# DEVELOPMENT OF ISLAMIC RELIGIOUS EDUCATION MATERIALS TO IMPROVE THE QUALITY OF LEARNING AT TRITECH INFORMATIKA PRIVATE VOCATIONAL SCHOOL MEDAN

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**Abstract**
*Minimal use of digital technology in learning can make students bored or less motivated if the digital material presented is not innovative or is only a digital version of a textbook. This study aims to examine in depth the use of digital technology in developing Islamic Religious Education materials at SMK Tritech Informatika Medan. The method used in this study was qualitative field research. Data were collected through observation and interviews. Interviews were conducted with four (4) informants, consisting of Islamic religious education teachers and students. The collected data were analyzed in three stages: data reduction, data presentation, and verification. The results show the use of digital technology in Islamic Religious Education (IS) learning in schools is supported by adequate infrastructure, school policies that encourage the use of digital devices, and an IT-based digital culture. However, obstacles remain, including limited teacher competency and confidence in integrating technology, limited training, classroom management challenges, digital-based learning evaluation, limited student internet access, a digital literacy gap, and limited availability of interactive and contextual digital Islamic education materials. Improving the quality of Islamic religious learning can be done through Tech-Based Islamic Learning, namely by creating applications such as prayer reminders, the Iqra Application, and the Prophet's Stories Application. Project-Based Learning (PjBL) based on Islamic values through the creation of Islamic podcast short films, Islamic content, Islamic posters, and Islamic blogs.*

**Keywords:** *Digital Technology; Islamic Religious Education*

## A. Introduction

Islamic Religious Education plays a crucial role in shaping student character (Santi et al., 2023). In the current era of the industrial revolution 4.0, the Development of digital technology has penetrated various aspects of life, including the world of education (Muis, 2024). The theory of digital literacy was first introduced by Gilster in 1990. Digital literacy is the ability to understand and use information from various online sources, including the analytical skills needed to assess data on digital platforms. In the context of Islamic civilization, technological development has been a key factor in the rise of a great civilization. In Islamic teachings, the use of multimedia technology is not prohibited; rather, it is permitted if it provides significant benefits to human development. Islam consistently emphasizes the value of goodness and harmony, and of change and progress. Islam also encourages its followers to master knowledge in various sectors, including disciplines directly related to multimedia technology.The integration of digital technology into the learning process offers great potential to create more immersive, interactive, and relevant learning experiences (Abas & Supi'ah, 2025).

Theoretically, digital integration in Islamic Religious Education (PAI) learning can be grounded in the Technological Pedagogical Content Knowledge (TPACK) framework, which emphasizes the synergy among material mastery, pedagogical strategies, and technology in the learning process (Sari, 2019). Furthermore, a constructivist approach reinforces the urgency of student-centered learning, in which students actively construct understanding through experience, exploration, and the solving of real-world problems. A contextual approach is also relevant to ensure Islamic Religious Education (ISE) material is directly connected to the world of work and the digital environment students encounter. Therefore, developing ISE materials that integrate digital technologies is a strategic step to improve learning quality and produce graduates who are technologically competent and imbued with Islamic morals (Afifah, dkk, 2021).

In practice, ISE teaching in schools still faces several challenges. The learning process tends to be conventional, using lectures and memorization methods, thus providing little opportunity for students to develop contextual and applicable understanding (Mayer, 2009) Furthermore, ISE materials are often not integrated with students' expertise in information technology, leading students to view this subject as separate from their vocational pursuits. This condition affects low engagement and motivation to learn, especially among students who are familiar with digital devices, applications, and dynamic technological environments on a daily basis.

SMK Swasta Tritech Informatika Medan, as an educational institution focused on information technology, faces unique challenges and opportunities in adapting to digital innovation. Students at this vocational school are already accustomed to using technology in everyday life, so the implementation of technology is natural to them. Digital in Islamic Religious Education learning is expected to increase interest and their understanding of the material. However, the question remains: how can digital technology be optimally utilized to develop Islamic Religious Education materials that are not only informative but also capable of fostering religious values and strong character? The use of digital technology in the Islamic Religious Education learning process is not running well (Manshur & Farida, 2023). Vocational school students face several challenges in using digital technology for Islamic Religious Education materials, including limited access and infrastructure (Prayetno, 2025). In this case, not all students have equal access to digital devices (laptops) or smartphones. Stable internet connection at home. Limited technological facilities at school (number of computers, internet speed, and adequate projectors) are obstacles. for students to seek information related to Islamic Religious Education. In addition, the gap in students' digital competence is a factor that needs to be addressed. Even though students at SMK Swasta Tritech Informatika Medan are already accustomed to the internet and technology, there are differences in their levels of digital literacy and in their ability to use certain applications or learning platforms.

Some students are only familiar with using social media and entertainment, not for learning. Furthermore, the availability of interactive, engaging digital Islamic Religious Education. Materials that align with the vocational school curriculum may still be limited. The available materials are lacking. relevant to the context of vocational school students'

lives, or not utilizing their potential for technology interactivity. Several students still complain that Islamic Religious Education has not yet addressed technological aspects and continues to use the old system (Sipahutar, 2022).

The lack of digital technology in learning can leave students bored or less motivated if the digital material presented is not innovative or is merely a digital version of textbooks. The Islamic Religious Education curriculum in the digital era requires support for creative and relevant learning media. However, the Development of media. This technology-based learning is not always simple. Besides funding, developing interactive, Islamically compliant content requires collaboration among Islamic education experts, technology experts, and education practitioners.

The digital era brings complex ethical challenges, including in the use of social media and other applications that can negatively influence students. The Islamic Religious Education curriculum must provide guidance and a strong understanding so that students can behave in accordance with Islamic teachings amid rapid digital developments (Wahyuni, 2024). Islamic Religious Education teachers may not yet fully master or be confident in integrating digital technology in learning (Hajri, 2023). This is caused by a lack of training or support for teachers in developing digital-based Islamic Education materials (Muflihin, 2020).

Apart from that, there are also challenges faced by Islamic Religious Education teachers. Managing the class when students are using digital devices, such as when they are more focused on the virtual world rather than on Islamic Religious Education material, and when misuse of digital devices exceeds the limitations of teacher control. Ease of internet access enables students to obtain religious information from various sources whose accuracy cannot all be guaranteed. On the other hand, the Islamic Religious Education curriculum faces the challenge of equipping students with critical thinking skills to distinguish valid information from deviant teachings and avoid being influenced by them. Therefore, clear rules and ethics for technology use are needed. In evaluating digital-based learning, teachers face challenges such as designing effective evaluation methods for Islamic Religious Education material delivered through digital technology and ensuring the Authenticity and integrity of students' answers in digital-based exams or assignments.

This study aims to examine in depth the use of digital technology in the Development of Islamic Religious Education materials at SMK Tritech Informatika Medan. The focus of this study is to identify the types of digital technology that can be integrated and to formulate strategies for optimizing their use to achieve the comprehensive Islamic Religious Education learning objectives. The results of this study can make a significant contribution to the Development of Islamic Religious Education learning innovations in the digital era, especially at SMK Tritech Informatika Medan, and serve as a reference for other educational institutions facing similar challenges.

## B. Method

This research employed qualitative research methods. Qualitative research is a structured, planned, and systematic activity (Al Farabi et al., 2024). The data sources in this study consisted of primary and secondary data. Primary data were obtained through interviews and direct field observations. Secondary data came from literature such as books and journals, as well as other official documents. This research was conducted at SMK Tritech Informatika Medan located at Jl. Bhayangkara No. 484, Indra Kasih Village, Medan Tembung District, Medan City, North Sumatra. This research was conducted from June to November 2025.

To produce data that accurately describes the actual situation, this study uses a series of data collection techniques based on field-observed phenomena. Data collection is carried out through observation, interviews, and document review. In this study, there are 4 informants: 2 teachers and 2 students. Interviews are conducted in-depth and openly. In order to obtain accurate and valid information that can be accounted for. The researcher also conducted observations to observe: 1) The researcher directly reviewed the research location, as well as the conditions around the school environment, including both classrooms, prayer rooms, and laboratories. 2)Observe ongoing teaching and learning activities, including the use of strategies and methods. 3) Observing the competence and pedagogy of teachers in teaching Islamic religious education. In addition, the researcher also conducted document studies, namely: 1) The researcher recorded the availability of primary reading books and supporting readings such as the availability of the Koran, hadith books, fiqh books, etc. 2) The researcher recorded the availability of applications used by Islamic religious education teachers, 3) The researcher recorded the availability of school facilities and infrastructure for teaching and learning facilities. 4) Researchers recorded the digital technology used and the teacher's mastery in using it.

The data analysis technique employed three data acquisition procedures, as follows: 1) Data reduction: summarizing, selecting key points, focusing on important points, namely themes and patterns, and eliminating unnecessary data; 2) Data presentation: the process of collecting information organized according to the necessary categories or data groupings; 3) Data verification: conducted when the initial conclusions presented are still provisional and will likely change if they are not supported by strong evidence in the next stage of data collection

## C. Finding and Discussion

### 1. Forms of Digital Technology that Can Be Integrated into Islamic Religious Education Learning

Based on interviews and observations, the use of digital technology in Islamic Religious Education learning at SMK Tritech Informatika Medan, is still limited to PowerPoint as a presentation medium, application-based quizzes, Islamic videos, Zoom learning applications, and online discussion media. The forms of digital technology used at SMK Tritech Informatika Medan can be categorized into three parts:

a. Hardware: Mobile phones, laptops, and projectors are used in teaching and learning activities. Students are required to bring these devices daily to access digital materials and presentations.
b. Software: Applications such as Microsoft PowerPoint, Microsoft Word, and the Queper quiz application are the main tools in Islamic Religious Education learning, both for presentation assignments and assessments.
c. Digital Media (Learning Content):
Teachers utilize Islamic videos, interactive materials, and online discussions to reinforce religious concepts and instill media ethics.

Digital media is indeed effective for supporting visual comprehension and quickly assessing student understanding, but it remains fundamental. Developing materials that are appropriate for the digital era and still incorporate authentic Islamic values must be a priority. This includes creating Islamic Religious Education materials relevant to students' digital lives, including topics such as digital ethics, the influence of social media on morals, and how to use technology in an Islamic manner. Social media platforms like YouTube, Instagram, and TikTok can be used to disseminate engaging and easily understood Islamic Religious Education materials, while also providing examples of how to interact effectively online. In this context, the Islamic Religious Education curriculum needs to emphasize strengthening morals and character, so that students can use technology wisely in accordance with Islamic guidance (Kismanto, 2021).

The use of digital technology at SMK Tritech Informatika Medan remains at a basic level, whereas its actual potential for integration is far broader. Teachers, as educators, are required to master various forms of digital technology to create an active, engaging, and enjoyable learning environment. Therefore, continuous training and education for Islamic Religious Education teachers need to be strengthened, particularly in mastering technology and digital-based teaching methods.

There are several digital technologies available to support Islamic Religious Education learning for students at SMK Tritech Informatika Medan, such as Google Classroom, Moodle, and Edmodo. These applications are useful for managing materials, assignments, exams, and online discussions, as well as discussion forums for tafsi (Islamic interpretation) and hadith (Islamic teaching). Applications used to improve basic competencies include Quran.com, which can be used for translations and audio murattal (recitation). Furthermore, the Hadith Encyclopedia of the Book of the Nine Imams application is useful for searching hadith by theme. The Ruang Guru application is useful for structured learning videos, and Zenius provides supporting materials for Islamic Religious Literacy. These technologies also support Islamic digital literacy-based learning. When delivering material, teachers can utilize digital presentation and design tools such as Canva and Prezi to create infographics, visual modules, and interactive presentations. Visualizing material such as the history of Islamic civilization or the concept of praiseworthy morals becomes more engaging and easier to understand. This is important for vocational high school students who tend to prefer visual and practical learning. For evaluation, teachers can use interactive quiz applications such as Kahoot! and Quizizz.

This technology makes the assessment process more enjoyable and competitive in a healthy way. Students can see results in real time, thereby increasing learning motivation.

In addition, teacher professional Development is conducted at the beginning of each semester. However, the available data do not indicate that the professional Development activities are sustained, involve mentoring, or include regular peer sharing. Research by institutions such as the Learning Policy Institute demonstrates that the most effective professional Development is continuous, practical, and collaborative. Teacher training should not focus solely on technical skills (e.g., using PowerPoint), but also on designing creative assignments, developing assessment rubrics, managing digital classrooms, and evaluating students' religious attitudes and values.

The use of these technologies aligns with Islamic principles that emphasize the importance of employing tools and resources for beneficial purposes. This is supported by Qur'an Surah Al-Jasiyah, verse 13.

وَسَخَّرَ لَكُمْ مَّا فِى السَّمٰوٰتِ وَمَا فِى الْاَ رْضِ جَمِيْعًا مِّنْهُ ۗ اِنَّ فِيْ ذٰلِكَ لَاٰ يٰتٍ لِّقَوْمٍ يَّتَفَكَّرُوْنَ

"And He has subjected to you whatever is in the heavens and whatever is on the Earth—all from Him. Indeed, in that are signs for a people who give thought" (Qur'an, Al-Jathiyah: 13).

According to Al-Maraghi, the verse indicates that everything in the heavens and the Earth, including science and technology, is a gift from Allah that has been made subservient for the benefit of humankind. Therefore, human beings are obliged to utilize these endowments in beneficial ways and in accordance with the sharia (Al-Maraghi, 2010). Similarly, Quraish Shihab explains that the subjugation of nature by Allah includes human intellectual potential and innovation, such as the emergence of digital technology (Shihab, 2007).

Thus, integrating technology into religious education is not merely a practical necessity but also a form of gratitude for the blessing of knowledge. The use of hardware, software, and digital media in Islamic Religious Education reflects the fulfillment of Allah's mandate to manage and utilize His creation for the welfare and education of the ummah. The various forms of digital technology integrated into Islamic Religious Education learning at SMK Tritech Informatika Medan illustrate the implementation of the principle of *taskhīr* (the subjugation of Allah's creation for human benefit) as mentioned in Qur'an Al-Jathiyah, verse 13.

Based on the interpretations of Al-Maraghi and Quraish Shihab, this verse affirms that all of Allah's creations, including science and technology, are subject to assisting human beings in achieving a better life. Therefore, the use of technology in Islamic religious education constitutes an expression of gratitude and a sense of responsibility in wisely utilizing Allah's blessings.

**Strategies for the Utilization of Digital Technology in Islamic Religious Education Learning**

Based on observations and field interviews conducted at SMK Tritech Informatika Medan, the utilization of digital technology in Islamic Religious Education learning has

been implemented in a well-directed manner. Technology is employed to enrich learning media, such as PowerPoint presentations, videos, and interactive applications. This makes the learning process more engaging and easier to understand. However, the current use of digital technology in Islamic Religious Education materials is still dominated by PowerPoint as the primary delivery medium and by quiz applications (e.g., Queper) as evaluation tools. Students are required to bring smartphones and laptops, while the school provides computer laboratories and projectors to support visualization.

Although the basic infrastructure is adequate and a culture of technology use has been established, the integration of technology into Islamic Religious Education learning remains limited in substance. Within the SAMR model (Substitution, Augmentation, Modification, Redefinition), the use of PowerPoint and digital quizzes as replacements for traditional methods (lectures and printed worksheets) falls under the Substitution/Augmentation stage. Technology replaces older tools without a significant transformation of the learning tasks themselves. In the context of Islamic Religious Education, which requires understanding values, morality, reflective behavior, and character Development, this stage is still far from optimal.

Field findings at SMK Tritech Informatika Medan indicate that realistic strategies for strengthening reflective learning and internalizing values through digital technology include using Google Classroom, class blogs, and digital journals. Islamic Religious Education teachers reported that through these media, students can be assigned to write religious reflections, such as their experiences in applying honesty, responsibility, and Islamic social ethics in daily life. According to informants, this approach helps students connect Islamic Religious Education materials with their personal experiences, ensuring that learning does not stop at the cognitive level but also touches the affective domain and character formation. Within the SAMR framework, this practice tends toward the Modification stage, as the structure of learning tasks shifts from merely answering questions to producing reflections on personal and contextual value. This finding aligns with Abuddin Nata's view that Islamic education should prioritize the internalization of values and moral formation rather than merely knowledge transfer (Nata, 2014).

Field data also reveal that project-based Islamic Religious Education learning supported by digital technology is considered relevant for further Development at SMK Tritech Informatika Medan. Teachers suggested that students could be assigned projects such as producing da'wah videos, creating digital posters on adolescent morality, or creating educational content on Islamic ethics in social media use. Such activities encourage collaboration, foster creativity, and cultivate responsibility for the learning products created. In this practice, technology no longer functions merely as a presentation tool. However, it becomes a medium for the production and dissemination of Islamic values that are more contextually relevant to students' lives. This is consistent with Rusman's argument that project-based learning effectively enhances conceptual understanding and 21st-century skills by engaging learners through real experiences and problem-solving (Rusman, 2017).

Further findings show that the use of digital technology for contextual learning through case studies and moral discussions is perceived as effective in Islamic Religious Education instruction. Teachers frequently relate materials to contemporary issues, such as misuse of social media, the spread of hoaxes, cyberbullying, and intolerance, presented in the form of videos or digital articles. These cases are then discussed with students through online forums or technology-assisted classroom discussions. According to teachers, this approach encourages critical thinking, enables students to evaluate actions in line with Islamic values, and trains them to make responsible moral decisions. Such practices indicate movement toward the Redefinition stage in the SAMR model, as technology enables learning experiences that would be difficult to achieve conventionally. Value-based education must be contextual and connected to learners' realities to build strong character.

The validity of learning theory supported by multimedia literature suggests that presentation media should be designed according to principles such as coherence, signaling, segmenting, redundancy, and modality, so that students' cognition is not overloaded and materials can be understood more easily. Slides that consist solely of text, without appropriate graphics or animations, may instead create a distraction. Without designs grounded in these principles, PowerPoint may function merely as visual decoration rather than supporting deep understanding. On the other hand, providing school Wi-Fi exclusively for teachers while students rely on personal hotspots reflects unequal access. The literature on the digital divide indicates that such differentiation can affect equality in learning outcomes and student satisfaction. Students with stable internet quotas tend to have better digital learning experiences than those with limited access.

This integration of technology aligns with Islamic values that encourage people to seek and develop knowledge through modern means. Its normative foundation can be found in Qur'an Al-'Alaq, verses 1–5.

اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ ۝ خَلَقَ الْإِنسَانَ مِنْ عَلَقٍ ۝ اقْرَأْ وَرَبُّكَ الْأَكْرَمُ ۝ الَّذِي عَلَّمَ بِالْقَلَمِ ۝ عَلَّمَ الْإِنسَانَ مَا لَمْ يَعْلَمْ

Here is the academic English rendering of the continuation of your manuscript. I maintain the formal research tone, clarity, and consistency with the earlier translated sections.

"Read in the name of your Lord who created. He created man from a clinging substance. Read, and your Lord is the Most Generous, who taught by the pen. He taught man that which he knew not" (Qur'an, Al-'Alaq: 1–5).

According to Ibn Kathir, these verses contain the first command to read and to seek knowledge (Ibn Kathir, 2011). The phrase *bi al-qalam* (by the pen) signifies the importance of tools and media in the learning process. In the modern context, digital technology may be regarded as the contemporary "pen," a medium for disseminating knowledge. Likewise, Quraish Shihab in *Tafsir Al-Mishbah* emphasizes that the revelation of Surah Al-'Alaq, verses 1–5, marks the beginning of a civilization of knowledge, in which humans are urged to use any means to acquire and transmit knowledge, as long as it does not contradict divine values (Shihab, 2007). Therefore, the use of digital technology in Islamic Religious

Education actualizes Allah's command to learn and develop knowledge through media inspired by Him continuously.

Based on the research findings, strategies to optimize the use of digital technology in Islamic Religious Education learning at SMK Tritech Informatika Medan should focus on shifting the role of technology from a mere presentation medium to a reflective, contextual, and value-oriented learning tool. Islamic Religious Education teachers need to develop digital materials that connect Islamic teachings with students' digital realities, including social media ethics, digital responsibility, and Islamic uses of technology. This strategy enables Islamic Religious Education content not only to be cognitively understood but also to be internalized in students' daily behavior.

Furthermore, optimization can be pursued through a wider range of digital media, such as Islamic reflective videos, online case-based discussions, and the use of integrated learning platforms (LMS) to facilitate interaction, assessment, and continuous feedback. Field findings also indicate the need to enhance teacher competence through sustained training so that teachers can design creative and meaningful technology-based Islamic Religious Education instruction. By implementing these strategies, digital technology is expected to support the comprehensive achievement of Islamic Religious Education learning objectives, namely the balanced Development of students' cognitive, affective, and psychomotor domains.

**Supporting and Inhibiting Factors in the Utilization of Digital Technology in Islamic Religious Education Learning**

Based on interview results, students become more active in discussions and demonstrate better understanding of religious concepts through visualization and interactive applications such as Queper. Beyond the cognitive aspect, improvement also involves cultivating digital morality. Teachers instill Islamic ethical values in social media use through topics such as social media etiquette (Grade X) and guarding one's speech in the digital world (Grade XI). The use of digital technology to improve the quality of Islamic Religious Education materials at SMK Tritech Informatika Medan is considered highly effective, particularly in the cognitive domain. Digital media such as PowerPoint and the Queper quiz application help students understand materials in a more structured and visual manner, making previously abstract content easier to grasp. This is reflected in increased participation in classroom discussions and students' activeness in responding to application-based questions during learning activities.

A primary supporting factor is the relatively adequate availability of technological facilities and infrastructure. The school provides computer laboratories and classroom projectors. In addition, school policies requiring students to bring digital devices, such as smartphones and laptops, further support the integration of technology in Islamic Religious Education learning. These conditions create a conducive environment for implementing digital media. Another supporting factor is the school's established digital culture. As an informatics-based vocational institution, students are relatively accustomed to using digital technology in their daily academic activities. This situation facilitates Islamic Religious Education teachers in implementing technology-based learning, whether

in delivering materials, assigning tasks, or conducting evaluations. Moreover, teachers' openness to technological use is an important factor in sustaining digital-based Islamic Religious Education instruction.

Nevertheless, interviews indicate that the use of digital technology in Islamic Religious Education learning still faces several obstacles. Teachers reported that limited mastery and lack of confidence in integrating technology constitute major barriers, influenced by the minimal training and support in developing digital-based Islamic Religious Education materials. Teachers also face challenges in classroom management when students use digital devices, including reduced focus on Islamic Religious Education materials, potential misuse of gadgets, and difficulty in controlling access to religious information whose validity may be uncertain.

From an evaluation perspective, teachers struggle to design effective digital assessments and verify the Authenticity of students' answers, resulting in suboptimal evaluation processes. Another inhibiting factor is limited internet access at school, where Wi-Fi is available only for teachers, while students rely on personal hotspots. Although vocational students are generally familiar with technology, interviews reveal a digital literacy gap, as some are more accustomed to using it for entertainment than for learning. In addition, the availability of interactive, contextual digital Islamic Religious Education materials suited to vocational students remains limited.

However, these improvements have not yet comprehensively addressed the overall quality of Islamic Religious Education materials. Instruction remains dominated by information delivery and memorization of concepts. At the same time, value internalization, religious reflection, and the formation of Islamic attitudes and behavior have not been optimally developed through digital technology. Technology still primarily serves as a delivery aid rather than a medium for transforming students' religious learning experiences. These findings indicate that the enhancement of Islamic Religious Education quality through digital technology at SMK Tritech Informatika Medan is still at the stage of strengthening basic understanding and has not yet reached the affective and psychomotor dimensions that constitute the essence of Islamic Religious Education .

When compared with the broader potential of digital media, the improvement remains limited. Nurhayati (2024) states that technology-based Islamic Religious Education learning becomes optimal when teachers move beyond presentation tools and integrate interactive media, application-based evaluation, and digital collaboration. This means that to enhance learning quality, teachers at SMK Tritech Informatika Medan need to expand the use of digital technology from simple presentation aids into creative, collaborative, and experientially grounded Islamic learning media. Consequently, technological advancement at the school continues to improve cognitive understanding but has not fully addressed the affective and psychomotor aspects that embody the spirit of Islamic Religious Education

Within the context of Islamic Religious Education, this transformation enables students to explore Islamic topics through platforms such as YouTube, Islamic podcasts, interactive Qur'an applications, and online discussion forums addressing moral and social

themes. This shift not only improves students' comprehension but also encourages the Development of reflective religiosity grounded in real personal experiences. The integration of digital technology into the Development of Islamic Religious Education resources has a significant positive impact on the learning process. Literature reviews and analyses of educational practices reveal that technology enhances students' active engagement in learning. The interactivity offered by digital media creates more appealing learning experiences and allows students to explore Islamic Religious Education materials independently and collaboratively (Putriana, 2024).

This ethical foundation is also in line with the words of Allah in the Qur'an, Al-Hujurat, verse 6.

يَا أَيُّهَا الَّذِينَ آمَنُوا إِن جَاءَكُمْ فَاسِقٌ بِنَبَإٍ فَتَبَيَّنُوا أَن تُصِيبُوا قَوْمًا بِجَهَالَةٍ فَتُصْبِحُوا عَلَىٰ مَا فَعَلْتُمْ نَادِمِينَ

"O you who believe! If a wicked person comes to you with news, verify it thoroughly (tabayyun), lest you inflict a calamity on a people without knowing their condition, which would cause you regret." (QS. (Al-Hujurat: 6)

According to Ibn Kathir (2011), the above verse implies a directive instructing Muslims to verify all information received before disseminating it. This is particularly relevant in the digital context, where fake news (hoaxes) spreads easily. On the other hand, M. Quraish Shihab (2007) also interprets this verse as containing the value of information literacy, namely the ability to think critically and ethically about news circulating, especially on social media. Furthermore, fostering digital ethics is also in line with the saying of the Prophet Muhammad (peace be upon him):

مَنْ كَانَ يُؤْمِنُ بِاللَّهِ وَالْيَوْمِ الْآخِرِ فَلْيَقُلْ خَيْرًا أَوْ لِيَصْمُت

"Whoever believes in Allah and the Last Day should speak what is good or remain silent" (Reported by al-Bukhari No. 6018 and Muslim No. 47).

This hadith teaches a fundamental principle of digital communication ethics, namely, exercising caution in writing, speaking, or disseminating information in cyberspace. Technology-based learning, therefore, should not be measured solely by academic achievement, but also by the extent to which it instills Islamic values in students' digital lives. Learners are expected to develop awareness that every statement, post, or shared content carries moral consequences and accountability.

This prophetic guidance also resonates with the integrative relationship between knowledge and faith, as emphasized in Qur'an Al-Mujadalah, verse 11.

يٰٓاَ يُّهَا الَّذِيْنَ اٰمَنُوْٓا اِذَا قِيْلَ لَكُمْ تَفَسَّحُوْا فِى الْمَجٰلِسِ فَا فْسَحُوْا يَفْسَحِ اللّٰهُ لَكُمْ ۚ وَاِ ذَا قِيْلَ انْشُزُوْا فَا ۨنْشُزُوْا يَرْفَعِ اللّٰهُ الَّذِيْنَ اٰمَنُوْا مِنْكُمْ ۙ وَا لَّذِيْنَ اُوْتُوا الْعِلْمَ دَرَجٰتٍ ۗ وَا للّٰهُ بِمَا تَعْمَلُوْنَ خَبِيْر

"O you who believe! When it is said to you, 'Make room in the assemblies,' then make room; Allah will make room for you. And when it is said, 'Rise,' then rise; Allah will raise those who believe among you and those who have been given knowledge by degrees. Furthermore, Allah is All-Aware of what you do" (Qur'an, Al-Mujadalah: 11).

Al-Maraghi (2010) interprets this verse as emphasizing the virtue of knowledge and the merit of the believers. Beneficial knowledge, including the use of technology for educational purposes, becomes a means of attaining honor in the sight of Allah. Similarly, Ibn Kathir (2011) explains that Allah elevates those who possess knowledge because they are able not only to learn it but also to practice it.

The use of digital technology can therefore be understood as a synergy between knowledge mastery and moral Development. As affirmed in Qur'an Al-Mujadalah verse 11, Allah raises the rank of those who believe and those who are knowledgeable. Both Al-Maraghi and Ibn Kathir stress that beneficial knowledge is knowledge that is implemented for goodness and public benefit. In this context Islamic Religious Education teachers at SMK Tritech Informatika Medan function not merely as transmitters of religious knowledge but also as guides of digital morality, ensuring that students are capable of using technology responsibly, ethically, and in accordance with Islamic values.

**E. Conclusion**

The utilization of digital technology in the Development of Islamic Religious Education materials at SMK Tritech Informatika Medan, has been implemented effectively, remains relevant, carries educational value, and reflects a spiritual dimension. Technology not only enriches learning methods and media but also instills Islamic values in the context of modern life. The digital technologies employed include hardware such as smartphones, laptops, and projectors, as well as software such as Microsoft PowerPoint, Microsoft Word, and the Queper quiz application. Digital media, including Islamic videos, interactive materials, and online discussions, support these. Strategies for technology utilization in the Islamic Religious Education learning process are implemented through the use of Google Classroom to facilitate online discussions and case analyses, class blogs that provide more varied digital media such as Islamic reflective videos, online sermons and lectures, and the Queper platform as an integrated learning management system (LMS) that supports interaction, assessment, and continuous feedback.

The integration of digital technology into Islamic Religious Education learning at this school is supported by adequate infrastructure, institutional policies that encourage the use of digital devices, and a student digital culture shaped by the vocational school's informatics orientation. Nevertheless, several challenges remain, including limited teacher competence and confidence in integrating technology, insufficient training, difficulties with classroom management and digital assessment, restricted internet access for students, digital literacy gaps, and limited availability of interactive, contextually relevant digital Islamic Religious Education materials. Islamic Religious Education teachers are therefore expected to continuously enhance their digital and pedagogical competencies to optimize their use of technology. Teachers need to innovate in creating engaging technology-based learning media, such as interactive videos, Islamic infographics, and digital quizzes. Moreover, teachers should model ethical technology use and guide students to filter and utilize digital information in Islamic and responsible ways.

In addition, the school should provide adequate digital infrastructure, including Wi-Fi networks accessible to all students, optimally functioning computer laboratories, and regular digital literacy training for both teachers and learners. Schools also need to formulate digital ethics policies grounded in Islamic values as guidelines for the entire academic community. Students, in turn, are expected to use technology productively and ethically, recognizing that it is a means to increase knowledge and strengthen faith. By understanding the principles of benefit and Islamic ethics in digital engagement, students can develop into a generation that is intellectually, emotionally, and spiritually competent.

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