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Metaverse as the Solution to the Absence of a Constitutional Court Moot Courtroom in Universities

Nur Putri Hidayah [a]✉, Galih Wasis Wicaksono [b], Amiludin Amiludin [c], Annisa' Al Sakinata [a], Allysa Sonia Arcelia [a], Kiki Andesti [a], Siti Nurmala Lailatul Muafika [a], Meisya Maulidina Saleha [a]

[a] Faculty of Law, Universitas Muhammadiyah Malang, Indonesia
[b] Faculty of Engineering, Universitas Muhammadiyah Malang, Indonesia
[c] Faculty of Law, Universitas Muhammadiyah Tangerang, Indonesia

✉ Corresponding email: nurputri@umm.ac.id

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Abstract

Courses related to procedural law are practicum courses with Course Learning Outcomes (CLO)/ *Capaian Pembelajaran Mata Kuliah* (CPMK) students who

can simulate trials in court. In this case, the moot courtroom's urgency is to provide an infrastructure for students to conduct moot trials. One of the practicum courses is the Constitutional Court's Judicial Procedural Law. Students who take this course must be competent and able to practice in the objective realm of justice. However, based on the observation and tracing results, the service activities' partners do not have a moot courtroom in the constitutional court, so they cannot carry out moot court in the course. Digital/virtual space, known as Metaverse, is a solution for procuring infrastructure for the constitutional court's moot courtroom. The results of this service show that the Metaverse Moot Court of the Constitutional Court is an appropriate technology-based product that is the only quick solution to the absence and limitations of the Constitutional Court's moot courtroom at Partner universities. Partners do not need to spend millions to billions of Rupiahs to procure facilities and infrastructure for the Constitutional Court's moot courtroom. In addition, this product is a solution to time constraints, considering that the campus has operational hours while students are still required to be proficient in practicing proceedings at the Constitutional Court. Finally, the virtual reality technology product implemented in this pseudo-courtroom provides an immersive experience like the real atmosphere in the courtroom. It makes students more excited and increases motivation to practice the trial.

KEYWORDS *Constitutional Court, Digital Space, Metaverse, Moot Court*

Introduction

In an era of rapid technological development, digital transformation has changed how we carry out various activities, including education and learning.[1] While educational institutions face challenges in providing

[1] Parwata, I. Wayan, Ahmad Hariyadi, and Mochamad Heru Riza Chakim. "The Development of Digital Teaching to Improve the Quality of Student Learning in the Revolution 4.0 Era at Warmadewa University." *Jurnal Iqra': Kajian Ilmu Pendidikan* 8, no. 1 (2023): 254-269; McCarthy, Aidan Michael, et al. "Digital

adequate facilities to support the student learning experience, technological advances offer opportunities to find innovative solutions.[2] One example is conducting practicum courses in the Procedural Law of the Constitutional Court.

This course emphasizes the importance of students understanding and practicing skills for conducting trial simulations in courts, especially the Constitutional Court. On the other hand, educational institutions often face obstacles in providing adequate infrastructure for the practicum. One essential but frequently limited infrastructure is a pseudo-courtroom.

The pseudo-courtroom plays a crucial role as a simulated environment that supports students in practicing moot court processes.[3] However, not all institutions, including the Constitutional Court, can provide appropriate pseudo-courtrooms. This problem hinders students from developing their skills in event practice at the institution.

Innovative solutions are emerging in digital or virtual spaces, which we call the Metaverse.[4] The Metaverse offers an attractive alternative to the Constitutional Court's pseudo-courtroom infrastructure. Students can use virtual reality technology and digital platforms to engage in trial simulations more easily and effectively.

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transformation in education: Critical components for leaders of system change." *Social Sciences & Humanities Open* 8, no. 1 (2023): 100479.

[2] Bautista, Genica Fae, Pol Ghesquière, and Joke Torbeyns. "Stimulating preschoolers' early literacy development using educational technology: A systematic literature review." *International Journal of Child-Computer Interaction* 39 (2024): 100620; Liu, Jun, et al. "Identification and evaluation of educational technology trends from 2004 to 2022: Evidence based on computers in human behavior and horizon report." *Heliyon* 10, no. 2 (2024): e24277.

[3] Hawari, Kanigara, et al. "Implementation of Moot Court Learning-Based Model to Improve Learning Quality in Procedural Law Course." *2nd Annual Civic Education Conference (ACEC 2019)*. Atlantis Press, 2020.

[4] Al-Emran, Mostafa, and Muhammet Deveci. "Unlocking the potential of cybersecurity behavior in the metaverse: Overview, opportunities, challenges, and future research agendas." *Technology in Society* (2024): 102498; Hwang, Gwo-Jen, Yun-Fang Tu, and Hui-Chun Chu. "Conceptions of the metaverse in higher education: A draw-a-picture analysis and surveys to investigate the perceptions of students with different motivation levels." *Computers & Education* 203 (2023): 104868.

This article explores the urgency of the moot courtroom as a student infrastructure for conducting moot courts, especially in the context of the Constitutional Court Procedural Law course. We will explain in detail the important role of pseudo-courtrooms, the challenges educational institutions face in providing them, and how metaverse solutions can be an effective alternative to overcoming these obstacles.

Thus, this article provides a deeper understanding of the urgency of pseudo-courtrooms in legal education and proposes innovative solutions that can enhance the student learning experience and expand accessibility to judicial procedural law learning.

The Faculty of Law, the University of Muhammadiyah Tangerang (UMT), is our partner in disseminating and testing the product. The faculty manages one study program: a law program with accreditation status' B,' valid until October 24, 2024. The current number of students is 1,030, with 27 lecturers. To support learning activities, partners have infrastructure such as classrooms, moot courtrooms, libraries, etc.

FIGURE 1. Partner-Owned Pseudo-Courtrooms

FIGURE 2. Trial Conditions in Partner Moot Courtrooms

Based on the results of interviews with partners, one of the partners focuses on producing graduates with legal practice skills. Therefore, in the curriculum, some courses require students to be able to practice/convene, including Criminal Procedural Law, Civil Procedural Law, State Administrative Procedural Law, and Constitutional Court Procedural Law. Infrastructure in the form of a moot courtroom is needed for students to practice trials. However, the courtroom in court is not always the same. Courtrooms that have the same or similar layout include district courts (for *Criminal Procedure Law* and *Civil Procedure Law courses*) and State Administrative courts. Especially for the Constitutional Court, the design of the courtroom is different. Unfortunately, partners only have moot courtrooms with a layout like district courts and state administrative courts, and they do not have moot courtrooms for constitutional courts. So far, partners have not provided the practice of quasi-hearings of the constitutional court, but only until the preparation of legal documents. In contrast, proficiency in practicing in the judicial world is a demand as a graduate of the law study program. Partners have also been unable to procure space due to costs and non-existent land.

In addition, campus operational time is also an obstacle in the quantity aspect of conducting pseudo-trial practices. The limited space

makes students take turns using the moot courtroom of the District Court, which is made as if it were a moot courtroom of the Constitutional Court, even though students in Course Learning Outcomes (CLO)/ *Capaian Pembelajaran Mata Kuliah* (CPMK) must be proficient in doing event practices.

The solution we offered is to create a digital/metaverse space for a Constitutional Courtroom in a virtual world. Through this solution, we can solve problems with the following advantages:

1. A virtual room solved the problem of the absence of a moot courtroom.
2. Metaverse is suitable for not full-time learning.[5]
3. Students have new and meaningful learning experiences.[6]
4. Increase student interest in learning.[7]
5. Learning with the Metaverse produces relevant and effective learning.[8]

The work procedures in this service activity are as follows:

1. Find a place of service by visiting the location to ask for permission to carry out activities.
2. Implementation time: for 1 year
3. Place of execution:
    a. Office of Faculty of Law, University of Muhammadiyah Tangerang.
    b. Implementation: Monday-Saturday 09.00-14.00 (adjusted to Partner activities).
    c. Partner: Faculty of Law, University of Muhammadiyah Tangerang.
4. Preparation for Activities:

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[5] Fitria, Tira Nur, and Nurmala Elmin Simbolon. "Possibility of metaverse in education: opportunity and threat." *SOSMANIORA: Jurnal Ilmu Sosial dan Humaniora* 1, no. 3 (2022): 365-375.

[6] Fitria and Simbolon.

[7] Talan, Tarik, and Yusuf Kalinkara. "Students' Opinions about the Educational Use of the Metaverse." *International Journal of Technology in Education and Science* 6, no. 2 (2022): 333-346.

[8] Sá, Maria José, and Sandro Serpa. "Metaverse as a learning environment: Some considerations." *Sustainability* 15, no. 3 (2023): 2186.

   a. Create a training schedule.
   b. Sorting metaverse usage modules.
5. Implementation of activities, including:
   a. Training on digital space/Metaverse of Constitutional courtroom.[9]
   b. Constitutional court moot trial (*role play*).
   c. Filling out activity evaluation questionnaires.
   d. Documentation of activities.
6. Activity evaluation
7. External compilation, covering:
   a. Preparation of progress reports.
   b. Preparation of the final report.

Metaverse as an Immersive Learning Tool

Metaverse is a virtual world of 3D space and real-time user interaction through digital representations such as avatars.[10] The term, which can be widely applied, refers to an extended reality combining virtual and augmented elements. Metaverse is used in various ways to provide an experience that is close to real in an activity without the limitations of space and time.[11]

Previous research has addressed communicative and cooperative competencies to meet professional job qualifications and students' roles

[9] Hidayah, Nur Putri, and Komariah Komariah. "Peningkatan Kapasitas Kelompok PKK Desa Sumbersekar Kecamatan Dau Kabupaten Malang untuk Mengatasi Problematika Hukum Waris Islam." *Jurnal Penelitian Dan Pengabdian Kepada Masyarakat UNSIQ* 6, no. 3 (2019): 122-127.

[10] Shin, Hakseung, and Juhyun Kang. "How does the metaverse travel experience influence virtual and actual travel behaviors? Focusing on the role of telepresence and avatar identification." *Journal of Hospitality and Tourism Management* 58 (2024): 174-183.

[11] Mirza, Rsha, et al. "Clustering potential metaverse users with the use of a value-based framework: Exploiting perceptions and attitudes on the use and adoption of metaverse for bold propositions." *Telematics and Informatics* 87 (2024): 102074.

in virtual societies.[12] In addition, by utilizing the available platforms, many have carried out development in education by collaborating on virtual-based learning.[13] Even studies have discussed metaverse architecture as being safe for the learning process. The use of Metaverse in various fields, including learning and education, should be implemented now and in the future. Although multiple studies investigate the development and utilization of the Metaverse in a learning context, the Metaverse framework itself is ambiguous, and its components are difficult to define precisely.[14] The integration of E-Learning systems with the Metaverse has not been adequately described or adopted, and it is often limited to 3D environments.

The Metaverse can be a platform for students to carry out practical activities of moot hearings of the Constitutional Court because previous research has proven that teachers can use the Metaverse in virtual-based learning. Moot court is a forum for students to practice proceedings in court in the context of resolving litigation disputes. According to Article 1 Number (1) of Law No. 24/2003 concerning the Constitutional Court/ *Undang-Undang Mahkamah Konstitusi* (Constitutional Court Law), the Constitutional Court states, "*The Constitutional Court is one of the actors of judicial power as referred to in the Constitution of the Republic of Indonesia Year 1945.*"

The constitutional court is a very strategic and significant judicial body in Indonesia, considering that the Constitutional Court has several authorities, as stated in Article 10 of the Constitutional Court

[12] Estriegana, Rosa, et al. "Virtual learning environment to encourage students' relationships and cooperative competence acquisition." *Proceedings of the 26th ACM Conference on Innovation and Technology in Computer Science Education V. 1*. 2021.

[13] Spike, Jonathan, and Ying Xie. "Using VR for Collaborative Learning: A Theoretical and Practical Lens". In *Encyclopedia of Information Science and Technology, Sixth Edition* (IGI Global, 2024); Tataru, Marius, et al. "Designing applications for collaborative learning in virtual reality." *2022 International Symposium on Electronics and Telecommunications (ISETC)*. IEEE, 2022.

[14] Camilleri, Mark Anthony. "Metaverse applications in education: a systematic review and a cost-benefit analysis." *Interactive Technology and Smart Education* 21, no. 2 (2024): 245-269; Song, Chuanxiang, Seong-Yoon Shin, and Kwang-Seong Shin. "Exploring the key characteristics and theoretical framework for research on the metaverse." *Applied Sciences* 13, no. 13 (2023): 7628.

Law, including:

a. The Constitutional Court is authorized to adjudicate at the first and last instance whose decision shall be final for:
   1) Testing laws against the 1945 Constitution of the Republic of Indonesia.[15]
   2) Decide disputes over the authority of state institutions whose authority is granted by the 1945 Constitution of the Republic of Indonesia.[16]
   3) Break the dissolution of political parties.[17]
   4) Resolve disputes about election results.[18]
b. The Constitutional Court must give a decision[19] based on the opinion of the House of Representatives that the President and/or Vice President is suspected of having violated the law in the form of treason against the state, corruption, bribery, other serious crimes, or reprehensible acts, and/or is no longer qualified as President and/or Vice President as referred to in the Constitution of the Republic of Indonesia Year 1945.
c. The provisions referred to in paragraph (2) are:
   1) Treason against the state is a criminal offense against state security, as stipulated in the law.
   2) Corruption and bribery are criminal acts or bribery as stipulated in the law.
   3) Other serious crimes are punishable by imprisonment of 5 (five) years or more.

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[15] Riyah, Juwai. "Position and Authority of the Constitutional Court as a State Institution." *JUSTICES: Journal of Law* 3, no. 2 (2024): 76-85.

[16] Riyah.

[17] Ramadhan, Alwi Yusup, and Yuliant Prajaghupta. "The Dissolution of Political Parties as Sanctions For Corruption Crimes." *Jurnal Ilmiah Mizani: Wacana Hukum, Ekonomi Dan Keagamaan* 10, no. 1 (2024): 27-38.

[18] Siregar, Doni Pratama, and Fifiana Wisnaeni. Political Legal Dissenting Opinion Ruling in the Dispute Cases on the Results of the 2024 Presidential General Election by Constitutional Judges. *International Journal of Social Science and Human Research* 7, no. 7 (2024): 7-94. https://doi.org/10.47191/IJSSHR/V7-I07-94

[19] Suntana, Ija, and Tedi Priatna. "Four obstacles to the quality of constitutional law learning in Indonesia." *Heliyon* 9, no. 1 (2023).

4) Reprehensible acts can degrade the dignity of the president and/or vice president.
5) Article 6 of the Constitution of the Republic of Indonesia, adopted in 1945, specified that the president and/or vice president must no longer be qualified.

The Constitutional Court Courtroom Metaverse Moot Court product is a strategic innovation that combines advanced technology with modern legal learning needs. This technology successfully presents a realistic, interactive, and immersive virtual courtroom, thus creating a learning experience similar to an actual trial's atmosphere. By simulating the Constitutional Court's procedures, this product provides a solution to the limitations of physical moot courtrooms, which have been obstacles in various legal education institutions.

Moot Court's Metaverse technology allows students to experience the trial process in depth, from understanding trial procedures to drafting legal arguments and practicing public speaking skills. This approach provides a valuable experiential learning experience, as students can holistically develop legal competencies. In a virtual environment resembling a Constitutional Court courtroom, students learn to understand procedures and improve their analytical skills, legal argumentation, and decision-making.

From a pedagogical point of view, this product promotes more interactive and engaging legal learning. Students are no longer passive listeners in the classroom but active actors directly involved in the trial simulation. This approach encourages collaboration between students, lecturers, and legal practitioners, creating a productive discussion space to hone critical thinking skills. In addition, this technology allows students to practice legal principles in contexts that resemble reality, better preparing them to face the challenges of the professional world.

Metaverse Development and Dissemination to Partners

Several stages of activities are carried out when implementing this community service project. Finally, this metaverse platform is built and can be used by the public in general and Partners in particular, which include:

1. Preparation of legal materials related to the procedural law of the constitutional court.
2. Data collection related to the constitutional court courtroom and supporting facilities.
3. Metaverse creation.
4. Metaverse trial.
5. Launching Process, and
6. Implementation of Community Service.

In the first stage, the team collected legal materials related to the Procedural Law of the Constitutional Court. These legal materials are obtained from Law Number 24 of 2003 concerning the Constitutional Court, which is the primary legal material and continued with scientific works in books and journal articles nationally and internationally. The collection of legal materials aims to understand in depth the duties and authorities of the Constitutional Court, the parties in the Constitutional Court trial, and the procedures for convening at the Constitutional Court. Furthermore, the legal material collected is processed to be used as a sample trial script/prompting that users can see. We prepared this text to help users who have not yet understood the procedural law of the Constitutional Court but still want to practice moot trials.

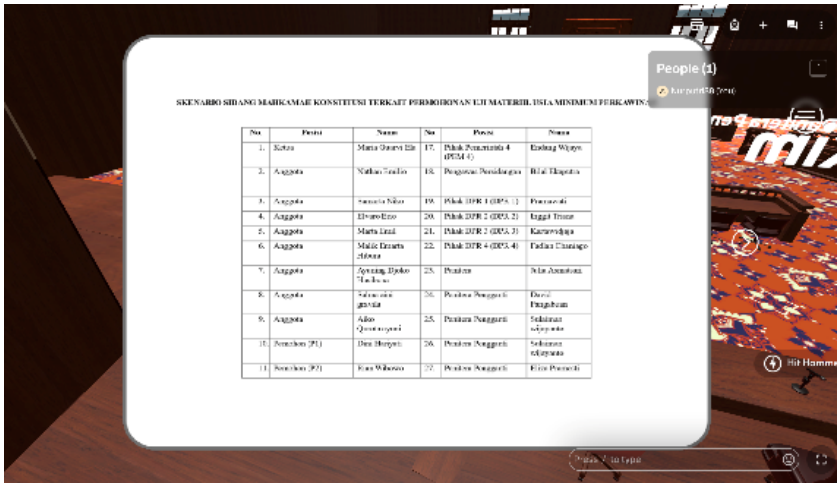

FIGURE 3. Constitutional Court Trial Scenario Script

The second step is data collection related to the constitutional court courtroom. This second activity includes collecting several data that are traced bibliographically to obtain:

1. The current description of the Constitutional Court courtroom includes the types and number of facilities to its original color.
2. The description of the parties to the trial is accompanied by the clothes they use, down to the color of the clothes. To strengthen the results of the data obtained, we interviewed Sumali, S.H., M.Hum, as an advocate who had experience conducting trials at the Constitutional Court.

The results of this activity show that judging from the parties, the number of judges in the Constitutional Court is 9 (nine) people, which is different from the courts in the Supreme Court, which are 3 (three) people. In addition, there is a Pedel who guides the trial, a substitute clerk who arranges and records the proceedings, the party who is the applicant, and the party who is the respondent or related. In terms of facilities in the courtroom, several things must be considered in detail, including the layout of the red and white flag, chairs and tables of 9 (nine) judges of the Constitutional Court, the Garuda Pancasila symbol, white screens, seats of the parties, witness podiums, and the carpets.

The third phase is the creation of a metaverse moot courtroom of the Constitutional Court. To build it, we use the Spatial platform. There are already some things that automatically exist/are available, such as male and

female avatars. However, some things are made explicitly by the team, namely the judge's robe at trial and the avatar of the veiled woman. At its core, the Constitutional Court moot courtroom Metaverse is as similar as possible to the original Constitutional Court courtroom. However, the service added one tool not in the original Constitutional Court Courtroom: mirrors. The existence of the mirror is intended to make it easier for users who want to act as judges to ensure that their avatars have changed into the judges they have chosen.

FIGURE 4. Constitutional Court Courtroom Metaverse

FIGURE 5. Avatar of a Constitutional Court Judge

The fourth is the trial stage. The product trials aim to:

1. Technical functionality testing and product trials make it possible to test the technical functionality of the moot-courtroom Metaverse.

This activity includes testing various features, user interfaces, and other technical capabilities necessary to ensure that a moot courtroom can run adequately and meet established technical standards.

2. Get user experience (UX), where trials allow related parties, including judges, lawyers, and other participants, to experience the user experience in a Metaverse courtroom. This helps assess the extent to which virtual settings can provide an intuitive, efficient, and convenient experience for all users.
3. Security and reliability, i.e., trials also involve testing the safety and reliability of the pseudo-courtroom Metaverse. This includes identifying and addressing potential security risks and ensuring that systems can operate stably without significant risk of technical failure.
4. Interoperability, which testing can assess the interoperability of the Metaverse with other systems and technologies that may be involved in legal proceedings. This is important to ensure that the moot courtroom can integrate with existing systems and function properly in conjunction with other technologies the Constitutional Court uses.
5. Proof of concept helps prove the concept and validity of using the Metaverse in a moot courtroom. The results of this trial can be used as a basis for considering further decisions regarding implementing the Metaverse in a judicial context.
6. Training and awareness trials allow users to adapt to the Metaverse and understand how to use specific tools or features. This can help in user training and raise awareness regarding potential benefits and challenges that may arise.

It is important to note that the trial of this product is a critical step in developing the Constitutional Court's moot courtroom Metaverse to ensure its quality, safety, and effectiveness in supporting legal proceedings.

The testing process itself was first carried out by experts with experience in the Constitutional Court to ensure the level of similarity between the Metaverse and the original Constitutional Court courtroom. As a result, experts state the similarity is 95% (different carpet colors make it 100% indestructible). In addition, the expert states that such experts step into another world that is very similar to the courtroom of the

Constitutional Court. Such an experience is real. However, it turns out that the experts feel dizzy after using this product, the VR headset Oculus.

In addition to experts, trials were conducted on lecturers and students of the Faculty of Law, University of Muhammadiyah Malang. All opinions are almost identical, stating they get real-world experience in a Constitutional Court courtroom. However, for trials using Oculus, some trial participants expressed feeling dizzy.

FIGURE 6. Constitutional Court Moot Courtroom Metaverse Trial

The fifth step is the launching process. The launching was carried out in collaboration with the Law Laboratory of the University of Muhammadiyah Malang and the Faculty of Law, University of Muhammadiyah Malang. Carrying the theme "The First Virtual Law Laboratory in Indonesia," we introduced this product to the public, which was witnessed online by various law universities in Indonesia. In principle, this product can be used freely, free of charge, and only needs to apply for cooperation with the UMM Faculty of Law.

FIGURE 7. Launching Constitutional Court Moot Courtroom Metaverse

FIGURE 8. Use of Metaverse at Launch

The last stage involves using and disseminating products by Partners, namely the Faculty of Law, University of Muhammadiyah Tangerang (UMT). To expand the benefits of this product, we introduce and apply the products to various related parties, including university leaders, lecturers, and law students.

Dissemination and training activities are carried out in a formal and scientific atmosphere, involving various stakeholders, namely:

1. UMT Rector, who opened the event and conveyed institutional support for the integration of technology in legal education.
2. Dean and Vice Dean of the Faculty of Law, who provide a strategic perspective on developing a technology-based curriculum.
3. Head of the Bachelor and Master of Law Study Program, who discussed the potential use of this product in daily learning activities.

4. Lecturers and Head of the Law Laboratory, who try simulations and provide technical feedback.
5. The product's primary users are the Law Study Program students, who are actively involved in the practice session.

The implementation of the activity consists of three main stages:

1. Presentation of the Concept and Benefits of the Metaverse Moot Court This activity began with an in-depth presentation of the concept, goals, and benefits of using the Metaverse Moot Court. The development team explained how this technology can simulate the Constitutional Court hearings in detail and interactively, providing an immersive learning experience for law students.
2. Simulation and Training Participants were allowed to try the Moot Court Metaverse platform firsthand. In the simulation, participants played various roles, such as judges, legal representatives, and parties to the dispute. This approach provides an in-depth understanding of court procedures and trains legal communication, analysis, and argumentation skills.
3. Discussion and Evaluation The last stage of the activity involved interactive discussions. Participants gave feedback on the advantages and potential of product development. Some valuable inputs were obtained regarding the user interface, enrichment of educational features, and improved accessibility.

FIGURE 9. Implementation of Metaverse Demonstration to Partners

FIGURE 10. Product Demonstrations by Partners

In this stage of dissemination, results are obtained in the form of:

1. Based on the technical functionality aspect, using features such as avatars, substituting regular avatars for judges' avatars, scripting/prompting, sitting and standing functions, and tapping the judge's gavel work well.
2. Based on user experience, this Metaverse can provide a virtual experience close to the real world. Users feel like they are in an actual

Constitutional Court courtroom. In addition, it becomes efficient because users do not need to spend significant funds on infrastructure facilities to feel like they are in the constitutional courtroom and practice pseudo-practice.

3. Based on safety and reliability, there are failure-to-use factors if the users are Generation X and Baby Boomers. The users of that generation take a very long time to adapt so that the first use can fail. It must be done several times to be successful and use the Metaverse smoothly. In addition, there is a dizzy effect after using the Metaverse with Oculus devices. This happens only in a few people, but not at the generational level.
4. The Metaverse is interoperable and can be used on various devices, including Oculus, smartphones, tablets, and laptops.
5. Based on the proof of concept, the Constitutional Court's pseudo-courtroom Metaverse has been declared like the original courtroom. Experts validated this during the trial and some participants during demonstrations at partners.

Finally, based on training and awareness, more adaptation is needed for Generation X users and baby boomers. While users who are Generation Y/millennial, let alone Generation Z, don't even need to be taught, these generations can directly operate the Metaverse with any device.

Success of Community Service Programs

The Metaverse Constitutional Moot Courtroom has successfully created a significant positive impact during the implementation of dissemination and training activities. Some of the indicators of the success of this program include:

1. Positive Reception from the University Rector of the University of Muhammadiyah Tangerang gave high appreciation for this innovation, stating that technology like this can be a modern learning model relevant to the needs of legal education in the digital era.

2. Enthusiasm of Participants The lecturers and students showed great interest in this product. Most participants used the platform well, even though it was their first time getting to know it. The simulation went smoothly, and participants actively discussed to optimize the use of this technology.
3. Through training, students gain practical experience that improves their understanding of legal procedures and critical thinking, problem-solving, and decision-making skills in the context of a trial.
4. The Potential Collaboration of the Faculty of Law, University of Muhammadiyah Tangerang, expressed interest in establishing further cooperation by regularly using this product and developing continuous training programs.

The development of the Metaverse Constitutional Court Moot Courtroom is a significant breakthrough that proves the ability of virtual technology to support the legal learning process and the success of building a simultaneous and immersive virtual Courtroom. These successes can be elaborated on in detail as follows:

1. Realistic courtroom simulation: this product is designed to resemble an actual Constitutional Court courtroom, with accurate interior details, layout, and procedural elements. This feature allows students to experience the atmosphere of an original trial, providing a more immersive learning experience than the conventional methods.
2. Simultaneous participation: the platform supports the simultaneous participation of multiple users, including lecturers and students. In the training session, participants can collaborate directly, play roles according to the needs of the case, and develop legal arguments collectively. This ability encourages the development of soft skills such as communication, teamwork, and leadership.
3. An immersive learning experience with virtual reality technology allows participants to actively and deeply engage in simulations. This technology presents a real-life environment, allowing students to focus more and more effectively on understanding the complexities of legal procedures.
4. Extensive accessibility: the platform is designed to be accessible through various devices, from computers/laptops to VR headsets. This ensures user flexibility in both on-campus and off-campus

learning contexts. This accessibility is the main advantage of supporting technology-based legal learning.

5. Interactive and Educational Features: The platform has interactive features, such as learning modules, procedural guides, and a database of legal cases. These features support the simulation process and make it an information-rich learning resource for students.

Illustration of Program Impact

A student participating in the training revealed that the experience of trying the Metaverse Moot Court gave him new insights that had only been learned theoretically in class. In the simulation, he plays the role of a lawyer, which forces him to think quickly when drafting arguments based on available facts and laws. "This experience helped me understand the real dynamics of the trial," he said.

The head of the law laboratory, speaking on behalf of the Lecturers, stated that this product opens up opportunities to revolutionize law teaching methods, especially in the limited facilities of the moot courtroom on campus.

The dissemination and training activities of the Metaverse Moot Court product in the Constitutional Court Courtroom at the Faculty of Law UMT have been successful and have had a significant positive impact. This activity shows that integrating technology into legal education enables more interactive learning and provides solutions to traditional challenges in legal education, such as limited space and physical facilities.

The use of Metaverse Moot Court technology in The Constitutional Court Courtroom has various positive impacts on legal learning, which can be analyzed from the following aspects:

1. The Pedagogical Aspects of this technology allow for more interactive and participatory legal learning. In trial simulations, students are passive listeners and active actors. This approach encourages experiential learning, which has proven effective in improving understanding of legal concepts and analytical skills.
2. Technological Aspects This platform utilizes cutting-edge technology, such as virtual reality, to introduce students to

innovations relevant to the digital era. This improves their technological literacy and broadens their insights into how technology can be integrated into legal practice.

3. Psychological Aspects Realistic simulations help students overcome the nervousness or anxiety that often arises in real trial situations. Practicing in a virtual environment can build confidence and hone their public speaking skills.
4. The Collaborative Aspect of this Platform encourages cooperation between students, lecturers, and legal practitioners. With simultaneous participation, users can share knowledge, discuss legal strategies, and provide constructive feedback. This aspect is crucial in building professional interpersonal and networking skills.
5. Aspect of Technology Curriculum Innovation allows legal education institutions to update their curriculum. Moot Court's Metaverse integration enables legal teaching that is more relevant to industry needs while providing its graduates with a competitive advantage in the global job market.
6. Social and Economic Aspects In the long run, this technology can help reduce the cost of legal education. Virtual simulations can minimize the need for expensive physical courtrooms without compromising the quality of learning.

As a follow-up, several recommendations were given:

1. Product Feature Development Adding new features, such as a legal case database and additional learning modules, to support the diverse needs of users.
2. Improved accessibility ensures users can easily access the platform from various devices with mid-to-low specifications.
3. Continued Cooperation: Establish partnerships with other law schools to expand the range of these products and share user experiences.

With this success, the Metaverse Moot Court is expected to be an essential milestone in transforming legal education in Indonesia and making a real contribution to developing competent and competitive human resources globally.

Future Challenges for the Constitutional Court's Moot Courtroom Metaverse

The positive reception from partners, such as the Faculty of Law, University of Muhammadiyah Tangerang, shows that this product is relevant to the current needs of legal education. Partners recognize that the platform is not only cost-efficient but also provides an immersive learning experience for students. Institutions can offer high-quality moot courtrooms without building expensive physical facilities by requiring only devices such as computers or VR headsets. This solution is ideal for institutions with limited resources, as they can still provide an optimal learning experience for students.

However, challenges remain in implementing this technology. One of the main obstacles is teaching lecturers to adapt to technology. While students, who are generally more familiar with digital technology, can quickly master using these platforms, lecturers often take longer to adapt. This highlights the importance of additional training for lecturers to utilize this technology's potential fully. Partner institutions are advised to provide adequate time and resources for lecturers to practice using this platform to minimize the technology gap between lecturers and students.

Using the Moot Court Metaverse offers significant social and economic benefits. In the long term, this technology can reduce reliance on physical spaces, which often require enormous construction and maintenance costs. This platform allows legal learning access from anywhere and anytime, allowing students greater flexibility. This accessibility is crucial, especially for students from remote areas who may not have access to adequate legal education facilities.

The product also offers excellent opportunities to develop more innovative legal curricula. By integrating this technology, educational institutions can introduce teaching methods more relevant to the industry's needs. For example, additional learning modules integrated within the platform can be used to teach current legal cases, providing students with a deeper insight into emerging legal issues. This improves

the quality of legal education and helps produce graduates who are more competent and ready to compete in the global job market.

Developing additional features to improve the user experience is highly recommended. For example, integrating a comprehensive legal database can allow students to refer to relevant legal cases during the simulation. Additionally, user interface enhancements can help ensure the platform is easy for all users, including lecturers who may be less familiar with virtual technology.

In the context of collaboration, the potential for partnerships with other legal education institutions is enormous. By sharing experiences and resources, institutions can jointly develop these technologies further and expand their impact. For example, developing a joint training program for lecturers and students can be a strategic step to ensure the successful implementation of this technology in various institutions.

The Metaverse Moot Court Courtroom of the Constitutional Court is a vivid example of how technology can catalyze legal education reform. This product not only answers today's needs but also paves the way for a more inclusive, efficient, and relevant future of legal education. With realistic design, broad accessibility, and excellent development potential, this technology is expected to be an important milestone in building an innovative and competitive legal generation internationally.

In addition, this product's success shows that integrating technology into legal education improves the quality of learning and provides practical solutions to various traditional challenges. By continuing to support the development and dissemination of this technology, legal education institutions can play an essential role in shaping the future of a more modern and adaptive legal profession.

The Metaverse Moot Court is a technological innovation and a symbol of transformation in legal education in Indonesia. With the proper support from various stakeholders, this technology can continue to evolve and significantly positively impact legal education.

Conclusion

Metaverse Moot Court of the Constitutional Court is a technology-based legal learning innovation that presents an interactive and immersive virtual courtroom simulation. This technology provides a learning experience that resembles a real trial, providing a solution to the limitations of physical moot court rooms in legal education institutions. Through this platform, students can understand court procedures, compose legal arguments, and practice public speaking skills. The simulation supports experiential learning that enriches legal competencies, including analysis, argumentation, and decision-making. Pedagogically, this technology encourages more interactive learning, where students play an active role in the simulation, not just listeners. Collaboration between students, lecturers, and legal practitioners creates a productive discussion space that enhances critical thinking skills. Positive responses from partners, such as the Faculty of Law at Universitas Muhammadiyah Tangerang, demonstrate the relevance of this innovation. The platform is also cost-efficient as it only requires a computer or VR headset, without the need to build physical facilities. However, challenges in technology adaptation by lecturers are a concern. Additional training is required for them to optimally utilise the potential of this platform. In addition to improving access to flexible legal education for students, especially in remote areas, the platform opens up opportunities for innovative curriculum development. The integration of legal databases and other additional features can enrich the learning experience. With the support of various parties, Metaverse Moot Court is expected to be a milestone in the transformation of Indonesian legal education that is more inclusive, efficient, and ready to compete at the global level.

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