

CHALLENGES AND OPPORTUNITIES FOR ISLAMIC EDUCATION IN THE 5.0 ERA IN OGAN KOMERING ULU REGENCY

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Abstract

This study aims to analyze the challenges and opportunities of Islamic education in the 5.0 era, particularly in Ogan Komering Ulu (OKU) Regency, as part of an effort to understand the readiness of Islamic educational institutions in facing digital transformation and the demands of the 21st century. The background of this study is based on the urgent need for an Islamic education system that can adapt to technological developments without neglecting spiritual values and Islamic character. This study uses a qualitative approach with an exploratory descriptive design. The research subjects consisted of madrasah principals, Islamic education teachers, pesantren administrators, students, and representatives from the OKU District Education Office and the Ministry of Religious Affairs. Data was collected through in-depth interviews, participatory observation, and documentation, then analyzed using thematic analysis techniques. The results of the study indicate that the main challenges of Islamic education in OKU lie in the limitations of technological infrastructure, the low competence of teachers in utilizing digital technology, and the absence of strategic planning for digital transformation in education. Meanwhile, opportunities that can be developed include the high enthusiasm of students for digital learning, the potential for collaboration with local communities, and strong social and cultural support for Islamic education. Islamic education in OKU is in a strategic position to undertake sustainable transformation, provided that there is contextual policy support, structured teacher training, and the integration of Islamic values in the use of technology. These findings are expected to serve as a foundation for the development of inclusive, adaptive, and competitive Islamic education in the 5.0 era.

Keyword: Islamic education, era 5.0, digitization, educational transformation

Abstrak

Penelitian ini bertujuan untuk menganalisis tantangan dan peluang pendidikan Islam di era 5.0, khususnya di Kabupaten Ogan Komering Ulu (OKU), sebagai bagian dari upaya memahami kesiapan lembaga pendidikan Islam dalam menghadapi transformasi digital dan tuntutan abad ke-21. Latar belakang penelitian ini didasarkan pada kebutuhan mendesak akan sistem pendidikan Islam yang mampu beradaptasi dengan perkembangan teknologi, tanpa mengabaikan nilai-nilai spiritual dan karakter islami. Penelitian ini menggunakan pendekatan kualitatif dengan desain deskriptif eksploratif. Subjek penelitian terdiri atas kepala madrasah, guru pendidikan agama Islam, pengelola pesantren, siswa, serta pihak dari Dinas Pendidikan dan Kementerian Agama Kabupaten OKU. Data dikumpulkan melalui wawancara, observasi partisipatif, dan dokumentasi,

kemudian dianalisis menggunakan teknik analisis tematik. Hasil penelitian menunjukkan bahwa tantangan utama pendidikan Islam di OKU terletak pada keterbatasan infrastruktur teknologi, rendahnya kompetensi guru dalam pemanfaatan digital, serta belum adanya perencanaan strategis untuk transformasi digital pendidikan. Sementara itu, peluang yang dapat dikembangkan mencakup tingginya antusiasme siswa terhadap pembelajaran digital, potensi kolaborasi dengan komunitas lokal, serta dukungan sosial budaya yang kuat terhadap pendidikan Islam. Pendidikan Islam di OKU berada pada posisi strategis untuk melakukan transformasi yang berkelanjutan, dengan catatan perlu adanya dukungan kebijakan yang kontekstual, pelatihan guru yang terstruktur, dan integrasi nilai keislaman dalam pemanfaatan teknologi. Temuan ini diharapkan dapat menjadi dasar pengembangan pendidikan Islam yang inklusif, adaptif, dan berdaya saing di era 5.0.

Kata Kunci: Pendidikan Islam, era 5.0, digitalisasi, transformasi pendidikan

INTRODUCTION

Islamic education is the main foundation in shaping the character, morals, and spirituality of Muslim society. In the context of Indonesian society, Islamic education is not merely a vehicle for transferring religious knowledge, but also a means of internalizing human and national values. The development of the times demands that education systems, including Islamic education, continue to adapt to global challenges and technology. Today, the world has entered the era of the 5.0 industrial revolution, which emphasizes collaboration between humans and technology based on artificial intelligence, big data, the internet of things, and robotics. Islamic education cannot escape this change. In fact, the challenges of the 5.0 era present an opportunity to reform learning models, educational management, and improve the quality of human resources that are both religious and adaptable to digital transformation.

The 5.0 era presents a more complex society, marked by rapid social and technological changes that bring new challenges to the existence of Islamic education. The digital transformation occurring in this era demands that the education system be more responsive, creative, and innovative in developing learning approaches. Islamic education, which was previously based on conventional lecture and face-to-face methods, now needs to design interactive, technology-based learning strategies and utilize digital platforms to reach students widely and effectively. On the other hand, Islamic values that emphasize morals, ethics, and spirituality face great challenges due to the rapid flow of information and global culture that often contradict moral values.

Ogan Komering Ulu (OKU) Regency, as one of the regions in South Sumatra Province with a religious community, has also experienced the dynamics of Islamic education in the midst of this era of technological disruption. The majority of the population is Muslim, and Islamic educational institutions such as madrasahs, Islamic boarding schools, and public schools with Islamic curricula are developing rapidly. However, technological advancements have not been fully matched by the readiness of educational infrastructure and the competencies of educators in this region. The digital divide or technological gap remains a challenge in implementing digital-based Islamic education in the OKU region.

This reflects that while there are significant opportunities for integrating Islamic education with 5.0 technology, various obstacles need to be identified and addressed systematically.

Theoretically, this study is based on educational system theory and technology adaptation theory. Talcott Parsons' (1977) educational system theory views education as a subsystem that transmits cultural values and prepares individuals to become productive members of society. In the context of the 5.0 era, the Islamic education system is required to balance traditional Islamic values with the demands of modernity and technology. Meanwhile, technology adaptation theories such as the Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Venkatesh et al. (2003) explain that the use of technology in education is highly dependent on factors such as performance expectations, effort expectations, social influence, and facility conditions. These two theories complement each other in examining how Islamic education in OKU Regency responds to the challenges and opportunities of the 5.0 era.

Previous studies have highlighted the transformation of Islamic education in the context of technological development. First, research by Suyadi and Selvi (2020) titled “Digital Islamic Education: A New Paradigm of Teaching and Learning in the Era of Industry 4.0” shows that the digitization of Islamic education can increase participation and access to learning, but requires improvements in teacher capacity and infrastructure. Second, a study by Wahyudi (2021) on “Strategies for Islamic Education in the Digital Era” emphasizes the importance of integrating technology-based curricula and teacher training to address the digital era. Third, Rahayu's (2022) research highlights the moral challenges faced by students in Islamic education in the digital era, where Islamic values need to be emphasized to address moral degradation. Fourth, a study by Haryanto (2023) found that Islamic boarding schools that adopted online learning systems were able to maintain their existence during the pandemic while expanding their outreach. Fifth, research by Azis and Nur (2023) showed that the implementation of digital learning applications in madrasahs had positive results on student motivation, but was still constrained by limitations in devices and internet networks in rural areas.

This study differs from the previous five studies because it specifically examines Islamic education in the Ogan Komering Ulu Regency, which has its own unique local characteristics, both in terms of geography, society, and infrastructure. Most previous studies were more general or focused on urban areas with better access to technology. Therefore, the focus of this study provides an important contribution to mapping the actual conditions of Islamic education in semi-rural areas in facing the 5.0 era. Additionally, this study not only discusses challenges but also explores strategic opportunities that can be utilized by Islamic educational institutions in the OKU region.

The novelty of this study lies in its contextual approach to the transformation of Islam-based education based on locality and digitalization. This study highlights how the Islam-based education community in OKU responds to the 5.0 era with all its limitations and

potential. This approach fills a gap in the literature, which has so far emphasized metropolitan areas and large institutions. On the other hand, the results of this study are also expected to provide a strategic overview and policy recommendations for local governments, Islamic educational institutions, and other stakeholders in designing Islamic education that is relevant to the needs of the times.

The urgency of this study is not only academic but also practical and policy-related. Islamic education in areas such as OKU needs more attention so that it does not lag behind the national digitalization trend. Lagging infrastructure, teacher competence, and educational policies can lead to exclusivity in Islamic education and widen the quality gap between rural and urban areas. Therefore, this research is important to describe the real conditions, identify the main challenges, and explore the potential that can be developed as solutions. In addition, this research can also be used as a reference in efforts to revitalize the Islamic education curriculum oriented towards strengthening digital literacy, cross-disciplinary collaboration, and improving 21st century skills.

The objectives of this study are to analyze the challenges and opportunities for Islamic education in the 5.0 era in Ogan Komering Ulu Regency. This study also aims to identify the supporting and inhibiting factors of digitalization in Islamic education in this region, as well as provide strategic recommendations to improve the quality of technology-based Islamic education. Thus, it is hoped that the results of this study can provide a real contribution to the development of adaptive, inclusive, and transformative Islamic education, in line with the spirit of the 5.0 industrial revolution centered on human values and human-technology collaboration.

METHOD

This study uses a qualitative approach with an exploratory descriptive study type. This approach was chosen because it aims to describe in depth the real conditions of Islamic education in Ogan Komering Ulu (OKU) Regency in facing challenges and taking advantage of opportunities in the 5.0 era. According to Creswell (2014), a qualitative approach is suitable for understanding complex social phenomena through the perspectives of participants, especially when the topic being studied is contextual and requires deep meaning. This study focuses on the processes, meanings, and understandings gained from the interaction between Islamic education and digital transformation at the local level. The research subjects include madrasah principals, Islamic education teachers, boarding school administrators, students, as well as representatives from the Education Office and the Ministry of Religion of OKU District. The subjects were selected using purposive sampling, which involves choosing informants deemed to have relevant information and experience regarding the transformation of Islamic education in the digital era. Data collection techniques included in-depth interviews, participatory observation, and document analysis. Interviews were conducted using a semi-structured approach to allow researchers to explore a wide range of information while remaining focused on the research issues. The collected data were

analyzed using thematic analysis as developed by Braun and Clarke (2006). The analysis process included data coding, identification of main themes, organization of data into categories, and drawing interpretive conclusions. Data validity is ensured through triangulation of sources and techniques, as well as participant verification with informants to ensure the accuracy of information. With this method, the study aims to provide a comprehensive understanding of how Islamic education in OKU District responds to the challenges and opportunities of the 5.0 era holistically and contextually.

RESULTS AND DISCUSSION

This study reveals various dynamics in the implementation of Islamic education in Ogan Komering Ulu (OKU) Regency in facing the era of 5.0. Based on interviews with key informants, including madrasah principals, Islamic education teachers, pesantren administrators, students, and officials from the Ministry of Religion and the Education Office, it was found that Islamic education in OKU has undergone several changes, although this transformation is not yet evenly distributed across all educational institutions. One important finding is that most Islamic educational institutions have begun integrating technology into the learning process, though at a very limited level.

These efforts are mostly focused on the use of digital media such as WhatsApp, Zoom, and YouTube in the teaching and learning process, especially after the COVID-19 pandemic. Based on observation data from 10 Islamic educational institutions consisting of madrasah ibtidaiyah, madrasah tsanawiyah, madrasah aliyah, and Islamic boarding schools, it was found that only 30% had regular access to internet-based technology. The rest still heavily rely on conventional teaching methods. This is further supported by findings that not all schools have stable internet connections, adequate computer devices, or competent educators in information technology. The following table presents an overview of technology access in Islamic educational institutions in OKU:

Table 1. Level of Access to Technology in Islamic Educational Institutions in OKU Regency

| TYPES OF INSTITUTIONS | TOTAL INSTITUTIONS | ADEQUATE INTERNET ACCESS | USE OF DIGITAL PLATFORMS |
|-----------------------------------|---------------------------|---------------------------------|---------------------------------|
| ELEMENTARY ISLAMIC SCHOOL | 4 | 1 | 2 |
| ISLAMIC JUNIOR HIGH SCHOOL | 3 | 1 | 2 |
| SENIOR HIGH SCHOOL | 2 | 1 | 1 |
| ISLAMIC BOARDING SCHOOL | 1 | 0 | 1 |
| TOTAL | 10 | 3 | 6 |

Based on the data, it can be concluded that only 30% of institutions have adequate internet access, and only 60% have tried to utilize digital platforms in the learning process, albeit with limited frequency and coverage. These findings indicate that the main challenges of Islamic education in OKU lie in technological infrastructure and digital competence. In terms of teacher competencies, this study found that many educators have not received specialized training in the use of digital learning technologies. Only a small number of teachers have taken the initiative to learn independently, such as creating religious content on social media or managing online classes through Google Classroom. Younger teachers who are more familiar with digital media generally adapt more quickly, while senior teachers show resistance due to a lack of confidence and limited experience. This indicates an urgent need for systematic and structured technology-based training for Islamic education teachers in OKU. On the other hand, there are great opportunities in the development of digital-based Islamic education. Students and santri generally show high enthusiasm for technology-based learning. The majority of students interviewed stated that the use of digital media makes learning more interesting and easier to understand.

They are more interested in accessing learning videos, interactive interpretation applications, and online discussion forums than conventional lecture methods. These findings indicate that the student generation in OKU has a tendency toward visual and digital-native learning, which is an important asset in the development of innovative learning strategies. Apart from the technological aspect, this study also found that the Islamic education curriculum has not been adapted to the challenges of the times. The lesson materials still focus heavily on cognitive memorization without encouraging 21st-century skills such as critical thinking, creativity, collaboration, and communication. These skills are essential for shaping an adaptive Muslim generation in the 5.0 era. The teachers interviewed stated that they are still bound by the national curriculum, which tends to be normative, and limited by time to develop more contextual and collaborative approaches.

In terms of institutional management, most madrasahs and Islamic boarding schools do not yet have long-term strategic policies related to digital transformation. Several school principals said that information technology development planning is still limited to discourse and depends on the availability of government funding. The lack of a specific budget for digitization is a serious obstacle to the realization of learning innovations. In some cases, Islamic educational institutions rely solely on the participation of school committees or donations from alumni to provide the necessary ICT equipment. Therefore, cross-sector collaboration between local governments, relevant ministries, the private sector, and the community is needed to support technology-based Islamic education transformation. This study also found great potential in the existence of local religious communities and pesantren alumni who are active on social media.

They can become agents of change in supporting digital Islamic education through content creation, religious webinars, and the development of local Islamic-themed

applications. Some teachers in madrasahs have even started involving alumni to become online resource persons in inspirational classes or digital mentoring. This shows that a strong Islamic education ecosystem at the local level can be a driver of innovation if managed strategically. In terms of policy, the local government of OKU District, through the Education Office and the Ministry of Religious Affairs Office, has expressed its commitment to supporting the strengthening of Islamic education. However, the implementation of these policies still faces technical and administrative obstacles. Support for madrasah digitization programs from the central government has not fully reached remote areas in OKU. In addition, there are no specific guidelines for Islamic educational institutions in adopting learning technologies in accordance with Islamic values.

Therefore, this study recommends the need for synergy between central and local policies and the development of a roadmap for the digital transformation of Islamic education based on local conditions. Overall, the findings of this study indicate that Islamic education in OKU Regency faces major challenges in terms of infrastructure, teacher competence, institutional management, and curriculum. However, there are enormous opportunities in terms of student readiness, local digitalization potential, and socio-cultural support from the community. Balancing Islamic values with the utilization of technology is key to making Islamic education a resilient, adaptive, and transformative system in the 5.0 era.

DISCUSSION

Research findings on Islamic education in Ogan Komering Ulu (OKU) Regency reveal the complexity that characterizes the paradigm shift in education from conventional to adaptive education in response to technological developments and contemporary challenges. The discussion of these findings emphasizes that Islamic education in OKU not only faces challenges in terms of infrastructure and human resources but also has great potential for significant transformation if managed strategically and contextually. The theory of the education system proposed by Talcott Parsons (1977) explains that education is a subsystem of society that is responsible for transmitting values and preparing individuals to play a role in a larger social system. In this context, Islamic education is not merely about transferring religious knowledge, but also about internalizing Islamic values so that students are prepared to face the dynamics of globalization and digital disruption.

In Parsons' theory, the challenges of Islamic education in OKU found in this study, such as limited technological infrastructure, low teacher competence in utilizing digital media, and unequal internet access, become obstacles in maximizing the institutional function of education. When educational institutions fail to adapt to social and technological changes, an imbalance occurs in the social system as a whole. Conversely, if Islamic educational institutions are able to adapt, they function as an integrative force and a strong social cohesion builder. Therefore, it is important for Islamic educational institutions in OKU

to strengthen their adaptation and transformation in order to remain relevant to the needs of modern society. Additionally, the finding that students in OKU demonstrate high enthusiasm toward digital learning can be explained through the Unified Theory of Acceptance and Use of Technology (UTAUT) framework developed by Venkatesh et al. (2003). This theory states that users' intentions to adopt technology are significantly influenced by four main constructs: performance expectations, effort expectations, social influence, and facility conditions. In the context of this study, students have high performance expectations toward digital media because they perceive ease of access, variety of learning content, and ease of understanding the material. However, effort expectations pose a challenge for some teachers and school principals who are not yet familiar with digital technology. Facility conditions, as found in the previous table, remain the main obstacle because not all schools have adequate devices and internet connections.

Thus, the UTAUT theory provides a strong foundation that the acceptance of technology in education is highly dependent on the synergy between infrastructure readiness and human resource capacity building. Furthermore, this study also shows that the transformation of Islamic education is not only limited to the use of technology, but also involves changes in management, curriculum, and institutional culture. This is in line with the transformative education theory proposed by Mezirow (1991), where transformative learning processes must lead to changes in mindsets, value systems, and ways of interacting with the world. In the context of Islamic education in OKU, such transformation has not yet occurred systematically. Teachers still focus on transferring religious knowledge without integrating 21st-century skills, such as critical, collaborative, and creative thinking. The curriculum used is still normative and not responsive to the technological social reality faced by students. Another obstacle found in this study is the lack of strategic planning at the Islamic educational institution level in welcoming the 5.0 era. Most madrasahs and Islamic boarding schools do not have a roadmap or master plan for information technology development. However, as explained by Fullan (2007) in his theory of transformational leadership in education, leaders of educational institutions must have a clear vision, strong implementation strategies, and the ability to build an organizational culture that supports change. Madrasah principals who lack managerial skills in the field of technology will find it difficult to facilitate the necessary changes. Therefore, leadership capacity in Islamic education is an important aspect in supporting the success of digitization.

The finding that some institutions have started to collaborate with alumni and local communities to support the digitization of education shows the potential for social empowerment. This is in line with the concept of *community-based education*, which emphasizes the role of the community in supporting the educational process. Religious communities, Islamic boarding school alumni, and local figures can be catalysts for change through training, donations of digital devices, and the development of digital-based Islamic content. This shows that although Islamic educational institutions in OKU

face various limitations, there is still social strength that can be optimized. From a policy perspective, the absence of implementation guidelines for integrating technology into Islamic education indicates a regulatory vacuum at the local level. Although there is a madrasah digitization program from the Ministry of Religious Affairs, its implementation is still focused on areas that are easier to reach. According to Tilaar (2002), education policy should consider local diversity and not be uniform (one size fits all). In the context of OKU, a policy approach based on locality and contextual needs is essential. Local governments must be able to design digitization programs that not only provide devices but also pay attention to training, mentoring, and technology-based curriculum development. The discussion also highlighted the great opportunities arising from the characteristics of Generation Z students in OKU who are familiar with technology.

They are digital natives who are highly skilled in using gadgets, social media, and educational applications. These characteristics should form the basis for designing interactive, visual, and collaborative learning methods. Video-based learning, religious podcasts, interactive quizzes, and the use of gamification can be new approaches in Islamic education. This is where the importance of pedagogical innovation developed by Islamic education teachers lies, in order to adapt to the characteristics of today's students. This discussion also emphasizes that Islamic education must maintain a balance between digital transformation and the strengthening of moral values. Technology, if not guided by strong Islamic values, can bring about liberalism, materialism, and individualism that are contrary to Islamic principles. Therefore, the integration of technology and spirituality is a major task for Islamic educational institutions. In line with Al-Attas (1980), who emphasized the importance of Islamizing knowledge, Islamic education must ensure that the use of technology does not obscure the values of tawhid and akhlak. In this framework, Islamic education needs to build a new paradigm: *technology as a means, not as an end* technology as a tool, not a goal. Considering the overall findings and theoretical discussions above, it can be concluded that the transformation of Islamic education in the 5.0 era, particularly in OKU Regency, is a complex process involving structural, cultural, and pedagogical dimensions. The main challenges lie in infrastructure, teacher competence, policy, and curriculum, while the greatest opportunities lie in the enthusiasm of students, the strength of the local community, and awareness of the need for renewal. This transformation will only succeed if it is carried out holistically, involving all stakeholders, and making Islamic values the primary foundation for the utilization of technology.

CONCLUSION

Based on the findings and discussions of the research on the challenges and opportunities of Islamic education in the 5.0 era in Ogan Komering Ulu Regency, it can be concluded that Islamic education in this region is at a crossroads between the need for digital transformation and the reality of infrastructure and human resource limitations. The main challenges include limited internet access, a lack of technological devices, low digital competence among teachers, and the absence of strategic policies from Islamic

educational institutions in responding to technological changes comprehensively. The curriculum used is still normative and not responsive to the needs of the 21st century, so the learning process does not fully support the development of critical, creative, collaborative, and communicative skills needed in the digital era. Nevertheless, there are significant opportunities that can be exploited, such as students' enthusiasm for technology-based learning, the potential of local communities and digitally active pesantren alumni, and the commitment of local governments to support the strengthening of Islamic education. The presence of the digital-native generation is an important force for driving more contextual, interactive, and engaging learning innovations. In addition, community participation and cross-sector collaboration are strategic aspects in building adaptive and transformative Islamic education. Thus, Islamic education in OKU requires a holistic and contextual approach in welcoming the 5.0 era. This transformation not only demands the use of technology but also emphasizes the importance of synergy between Islamic values, policies that prioritize local needs, and the enhancement of teachers' and institutional capacities. Only through this approach can Islamic education develop into a relevant, resilient system capable of producing Muslim generations who are spiritually, socially, and technologically intelligent.

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