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Integrating Visual Communication Design into Islamic Religious Education: Educational Innovation in the Digital Age

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Abstract

This study aims to describe and analyze the integration of visual communication design in Islamic Religious Education (PAI) learning to improve students' understanding and engagement. The study employed a qualitative approach using a field research method conducted in several schools and madrasahs in Bekasi Regency. Data were collected through observation, interviews, and documentation involving teachers and students engaged in visual-based learning activities. Data analysis was carried out using the interactive model of Miles, Huberman, and Saldaña through data reduction, data display, and conclusion drawing. The findings reveal that the integration of visual communication design through the use of PowerPoint, Canva, infographics, animated videos, and interactive media was able to improve students' understanding of abstract Islamic education materials into more concrete and contextual learning experiences. Technology-based visual media also enhanced students' engagement, attention, motivation, and active participation during the learning process. Furthermore, the integration of digital technology in Islamic Religious Education supports the creation of more interactive, communicative, and relevant learning environments for the digital generation. However, the implementation of visual communication design still faces several challenges, including limited technological facilities, teachers' digital competencies, and limited time for developing visual learning media. This study indicates that visual communication design can serve as an effective pedagogical approach in supporting the transformation of Islamic Religious Education learning in the digital era.

Keywords: Visual Communication Design, Islamic Religious Education, Digital Learning Media, Student Engagement

INTRODUCTION

Islamic Religious Education (PAI) plays a strategic role in fostering students' character, moral values, and spiritual development based on Islamic teachings. In the context of globalization and rapid technological advancement, PAI is expected not only to strengthen students' religious understanding but also to equip them with the ability to apply Islamic values in their daily lives. However, achieving these objectives remains challenging. PAI instruction continues to rely predominantly on teacher-centered learning, characterized by one-way lectures, memorization, and limited use of interactive and innovative learning media (Maqhfiroh et al., 2026; Wijayanti et al., 2026). Such instructional practices limit students' active participation and meaningful engagement in the learning process, making it more difficult for students to develop a deeper

understanding of religious concepts and to relate Islamic teachings to authentic real-life contexts. As a result, many students become less motivated and less engaged during the learning process, hindering the achievement of PAI's broader educational goals of fostering religious character and internalizing Islamic values (Prameswara & X, 2023).

The current generation, often referred to as digital natives, has a different mindset, learning habits, and expectations than previous generations. These children and adolescents are growing up in a digital era filled with visual information and interactive technology. They are more accustomed to communicating and learning through visual media, such as videos, graphics, or digital applications, compared to traditional text-based or lecture-based learning method (Rohman et al., 2023). In the context of learning, these characteristics demand a new approach that can integrate their preference for visual media with learning objectives, including in Islamic Religious Education. Visual communication design is a relevant approach to address these needs. Accordingly, Visual Communication Design (VCD) offers a promising approach to addressing these learning needs by integrating visual communication principles into instructional design.

Previous studies have explored the use of various visual and interactive learning media in Islamic Religious Education (PAI), including digital learning platforms, interactive multimedia, and game-based instructional media (Chalim & Prahesti, 2021; Firdausy & Latif, 2026; Maqhfiroh et al., 2026). Collectively, these studies consistently demonstrate that integrating visual and technology-assisted learning media enhances students' motivation, engagement, conceptual understanding, and learning outcomes in PAI. Despite employing different types of instructional media, these studies share a common emphasis on improving learning outcomes through the use of visual media, reflecting a growing interest in technology-supported PAI instruction.

Despite these promising findings, existing studies have primarily focused on evaluating the effectiveness of specific instructional media rather than examining how systematic Visual Communication Design (VCD) principles can be integrated as a comprehensive pedagogical framework for Islamic Religious Education. Consequently, limited attention has been given to how VCD principles such as clarity, visual hierarchy, aesthetics, consistency, and contextual relevance can systematically guide teachers in designing meaningful learning experiences. Moreover, little empirical evidence is available regarding how these principles are implemented in authentic Islamic Religious Education classrooms, particularly within Indonesian school contexts. Addressing this gap, the present study investigates the integration of VCD principles into PAI learning through qualitative field research conducted in Indonesian schools. Unlike previous studies that primarily evaluated the effectiveness of individual visual media, this study conceptualizes VCD as a pedagogical framework and provides empirical evidence on how its principles are implemented in authentic classroom practices to enhance students' engagement and conceptual understanding.

Visual Communication Design (VCD) applies visual elements such as images, typography, colour, layout, and animation to communicate information clearly and effectively. In educational contexts, VCD supports meaningful learning by presenting complex concepts through structured and engaging visual representations. Principles such as clarity, visual hierarchy, consistency, aesthetics, and contextual relevance enable teachers to design instructional materials that are easier to understand and more relevant to students' learning experiences (Mamis et al., 2023; Moeljadi, 2013). Applied to Islamic Religious Education (PAI), these principles enable teachers to present abstract religious concepts in more concrete and meaningful ways, thereby helping students connect Islamic teachings with authentic real-life situations. This approach is particularly relevant for today's digital-native learners and aligns with the Cognitive Theory of Multimedia Learning, which posits that meaningful learning occurs when learners actively engage in selecting relevant information, organizing it into coherent mental structures, and integrating it with prior knowledge through

well-designed multimedia instruction (Mayer, 2024). Consequently, VCD provides a pedagogically meaningful framework for enhancing students' engagement, conceptual understanding, and internalization of Islamic values.

This study contributes to the advancement of Islamic Religious Education by positioning Visual Communication Design (VCD) as a pedagogical framework rather than merely a visual learning medium. It provides practical insights for teachers in designing visually effective and pedagogically meaningful PAI instruction that aligns with the demands of twenty-first-century learning while strengthening students' understanding and internalization of Islamic values (Rogahang et al., 2024).

METHOD

This study employs a qualitative approach using field research to describe and analyze the integration of visual communication design into Islamic Religious Education instruction to enhance students' understanding and engagement. The qualitative approach was chosen because this study focuses on understanding natural learning phenomena through the experiences, interactions, and perceptions of research subjects in real-world learning contexts (Moleong, 2017; Sugiyono, 2017).

The study was conducted at three junior high schools and Islamic madrasahs in Bekasi Regency that have integrated technology-based visual media into Islamic Religious Education instruction, such as Canva, PowerPoint, animated videos, infographics, Quizizz, and Wordwall. These research sites were purposively selected because they represented schools that had actively implemented digital visual media in classroom learning, providing an appropriate context for examining the integration of visual communication design in Islamic Religious Education. Data were collected from January to May 2026. The participants consisted of eight Islamic Religious Education teachers and nine students who were directly involved in the implementation of visual media-based learning. Participants were selected purposively based on their experience in using or participating in technology-supported learning activities.

Data collection methods included classroom observation, semi-structured interviews, and documentation. Classroom observations were conducted during Islamic Religious Education lessons to examine how visual communication design was implemented, the types of visual media used, teacher–student interactions, and students' engagement throughout the learning process. Each school was observed six times during the research period. Semi-structured interviews were conducted using an interview protocol focusing on teachers' instructional practices, the implementation of visual communication media, students' learning experiences, perceived benefits, and implementation challenges. Each interview lasted approximately several minutes. Documentation was used to complement the findings, including lesson plans, presentation slides, photographs of learning activities, visual learning media, and other supporting instructional documents.

Data analysis was conducted using the interactive analysis model developed by Miles, Huberman, and Saldaña, consisting of data reduction, data display, and conclusion drawing (Miles et al., 2014). After the interview recordings were transcribed and the observation notes had been compiled, the researcher reduced the data by selecting and organizing information relevant to the research objectives. The reduced data were then compared across observations, interviews, and documentation to identify consistent findings regarding the implementation of visual communication design in Islamic Religious Education. Finally, the findings were presented descriptively and interpreted to draw conclusions based on patterns identified from the field data.

The validity of the data was established through source triangulation and methodological triangulation by comparing information obtained from teachers, students, classroom observations, focus group discussions (FGDs), and supporting documentation. Source triangulation was implemented by comparing participants' perspectives across different schools and participant groups, while methodological triangulation

was achieved by comparing evidence obtained through classroom observations, semi-structured interviews, FGDs, and documentation. The FGDs were conducted to validate emerging themes, encourage interaction among participants, and gain deeper insights into their shared experiences regarding the implementation of Visual Communication Design (VCD) in Islamic Religious Education learning. Member checking was carried out by confirming interview and FGD summaries with several participants to ensure the accuracy of the researcher's interpretations. In addition, the research process, including data collection procedures, coding decisions, and analytical memos, was documented systematically to maintain the credibility, dependability, and trustworthiness of the findings.

RESULTS AND DISCUSSION

Research Findings

Implementation of Visual Communication Design in Islamic Education

Based on observations conducted at several schools and madrasahs in Bekasi Regency, it was found that Islamic Religious Education teachers have utilized various technology-based visual media in the learning process. The media used include PowerPoint, Canva, animated videos, infographics, digital posters, and interactive learning tools such as Quizizz and Wordwall. These media support the delivery of Islamic Religious Education content, making it more engaging, communicative, and easier for students to understand. The observation and interview findings indicate that teachers consistently selected different forms of visual media according to the learning objectives and the characteristics of the instructional materials.

The use of visual communication design is evident in the presentation of materials on Islamic creed, worship, Islamic history, and ethics. In the creed section, teachers use infographics and visual diagrams to explain the relationship between the pillars of faith and their application in daily life. In the worship material, animated videos are used to explain the procedures for *wudu* and prayer, helping students understand the practical aspects of worship more concretely. Meanwhile, in the Islamic history material, educational videos and visual illustrations are used to explain the life and struggles of Prophet Muhammad and the early development of Islam. These findings suggest that visual communication media facilitate the presentation of abstract and procedural concepts by transforming them into more concrete and easily understood learning materials.

In addition, teachers also stated that technology-based visual media can boost students' motivation to learn. When lessons incorporate animated videos or interactive quizzes, students appear more enthusiastic and actively ask questions throughout the learning process. The use of interactive media, such as Quizizz and Wordwall, also encourages students to engage directly in the learning process through quizzes and educational games grounded in Islamic values. One teacher explained,

> *"Students become more enthusiastic when learning activities involve animated videos and interactive quizzes because they are more interested in the lesson and actively participate in classroom discussions."*

This statement is consistent with the classroom observations, which showed increased student participation during visually supported learning activities.

From the students' perspective, interview results indicate that visual-based learning is considered more engaging and enjoyable. Students reported finding it easier to understand the material when teachers used images, videos, and attractive colors compared to lessons that relied solely on verbal explanations. Some students also noted that visual media help them retain the material longer because the information is presented clearly and systematically. One student stated

"I find it easier to understand and remember the lesson when the teacher uses pictures, videos, and colorful presentations because the material is clearer and more interesting".

These findings indicate that integrating visual communication design contributes to improving students' learning experiences by making Islamic Religious Education more engaging, interactive, and easier to comprehend.

Forms of Visual Media Use in Islamic Education

The research findings indicate that the integration of visual communication design into Islamic Education (PAI) instruction is implemented through various forms of visual learning media tailored to the instructional content and students' needs. An interesting finding emerged when the researcher interviewed a member of the Bekasi Regency Association of Similar Professional Expertise (APKS): guidance on creating digital learning media using the Canva app had already been provided, and many teachers were already skilled and applying it directly in their teaching.

a. Use of Infographics and Concept Maps

Teachers use infographics to present conceptual and systematic material, such as the pillars of Islam, the pillars of faith, worship practices, and moral values. Infographics are designed by combining icons, colors, illustrations, and brief points of information so that the material is easier for students to understand.

Based on observations, infographics help students understand the relationships between concepts in a more structured way. Teachers reported that presenting material through infographics helps students grasp core concepts more quickly because the information is displayed concisely and visually. Additionally, students appear to retain the material more easily when information is presented in the form of images and diagrams rather than lengthy text. One teacher explained

"Students understand the relationships between concepts more easily when the material is presented through infographics because the information is organized visually and is easier to remember."

These findings indicate that infographics facilitate students' conceptual understanding by presenting complex information in a clear and systematic visual format.

Figure 3. Flowcharts illustrating the steps for wudu

Figure 2. the procedure for paying zakat

Figure 1. the Prophet's Isra' and Mi'raj

The flowchart illustrating the procedure for performing wudu is not only presented during classroom instruction but also reproduced and displayed on a board near the entrance to the prayer room's wudu area, as observed at SMPIT 01. In addition to the wudu flowchart, other materials

containing moral advice are presented during lessons and displayed on bulletin boards in front of the classroom, as shown in Figures 4 and 5, which the researcher documented at SMPN 3.

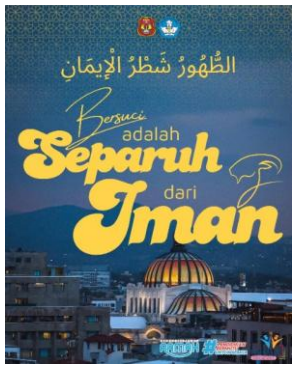

Figure 5. Posters containing advice

Figure 4. Posters containing advice

b. Use of Animated Videos

Animated videos are used to present material on Islamic history, the stories of the prophets, Islamic ethics, and religious practices. Teachers use educational videos from digital platforms and videos they create themselves to explain the material more engagingly.

Observations show that the use of animated videos increases student attention during lessons. Students appear more focused and active when watching videos compared to when teachers only explain the material verbally. Additionally, animated videos help students understand Islamic historical events more concretely because the material is visualized through moving images and audio narration. One student stated

"Watching animated videos makes it easier for me to understand the stories because I can see the events rather than only listening to explanations."

These findings suggest that animated videos enhance students' engagement by helping them visualize learning content more concretely.

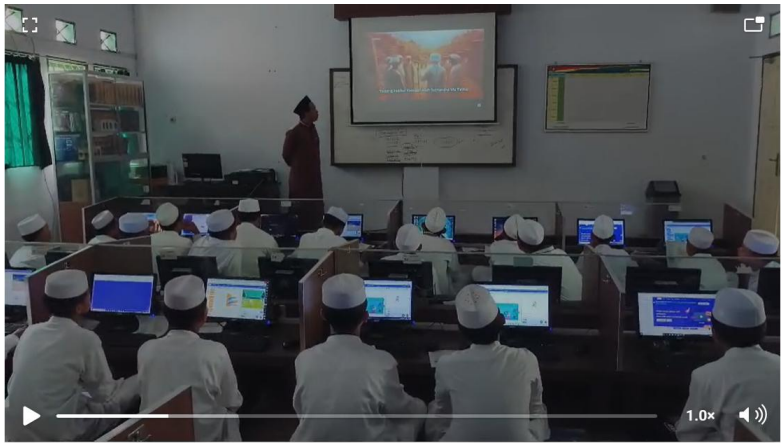

Figure 6. The Use of Animated Videos in SKI Instruction

Figure 6 above shows one of the researcher's observations at MTs Attaqwa, where a video about the stories of the Prophets was being shown while the students accessed the material on their own laptops.

c. Use of PowerPoint and Canva

PowerPoint and Canva are the tools most frequently used by teachers to create visual teaching materials. Teachers utilize a combination of colors, typography, illustrations, and visual layouts to make learning materials more engaging. The majority of teachers in APKS are proficient in using Canva to create PowerPoint presentations, as shown in Figure 7 below:

Figure 7. The first slide of a PowerPoint presentation for one of the learning materials

Based on the interview results, teachers stated that using Canva simplifies the process of creating instructional materials because it offers a variety of visual templates that can be adapted to Islamic Education content. In addition, the use of visual slides helps teachers present the material more systematically and makes it easier for students to follow the flow of the lesson.

d. Use of Interactive Media

Teachers use interactive tools like Quizizz and Wordwall to boost student engagement in the classroom. Using game-based quizzes makes students more active and enthusiastic about learning.

Figure 8. One of the quiz tools used by the Islamic Education teacher

The results of the observation show that students appear more enthusiastic when participating in learning assessments using interactive media. The classroom atmosphere becomes more-lively as students actively answer questions and engage in healthy competition with their peers. Teachers also noted that interactive media increased student participation among those who had previously been passive in class.

The Impact of Integrating Visual Communication Design on Student Understanding and Engagement

Based on the research findings, integrating visual communication design into Islamic Education (PAI) instruction positively impacts students' understanding and engagement in the learning process. In terms of understanding, the use of visual media helps students grasp material that was previously considered abstract, making it more concrete and easier to understand. Students can better understand topics such as Islamic beliefs, Islamic history, and rituals with the aid of images, videos, diagrams, and visual animations. Teachers report that students find it easier to understand explanations when visual media support the material than when learning is lecture based alone.

Additionally, visual design helps improve students' retention of learning material. Presenting information through a combination of text, color, and illustrations helps students remember key points in the lesson. Students report that it is easier for them to memorize and understand the material when learning uses engaging and interactive visual media.

In terms of student engagement, the use of visual media creates a more active and enjoyable learning environment. Students appear more focused on the teacher's explanations, ask questions more frequently, and participate more actively in learning activities. The use of animated videos and interactive media also encourages students to engage directly in the learning process, preventing lessons from becoming monotonous.

The research findings also indicate that integrating visual communication design makes Islamic Religious Education more relevant to the characteristics of the digital generation, who are accustomed to technology and visual media. Therefore, the use of technology-based visual media can serve as an innovative approach for enhancing the quality of Islamic Religious Education.

Challenges in Applying Visual Communication Design in Islamic Education

Although it has had a positive impact, the implementation of visual communication design in Islamic Education (PAI) still faces several challenges. Based on interviews and observations, the main challenge identified is the limited availability of technological facilities in some schools, including a shortage of LCD projectors, internet access, and devices to support digital learning. In some of the schools observed in this study, many schools already had these facilities; in fact, at MTs Attaqwa, students even brought their own laptops. However, in several other schools, this remains a significant challenge.

In addition, not all teachers have sufficient skills in designing technology-based visual media. Some teachers admit that they still have difficulty operating design applications such as Canva or creating interactive learning media on their own. This condition indicates that visual media have not yet been utilized to their full potential in every lesson.

Another challenge is the limited time available to prepare visual learning media. Teachers require additional time to create presentation designs, videos, or interactive media, so not all material can be presented effectively using visual media.

Nevertheless, teachers continue to strive to use simple visual media within their capabilities and available resources. Teachers also emphasize the need for training and guidance regarding the use of

technology and visual communication design so that the implementation of visual media in PAI instruction can be carried out more effectively and sustainably.

Discussion

Integrating Visual Communication Design into Islamic Education

The findings of this study indicate that integrating visual communication design into Islamic Religious Education (PAI) creates a learning process that is more engaging, interactive, and easier for students to understand. Classroom observations showed that teachers consistently utilized infographics, PowerPoint, Canva, animated videos, and interactive digital media to present Islamic concepts in a more structured and contextual manner. Interview results also revealed that both teachers and students perceived these visual media as facilitating classroom interaction and improving students' understanding of learning materials. These findings demonstrate that visual communication design functions not merely as an aesthetic component of instructional media but also as an educational communication strategy that supports meaningful learning.

The findings further revealed that visual communication design assisted teachers in presenting abstract Islamic concepts, particularly those related to *aqidah*, worship, Islamic history, and moral education. The combination of colors, typography, illustrations, icons, and well-organized layouts enabled students to recognize relationships among concepts more systematically and reduced their dependence on lengthy verbal explanations. These findings suggest that visual communication design improves the organization of instructional content, making complex religious concepts easier for students to comprehend. This finding is consistent with the view of Anggraini and Nathalia, who argue that visual communication design functions as a process of delivering messages through visual elements to facilitate effective communication (Anggraini & Nathalia, 2021). However, the present study extends this perspective by demonstrating its practical application within Islamic Religious Education classrooms through various forms of technology-based visual media.

The classroom observations and interview findings also indicate that students were more attentive and actively engaged when learning materials were presented through animated videos, infographics, and visual presentations. Students explained that visual representations made learning materials easier to understand and remember because information was presented systematically through images, colors, and concise explanations. These findings suggest that visual communication design supports students' cognitive processes by organizing verbal and visual information simultaneously, thereby reducing difficulties in understanding abstract learning materials. This finding supports the Cognitive Theory of Multimedia Learning proposed by Mayer (2024), which explains that learning becomes more effective when information is processed through both visual and verbal channels.

Another important finding is that visual media enabled students to understand the relationships among Islamic concepts more clearly. The use of infographics, concept maps, and visual diagrams helped students connect concepts related to faith, worship, and moral values rather than learning them separately. This indicates that visual communication design facilitates conceptual understanding by presenting interconnected information in a structured format. Similar findings were reported by Yoon et al. (2021), who emphasized that visual representations strengthen conceptual understanding by illustrating relationships among ideas. However, this study demonstrates that such an approach is equally effective in facilitating the learning of Islamic Religious Education, particularly for abstract religious concepts.

The present study also found that visual communication design increased students' attention and classroom participation. During observations, students appeared more willing to ask questions, participate in discussions, and respond to teachers' explanations when visual and interactive media were integrated into

learning activities. Teachers likewise reported that students became more enthusiastic during lessons involving digital visual media. These findings indicate that visual communication design enhances not only students' comprehension but also their active engagement throughout the learning process. This finding is in line with the study conducted by She et al. (2024), which reported that visual cues improve students' attention by directing them toward essential learning information.

Furthermore, the findings indicate that presenting instructional materials through a combination of text, images, animations, and colors reduced students' learning difficulties when studying complex Islamic Religious Education topics. Rather than overwhelming students with excessive textual information, visual communication design organized learning materials into smaller and more meaningful units. This finding supports the argument of (Bali et al., 2026), who explain that well-designed multimedia learning reduces extraneous cognitive load and facilitates more effective information processing.

The findings also demonstrate that integrating visual communication design encourages a transition from teacher-centered instruction toward more student-centered learning. Students were not merely passive recipients of information but actively observed, discussed, asked questions, and participated in classroom activities supported by visual media. This finding is consistent with constructivist instructional approaches, which emphasize that meaningful learning occurs when learners actively construct knowledge through authentic learning experiences, collaboration, and active engagement rather than passively receiving information (Arega & Hunde, 2025).

Similarly, the use of interactive media such as Quizizz, Wordwall, and digital instructional videos promoted greater classroom participation. Students actively responded to questions, completed interactive tasks, and engaged in collaborative learning activities. These findings indicate that interactive visual communication design contributes to both cognitive and emotional engagement during Islamic Religious Education instruction. This supports the findings of (Leem, 2023), who argues that interactivity in digital learning environments improves students' engagement in learning and problem-solving activities.

Another important finding of this study is that integrating visual communication design corresponds with the learning characteristics of today's digital generation. Students demonstrated greater interest in visually organized learning materials than in conventional lecture-based instruction. This finding is consistent with (Rohman et al., 2023), who explain that Generation Z tends to learn more effectively through digital and interactive visual media. Nevertheless, the present study extends previous research by demonstrating that these characteristics are also evident within the context of Islamic Religious Education, where visual communication design facilitates students' understanding of religious knowledge while maintaining their engagement throughout the learning process.

Finally, the findings indicate that visual communication design contributes not only to improving instructional media but also to strengthening the overall quality of Islamic Religious Education learning. The integration of technology-based visual media encourages more interactive classroom communication, facilitates students' conceptual understanding, and supports active participation in learning activities. These findings are consistent with (Zydney et al., 2020), who argue that technology-based instructional design creates more meaningful and active learning experiences. A notable contribution of this study is that it demonstrates how visual communication design can be integrated across various Islamic Religious Education topics including *aqidah*, worship, Islamic history, and moral education thereby extending previous research that has generally examined visual media in broader educational contexts. Accordingly, this study highlights the pedagogical value of visual communication design as an effective instructional strategy for enhancing Islamic Religious Education in the digital era.

Thus, the integration of visual communication design into Islamic Education (PAI) instruction serves not only as an innovation in instructional media but also as a pedagogical approach capable of enhancing the effectiveness of learning, strengthening student engagement, and helping to transform PAI instruction to be more responsive to technological advancements and the characteristics of today's digital generation.

The Use of Visual Media to Facilitate Understanding of Islamic Education Concepts

The findings of this study indicate that the use of visual media helps students understand Islamic Religious Education (PAI) materials that were previously perceived as abstract in a more concrete and accessible manner. Classroom observations and interview results consistently showed that images, diagrams, animated videos, and infographics enabled students to understand concepts related to *aqidah*, Islamic history, worship practices, and moral values more easily than conventional text-based explanations. These findings suggest that visual communication design supports students' conceptual understanding by transforming complex religious concepts into organized and meaningful visual representations.

The present study found that infographics and concept maps enabled students to identify relationships among Islamic concepts more systematically. Teachers reported that students experienced fewer difficulties in understanding the connections between the pillars of faith, worship practices, and Islamic values when information was presented visually rather than through lengthy explanations. This indicates that visual media facilitate conceptual organization and make learning materials easier to comprehend. These findings are consistent with Listya's view that infographics communicate information more clearly and effectively through the integration of visual elements and text (Listya, 2018). However, the present study extends this perspective by demonstrating that infographics are effective not only for presenting general educational content but also for explaining abstract concepts in Islamic Religious Education.

The findings also indicate that students constructed a better understanding of abstract Islamic concepts when visual and verbal information were presented simultaneously. During classroom observations, students appeared more capable of connecting new learning materials with previously learned concepts after teachers used visual diagrams and illustrations. This suggests that visual communication design facilitates meaningful learning by helping students organize knowledge more systematically. These findings support the study by Yoon et al (2021), who argue that visual representations enhance conceptual reasoning by illustrating relationships among ideas. Likewise, they are consistent with the principles of dual-coding theory, which explains that information presented through visual and verbal channels is processed more effectively.

Another important finding of this study is that animated videos improved students' understanding of Islamic history and stories of the prophets. Both teachers and students explained that moving images and narration enabled students to follow historical events more easily and understand the moral messages contained in the lessons. These findings indicate that animated videos help students visualize historical events that are otherwise difficult to imagine through verbal explanation alone. This finding supports Mayer's Cognitive Theory of Multimedia Learning, which states that learning becomes more effective when visual and verbal information are processed simultaneously (Mayer, 2024).

The present study further found that visual media reduced students' learning difficulties when studying complex Islamic Religious Education topics. Organizing information through images, colors, symbols, and animations enabled students to focus on essential learning content without becoming overwhelmed by excessive textual information. These findings suggest that visual communication design minimizes unnecessary cognitive demands while facilitating more effective learning. This finding is consistent

with Bali et al. (2026), who explain that well-designed multimedia reduces extraneous cognitive load and improves information processing.

In addition to improving conceptual understanding, the findings demonstrate that visual media also strengthened students' retention of learning materials. Students explained that colorful illustrations, icons, and visual symbols helped them remember important concepts, worship procedures, and Islamic historical events more easily. This indicates that visual communication design contributes to long-term memory by presenting information in meaningful visual forms. Similar findings were reported by (Chung et al., 2024), who found that meaningful visual information is more effectively processed and retained in long-term memory.

The findings also revealed that visual media increased students' attention throughout the learning process. Classroom observations showed that students maintained greater focus during lessons supported by visual presentations than during conventional lecture-based instruction. Teachers likewise observed that students participated more actively when learning materials incorporated visual elements such as colors, icons, and animations. These findings indicate that visual communication design performs not only an aesthetic function but also a cognitive function by directing students' attention toward essential learning information. This finding supports the study conducted (She et al., 2024), which explains that visual cues improve students' attention and information processing during digital learning

Thus, the findings demonstrate that visual media play an important pedagogical role in facilitating students' understanding of Islamic Religious Education concepts by simplifying abstract materials into meaningful visual representations. Beyond improving conceptual understanding, visual communication design also supports students' attention, memory retention, and cognitive engagement throughout the learning process. A notable contribution of this study is that it demonstrates how various forms of visual media including infographics, animated videos, concept maps, and interactive digital media can be integrated into different Islamic Religious Education topics to facilitate students' conceptual understanding within authentic classroom settings**.** Therefore, visual communication design represents a relevant instructional strategy for strengthening Islamic Religious Education in the digital era.

Increased Student Engagement and Motivation

The study's results indicate that integrating visual communication design can enhance student engagement and motivation in Islamic Education (PAI) lessons. The use of technology-based visual media makes the learning environment more active, engaging, and less monotonous. Students appear to pay closer attention to the material, ask questions more actively, and participate more enthusiastically in learning activities when teachers use visual media rather than conventional teaching methods. Classroom observations also showed that students became more responsive during discussions and were more willing to participate in learning activities when visual media were integrated into instruction. These findings indicate that visual communication design not only aids in delivering content but also influences students' affective and psychological aspects of the learning process.

In the context of PAI instruction, student engagement is a critical factor because religious education emphasizes not only cognitive aspects but also the development of students' attitudes, interests, and spiritual awareness. The use of engaging visual media can create a more communicative learning experience, so that students are not merely passive listeners but actively participate in the learning process. This indicates that visual communication design can foster higher student engagement through visual, audio, and digital activities that align with the characteristics of the current generation. The findings suggest that student engagement

was reflected not only in increased classroom participation but also in students' willingness to communicate, ask questions, and remain attentive throughout the learning process.

The use of interactive media such as Quizizz and Wordwall provides a more enjoyable learning experience for students because learning is presented in the form of educational games. These tools encourage students to engage directly in the learning process through activities such as answering questions, participating in discussions, and engaging in healthy competition. Based on classroom observations, students showed greater enthusiasm when participating in game-based learning activities, and teachers reported that even less active students became more involved during interactive quizzes. These findings align with research by Hasanah and Subando, which indicates that the use of the Quizizz application can increase student engagement and active participation in learning (Hanasanah & Subando, 2025). The use of interactive quizzes in PAI instruction makes students more enthusiastic about participating in learning assessments because the learning process is more relaxed, competitive, and communicative.

The present findings further indicate that integrating gamification elements into Islamic Education lessons contributed to a more enjoyable classroom atmosphere and encouraged students to participate more actively in learning activities. Students appeared more motivated to complete classroom tasks when assessment activities were presented as interactive challenges rather than conventional tests. These research findings are further supported by educational practices in Indonesia, which indicate that the use of interactive digital media can enhance student motivation and engagement in both religious-based and general education. Research by Ahyani et al. shows that Quizizz-based gamification in secondary school learning can increase student motivation and participation by making the learning process more enjoyable and less monotonous (Ahyani et al., 2024). In practice, game elements, scores, and challenges in interactive media help create a more competitive learning atmosphere and encourage students to participate more actively in the learning process.

In addition, the use of animated videos and interactive multimedia helps enhance students' motivation to learn because the material is presented in a more engaging and interactive way. Students feel that PAI lessons are more relevant to their daily lives and align with their habits of frequent digital media use. Interview findings also revealed that students preferred audiovisual learning because it made abstract Islamic concepts easier to understand and more enjoyable to learn. This finding supports the research by Dirgantini et al, which indicates that audiovisual media have a positive influence on students' motivation to learn in PAI (Dirgantini et al., 2022). The use of instructional videos, visual illustrations, and animations helps students understand the material more concretely, making the learning experience more engaging and easier to grasp.

From an educational psychology perspective, student motivation and engagement are influenced by their level of attention, interest, and participation during the learning process. The findings of this study indicate that students demonstrated higher levels of attention and participation when teachers integrated visual and interactive media into classroom instruction. Students not only focused more on the lesson but also became more confident in responding to teachers' questions and participating in classroom discussions. Communicative visual media can enhance students' focus by simultaneously incorporating visual, audio, and interactive digital elements. Wang and Degol explain that student engagement encompasses behavioral, emotional, and cognitive involvement that are interrelated in improving the quality of the learning process (Wang & Degol, 2014). Additionally, several studies have shown that multimedia-based digital learning positively impacts students' learning motivation and academic outcomes by creating a more engaging, flexible, and interactive learning experience (Ali et al., 2025; Lin & Chen, 2017; Putri, 2023). These previous studies support the present findings, demonstrating that visual communication design contributes not only to students' motivation but also to their behavioral, emotional, and cognitive engagement during Islamic Religious Education learning.

From a visual communication design perspective, interactivity is a key element in creating effective communication. Zhiyuan and Chubotina explain that interactive design elements can increase user engagement by creating a more dynamic communication experience (Zhiyuan & Chubotina, 2024). This was evident in the present study, where interactive digital media encouraged more active communication between teachers and students during classroom learning. In PAI instruction, the use of interactive media makes students more active in observing, answering, and responding to instructional materials, thereby creating two-way interaction between teachers and students.

In addition to increasing students' emotional engagement, the use of interactive visual media also enhances their cognitive engagement throughout the learning process. Students do not merely passively receive information but are actively engaged in thinking, analyzing, and problem-solving through the digital activities provided by the teacher. These findings demonstrate that visual communication design supports active learning by encouraging students to construct understanding through direct interaction with digital learning media. This aligns with the research by Wang and Degol, which explains that learning engagement encompasses behavioral, emotional, and cognitive aspects that are interrelated in enhancing the quality of student learning (Wang & Degol, 2014).

Thus, integrating visual communication design into Islamic Education instruction not only enhances the appeal of the learning process but also increases student motivation, attention, participation, and active engagement. Unlike previous studies that primarily examined digital media in general educational settings, this study demonstrates how the integration of visual communication design specifically supports student engagement and motivation within Islamic Religious Education classrooms. The use of technology-based visual media can create Islamic Education lessons that are more communicative, interactive, and relevant to the characteristics of the digital generation, thereby making the learning process more effective and meaningful for students.

Integration of Digital Technology in Islamic Education

Research findings indicate that the use of digital technology is crucial for implementing visual communication design in Islamic Education (PAI) instruction. Teachers utilize various digital platforms and applications such as Canva, PowerPoint, YouTube, and interactive learning media to develop learning materials that are more innovative, engaging, and aligned with the characteristics of the digital generation. Classroom observations showed that teachers integrated these digital tools not only to present instructional content but also to encourage students' active participation during learning activities. Interview findings further revealed that students responded more positively to lessons delivered through digital media because they were more engaging and easier to understand. The integration of digital technology into PAI instruction serves not only as a tool for delivering content but also as a pedagogical strategy that creates learning experiences that are more flexible, interactive, and contextual

The use of Canva and PowerPoint helps teachers organize learning materials in a more structured way by leveraging color schemes, typography, illustrations, icons, and visually appealing layouts. These visual presentation tools make it easier for students to follow the lesson flow and grasp the teacher's key concepts. The findings of this study indicate that well-organized visual presentations enabled students to understand Islamic Religious Education concepts more systematically and maintain their attention throughout the lesson. This aligns with Supriyono's view that visual communication design facilitates effective message delivery by properly organizing visual elements (Supriyono, 2016). In Islamic Education (PAI) instruction, the systematic use of visual slides helps students grasp Islamic concepts more simply and effectively compared to lengthy text-based presentations.

In addition to facilitating the delivery of instructional content, the use of digital technology also reflects a shift in learning patterns toward a digital learning environment. Teachers no longer rely solely on textbooks as their primary source of instruction but are increasingly using a variety of dynamic and interactive digital learning resources. The use of YouTube instructional videos, interactive multimedia, and other digital platforms allows students to gain a broader, more contextualized learning experience. These findings suggest that integrating multiple digital resources provides students with richer learning experiences while encouraging greater classroom participation. This finding supports the research by Ramadhan and Tarsono, which explains that the use of digital platforms in learning can enhance the effectiveness and flexibility of the learning process by enabling students to access learning materials more easily and in a more varied manner (Ramadhan & Tarsono, 2020).

From a digital learning perspective, the integration of technology is also linked to teachers' ability to create learning experiences that are more responsive to advances in information technology. The present study found that teachers were able to adapt instructional strategies by integrating interactive digital media into classroom learning, enabling students to become more actively involved in classroom activities rather than simply receiving information. Bond et al. explain that the use of digital technology in learning can enhance student engagement, communication, and collaboration by enabling broader and more flexible learning interactions (Bond et al., 2020). In the context of Islamic Education (PAI) learning, the use of digital media such as interactive videos, Canva, and digital quiz platforms helps create a more participatory learning environment so that students do not merely passively receive material but are also actively engaged in the learning process.

The integration of digital technology into Islamic Education (PAI) also reflects a shift in learning toward 21st-century learning, which emphasizes creativity, communication, collaboration, and digital literacy (Bahri et al., 2024; Ismantara et al., 2025). Learning no longer focuses on one-way knowledge transfer but emphasizes students' ability to access, understand, and critically process information through digital technology. In this context, visual communication design plays a crucial role in creating learning experiences that are adaptable to technological advancements and the needs of the digital generation.

Research findings indicate that students are more engaged in learning when teachers use digital media rather than conventional lecture-based methods. This suggests that digital technology has the potential to enhance students' attention and learning experiences by presenting material that is more visual and interactive. Research by Zydney et al. also indicates that interactive technology-based learning can improve students' learning experiences by providing them with opportunities to build understanding through visual exploration and more contextually relevant digital activities (Zydney et al., 2020).

In the context of education in Indonesia, the integration of digital technology into learning is becoming increasingly relevant as the use of design applications and visual media in the learning process grows. Hapsari and Zulherman demonstrate that animated videos created with the Canva application are effective for learning and can enhance student motivation and academic achievement (Hapsari & Zulherman, 2021). This finding reinforces research results indicating that the use of Canva, PowerPoint, instructional videos, and interactive media in Islamic Education (PAI) instruction can help teachers present material in a more engaging, interactive, and easily understandable way for students.

In addition, the use of digital technology in PAI instruction also supports the development of students' digital literacy skills. Through the use of technology-based visual media, students not only learn to understand religious material but also learn to use technology more wisely and productively. This is crucial for addressing the challenges of the digital age, which require students to possess digital literacy, critical thinking, and the ability to filter information effectively.

Thus, integrating digital technology into PAI instruction demonstrates that technology-based visual communication design can create learning experiences that are more innovative, flexible, interactive, and relevant to the needs of the digital generation. The use of digital technology not only improves the effectiveness of instructional delivery but also supports the transformation of PAI instruction toward 21st-century learning that is more adaptive, interactive, and focused on developing students' digital skills.

Challenges in Implementing Visual Communication Design in Islamic Education

Although it has a positive impact on learning, research indicates that the implementation of visual communication design in Islamic Education (PAI) still faces various challenges, both technical and pedagogical. The main challenges identified include limited technological resources, teachers' limited ability to use digital media, time constraints in preparing visual learning materials, and uneven school readiness to support technology-based learning.

Limitations in school facilities, such as LCD projectors, computers, internet access, and digital learning support devices, mean that visual media cannot yet be fully utilized in all schools. While some schools have adequate technological facilities, others still face resource constraints, forcing teachers to adapt their use of learning media to the available conditions. The findings suggest that the availability of technological facilities influenced teachers' flexibility in selecting and implementing visual media during classroom instruction. Teachers adjusted the type of digital media they used according to the technological resources available in each school, enabling them to continue integrating visual communication design despite existing limitations. This aligns with the research by Pamela et al, who noted that technological resource limitations remain a barrier to the implementation of digital-based visual communication design in educational settings (Pamela et al., 2025).

In the context of digital education, the readiness of technological infrastructure has a significant impact on the effectiveness of multimedia-based learning. Bond et al. explain that the success of technology integration in learning is influenced not only by the quality of learning media but also by the readiness of technological facilities, digital access, and institutional support for technology-based learning processes (Bond et al., 2020). In PAI learning, limitations in digital devices mean that instructional videos, interactive media, and visual multimedia have not yet been uniformly implemented throughout the learning process.

In addition to limited facilities, the research findings also indicate that not all teachers have adequate skills in designing technology-based visual media. Some teachers still face difficulties in using design applications such as Canva, developing interactive learning materials, and optimally using digital platforms in the learning process. This situation highlights that teachers' digital competencies are a critical factor in the successful implementation of visual communication design in Islamic Education (PAI) instruction. This finding supports the research by Sajidan et al., which shows that teachers' level of digital literacy remains a challenge in the application of learning technology, as some teachers are not yet fully able to effectively integrate digital technology into the learning process (Sajidan et al., 2023).

The issue of teachers' digital competence also poses a challenge in 21st-century educational transformation. Teachers are not only expected to master the subject matter but also to possess digital pedagogical competencies to develop innovative and interactive learning materials. Tondeur et al. explain that the success of technology integration in learning is strongly influenced by teachers' pedagogical beliefs and technological competencies in using digital media effectively in the classroom (Tondeur et al., 2017). In the context of Islamic Education (PAI) learning, teachers' ability to design visual media is crucial so that learning materials are not only visually engaging but also remain aligned with learning objectives and the Islamic values being conveyed.

From a pedagogical perspective, time constraints also pose a challenge to the development of visual learning materials. Teachers require additional time to design presentations, instructional videos, infographics, and interactive media; consequently, not all content can be presented optimally using visual media. This situation indicates that developing visual media requires significant creative effort, planning, and technical readiness. In practice, teachers often have to divide their time between preparing lesson plans, developing content, and creating digital visual media.

In addition, the research findings indicate that some teachers still use visual media in a basic way due to time constraints and limited technical skills. The use of basic PowerPoint presentations and instructional videos sourced from digital platforms is the most commonly used alternative because it is more practical and easier to implement in daily teaching. Nevertheless, this also reflects teachers' efforts to adapt to technological advancements and the demands of digital learning.

In the context of education in Indonesia, the challenges of implementing digital technology are also influenced by disparities in access to technology across schools. Research by Hapsari and Zulherman indicates that the use of Canva-based digital media in learning requires device support, teacher competence, and school readiness for optimal implementation (Hapsari & Zulherman, 2021). These findings demonstrate that the success of integrating visual communication design depends not only on teacher creativity but also on support from school facilities and policies that foster technology-based learning.

Therefore, training, mentoring, and facility support from schools and educational institutions are necessary to ensure that the implementation of visual communication design in Islamic Education instruction can be implemented more effectively and sustainably. Training in visual media development, improving teachers' digital literacy, and providing technological facilities are crucial steps toward an innovative transformation of Islamic Education instruction that adapts to advancements in digital technology.

Overall, the research findings indicate that integrating visual communication design into Islamic Religious Education learning enhances students' understanding, engagement, and motivation. The use of technology-based visual media can create learning experiences that are more interactive, contextual, and aligned with the characteristics of the digital generation. However, its implementation still requires facility support, the strengthening of teachers' digital competencies, and the readiness of educational institutions to support technology-based learning.

CONCLUSION

The integration of visual communication design into Islamic Religious Education instruction has proven effective in enhancing learning outcomes by using technology-based visual media that are more interactive, engaging, and contextual. The use of media such as Canva, PowerPoint, infographics, animated videos, and interactive media not only helps students understand abstract PAI material more concretely but also increases student engagement, attention, and motivation during the learning process. These findings indicate that visual communication design plays a strategic role as a pedagogical approach in supporting PAI learning that is more adaptable to the characteristics of the digital generation.

In addition to improving conceptual understanding, the integration of digital technology in PAI learning also drives a shift from a teacher-centered model toward a more participatory, student-centered approach. Visualizing content through a combination of visual elements, audio, and digital interactivity creates a more active and meaningful learning experience. Thus, visual communication design functions not only as a medium for conveying information but also as a learning strategy that strengthens students' cognitive and emotional engagement in PAI learning.

Nevertheless, the implementation of visual communication design in Islamic Education (PAI) still faces various challenges, particularly regarding limited technological resources, teachers' digital competencies, and schools' readiness to support digital-based learning. Therefore, support from educational institutions is needed through the provision of technological resources, digital literacy training for teachers, and the development of innovative, sustainable visual learning materials, so that the integration of visual communication design into Islamic Education (PAI) can be implemented more effectively in the digital age.

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