

STUDENT NEEDS IN E-BOOK USE FOR ACADEMIC PRESENTATION: A PERSPECTIVE ON HIGHER EDUCATION

AMBO, N. I.^{1*} – MUSTAPA, M.²

¹ *Faculty of Islamic Studies, Universiti Malaysia Sabah, Sabah, Malaysia.*

² *Academy of Contemporary Islamic Studies (ACIS), Universiti Teknologi MARA Cawangan Sabah, Sabah, Malaysia.*

**Corresponding author
e-mail: nurilma[at]ums.edu.my*

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Abstract. Digital transformation in higher education has changed the methods of managing and delivering academic information, including the documentation and presentation of scientific training. This study analyzes students' needs regarding the use of eBooks as a documentation tool for scientific presentation in the context of higher education in the digital era. This study uses a needs analysis method and technology acceptance models like the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) to look at what makes eBooks acceptable and useful. The results of the literature synthesis and conceptual analysis found that students' needs for eBooks encompass four main dimensions: technical, pedagogical, socio-cultural, and economic. From a technical aspect, accessibility, usability, and the interoperability of eBooks with the university's academic system become critical factors. The pedagogical dimension emphasizes the potential of eBooks in enhancing interactive and collaborative learning experiences. From a sociocultural perspective, academic norms, peer influence, and digital literacy play important roles in the acceptance of this technology. Meanwhile, economic aspects and digital infrastructure determine the accessibility and sustainability of eBook usage in higher education institutions. This study proposes a conceptual model of students' needs for eBooks that connects these four dimensions as a basis for improving academic policies and developing more user-friendly eBooks. The implications of this study also include recommendations for stakeholders in higher education to adapt eBook technology more strategically to enhance the documentation of academic training and support a viable digital learning ecosystem.

Keywords: *eBook, academic exercises, higher education, student needs, technology acceptance model, digital transformation*

Introduction

The digital transformation of higher education has had a substantial impact on teaching, learning, and research methodologies. The transition from traditional methods to digital technologies creates new potential for providing information more effectively and interactively. The utilisation of technology, such as eBooks, online learning systems, and digital resources, has become critical to empowering the 21st century learning ecosystem. The digitalisation of education necessitates investments in infrastructure and the creation of learning tools that fulfil the demands of students (Ardiansyah, 2022). According to a study conducted by Mahat and Yunos (2022), eBooks are becoming increasingly popular among students due to their accessibility and ability to improve comprehension and academic achievement. As a result, incorporating eBooks into higher education can meet students' research demands and deliver academic activities in a way that is consistent with contemporary technology developments.

The evolution in the documentation and presentation of academic exercise has also undergone changes in line with the advancement of digital technology. This can be seen

from traditional research documentation that relies on printed materials, which often face challenges in terms of accessibility, information updating, and effectiveness in conveying research findings. A study by Bakri and Willett (2017) shows that eBooks can overcome these challenges by providing reference materials that are more flexible, dynamic, and easy to update. Additionally, the study by Abd Rahman and Binti Ramli (2021) emphasizes that technology-based learning helps accelerate the process of information access while enhancing the effectiveness of self-directed learning. However, the lack of interactive and user-friendly digital reference materials has created a need for the development of specialized eBooks as the main reference materials in academic exercise presentations. The students' need for eBooks in the documentation of academic exercise is becoming increasingly evident due to the shift in learning approaches that emphasize digital access to information. Students often face challenges in obtaining the latest reference materials, especially in preparing academic exercise that require academic exercise and empirical information. According to Bakri and Willett (2017), eBooks offer the convenience of quick information retrieval while also providing more up-to-date content compared to printed materials. Features such as hyperlinks, internal search engines, and multimedia content make eBooks a more dynamic and user-friendly reference medium. Therefore, the development of eBooks specifically for academic exercise presentations is seen as an important necessity to support the academic needs of students.

As a result, the difficulties in traditional documentation are directly linked to issues of information obsolescence, limited accessibility, and time limits in accessing reference materials. The usage of printed materials frequently prevents students from receiving current and relevant information quickly. Furthermore, manually organizing and processing information can slow down the delivery of academic training. In this context, there is an urgent need to introduce eBooks as learning tools that not only supply reference resources but also function as interactive mediums for improving students' research skills.

Literature review

The development of ebook technology in an academic context

The development of eBook technology in the academic context has brought significant changes to the way scholarly materials are accessed, stored, and used in higher education. The application of eBooks is no longer just a digital version of printed books but now functions as an interactive learning medium that integrates various multimedia elements such as videos, audio, images, and hyperlinks. This evolution is in line with the advancement of information and communication technology (ICT), which enhances access to information more quickly and flexibly. According to Bakri and Willett (2017), the development of eBook technology offers a more dynamic learning experience as it allows users to search for information instantly, add digital notes, and use hyperlink features for cross-referencing. This shows that eBooks not only serve as reading materials but also as learning tools that enrich the academic experience of students. Previous studies by Mahat and Yunos (2022) emphasize that the use of eBooks in higher education is gaining attention due to factors such as accessibility, lower costs, and compatibility with various electronic devices. Furthermore, platforms such as the My Library, Digital Library, Google Books, and Kindle provide access to collections of academic materials online, allowing students to obtain reference materials anytime and

anywhere. This facility is highly relevant in the context of digital-era education that emphasizes flexible and self-directed learning. In addition, the development of eBook technology has also shown an increase in interactive features that positively impact the learning process. According to a study by Franco and Bidarra (2022) as well as Ismail et al. (2025), eBooks equipped with digital annotation functions, bookmarks, and internal search engines help students organize information more systematically. These features allow users to highlight important parts of the text, make digital notes, and access information quickly without having to go through the entire content. However, there are also challenges in the use of eBooks, such as a study conducted by Alsadoon (2020), which found that factors like digital literacy, access to electronic devices, and internet connection stability are among the main obstacles in adapting eBooks as a learning medium. Therefore, the provision of training and technical support by educational institutions is essential to ensure that the use of eBooks can be optimally utilized among students.

Overall, the development of eBook technology in the academic context has opened new opportunities in empowering learning and research at the higher education level. Although there are certain challenges, the potential of eBooks as a flexible, interactive, and inclusive learning medium makes them a tool capable of supporting the educational needs of the digital era. This study will further examine the needs of students regarding the use of eBooks in documenting scientific training presentations and the challenges faced in the process of adapting to this technology.

Presentation of academic exercise in the digital era

Digital transformation in higher education has revolutionized academic presentation methods, especially in scientific training. These changes allow students to present research findings more interactively using multimedia technology. According to Mohd Khairulnizam Ramlie et al. (2023), the use of multimedia materials in academic presentations can enhance student motivation and enrich the learning experience. Furthermore, digital presentations such as the use of Microsoft PowerPoint, Google Slides, and Canva software allow for the integration of visual, audio, and animation elements, making the presentations more engaging and easier to understand. A study by Saidin et al. (2023) also emphasizes that the use of multimedia technology in higher education plays an important role in enhancing students' understanding and interest in learning content. The need for digital documentation in scientific training is becoming increasingly urgent in line with students' need to access information quickly and systematically. A study by Rosly (2024) shows that eBooks offer quick access to reference materials, in addition to facilitating the organization and storage of information digitally. However, students often face challenges in managing presentation materials such as format compatibility issues, data security, and technological inconsistencies (Bakri and Willett, 2017). Therefore, the development of user-friendly and interactive eBooks can serve as a holistic solution in supporting the documentation and presentation of scientific training more efficiently and systematically. This development is expected to help students strengthen their research skills and improve the quality of their academic presentations.

The digital needs of contemporary generation students

Digital native generation students refer to individuals who were born and raised in the era of digital technology, where the use of technology has become a part of their daily routine. This generation is characterized by high proficiency in technology use, dependence on quick access to information, and a tendency towards interactive learning materials. Previous studies have shown that students prefer using digital materials such as eBooks over printed books because they offer immediate access, high mobility, and interactive features that support self-directed learning (Sannusi, 2020). Furthermore, the digital native generation has high expectations for learning resources that are customizable, flexible, and capable of providing detailed and rapid information (Vitvitskaya et al., 2022). Furthermore, Salamin and Glassey Balet (2016) also found that digital native students are more inclined to choose learning materials that are flexible and accessible online because it allows them to manage their learning independently without fully relying on formal learning schedules. This element of flexibility provides students with the opportunity to choose content that is relevant to their learning needs, thereby supporting lifelong learning. However, the expectation for quick access to information can have implications for the quality of understanding and evaluation of information sources. Nicholas et al. (2006) found that digital native generation students are more likely to browse information quickly without deeply assessing the credibility and authenticity of the sources obtained. This study emphasizes the need to develop digital learning materials that not only provide information immediately but also include guidelines for critically evaluating information to empower students' digital literacy. In this regard, the development of user-friendly and interactive eBooks is a necessity to meet this generation's expectations for a more effective digital learning experience.

In the academic context, digital native students' information-seeking behaviour indicates a preference for rapid information retrieval via digital platforms such as digital libraries, online journals, and eBooks. According to a study conducted by Nicholas et al. (2006), students prefer to acquire immediate information from digital sources rather than reading the complete content, highlighting the necessity for a quick search mechanism in digital reference materials. However, the biggest difficulty for pupils is a lack of digital literacy in determining the validity and legitimacy of digital sources (Ririen and Daryanes, 2022). Therefore, the development of eBooks that not only provide academic content but also include source evaluation guidelines, research steps, and critical information search strategies is greatly needed to enhance students' digital literacy in academic training.

Theoretical framework: Technology acceptance model in education

The Technology Acceptance Model (TAM), introduced by Davis (1989), is a theoretical framework often used to understand the factors influencing technology acceptance among users, including students. This model emphasizes two main constructs, namely perceived usefulness and perceived ease of use (Ma and Liu, 2004; Davis, 1989). Perceived usefulness refers to the extent to which a person believes that the use of a particular technology will enhance their work performance, while perceived ease of use refers to the extent to which a person believes that the use of that technology is free from difficult effort. Ezzuddin and Gani (2023) study shows that perceived usefulness plays an important role in determining technology acceptance among students. For example, in the context of e-learning, students tend to accept and use e-learning platforms if they feel that the platform can enhance their learning effectiveness.

This is consistent with research findings that show that perceptions of the benefits of technology influence users' acceptance of that technology. Meanwhile, the perception of ease of use is also a critical factor in technology acceptance (Davis, 1989). This can be proven from the study by Toros et al. (2024), which states that students are more likely to accept and use technology that they find easy to use without requiring significant effort. For example, study by Almogren et al. (2024) on the acceptance of ChatGPT technology among students, it was shown that the ease of use of the technology influenced their attitudes and intentions to use it. The majority of students have a positive view towards the use of ChatGPT as an aid in course assignments. This shows that the ease of use of ChatGPT influences students' positive attitudes towards the technology. In the meantime, understanding these factors has important implications for the development and implementation of educational technology. Developers and technology providers must ensure that the technology introduced is not only useful in improving students' academic performance but also easy to use. By ensuring both of these aspects, the rate of acceptance and use of technology among students can be increased, thereby contributing to the effectiveness of the learning process. Overall, the Technology Acceptance Model (TAM) provides a useful framework for understanding and evaluating the factors that influence technology acceptance among students. By focusing on perceptions of usefulness and ease of use, technology developers and educators can design and implement educational technology that is more effective and well-received by the target users.

Materials and Methods

Needs analysis approach

The needs analysis approach is a method used to identify, understand, and evaluate user needs systematically within a research context. The justification for applying this approach in the study is based on the need to deeply understand students' requirements regarding the use of eBooks in the presentation of scientific training in the digital education era. Needs analysis serves as a mechanism to identify the gap between user needs and the existing technological features (Vitvitskaya et al., 2022). The framework for analysing eBook user needs in this study is structured based on three main dimensions, namely the need for scientific content (information and learning resources), the need for interactivity (technological features such as annotations and multimedia), and the need for flexibility (self-access, ease of navigation, and content personalization) (Rosly, 2024). This needs analysis approach emphasizes the use of empirical data and previous literature to build a comprehensive understanding of eBook user needs. This process not only evaluates students' needs from the perspective of technology functionality but also considers the context of use, challenges of digital literacy, and users' expectations of learning technology (Sannusi, 2020).

Synthesis of the conceptual model

The synthesis of the conceptual model in this study is based on the integration of existing theories and models used in evaluating the acceptance of educational technology. The Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) are used as the basis for forming a conceptual model to understand the relationship between factors influencing students'

needs for eBooks. The integration of these two models allows the study to identify factors such as perceived usefulness, ease of use, performance expectancy, and social influence in the acceptance of eBook technology (Davis, 1989). The development of an eBook needs analysis framework for scientific training also takes into account the dimensions of user needs, interactive features, and information literacy support. The study by Ririen and Daryanes (2022) emphasizes that the development of eBooks that meet user needs must provide step-by-step guides, interactive multimedia materials, and an efficient information search system. The relationship between factors influencing student needs is analysed based on a systematic approach that encompasses technological factors and user needs, as well as social and academic support. This conceptual model is expected to provide a holistic view of how eBooks can be designed and developed more effectively to meet the needs of students in preparing scientific training presentations.

Results and Discussion

Technical dimensions of ebook requirements for academic training

Technical dimensions play an important role in determining the effectiveness of using eBooks as a medium for documenting scientific training presentations. Technical requirements encompass aspects of usability, accessibility, and interactive functions that support the process of digital information delivery (Leporini, 2007). This aspect also involves the integration of technology and the system's ability to meet user needs from the perspective of higher education in the digital era. The usability of eBooks refers to the ease of use and the ability of users to navigate the content intuitively. According to Ramlie et al. (2023), user-friendly interface design enhances the level of technology acceptance among students. Factors such as clear navigation, text customization, and search functionality are important elements that contribute to a positive user experience. Additionally, technology accessibility emphasizes the provision of eBooks in user-friendly formats for all user groups, including individuals with disabilities. Leporini (2007) emphasizes that features such as screen reader support, font customization, and colour contrast play a crucial role in ensuring that content is accessible without barriers. Therefore, the development of eBooks must take into account inclusivity aspects to meet the needs of various categories of users.

From another perspective, the integration of multimedia in eBooks, such as the use of audio, video, and animation elements, has been proven to enhance content comprehension and reader interactivity (Abd Rahman and Binti Ramli, 2021). This study found that the use of visual elements can convey abstract concepts more effectively, thereby enhancing information retention among students. This proves the necessity of using e-books for documenting scientific training presentations. The eBook system also needs to be designed with interoperability in mind to ensure it can function on various devices and platforms. Jakimoski (2016) emphasizes that the development of systems based on open standards such as EPUB and PDF facilitates the process of information sharing and minimizes format incompatibility issues. This is important in the context of higher education, which involves the use of various technology systems. Next, copyright protection and content security are important aspects in the development of eBooks. According to Zahara and Salim (2022), mechanisms such as digital rights management (DRM) technology can be used to prevent unauthorized access and ensure the preservation of intellectual property. This aspect is highly relevant

in the context of scientific training involving the original research outcomes of those students.

Although eBook technology offers various benefits, there are technical challenges that need to be addressed, such as infrastructure constraints, interoperability issues, and data security risks. These challenges require a holistic approach involving collaboration between educational institutions, technology developers, and policymakers (Obande et al., 2020). In summary, the technical dimensions of eBook requirements for documenting scientific training presentations emphasize aspects of usability, accessibility, multimedia integration, interoperability, and security. These requirements play an important role in ensuring that the process of digital information delivery is more efficient and inclusive. In the context of scientific training, the use of eBooks as a documentation medium not only empowers the presentation of research results but also supports the production of more dynamic and high-quality academic materials. Therefore, the development of eBooks in higher education needs to be aligned with the latest technology to meet the needs of students and enhance the digital learning experience.

Pedagogical and learning dimensions

The dimensions of pedagogy and learning play an important role in assessing the need for eBooks as a support medium in the presentation of scientific training. The potential of eBooks in enhancing the learning experience lies in their ability to provide interactive, dynamic, and multimedia learning materials. According to Ririen and Daryanes (2022), eBooks that contain multimedia features such as videos, hyperlinks, and interactive simulations can enrich the learning experience, especially in the context of self-directed learning. These interactive features help students understand complex concepts more easily and improve information retention. Furthermore, the adaptive eBook allows users to customize the learning content according to the duration and individual mastery level, in line with the principles of student-centered learning (Mishra and Koehler, 2006). In the context of 21st-century learning, collaborative learning through interactive eBooks is gaining increasing attention among researchers. A study by Rahmadani et al. (2019) found that the integration of interactive features such as comment sections, shared annotations, and discussion forums in eBooks can stimulate communication and collaboration among students. This platform allows students to exchange views, share reference materials, and build understanding collectively, which indirectly enhances active learning and critical thinking skills. Additionally, the developed eBook needs to be integrated with active teaching and learning strategies such as problem-based learning and project-based learning. A study by Ririen and Daryanes (2022) shows that eBooks supporting activities such as interactive Q&A, self-assignments, and case study simulations can enhance student engagement and mastery of research skills. This integration not only makes the eBook a reference source but also an interactive medium that empowers self-directed and collaborative learning (Haleem et al., 2022).

Next, the development of eBooks in line with modern pedagogical approaches must take into account interactive potential, collaborative learning, and integration with active teaching strategies to ensure they can holistically meet the learning needs of students. This implication emphasizes that the use of eBooks in academic training not only serves as a documentation platform but also as a learning instrument that empowers the development of students' academic and professional skills in the digital

era. In this regard, this study shows that eBooks have the potential to become an important medium in supporting student learning, particularly in the presentation of scientific training (Ulanday et al., 2021). The pedagogical and learning dimensions that encompass interactivity, collaborative learning, and active teaching strategies emphasize that eBooks are not just reading materials but also technology-based learning tools that enhance research and communication skills. In the context of academic training, the integration of interactive features in eBooks can help students present research findings in a more systematic and creative manner. Therefore, the development of eBooks needs to be aligned with the learning needs of students to ensure it can support comprehensive academic and professional development in the digital era.

Socio-cultural dimensions in ebook usage

The use of eBooks among students is also influenced by the academic norms and practices related to technology that are implemented in an educational institution. Academic norms that emphasize the use of technology as the primary reference source encourage students to shift from printed materials to eBooks as learning resources. Institutions that introduce digital learning platforms such as digital libraries and learning management systems indirectly shape the culture of eBook usage among students (Sivasubramanian et al., 2022). Furthermore, academic norms that encourage self-directed learning and independent research reinforce the role of eBooks as a medium that supports the need for flexible learning and quick access to information. In the context of the Scientific Training Course, this academic norm becomes increasingly significant because the course emphasizes the students' ability to conduct independent research and produce high-quality scientific findings. The use of eBooks as reference sources allows students to access academic materials quickly and comprehensively, in line with current research needs. A study by Jayasundara (2021) shows that the use of eBooks in a digital learning environment can enhance students' ability to conduct self-research, particularly in the aspects of information retrieval and literature analysis. The influence of peers and institutional culture also plays an important role in determining the level of acceptance of eBooks among students. Students are more likely to use eBooks if the technology is recommended by peers or lecturers. The institutional culture that supports digital transformation, including providing access to eBooks through the digital library portal, also enhances students' acceptance of digital reference materials (Obande et al., 2020). However, demographic factors such as age, field of study, and level of digital literacy affect the variation in students' needs for eBooks. The study conducted by Corlett-Rivera and Hackman (2014) states that students in technical fields are more inclined to use eBooks compared to students in the humanities because of their need for dynamic and rapid information. Meanwhile, in the context of the Scientific Training Course, this socio-cultural factor is important because students from various academic backgrounds will show different needs for eBooks. Therefore, the development of eBooks as academic reference materials needs to take into account socio-cultural factors and the specific needs of students to ensure their acceptance and effectiveness in use comprehensively. Institutional support in the form of digital literacy training and the provision of adequate technological infrastructure is also necessary to enhance the use of eBooks in academic training presentations.

Economic and infrastructure dimensions

The economic and infrastructure dimensions are important aspects that need to be emphasized when assessing the need for using eBooks as a medium for documenting scientific training presentations among students. One of the main factors that need to be considered is the cost of developing and preparing eBooks for academic purposes. A study by Sannusi (2020) shows that the cost of developing eBooks involves aspects of software development and digital content production, as well as the customization of interactive and multimedia features. These costs may pose a challenge to educational institutions, especially in ensuring comprehensive access for all students regardless of their socioeconomic background. However, the long-term cost of developing eBooks is lower compared to printed materials because they do not require repeated printing and can be easily updated digitally (Park and Lee, 2021). In addition to cost, the accessibility of digital infrastructure in higher education institutions also becomes a determining factor in the acceptance of eBook technology. A study by Ririen and Daryanes (2022) found that access to technological infrastructure such as high-speed internet, electronic devices, and online learning systems plays an important role in ensuring the effective use of eBooks. The main challenge identified is the digital divide between institutions in urban and rural areas, which can affect students' accessibility to digital learning resources. Therefore, sustainable infrastructure support needs to be provided to ensure that every student has equal opportunities in accessing eBook materials (Ayob et al., 2021).

In the context of sustainability, the use of digital resources in education offers a more environmentally friendly approach compared to printed materials. A study by Vitvitskaya et al. (2022) emphasizes that the use of eBooks can reduce dependence on paper and empower sustainable educational practices among students. However, this sustainability can only be achieved with continuous support from educational institutions in the form of digital literacy training, technological facilities, and user-friendly digital resource usage policies. Therefore, in the context of the Scientific Training Course, students' ability to use eBooks depends on the provision of comprehensive and inclusive technological infrastructure. Educational institutions play a crucial role in providing access to technology, including the provision of electronic devices and high-speed internet. The development of user-friendly and sustainable eBooks can support the production of more effective and high-impact scientific training documentation. Therefore, the development of eBooks needs to be implemented holistically, taking into account cost, accessibility, and sustainability as determining factors to ensure the acceptance of this technology among students.

Ebook requirement model for academic training

Development of a conceptual model for students ebook requirements

Based on the analysis of student needs in the use of eBooks, the development of a conceptual model for eBook needs in academic writing courses encompasses four main dimensions: technical, pedagogical, socio-cultural, and economic (*Figure 1*). This model aims to provide a holistic framework that illustrates the needs of students in documenting scientific training presentations digitally. Each of these dimensions complements each other in ensuring the development of an inclusive, functional, and high-impact eBook. The technical dimension emphasizes aspects of usability, accessibility, and the security of technology that supports the production and delivery of digital content. Elements such as user-friendly interface design, support for multiple file

formats, and security features like Digital Rights Management (DRM) technology are important factors in ensuring the effective use of eBooks (Ramlie et al., 2023). This dimension also emphasizes the interoperability of eBooks across various devices and platforms to ensure unrestricted access and effective use by students. The Pedagogical Dimension also encompasses features of interactive learning and active user participation. Elements such as hyperlinks, collaborative annotations, and the integration of case study simulations enable students to engage in self-directed learning and develop a deep understanding of scientific materials (Ririen and Daryanes, 2022). This feature also supports collaborative learning that fosters research skills and critical thinking among students, as well as systematic information delivery.

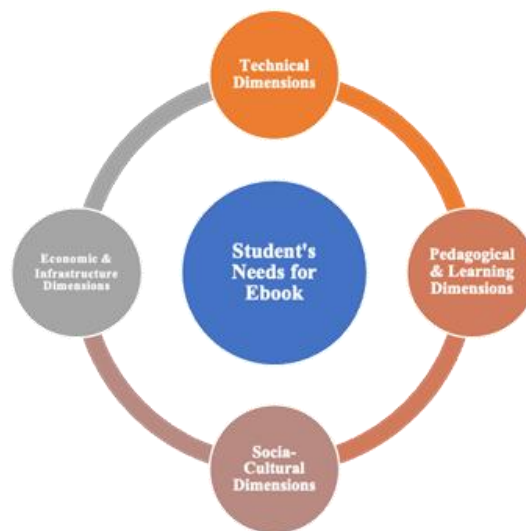


Figure 1. Conceptual model for ebook needs in academic writing courses.

The socio-cultural dimension emphasizes academic norms, institutional culture, and peer influence in the acceptance of eBook technology. The culture of self-directed learning driven by academic norms and peer support plays an important role in enhancing the acceptance of this technology. A study by Selfa-Sastre et al. (2022) shows that a collaborative culture supported by digital technology can strengthen collective learning among students. This dimension can also strengthen aspects of digital literacy and interactive learning. The Economic and Infrastructure Dimension focuses on aspects of development costs, technology accessibility, and eBook sustainability. Although the development cost of eBooks involves a high initial investment, it offers long-term cost savings compared to printed materials. Additionally, the provision of technological infrastructure such as high-speed internet and electronic devices by educational institutions is crucial in ensuring equitable access to eBooks among students. Touching on aspects of development costs, accessibility of digital infrastructure, and technological sustainability in ensuring eBooks are accessible to all students regardless of socioeconomic background (Vitvitskaya et al., 2022; Ayob et al., 2021). All four dimensions are interconnected and complement each other in ensuring the development of an eBook that holistically meets the needs of students. The technical dimension supports aspects of functionality and usability, while the pedagogical dimension enhances the learning experience through interactivity and collaboration. The socio-cultural dimension, on the other hand, influences the level of technology

acceptance among students, while the economic and infrastructure dimensions ensure fair and sustainable access for all students.

Conclusion

This study analyses the needs of students regarding the use of eBooks as a medium for documenting scientific training presentations in the context of higher education in the digital era. The findings indicate that the need for eBooks is multidimensional, encompassing technical, pedagogical, sociocultural, and economic aspects that are interrelated. The technical dimension emphasizes the usability, accessibility, and security of eBooks, which are fundamental prerequisites in the delivery of digital information. The pedagogical dimension, on the other hand, highlights the role of eBooks in supporting self-directed, collaborative, and problem-based learning, thereby empowering students to produce structured and high-quality academic documentation. From a socio-cultural perspective, this study found that academic norms, institutional culture, and peer influence play significant roles in determining the acceptance and use of eBooks among students. Meanwhile, the economic and infrastructure dimensions emphasize the importance of equitable access to digital technology and institutional support in providing an inclusive and sustainable learning environment. The development of the proposed conceptual model for eBook needs in this study has the potential to serve as a theoretical reference to enhance educational technology development strategies in the context of higher education. This model highlights the dynamic relationships among the four dimensions, which collectively contribute to enhancing students' learning experiences and the effectiveness of digital documentation of academic training. The contribution of this study to the theory, policy, and practice of higher education emphasizes that eBook development is not only focused on technological aspects but also takes into account the needs of pedagogy, learning culture, and infrastructure accessibility based on the principle of inclusivity.

In facing the era of digital transformation, this study suggests that future research should focus on the development of adaptive eBooks tailored to individual needs and fields of study, as well as the effectiveness of eBooks in empowering students' research and academic communication skills. Furthermore, the development of user-friendly, high-impact, and sustainable eBook design guidelines should be prioritized in shaping higher education policies and practices. Reflections on the future of academic documentation emphasize that the use of eBooks as a medium for documenting scholarly training has the potential to revolutionize approaches to learning and information management, ensuring equitable access, preservation of research outputs, and technological sustainability in higher education. Therefore, the provision of eBooks that holistically meet the needs of students will contribute to the development of a more inclusive, innovative, and globally competitive education system.

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Conflict of interest

The author confirms that there is no conflict of interest with any party involved in this research.

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