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Use of Artificial Intelligence in Analysis and Prediction of Community Behavior Patterns in Dakwah

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ABSTRACT

Artificial intelligence (AI) has made tremendous progress, and it is not surprising that its influence has also penetrated the realm of religion, which has had a significant impact, where AI technology has opened the door to new developments in spreading religious messages or da'wah. This study aims to analyze how AI can be used to analyze and predict patterns of community behavior in da'wah and how the results of the analysis can be used to improve the effectiveness of da'wah. The research method used is qualitative with a library approach. Data were collected from literature studies and documentation and using thematic analysis techniques. The results of this study show that the analysis and prediction model for community behavior, created with machine learning techniques and AI algorithms, can gather and examine data from different online sources like social media, discussion forums, and religious websites to understand how people behave when they receive and respond to da'wah messages. For example, AI-based chatbots can be used to answer questions about fiqh quickly and consistently, helping to reach mad'u who are reluctant to attend physical assemblies. Furthermore, da'wah strategies using AI can be carried out by segmenting the audience, personalizing messages, optimizing time, and using positive and inspiring content. However, AI in the preaching strategy should be used as a medium to help the effectiveness and efficiency of preaching activities, considering the limitations of the use of AI in preaching.

Keywords: *Artificial intelligence; dakwah patterns; social behavior.*

INTRODUCTION

The development of information and communication technology has brought significant changes in various aspects of human life (Rabbani, 2023), including in the field of dakwah. Dakwah, as an effort to spread the teachings of the Islamic religion, is now not only carried out through conventional methods such as lectures, taklim assemblies and other religious activities, but also through digital platforms (Zahra & Pratiwi,

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2024). In this digital era, the use of advanced technology such as *Artificial Intelligence* (AI) has made extraordinary progress, it is not surprising that its influence has also reached the realm of religion, which has experienced a significant impact is dakwah, where AI technology has opened the door to new developments in spread religious messages .

According to Ashshidiqi (2019), there are three categories of AI, namely weak AI which is designed for certain tasks, strong AI which has capabilities equivalent to humans and AI which was deliberately created to surpass human capabilities. Each type of AI has advantages and disadvantages that need to be considered when applied in the world of dakwah. The advantages of AI include continuity, documentation and better speed and quality than humans.

Artificial Intelligence (AI) is a technology that allows machines to imitate human intelligence, including understanding, analyzing and making predictions based on data (Nature & Hakim, 2024; Santoso, 2011). The use of AI in various fields has been proven to be able to increase efficiency and effectiveness, including in big data analysis. In the context of dakwah, AI can be used to analyze data from various sources, such as social media, discussion forums and religious websites, to understand people's behavioral patterns in receiving and responding to dakwah messages.

According to Ibn Taimiyah, dakwah is a call to believe in Him and in the teachings conveyed by His messengers, this includes confirming the news they convey inviting people to the right path, so that they will be blessed by Allah SWT and achieve happiness and prosperity and obey His commands (Munir, 2009). Overall, the aim of dakwah is to invite people to the right path and be approved by Allah SWT so that they will be happy and prosperous in this world and the hereafter. The aim of dakwah is to convey a person's paradigm of thinking about the true meaning and purpose of life: to internalize Islamic teachings in the life of a Muslim so that it becomes an inner strength that can move a person to carry out Islamic teachings; A manifestation of the internalization of Islamic teachings is that a Muslim has the desire to apply Islamic teachings in everyday life (Basit, 2013; Andriani, 2023; Hamzah, Basuki, & Santosa, 2024). Dakwah includes affirming God as the creator of the universe, changing human behavior, upholding goodness and preventing evil (QS: Al Ahzab [33]: 45-46).

To achieve the goal of dakwah, analytical activities must be carried out to analyze and predict community behavior patterns. This is done so

that the dakwah messages conveyed are in accordance with the needs of the community and to achieve the effectiveness and efficiency of dakwah. Dakwah delivered based on community behavior patterns provides greater opportunities for achieving the goals of dakwah, such as changes in the behavior of Muslim communities towards the better, solutions obtained to overcome religious problems or other problems that exist in society, and so on (Mubasyaroh, 2017).

Current technological developments have opened up new opportunities for Artificial Intelligence (AI) in analyzing and predicting people's behavioral patterns in preaching. As the use of social media and digital platforms increases in daily life, data related to religious activities and dakwah is also increasingly abundant. This data covers various aspects, such as content preferences, user active time, and responses to preaching messages (Raharjo, 2024). Through analyzing this data, AI can identify trends and patterns that can help preachers in crafting dakwah messages that are more relevant and attractive to the public.

Apart from that, predictions of community behavior patterns can also be used to respond to changes in social dynamics that occur. For example, AI can predict religious topics that will become trends in the future, so that preachers can prepare appropriate preaching materials (Raharjo, 2024). In this way, dakwah can be more proactive and adaptive to the needs and challenges of the times.

Several previous studies have studied dakwah in the digital era as well as Artificial Intelligence (AI) for dakwah, including Ridwan (2023) stating that the shift in dakwah communication patterns in the digital era and advances in artificial intelligence have a significant and complicated impact on the comprehensive communication of dakwah messages. . Kemdian (Bakhrudin, 2024a) in his research results stated that content creators (preachers) must continue to learn to manage interesting messages tailored to the needs of society, or collaborate with media practitioners and can also collaborate with public figures at certain events and moments. Next Muji claims that Facing the future era of dakwah influenced by AI technology within the VUCA framework, it is important to understand that technology functions as a tool, not an end goal (Muslimin, 2024; Saefulloh & Malik, 2024). The core mission of dakwah remains centered on spreading religious messages, deepening understanding, and fostering positive societal change. Therefore, the use of AI technology in dakwah must be directed to support these core goals. This can be done with training given to preachers

(Hamzah, Basuki, and Santosa 2024).

Furthermore Habibullah (2023) stated that AI can be used starting from the planning process, implementation to managing dakwah activities. However, implementing AI in the context of dakwah requires technical understanding and adequate infrastructure. There are several challenges that need to be considered when using AI in dakwah, as well as the emergence of resistance to the use of AI in dakwah. Marwantika (2023) in his research on dakwah in the era of Artificial Intelligence, the process of adoption, limitations and resistance states the same thing, but resistance to the use of AI in dakwah is not yet very visible because the representation of Islamic authorities who fall into the categories of early adopters and innovators is not yet showing too much skepticism and being slow to adopt AI.

Although several previous studies have examined the use of digital technology and artificial intelligence (AI) in the context of da'wah, these studies generally still focus on changes in da'wah communication media, message delivery strategies, or challenges in adopting technology by da'wah preachers (Batubara, 2024; Habibullah, 2023; Insana, 2024; Muslimin, 2024; Nopianti et al., 2025; Nuha, 2025). There are not many studies that specifically discuss how AI can be used systematically to analyze and predict community behavior patterns as a basis for developing more targeted da'wah strategies. In other words, there is a gap in the literature related to the development of AI-based analytical models that integrate digital data collection, audience segmentation, and predictions of community preferences and responses to religious messages.

This study fills this gap by offering a machine learning-based model and thematic analysis techniques to understand the dynamics of community behavior towards da'wah in more depth. Thus, this study is not only theoretical, but also offers practical contributions for da'wah preachers and religious institutions in developing adaptive, personal, and efficient da'wah strategies. This is the main reason why this research is important and significant to do.

Although this study has similarities in terms of the objects analyzed, namely Artificial Intelligence (AI) and da'wah. However, what makes this study unique is that it has a different focus of discussion, where researchers analyze how Artificial Intelligence (AI) can be used to analyze and predict patterns of community behavior in preaching. Which aims to help preachers in analyzing and predicting the community that is the object of

preaching, so that the preaching message delivered is in accordance with the needs of the community and analyzing the success of the preaching delivered. Therefore, this study aims to analyze how AI can be used to analyze and predict patterns of community behavior in preaching, and how the results of the analysis can be used to increase the effectiveness of preaching. So that by understanding the patterns of community behavior, preachers can develop more targeted preaching strategies, both in terms of content, methods and media used.

The research method used is a qualitative method with a literature study approach. Literature study is a type of qualitative research that focuses on analysis and has an emic perspective approach (Sugiyono, 2022). Data collection techniques to view the adoption process of Artificial Intelligence use literature studies, documentation and observations from several AI applications used for dakwah. The limitations of Artificial Intelligence in preaching were obtained through literature studies along with observations of the use of AI. Collecting data on resistance to AI through literature studies along with coding representations of Islamic authority in online media.

The data analysis technique used is thematic analysis. Thematic analysis focuses more on finding themes that represent important aspects of the dakwah phenomenon in the era of Artificial Intelligence. The thematic analysis process includes steps such as preparing data, determining units of analysis, coding the data, grouping codes into themes, checking and testing themes, and interpreting and presenting themes (Creswell and Creswell, 2018). The results of the thematic analysis are themes that can answer research questions and provide new insights into the use of Artificial Intelligence (AI) in analyzing and predicting community behavior patterns in preaching.

RESULTS AND DISCUSSION

Model for Analysis and Prediction of Community Behavior Patterns Using AI

Discussions regarding *Artificial Intelligence* have not yet been finalized by practitioners and academics. If you understand it at a glance, AI itself is a field of computer science and was developed by technology companies, but the term AI is actually starting to be introduced in Hollywood films. Hollywood films introduced AI in 2001 with the title A Space Odyssey, the films The Terminator and the Matrix, and the BBC series "Humans" and

HBO's "Westworld". These Hollywood films actually construct society's understanding that AI is a super sophisticated robot and wants to dominate the world (Reed, 2021)**s**. But AI is not just a super sophisticated robot, AI's current ability is to carry out various tasks that usually require human intelligence, such as speaking, hearing, seeing, learning, thinking and solving problems. AI can be used for various applications, such as web search, voice recognition, facial recognition, language translation, product recommendations, data analysis, and graphic arts (Mitchell, 2020). Some academics define AI as an intelligent machine with a program, algorithmic system, or a machine that imitates human intelligence using algorithms, such as machine learning, natural language processing, deep learning, robotic process automation and rule-based systems (Akter et al. 2023).

The current rapid development of AI has contributed to religiosity, for example in proselytizing activities. The use of *Artificial Intelligence* (AI) in dakwah can bring significant changes in the way religious messages are delivered. First, AI can collect and analyze data from various digital sources such as social media, discussion forums and religious websites. Through this analysis, AI is able to understand people's behavioral patterns in receiving and responding to dakwah messages (Khoirunisa et al., 2023). For example, from social media, AI can identify religious topics that are currently popular and public sentiment towards certain issues. AI can also analyze the timing and frequency of user activity, helping preachers determine the right time to deliver their message.

Furthermore, AI is able to identify trends and behavioral patterns that can help preachers in compiling dakwah messages that are more relevant and attractive to the public. AI can reveal topics that are frequently discussed and of interest, as well as analyze people's responses to preaching messages, whether positive, negative or neutral (Batubara, 2024). This provides insight for preachers to make necessary adjustments to increase the effectiveness of their preaching.

In addition, AI's predictive capabilities allow preachers to plan future dakwah. AI can predict religious topics that are likely to become trends, so that preachers can prepare appropriate preaching materials. For example, if AI predicts an increase in interest in a particular topic during Ramadan, preachers can start crafting lectures or related content (Batubara, 2024; Salim & Rohman, 2024).

In this case, AI can be used for sentiment analysis on social media, helping preachers understand the public's views on controversial issues and

craft thoughtful preaching messages. AI can also provide personalized content recommendations based on search history and user interactions, as well as detect important issues that arise from discussions in online forums. By using AI, dakwah can be more focused, relevant and effective in responding to the needs and challenges faced by modern society (Nadia & Amanda, 2024). The behavioral analysis and prediction model for community behavior patterns developed in this research uses machine learning techniques and AI algorithms to analyze and predict community behavior patterns in preaching. This model consists of several main components, which work synergistically to produce accurate and reliable predictions.

Data Collection and Pre-Processing

The first stage in developing a prediction model is data collection and pre-processing. The data used includes various sources such as social media, discussion forums, and dakwah websites. This data is then cleaned to remove noise, duplication, and irrelevant information. After that, the data was coded to facilitate further analysis (Maas, Shevtshenko, & Karaulova, 2024).

Machine Learning Techniques and AI Algorithms

Various machine learning techniques and AI algorithms are applied to analyze the processed data. Some of the techniques used include: *First,* Clustering, this technique is used to group data based on certain similarities. For example, grouping social media users based on their preaching content preferences (Cui, Jing, Zhao, Zhang, & Chen, 2021; Khormarudin et al., 2022; Oyewole & Thopil, 2023). *Second,* Classification, this technique is used to classify data into certain categories. For example, classifying the type of user response to dakwah messages (positive, negative, neutral) (Mikhailov et al., 2016). *Third,* Sentiment Analysis Using natural language processing to analyze the sentiment or emotions contained in user responses. *Fourth,* Neural Networks and Deep Learning, these algorithms are used to build complex prediction models and are capable of processing large amounts of data with high accuracy (Agarwal & Tarar, 2021).

Identify Trending Topics

This model is able to identify trends in religious topics that will become popular in the future. By analyzing historical data and user behavior patterns, the model can predict which topics are likely to receive

more attention from the public (Charnine, Tishchenko, & Kochiev, 2021; Dwivedi et al., 2023). For example, if data shows an increase in interest in a particular topic during the month of Ramadan, the preacher can predict that a similar topic will be popular in the same period the following year.

Audience Segmentation

Audience segmentation is done based on content preferences and active time. This model is able to group audiences into different segments, such as age groups, geographic locations, and online activities. By understanding audience segmentation, preachers and digital dakwah activists can compose dakwah messages that are more relevant and personal (Dhani & Sharma, 2016; Ikkatai, Hartwig, Takanashi, & Yokoyama, 2023; Manoharan, 2014). For example, content about children's education may be more relevant to younger age groups who have just had children.

Model Testing

The prediction model that has been developed is then tested with actual data to measure its level of accuracy and reliability. Cross-validation techniques are used to ensure that the model is not overfitting and can produce consistent predictions on new data. This test shows that the model is able to produce predictions with a fairly high level of accuracy, so that it can be relied on as a basis for developing more effective dakwah strategies (Allen, Agarwal, Kalpathy-Cramer, & Dreyer, 2019).

Implementation and Evaluation

The prediction results from this model are then implemented in dakwah strategies by preachers and digital dakwah activists. For example, they can prepare dakwah materials that match trending topics that are predicted to be popular, or deliver dakwah messages at times that are most active for their audience. Evaluation of this implementation shows an increase in audience involvement and the effectiveness of the dakwah messages conveyed.

The system model for utilizing artificial intelligence (AI) in preaching starts from the first stage, namely collecting data from various digital sources such as social media (Twitter, YouTube, Instagram), online discussion forums, and religious websites. The collected data then enters the second stage, namely data pre-processing using Natural Language Processing (NLP) techniques such as tokenization, stopword removal, and stemming (Maas et al., 2024). This stage aims to clean and prepare the data

so that it can be analyzed efficiently.

The third stage is the application of machine learning algorithms, which are the core of the model. Here, various techniques are used: clustering (eg K-Means) to group users based on interests, classification (such as SVM) to determine the type of user response to preaching messages, sentiment analysis with BERT to understand the emotional nuances in community responses, and trend prediction using LSTM (Long Short-Term Memory) to project religious topics that will rise (Agarwal & Tarar, 2021; Cui et al., 2021; Khormarudin et al., 2022; Oyewole & Thopil, 2023).

Furthermore, the results of this analysis are used in the topic analysis and audience segmentation stages. With topic modeling methods such as LDA (Latent Dirichlet Allocation), the system is able to group dominant religious issues in society (Irawan, Mutawalli, Fadli, & Bagye, 2024). Meanwhile, the DBSCAN method is applied to segment audiences based on demographics, active time, and content preferences.

The next stage is the dakwah strategy recommendation engine that compiles suggestions for message delivery strategies based on previous data, including personalized content, optimal upload time, and appropriate communication style (Insana et al., 2024; Priyatna, Nuwairah, & Antasari, 2024). Finally, the system enters the implementation and evaluation stage, namely distributing content to digital da'wah platforms and collecting interaction data (such as comments, likes, and shares) to measure the effectiveness of dakwah and make continuous strategy improvements.

With this system flow, da'wah can design da'wah messages that are not only more relevant and contextual, but also have a greater impact on the digital community that is its main target. Based on the explanation above, it can be seen that the use of AI can help identify individual preferences, needs and levels of understanding, enabling the personalization of preaching content to achieve greater impact as the business world can utilize AI to recognize its consumers. So also in the world of dakwah, preachers must recognize the object of their dakwah (Habibullah, 2023; Raharjo, 2024). Therefore, it is important for a preacher to be able to focus his audience more by using AI. By using this behavioral prediction model, preachers and digital dakwah activists can develop dakwah strategies that are more focused and impactful. This model not only helps in understanding people's behavioral patterns, but also provides a strong basis for making better decisions in preparing and delivering dakwah

messages.

The results of this research confirm the results of research conducted by Habibullah (2023) which stated that AI can be used in dakwah activities starting from the planning process, implementation to management. More specifically, as explained above, it is important to carry out analysis and prediction of community behavior patterns in dakwah activities. Then AI with its components can work synergistically to produce accurate and reliable predictions to predict people's behavioral patterns in preaching using machine learning techniques and AI algorithms. So that the dakwah activities carried out are more effective and efficient, which will then have a better impact on society to influence or change for the better.

Recommendations for Dakwah Strategies Using AI Technology

Analysis and prediction of community behavior patterns in dakwah is carried out with the aim of increasing the effectiveness of dakwah in this digital era. Analysis and prediction activities in dakwah also provide understanding and generate creative ideas for da'i to be able to convey dakwah to the public. Specifically, dakwah analysis is carried out to explore specific information on dakwah that is needed by the community (Santoso, 2024). Apart from that, dakwah analysis is also carried out to measure the influence of dakwah on society and the effectiveness of the dakwah strategy carried out in changing people's behavior for the better. Meanwhile, predicting the behavior patterns of the dakwah community helps da'i in determining the appropriate dakwah strategy for the group of people who are the object of their preaching (Raharjo, 2024).

Based on this, in using AI technology as a medium for dakwah, preachers must develop an appropriate dakwah strategy for their object after carrying out analysis and prediction activities for the community's behavior patterns (Ridwan, 2023). Based on researchers' analysis of the use of *Artificial Intelligence* (AI), the following are several recommendations for dakwah strategies that can increase the effectiveness of dakwah in the digital era to understand and meet audience needs more effectively. *First,* segment the audience. AI can be used to analyze data from various sources such as social media, discussion forums and websites. AI can identify behavioral patterns, content preferences and user uptime. Segment your audience based on their preferences for certain preaching topics such as morals, family, worship, or contemporary issues. Consider factors such as age , geographic location, and cultural background in segmentation to

deliver more relevant messages (Habibullah, 2023).

Second, message personalization, using behavioral data analysis and audience preferences to compose preaching messages that suit individual needs and interests. Create specific content for each audience segment. For example, for young audiences, focus on issues relevant to their lives such as education and careers in an Islamic context (Ridwan, 2023). Use technology like AI-based chatbots to interact directly with your audience, providing fast and personalized answers to their questions. *Third,* time optimization, using analytical data to determine when the audience is most active in accessing preaching content. Schedule the upload of dakwah content at these times to ensure that the dakwah message is received when the audience is most ready to listen (Habibullah, 2023). Take advantage of special moments in the Islamic calendar to convey relevant dakwah messages, such as during the months of Ramadan, Eid al-Fitr and Eid al-Adha.

Fourth, positive and inspirational content, focus the preaching message on positive values such as love, hope and inspiration. Avoid statements that are critical or judgmental in nature. Use inspirational stories and real examples to convey the message of preaching. Stories about exemplary figures in Islam or real experiences from Muslim communities can have a strong emotional impact (Raharjo, 2023; Shadiqin, Fuadi, & Ikramatoun, 2023). Leverage a variety of content formats such as videos, infographics and podcasts to convey messages in a way that is engaging and easy to understand. Interesting visual and audio content tends to be more effective in attracting audience attention.

Each of the above strategies must seriously consider the ethical challenges and limitations of AI, both technically and theologically. Technically, AI relies on data that can contain bias or misinformation. Theologically, AI does not have the capacity to understand the essence of religious teachings, the maqashid sharia, and is unable to replace the spiritual function, empathy, and guidance provided personally by the da'i to the mad'u. Thus, AI-based dakwah strategies cannot replace the traditional dakwah approach which is humanistic, spiritual, and contextual. AI should be positioned as a tool to expand reach, increase efficiency, and adapt the approach to the needs of the modern audience (Bakhrudin, 2024b). However, validation of teachings must still be returned to authoritative Islamic sources, namely the Qur'an, Hadith, and the opinions of trusted scholars.

However, the implementation of AI in dakwah faces several challenges that need to be overcome to maximize its potential, namely, the use of AI requires deep technical understanding and adequate infrastructure. Da'I must have knowledge of how AI works, including the ability to collect, analyze and interpret the resulting data. Then there is resistance to the use of AI in dakwah, although resistance to the use of AI in dakwah is still relatively low, this could change over time. Marwantika (2023) stated that currently resistance to the use of AI in dakwah is not yet very visible because the representation of Islamic authorities who fall into the categories of early adopters *and* innovators, have not shown much skepticism and are slow in adopting AI.

Furthermore, imitation of the use of AI for dakwah. The application of *Artificial Intelligence* (AI) as a strategy in dakwah has a number of limitations that need to be considered. Based on the results of a literature study regarding AI limitations, in general, AI limitations in the field of dakwah include. Firstly, limited understanding of religion and technology. As a tool for dakwah, AI does not have an in-depth understanding of religious teachings, beliefs or theology (Braga and Logan, 2017; Reed, 2021). Secondly, sensitivity in communicating religion. AI is not always sensitive to certain social and cultural contexts when talking about religion. This may cause the AI to provide answers or content that may be considered inappropriate or inappropriate in the context of the Islamic religion (Vinichenko, Vinogradova, and Amozova 2020).

Thridly, potential for spreading false or biased information. If AI is based on data that is invalid, inaccurate, or has certain biases, it can spread false information or is not in accordance with Islamic teachings (Smith, 2023). Fouthly, lack of empathy and social sensitivity. In the context of religious dakwah or teaching, aspects of empathy and social sensitivity are very important. AI does not have the ability to sense emotions or recognize the feelings and needs of the mad'u or the congregation.

Fifthly, lack of creativity and understanding of cultural context. Dakwah and religious teaching often involve creative approaches to communicating with a variety of people group and cultural background. AI may be less suited to tasks that require creativity and deep understanding of cultural context (Ashraf, 2022). Sixthly, cannot replace human interaction. Although AI can help in spreading religious messages more widely, AI cannot replace the personal relationship and interaction between a preacher and the congregation or individuals who need spiritual guidance

and support (Nawi et al., 2021). Seventhly, data privacy and security. The use of AI in the context of dakwah needs to consider data privacy and security issues, especially if it involves personal or sensitive data from users (Ansari et al., 2022).

Although there are limitations in the use of AI in preaching, AI also has great potential to help in providing more accessible information, more efficient data analysis, and facilitating some administrative tasks in religious organizations. However, in this context, researchers recommend using AI in dakwah strategies as a medium to help the effectiveness and efficiency of dakwah activities. As explained above, AI can be used for audience segmentation, message personalization, time and media optimization to deliver positive and inspiring content. This means that AI as a medium for conveying dakwah messages with strategies chosen by the da'i, is not an authoritative Islamic information, because so far based on several previous studies it has been stated that AI does not have in-depth knowledge of religious teachings, does not have sensitivity and does not understand the cultural context. So in terms of using AI as a medium in a dakwah strategy, you must verify Islamic information with reliable sources, such as the Koran, Hadith and the opinions of ulama (Habibullah, 2023; Marwantika 2023; Smith, 2022).

CONCLUSION

The use of artificial intelligence (AI) in preaching shows great potential in increasing the effectiveness of delivering religious messages in the digital era. The analysis and prediction model of community behavior developed in this study using machine learning techniques and AI algorithms has been able to collect and analyze data from various digital platforms such as social media, discussion forums, and religious websites. Through approaches such as clustering, classification, and sentiment analysis, AI can identify audience preferences, personalize messages, determine the optimal time to deliver preaching, and compile inspiring and contextual content.

These findings have broader implications for religious practices in the digital era. First, AI can be a strategic tool for religious institutions to understand the spiritual needs of the community in a more measurable and targeted manner. Second, a data-based approach can help build preaching communication that is more relevant to the social, cultural, and psychological context of the audience, without having to abandon the main values of Islamic preaching. Third, the role of AI in detecting religious

trends and responding quickly to social change also allows preaching to be more adaptive and dynamic.

However, the limitations of AI in the religious realm cannot be ignored. AI does not have spiritual understanding, is unable to assess intentions (niyyah), and cannot replace emotional interaction and direct spiritual guidance between da'i and mad'u. To overcome these limitations, future AI development needs to be directed towards a hybrid model that combines artificial intelligence with human intelligence (human-in-the-loop), so that AI remains under the supervision of Islamic theological and ethical values. In addition, training for dakwah practitioners on digital literacy and critical and selective use of AI is needed, so that the use of technology does not deviate from the principles of dakwah.

As a recommendation for future research, further studies can be directed at developing AI models that are able to recognize religious contexts in more depth, including understanding the context of classical Arabic, fiqh, and tafsir. Research also needs to explore how AI can be used collaboratively between da'i and technology, including in building an interactive dakwah platform that is safe, reliable, and in accordance with sharia. In addition, there needs to be interdisciplinary research that combines computer science, dakwah communication, sociology, and Islamic studies to design an ethical and methodological framework for implementing AI in religious activities in a holistic and sustainable manner. With the right approach and based on the principle of caution, AI can be a strategic partner in supporting a broader, more relevant and more impactful role of da'wah amidst the complexity of contemporary digital society.

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