skills.

Example 5: Virtual Internships and Networking

The metaverse facilitates virtual internships and networking opportunities for law students in Malaysia. For example, the Malaysian Bar Council has partnered with a virtual reality platform to create a virtual internship program where students can gain hands-on experience by working with virtual law firms, attending virtual client meetings, and drafting legal documents in a simulated environment.

In conclusion, the metaverse serves as a platform for networking, where students can connect with legal professionals, attend virtual career fairs, and participate in webinars and workshops. This can help students build valuable connections and gain insights into the legal profession, enhancing their career prospects.

The potential benefits of Metaverse integration in legal education are significantly constrained by the pervasive issue of the digital divide. The lack of equitable access to essential hardware (VR headsets, high-performance computers) and robust internet connectivity disproportionately impacts students from disadvantaged socioeconomic backgrounds and geographically remote locations, thereby perpetuating existing inequalities [35].

Some examples of successful pedagogical practices from diverse international educational systems that have effectively leveraged innovative technologies, including metaverse applications, to achieve enhanced learning outcomes. A notable example is South Korea's integration of metaverse-based Competence-Based Education (CBE), which facilitates seamless transitions between classroom learning and professional practice. This is exemplified by nursing students at Seoul National University Bundang Hospital, who utilize virtual hospital simulations to practice first aid and clinical skills on simulated patients with Nasopharyngeal carcinoma (NPC), thereby mitigating the logistical complexities associated with real-world training [36].

5.3 Metaverse and Its Challenges in Improving Legal Education in Malaysia

While the Metaverse offers a revolutionary potential as a learning hub, transforming education with immersive technologies and interactive experiences, it faces several significant challenges and considerations that need to be addressed before it can be fully embraced in educational settings. These challenges span across technological, social, economic, and ethical domains.

6. Technological Barriers and Limited Infrastructure

The successful implementation of the metaverse in legal education requires robust technological infrastructure. The metaverse relies heavily on advanced technologies like Virtual Reality (VR), Augmented Reality (AR), and high-speed internet connections. The setup of VR headsets and AR-compatible devices may not be feasible for all educational institutions, particularly those with limited resources. This includes the expense of acquiring VR/AR devices, high-performance computers, and internet bandwidth that can be a significant financial barrier for law schools especially in developing regions like Malaysia. In addition, to ensure smooth, uninterrupted experiences in virtual environments, students and educators need access to high-speed, stable internet connections. Rural or underserved regions with inadequate connectivity could be left behind, exacerbating the digital divide [37].

Focusing solely on the technological aspects of metaverse integration is insufficient for legal educators. Effective teaching requires a broader exploration of pedagogical approaches suited to the unique learning environment of the metaverse. To enhance legal education, educators can adopt experiential learning approaches. This involves shifting from passive learning to active participation in simulated legal scenarios, such as virtual courtroom simulations, contract negotiations, and mediation exercises. Role-playing activities, where students assume the roles of lawyers, judges, or clients, allow for practical skill development and problem-solving in a safe virtual environment. The flexibility of blended learning, combining metaverse activities and traditional teaching methods, enables educators to seamlessly integrate practical and theoretical learning. Virtual environments offer immersive practical training, while in-person sessions facilitate conceptual understanding and personalized instruction. This approach allows for tailored competency development based on individual student needs.

To leverage the metaverse for inclusive education, educators must create equitable learning experiences that accommodate all students' diverse needs and abilities. This includes ensuring access to the technology and infrastructure required for full participation by students with special needs and other diverse backgrounds.

6.1 Technological and Digital Literacy

Both students and faculty must be technologically literate to navigate and utilize the Metaverse effectively. This requires both initial and ongoing training for educators to adapt to new teaching methodologies in virtual environments. Many lecturers may not have the necessary skills to deliver effective learning experiences in the Metaverse, and students may struggle with the complexities of interacting within a digital, immersive environment.

6.2 Privacy and Security

The metaverse involves significant amounts of personal data, as users' actions, interactions, and behaviors are tracked in real-time. This raises concerns about data privacy and the security of sensitive information, especially in an educational context where students' academic records and personal information are stored digitally. The level of data collection required to create personalized learning experiences raises concerns about consent and transparency. Educational institutions and technology providers must ensure that they comply with data protection regulations like GDPR and other local privacy laws. The immersive nature of the metaverse means that interactions are continuously monitored, which could lead to ethical concerns regarding surveillance of students'

behaviour. Ensuring that these systems are transparent, ethical, and aligned with privacy laws is critical.

Similarly, the Metaverse is susceptible to cybersecurity threats, including hacking, data breaches, and identity theft. Given the financial and personal data stored within these virtual platforms, ensuring the security of these systems is paramount. Educational institutions must invest in robust cybersecurity infrastructure to protect students and faculty from these risks.

6.3 Ethical and Legal Considerations

The Metaverse creates a digital space where content can be easily created, shared, and manipulated. In an educational context, this raises questions about intellectual property rights—who owns the virtual content created within the Metaverse? Can students or educators copyright their creations within a virtual space? As more educational content is created and distributed in virtual environments, institutions and educators need to address the ownership and licensing of digital materials, such as virtual textbooks, simulations, or interactive lessons. Similarly, the ease of copying, modifying, and sharing content in a virtual world creates the potential for increased instances of plagiarism and copyright infringement. Institutions must establish clear policies and guidelines to protect creators' rights and intellectual property.

The extended immersion in the metaverse could have unintended consequences on students' mental health. The isolation from the physical world, potential for addiction to virtual environments, and the psychological impacts of constant engagement in avatar-based interactions may have negative effects. For some students, the metaverse could serve as an escape from real-world challenges, leading to reduced social interaction in the physical world and potentially exacerbating feelings of loneliness or anxiety. Spending long periods in virtual spaces may lead to "digital burnout," which could negatively impact students' focus, well-being, and academic performance.

6.4 Regulatory Framework

One of the primary barriers to using the Metaverse for legal education in Malaysia is the lack of a clear regulatory framework for virtual learning environments. While Malaysia has legal regulations governing traditional education, such as the Legal Profession Act and Higher Education Act, these do not account for the complexities of virtual education spaces. Issues such as the legality of virtual legal practice, digital property rights, and jurisdictional challenges in a virtual world remain largely unaddressed.

Moreover, as students engage in international virtual simulations, questions of jurisdiction and the applicability of local laws become relevant. A comprehensive regulatory framework that clearly defines the legal boundaries of virtual legal education is critical to ensuring that the Metaverse remains a credible and legitimate educational tool.

Existing legal frameworks, including Malaysia's Personal Data Protection Act 2010 (PDPA), offer some protection for privacy and data, but fall short in addressing the novel challenges posed by the metaverse. Issues such as virtual identity theft, harassment, and intellectual property disputes require more comprehensive legal solutions. While international frameworks like the GDPR offer guidance on cross-border data handling, they lack specific provisions for immersive virtual environments. It is recommended that the PDPA be amended to explicitly include the protection of personal data within non-commercial metaverse environments, such as those used for student collaboration. Furthermore, PDPA should mandate the encryption of all biometric data collected through VR headsets.

Meanwhile, the establishment of a Metaverse Oversight Task Force by the authority is proposed to conduct audits of educational platforms, ensuring adherence to Malaysia's Race, Religion, and Royalty (3R) sensitivity guidelines and the relevant principles of Syariah law for Muslim users [38].

7. Conclusion

The metaverse represents a new frontier in legal education, offering innovative solutions to the challenges faced by the traditional legal education system in Malaysia. By creating immersive learning environments, providing access to global resources, and fostering collaboration and engagement, the metaverse has the potential to revolutionize how legal knowledge is imparted and absorbed.

However, the successful integration of the metaverse into legal education requires careful consideration of technological, ethical, and regulatory challenges. With the right infrastructure, training, and guidelines, the metaverse can serve as a powerful learning hub, equipping the next generation of Malaysian lawyers with the skills and knowledge needed to navigate the complexities of the legal profession in the 21st century. To ensure the successful implementation of the Metaverse as a learning hub, educational institutions must adopt a phased and strategic approach that includes ensuring equitable access to technology, training educators, and addressing ethical and privacy concerns. Moreover, partnerships with technology providers, regulatory bodies, and other stakeholders will be essential to overcome these challenges and unlock the full potential of the Metaverse for education.

As Malaysia continues to embrace digital transformation, the metaverse offers a unique opportunity to innovate legal education and prepare students for the challenges and opportunities of tomorrow. By leveraging the potential of the metaverse, Malaysia can position itself as a leader in legal education, setting a benchmark for other countries to follow.

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