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THE PERSPECTIVES ON E-LEARNING TO IMPROVE THE
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This work is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)**Abstract:**

As the landscape of education evolves rapidly in today's world, technology plays an increasingly important role in delivering information and acting as a crucial tool in teaching and learning. E-learning, is one of the prominent tools in enhancing accessibility, flexibility, and engagement in various educational settings, offering an abundance of opportunities for both learners and educators. However, there has been a gap in knowledge regarding the availability of interactive e-learning materials for Islamic finance education, particularly in the Takaful industry. By examining findings from previous research, this study seeks to address the viewpoints of e-learning in the Islamic finance industry. The outcome of this study is to identify the challenges of implementing e-learning in Islamic finance, the level of acceptance, and user satisfaction of utilizing this method of education. It also aims on evaluating the quality of service as well as critical success factors of e-learning platforms. This study uses narrative review and focus group discussion, which synthesize the concept in the study and identify the design factors for e-book development. This research seeks to improve Islamic financial literacy in Malaysia by highlighting the significance of employing interactive e-learning materials such as e-books in the Islamic finance sector, within the Takaful industry.

Keywords:

E-Learning Platforms, Islamic Finance, Takaful Industry, Interactive Learning

Introduction

In recent years, e-learning has become an essential component of educational efforts across all levels, from elementary to higher education and continuous professional development. Education systems must evolve to address the increasing demand for personalized learning, adaptability, and accessibility, which is fundamentally fueling this digital transformation. The swift advancement of e-learning technologies has shown potential for enhancing educational results, fostering greater involvement from learners of all ages, and complementing conventional education methods.

Adaptive learning technologies and data-driven approaches have significantly improved educational outcomes by personalizing content delivery based on student performance metrics, thereby increasing learning efficiency (Hammad et al., 2018; Nguyen et al., 2021). This personalized approach addresses diverse learning needs and speeds. The global shift towards e-learning has also made education more accessible and equitable, extending opportunities to those previously underserved and overcoming geographic and socioeconomic barriers (Smith and Jones, 2018). E-learning supports self-directed learning, enhancing motivation, engagement, and academic performance by allowing learners to control their educational pace and environment (Hammad et al., 2018; Lee et al., 2022). Moreover, the integration of interactivity and multimedia in e-learning, such as videos, quizzes, and instant feedback, deepens engagement and improves comprehension and retention of information (Kumar and Johnson, 2019).

E-learning represents a type of educational technology that assists individuals in learning about various subjects, such as healthcare, tourism, finance, ICT, and many more. The pandemic has accelerated the trend towards online learning, underscoring the need for education to undergo digital transformation. E-learning has emerged as an effective tool for financial education, particularly during the COVID-19 pandemic (Firmansyah & Maulana, 2021). This shift is supported by increasing investments and the adoption of new technologies to facilitate learning in the field of Islamic finance ("Islamic edtech", 2021). For example, the United Arab Emirates, Saudi Arabia and Kuwait have concentrated on digital transformation in education namely in the areas of finance, accounting, shariah-compliant investment.

The use of E-learning has shown promising results in improving Islamic concepts including financial, ethics and accounting skills. Studies indicate that e-learning enhances student performance and employability in accounting (Al-Sartawi, 2020) and positively impacts financial literacy (Firmansyah & Maulana, 2021). A study in Uganda indicates a positive relationship between e-learning methods and their economic effects in universities (Eton & Chance, 2022). E-learning also improves learning outcomes in economics courses, with students showing increased interest and activity in online learning environments (Hamid et al., 2021). E-learning can be found to effectively enhance students' understanding of Islamic values when integrated with supply chain management principles (Syarif, 2020). In Islamic education, e-learning serves as a central resource for students, complementing traditional teaching methods (Ramdani et al., 2018). It also has demonstrated effectiveness in teaching various aspects of Islamic finance, including Shariah principles, governance, and risk management (Kamaruddin & Hanefah, 2023).

Even if the advantages of e-learning have been emphasized, there have been obstacles to its use in professional training, including technological problems and challenges with hands-on activities (Kamaruddin & Hanefah, 2023). Occasionally, it can be difficult for students and institutions to overcome accessibility issues including power outages, difficulty accessing online resources, and the high cost of gadgets and internet subscriptions. Additionally, insufficient training for teachers to design and deliver instructions via online platforms should be seen as crucial to maintaining the effectiveness of e-learning (Eton & Chance, 2022). Institutions should broaden the contexts of e-learning, connecting students to accounting professions, and ensuring teachers are proficient in delivering e-learning materials in order to maximize its benefits (Al-Sartawi, 2020; Kamaruddin & Hanefah, 2023).

Studies show e-learning can improve Islamic finance education by increasing financial literacy, Shariah compliance, and job skills. However, key gaps remain. For example, there's insufficient focus on challenges like matching Islamic ethics with online teaching, providing equal access in underserved regions, and preparing teachers for digital education. There's also a need for better strategies to tackle cultural, teaching, and organizational issues. Plus, more work is needed to create adaptive learning tools for Islamic finance, such as training in Shariah rules or risk management. Fixing these gaps will require collaboration across fields to make e-learning effective for skills and ethics while ensuring fair access for all. The purpose of this paper is to examine various viewpoints on e-learning from the finance industry, with emphasis on Islamic finance. The interest in understanding the implementation and utilization of e-learning in these fields stems from the intricate concepts, models, and terminologies that need to be explained to students who need a mechanism other than the traditional learning experience. Additionally, the discussions are not restricted to e-learning platforms per se but also include e-learning mechanisms such as interactive books that could improve literacy in the respective fields of study.

Methodology

There are two methodologies used in the study; narrative review and focus group discussion with content experts. It uses narrative review to synthesize themes in Islamic finance, Islamic education related to e-learning and interactive book/e-book. It is less structured, more descriptive, and no review protocol included. The narrative review used in the study aims to provide an overview of concepts in the study. Meanwhile focus group discussion method was used to share the e-book content development- expectations and issues raised from the industry experts related to the study.

Baker (2016) defined literature review as a critical and objective examination of existing knowledge on a specific scientific topic. This review involves a search strategy across several online databases, including SCOPUS, IEEE, and Islamic Finance News (IFN), employing keywords such as "E-Learning," "Interactive Book," "E-Book," "Finance," "Islamic Finance," "Sciences," and "Islamic Education." The search utilized Boolean operators "AND" and "OR" to refine the results. Additionally, relevant papers were also sourced from Google Scholar using the same keywords and Boolean operators.

Another inclusion criteria were scientific articles related to the main topic of the research present in the selected databases, also publications in English or Bahasa Malaysia. The research was limited to years 2016 – 2024. At first, the articles were selected through their title, before

analyzing their abstracts. The theoretical frameworks were elaborated after reading the entire article.

Additionally, data collection of a focus group discussion among experts will be informally presented in the findings. The focus group discussion was attended by 18 experts from Islamic finance, Islamic banking, Takaful and ICT. The focus group discussion initially from a workshop conducted among the industry experts and academia aims to focus on content development for an e-learning interactive book. The selection of the experts was based on convenience sampling whereby the experts should be involved in the industry or academic for more than 5 years. The interview questions used in the FGD are unstructured interview questions. The questions asked by the researchers according to the content presented by the experts. The focus group presentation was recorded, and the findings were reported in a summary.

Results and Discussions

Effectiveness of E-learning

The use of electronic technologies to transmit educational content outside of traditional classroom settings is known as e-learning, and it has undergone tremendous change over time. Originally focused on using computers to communicate simple content, it has evolved into a comprehensive system that facilitates a very engaging learning environment. Recent interpretations highlight its function in supporting self-paced learning via a range of digital platforms, including virtual classrooms, computer-based training, web-based training, and digital collaboration. This development highlights a move towards more independent learning settings that utilize technology to improve educational flexibility and accessibility (Smith & Choi, 2017).

E-learning proved to be a crucial instrument for preserving the continuity of health sciences education throughout the COVID-19 pandemic. Even though it was more difficult to carry out practical exercises that are essential to medical education, it was especially helpful for the continued education and evaluation of medical students. During this time, several factors affected the success of e-learning, such as participants' attitudes towards this style of learning, their level of collaboration, and the technological proficiency of both teachers and students (Ortega et al., 2022).

E-learning is useful for more than just keeping things running smoothly during emergencies like the pandemic. According to studies, this online method frequently outperforms conventional teaching strategies in terms of improving educational outcomes, enriching learning experiences, and increasing student motivation (Mulyanengsih & Wibowo, 2021). Additionally, it provides students with worthwhile chances to cultivate essential 21st-century abilities, equipping them to face contemporary difficulties in a technologically advanced society.

The adaptability of e-learning was demonstrated in Indonesia during the pandemic by ways of both synchronous tools (like Zoom and Google Meet) and asynchronous platforms (like Learning Management Systems and Google Classroom) (Asdlori, 2023). While asynchronous platforms gave students the freedom to interact with instructional materials at their own pace,

meeting a variety of learning requirements and situations, synchronous technologies enabled real-time exchanges, encouraging teamwork and active engagement.

After all, the strategic design of e-learning platforms greatly improves student engagement, learning results, and satisfaction. The ability of e-learning to enable students to access instructional materials from any location is the reason for its increasing appeal in higher education institutions, highlighting the modern e-learning environments' ability to combine effectiveness and ease-of-use. The growing significance of e-learning platforms in influencing the educational landscape is highlighted by their adaptability and accessibility (Yadav, 2024).

In another study, the transition to online learning for professional Shariah audit training during the COVID-19 pandemic brought forth both difficulties and opportunities. The study revealed major obstacles including insufficient practical experiences and technical challenges. Nonetheless, it also mentioned that e-learning could effectively encompass a broad range of theoretical knowledge. The results indicate the importance of a balanced strategy that integrates both conventional and digital educational techniques for professional development (Kamaruddin and Hanefah, 2023).

Hishamudin et al. (2023) explored the progress of digital platforms aimed at Islamic financial education in Malaysia. It emphasizes the necessity for a strong digital educational system to enhance accessibility and efficiency. The study recommended utilizing digital platforms to improve the quality and reach of Islamic financial education, which is essential in supporting the development of the Islamic finance industry.

E-learning has grown from simple online lessons to dynamic, adaptable systems that make learning easier to access and more engaging. During the COVID-19 pandemic, it became essential for keeping education running, especially in fields like healthcare and Islamic finance, where it helped teach theory even when hands-on training was hard. Research shows it often works better than traditional classroom methods, leading to better results, higher motivation, and stronger modern skills (e.g., critical thinking). Tools like Zoom enabled live group work, while platforms like Learning Management Systems (LMS) let students learn at their own pace, proving useful in places like Indonesia and Malaysia. However, success depended on technical skills, student attitudes, and support from schools. For example, training in Shariah auditing showed that mixing online and in-person methods could work well.

E-Learning Pedagogical Design

Despite being widely used for their ability to effectively spread knowledge, e-learning platforms run the potential of turning teachers into informational peddlers. This is a concern raised by al-Ghazali, who maintained that a teacher's job should involve more than just imparting knowledge. Al-Ghazali proposed that teachers should also concentrate on the overall growth of a student's personality and character, as these roles reflect those of their parents and go well beyond the conventional boundaries of instruction (Mohd Noor et al., 2021).

Johnson et al. (2021) highlighted the recent developments in educational technology, in particular, the incorporation of multimedia materials such as interactive simulations, movies, and gamification components, have been successful in raising student interest and boosting memory retention. These resources offered lively and captivating classroom settings that actively involved students, promoting a greater understanding of the subject matter.

Steils et al. (2017) explored consumer learning from an online and andragogical viewpoint, highlighting various e-learning methods designed for the requirements of adult learners in acquiring knowledge about new products. It contrasts conventional sequential teaching methods with the interactive and self-guided learning options provided online, emphasizing the move towards more independent and personalized educational experiences in digital settings. The advancement of adaptive learning technologies has transformed personalized education, enabling learning experiences to be customized to the unique needs, pace, and learning style of every student. These technologies facilitate subject mastery by tailoring content difficulty and presentation based on personal performance and advancement, promoting a productive and efficient learning experience (Lee & Nguyen, 2023).

The use of multimedia components and adaptive technologies in e-learning platforms enhances content delivery while catering to various learning preferences and styles. This method not only matches current educational demands but also improves the ability of e-learning platforms to address various educational needs, thus facilitating the holistic growth of students as proposed by educational theorists such as al-Ghazali (Yadav, 2024).

Good e-learning should emphasize character development in addition to information sharing, as al-Ghazali stressed. Games, simulations, and adaptive technology are examples of contemporary tools that customize learning to meet the requirements and preferences of each individual. These techniques simplify complex subjects like Islamic finance, increase student engagement, and aid in information retention. However, critics believe that educators are essential in promoting moral and intellectual growth and warn against dismissing them as merely "content sellers." Flexibility and student-centered learning are given priority in new strategies, such as self-paced modules and adult learning techniques. Technology should facilitate teaching strategies that cater to a range of demands in order to function effectively.

E-Learning Barriers and Challenges

There are key themes that influence both the support and challenges of e-learning in health sciences education. These themes encompass various aspects, such as the enhancement of learning processes, student motivation and expectations, and the incorporation of e-learning frameworks into current curricula (Regmi and Jones, 2020). Their examination highlighted the essential elements that affect the success of e-learning, including improving interaction and collaboration among students and teachers, handling learners' motivational issues, implementing accessible technological tools, and focusing the educational approach on the learners.

Throughout the COVID-19 pandemic, Mseleku (2020) observed various difficulties encountered by academicians and students in embracing e-learning. These issues mainly concerned the accessibility and use of online resources, which are further complicated by certain obstacles faced by learners in certain geographical areas. The technological era emphasized the essential demand for accessible and effective online learning resources in various environments.

Yadav (2024) also highlighted systemic challenges like the digital divide. This hinders equitable access to technology and internet connectivity, along with the continuous need for faculty development to adapt to swift technological advancements. These elements are essential for guaranteeing that e-learning is both accessible by students and addresses the

changing requirements of educational settings. Collectively, these studies highlighted the intricacies of deploying e-learning solutions and the diverse strategies required to tackle these obstacles while improving learning experience.

Another accessibility issue discussed by Sathish & Nerathravati (2022), was the technological gaps that hinder equal access to digital education. It had to do with teachers' varying levels of acceptance of online instructions and the significant financial outlay needed for upgrading educational infrastructures in order to provide effective support for digital learning.

Alharbi et al. (2020) identified additional challenges in utilizing e-learning tools throughout the pandemic, for instance, technical difficulties and inadequate training for users. These obstacles impeded the seamless shift to online learning and subsequently, its effectiveness, highlighting the necessity for extensive user support and training.

In addition, there are major challenges in implementing educational technologies, whether synchronous or asynchronous, throughout the duration of the pandemic. The main concerns involved inconsistent access to essential technology and internet resources, alongside financial limitations faced by students and their families, all of which notably affected the effectiveness of remote learning (Asdlori, 2023).

Despite its potential, e-learning faces systemic barriers, including the digital divide, infrastructural gaps, and unequal access to technology and connectivity. The pandemic worsened challenges like inconsistent internet access, financial constraints, and insufficient faculty training, particularly in resource-limited regions. Technical difficulties, resistance to online instruction, and high infrastructure costs further hindered implementation. Studies emphasize the need for equitable solutions, such as subsidized devices, faculty development programs, and hybrid models to bridge gaps between theoretical and practical learning. Addressing these challenges requires interdisciplinary strategies to ensure e-learning's scalability, inclusivity, and alignment with cultural and institutional contexts, particularly in specialized fields like Islamic finance and health sciences.

Integration of E-Learning and Interactive Book (E-Book) to Improve Literacy

The integration of technology in post-secondary education has witnessed a notable expansion, increasingly embraced a variety of teaching and learning tools. Digital textbooks, known as e-textbooks, represent a significant stride in this technological evolution. These resources have become increasingly popular, particularly interactive e-books that incorporate multimedia elements such as videos and quizzes. Mobile e-books are being used more widely in education because of their convenience and improved learning capabilities, including portability, interactive components, and easy access to numerous resources. They cater to different learning preferences and boost involvement with interactive and multimedia content. The study discovered that mobile e-books are especially beneficial for learners in various educational settings, indicating wide relevance across multiple subjects and fields (Suriani et al., 2023).

E-books are more effective than traditional books at enhancing learning outcomes. Interactive e-books are regarded as the most impactful, probably because they can engage users from different age groups and educational levels more thoroughly. This discovery is essential for educational institutions evaluating the incorporation of additional interactive and digital tools into their programs (Letchumanan, 2024).

Further studies have emphasized the importance of interactivity and multimedia components in e-learning environments. For instance, Kumar and Johnson (2019) demonstrate that e-learning tools which include interactive features such as videos, quizzes, and real-time feedback can significantly bolster student understanding and information retention. These tools facilitate an active learning environment where students are not merely passive recipients of information but are actively engaged in constructing their knowledge base through interactive content.

Spencer et al. (2020) explored the application and impact of interactive electronic texts in higher education. It highlights four primary themes: the impact of interactive e-texts on student learning experiences, the connection between these texts and academic success, elements affecting student acceptance and experiences, and duties and roles in utilizing these resources. The assessment highlights the significance of ease-of-use, cost-effectiveness, accessibility, and the active involvement of teachers in enhancing the advantages of interactive e-texts for learners.

The creation of an e-book focusing on public service oversight seeks to enhance the understanding of Civic Education teachers. This initiative is especially pertinent in improving the quality of education regarding public service rights and duties. The research indicates that these specialized e-books can notably enhance teachers' understanding and preparedness to incorporate these subjects into their lesson plans (Nurchotimah et al., 2022).

Studies examining the application of interactive books in the fields of finance and Islamic finance are scarce. The content for an e-book that focuses on the terms, concepts, and models in Islamic finance is one of the collective outputs of the focus group discussion. Some of the key points highlighted are the importance of e-book development is necessary to help students, insurance agents, and researchers understand the complex ideas and models of Islamic finance and takaful. The experts' recommendations for e-book design include quizzes, which can improve comprehension of the material and brief, to-the-point video explanations. They would anticipate that students of all ages could use e-book to comprehend the industrial concept and procedure.

In summary, to design an effective interactive e-book for Islamic finance, begin by defining clear pedagogical objectives, such as enhancing understanding of Shariah principles, governance, and practical applications. Integrate multimedia elements (e.g., videos explaining sukuk structures, quizzes on Islamic ethics) and adaptive features (e.g., personalized learning paths) to cater to diverse learning styles and levels, as highlighted by Suriani et al. (2023) and Kumar and Johnson (2019). Prioritizing user-centered design will ensure accessibility across devices, cost-effectiveness, and intuitive navigation, aligning with Spencer et al.'s (2020) emphasis on ease-of-use.

Conclusion

The digital method enhances accessibility while incorporating modern teaching tools that address a varied range of learners. This personalization boosts learners' involvement and understanding, cultivating a more profound grasp of various areas such as sciences, finance, Islamic finance-governance, and risk management in the realm of the Takaful industry. The effectiveness of these digital learning tools highlights their importance in both enhancing

traditional teaching methods and promoting ongoing professional growth and lifelong education.

Nonetheless, the transition to e-learning platforms comes with its own set of difficulties. Technological obstacles, the expense of digital infrastructure, and the necessity for faculty training represent major challenges that can obstruct the broader implementation of e-learning. Additionally, the research emphasizes the significance of practical experiences, which are frequently difficult to replicate using digital methods. These challenges require a balanced strategy that utilizes both digital and conventional learning methods to enhance educational results. Consequently, although e-learning offers a hopeful path for enhancing Islamic finance education, it necessitates a strategic approach that tackles these complex challenges.

In conclusion, creating an e-book tailored for this industry represents a major progression in the educational field, connecting traditional approaches with contemporary digital learning. This e-book has the potential to enable users to interactively explore intricate Islamic financial concepts and models, improving comprehension and accessibility. The combination of e-learning platforms with this e-book showcases the ability of digital tools to revolutionize educational experiences, incorporating interactive and multimedia features to enhance user involvement and knowledge retention.

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