



## **AI-Islam and Kemuhammadiyah as Foundational Ethical Frameworks for Professional Conduct in the Era of Industry 5.0**

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### **ABSTRACT**

The Fifth Industrial Revolution has fundamentally transformed the landscape of the global workforce, blending technological sophistication with humanistic values. In this context, professional ethics emerge as a critical element that must be supported not only by technical standards but also by strong spiritual and moral foundations. This article aims to explore the role of AI-Islam and Kemuhammadiyah values as a relevant and applicable foundation for professional ethics in the era of Industrial Revolution 5.0. This study employs a literature review method with a descriptive-qualitative approach, analyzing Islamic literature alongside relevant scholarly works and existing research. The findings reveal that principles such as tauhid (monotheism), amanah (trustworthiness), ihsan (excellence), tajdid (renewal), and ukhuwah (brotherhood) possess transformative power in shaping professionals with integrity and a humanistic orientation. The article further highlights the application of these values within Muhammadiyah education and professional spheres, offering a contextual and sustainable model of professional ethics. Thus, AI-Islam and Kemuhammadiyah serve not only as ideological identifiers but also as practical solutions to contemporary ethical challenges in the professional realm. This study recommends strengthening the integration of AI-Islam and Kemuhammadiyah (AIK) values into the Muhammadiyah educational system, professional training programs, and institutional policies as a strategic effort to cultivate a progressive and dignified professional society.

**Keywords:** AI-Islam, Kemuhammadiyah, professional ethics, Industrial Revolution 5.0, spiritual values, professionalism.

## INTRODUCTION

The Fifth Industrial Revolution marks a new phase in the development of human civilization, characterized by the integration of artificial intelligence with humanistic values (Rustandi & Husni, 2024). Unlike the Fourth Industrial Revolution, which primarily emphasized automation and production efficiency, Industry 5.0 highlights the importance of collaboration between humans and technology to build a sustainable, inclusive, and ethical society. Within this context, a fundamental question arises: *How should professional ethics evolve to accommodate technological advancements while safeguarding human dignity?* (Fitriani et al., 2025).

Professional ethics refers to a set of moral norms and principles that guide individual behavior in fulfilling their professional duties and responsibilities. In practice, it serves both as a moral compass and a mechanism of social control, preventing abuses of power, dishonesty, and violations of integrity within the workplace. However, the challenges facing professional ethics are becoming increasingly complex amid the disruptive influence of technology, which continues to blur the boundaries between humans and machines, and between reality and virtual environments (Putra et al., 2024). In Indonesia, the crisis of professional ethics is evident across various sectors such as healthcare, law, education, and business, reflecting a broader degradation of moral values within professional domains.

In the healthcare sector, the 2021 case involving the reuse of rapid antigen test kits by employees of Kimia Farma at Kualanamu Airport attracted national attention. This act not only violated legal regulations but also represented a serious breach of medical ethics, which prioritize patient safety and rights. Another violation occurred when medical personnel at RSUD Martapura live-streamed a surgical procedure on social media, contravening the principles of patient confidentiality and professional integrity (Putra et al., 2024). In the legal field, bribery cases involving prominent lawyers such as Lucas and Fredrich Yunadi highlight a weak commitment to the Indonesian Advocates Code of Ethics (KEAI), which is supposed to uphold justice and honesty.

Other unethical legal practices including client fund embezzlement and document forgery further tarnish the public image of the legal profession. In the business sector, PT Garuda Indonesia and its external auditors were implicated in financial statement manipulation in 2019, illustrating how the pursuit of profit can override the principles of accountability and transparency (Satiadharmanto et al., 2024). Meanwhile, in the media industry, unbalanced and sensationalized coverage of public figures' private lives such as the cases involving G.A. and B.T.P. exemplifies serious violations of the Journalistic Code of Ethics, particularly regarding privacy and objectivity.

These instances reveal that professional ethics grounded solely in positive law or secular values remain insufficient to address the complexities of modern moral crises. Therefore, there is a pressing need for an ethical framework rooted in spiritual and transcendent values, as advocated by the teachings of *Al-Islam* and *Kemuhammadiyah*. As a value system within the Muhammadiyah movement, *Al-Islam* and *Kemuhammadiyah* offer a distinctive ethical paradigm derived from Islamic teachings and the spirit of *tajdid* (renewal). Values such as *tauhid* (monotheism), *amanah* (trustworthiness), *ihsan* (excellence), and social responsibility form a moral foundation that governs not only interpersonal relations but also one's relationship with God

and the universe. Within the professional realm, these values cultivate individuals who are both morally upright and technically competent.

Muhammadiyah, as a modernist Islamic movement, has long demonstrated its commitment to fostering a morally grounded professional society through its various philanthropic efforts in education, healthcare, social services, and economic development. In each of these areas, the integration of Al-Islam and Kemuhammadiyah values serves as an ethical compass for both institutional operations and individual conduct. Thus, Muhammadiyah functions not only as a religious movement but also as an agent of ethical transformation in the public sphere (Solihati et al., 2022). The era of Industry 5.0 necessitates a paradigm shift in professional ethics—from a mechanistic to a humanistic and spiritualistic model. Consequently, it is essential to explore and actualize the values of *AIK* (Al-Islam and Kemuhammadiyah) as an ethical framework capable of shaping professionals who are not only technically proficient but also possess strong moral character and dignity.

The integration of AIK values in the development of professional ethics is not limited to Muhammadiyah institutions but also offers a universal ethical model applicable to a wide range of organizations and professional bodies across Indonesia. Ethics based on AIK provides a holistic approach that encompasses spiritual, social, and intellectual dimensions in cultivating professionalism aimed at serving the greater good (Andi Arbaina Fariza et al., 2024).

This article aims to examine how the values of Al-Islam and Kemuhammadiyah can serve as foundational pillars for professional ethics amid the complexities of the Fifth Industrial Revolution. By exploring the core principles of AIK and their relevance to contemporary professional challenges, this study aspires to offer both conceptual insights and practical contributions toward building a robust ethical foundation. Methodologically, this study employs a qualitative approach through a literature review, collecting data from various sources related to the concepts of professional ethics, Al-Islam and Kemuhammadiyah, and the development of Industry 5.0. The analysis is conducted using descriptive and normative methods to identify key AIK values and contextualize them within the current professional landscape (Hadi & Jayadi, 2024). Therefore, this article is expected not only to deepen academic understanding of the relationship between AIK and professional ethics but also to serve as a reference for curriculum development, professional training, and institutional policymaking both within Muhammadiyah and the broader society as they navigate the dynamics of the 5.0 era.

## METHOD

This study employs a qualitative-descriptive approach using the literature review method. This approach was chosen to gain a comprehensive understanding of Al-Islam and Kemuhammadiyah (AIK) values in the context of professional ethics formation and their relevance to the challenges posed by the Fifth Industrial Revolution (Industry 5.0). Rather than aiming to explore, interpret, or synthesize new theoretical constructs, this research focuses on examining and contextualizing existing scholarly and authoritative sources.

The data sources used in this study consist of both primary and secondary literature. Primary sources include the Qur'an, Hadith, and official documents issued by the Muhammadiyah

organization concerning AIK teachings, such as Kepribadian Muhammadiyah (The Muhammadiyah Personality), Pedoman Hidup Islami Warga Muhammadiyah (Guidelines for Islamic Living for Muhammadiyah Members), and official resolutions from Muhammadiyah Congresses. Secondary sources comprise scholarly articles, academic books, research reports, and conceptual studies addressing themes such as professional ethics, Industry 5.0, and the relevance of Islamic values in shaping professional character.

Data analysis was conducted using content analysis, which involved examining the content of the literature to identify key themes related to Islamic ethical values, Muhammadiyah principles, and dimensions of contemporary professional ethics. This process included categorization and interpretation to uncover conceptual linkages between AIK values and the ethical dimensions required in professional settings within the framework of Industry 5.0.

The analytical procedure was carried out systematically, beginning with the selection and identification of relevant sources, followed by critical reading and thematic synthesis. This methodological approach enables the authors to present a holistic and contextualized understanding of the topic while highlighting the contribution of AIK values in developing a model of professional ethics grounded not only in competence but also in moral and spiritual values. Through this approach, the article aims to establish a strong theoretical and conceptual foundation and offer a novel perspective on developing an AIK-based professional ethics model that addresses contemporary challenges.

## **RESULT AND DISCUSSION**

### **Ethical Challenges of Professionalism in the Era of the Fifth Industrial Revolution**

The Fifth Industrial Revolution marks a profound transformation in the professional landscape by integrating advanced technologies such as artificial intelligence (AI), robotics, big data, and the Internet of Things (IoT) with humanistic values (Ainun & Sewang, 2023). Unlike the Fourth Industrial Revolution, which prioritized automation and efficiency, this new phase emphasizes the central role of human agency in fostering meaningful and sustainable innovation (Wibowo et al., 2024). Nevertheless, this technological shift has introduced a range of significant ethical challenges across various professional domains.

One of the primary challenges is the emergence of moral dilemmas in algorithm-driven decision-making. Professionals in technology, healthcare, education, and finance are increasingly encountering situations in which ethical responsibility no longer lies solely with human actors, but also with autonomous AI systems. In such cases, moral accountability becomes blurred, as decisions made by these systems are often opaque and not fully comprehensible even to their human users (Agustus et al., 2024).

Another ethical concern arises from the disruption of traditional work values, driven by an excessive focus on productivity and efficiency. Professionals are under mounting pressure to conform to technology-based performance standards, which may erode moral sensitivity, empathy, and social responsibility (Sarfraz et al., 2021). This is especially evident in public service sectors,

where human relationships cannot be entirely replaced by machines or digital systems (Humayun, 2021).

The Fifth Industrial Revolution has also fostered conditions that promote increasing professional individualism. High levels of digital connectivity and flexible work arrangements often lead to isolation, diminishing opportunities for collective interaction and shared moral development. Yet, professional ethics are fundamentally nurtured within a collective culture that upholds values, norms, and social accountability (Taj & Jhanjhi, 2022).

The commercialization and commodification of professions represent a further ethical threat, undermining the integrity of professional practice. Competitive pressures and market demands have, in some cases, driven professionals to compromise principles of honesty and integrity in pursuit of material gain. This trend exacerbates manipulative practices, conflicts of interest, and professional misconduct, ultimately eroding public trust in institutions and professions. Ethical challenges are also evident in the form of technological access inequality, which indirectly creates professional disparities between those who can adapt to innovation and those who are left behind. Such disparities contribute to structural injustice and workplace discrimination, contravening universal ethical principles such as justice, equality, and respect for human dignity (Rijwani et al., 2025).

The erosion of spirituality in professional practice further compounds ethical challenges. When work is viewed merely as a means of livelihood rather than as a trust or form of service, the ethical dimension loses its firm moral grounding, making it vulnerable to moral relativism. In conclusion, the ethical challenges of professionalism in the Fifth Industrial Revolution are complex and multidimensional (Wahyudi et al., 2025). They extend beyond technical and normative concerns to encompass humanistic, spiritual, and social dimensions. Addressing these challenges requires a comprehensive value framework deeply rooted in Islamic and Muhammadiyah principles, enabling professionals to respond wisely, contextually, and sustainably.

### **The Relevance of Al-Islam and Muhammadiyah Values as the Ethical Foundation of Professionalism**

The values of Al-Islam and Muhammadiyah (AIK) occupy a strategic position in shaping professional character and integrity in the era of the Fifth Industrial Revolution. In Islamic teachings, ethics are not merely external behavioral norms, but rather an integral component of faith and devotion to Allah SWT. Accordingly, professionalism in Islam is inseparable from the values of *tawhid* (monotheism), honesty, trustworthiness (*amanah*), justice, and *ihsan* (excellence), which together form the moral foundation for individuals in carrying out their professional roles. This principle redefines every profession as a form of devotion and worship, rather than merely a worldly activity (Puspita Handayani et al., 2022).

Muhammadiyah, as a modernist Islamic reform movement, has long emphasized the importance of cultivating an excellent society in spiritual, intellectual, and professional dimensions. Muhammadiyah values such as sincerity, simplicity, diligence, and social

responsibility serve as normative frameworks that underpin the organization's work across various sectors. Thus, AIK values are not merely normative doctrines but constitute a professional ethos that shapes a culture of integrity and humanistic professionalism.

The concept of *amanah* within AIK is particularly relevant to professional responsibilities in the digital age, where data, information, and automated systems require honest and accountable governance. A professional who upholds *amanah* will maintain integrity in decision-making and resist the temptation to manipulate systems or abuse authority, even when technology offers the opportunity to do so. This builds public trust, a vital asset in professional relationships (Faridli et al., 2024).

Similarly, the principle of *ihsan*, which entails performing every task with excellence and sincerity of intention, motivates professionals to prioritize quality and the common good in their work. In the context of the Fifth Industrial Revolution, which demands efficiency and innovation, *ihsan* encourages professionals not merely to complete tasks, but to do so meaningfully and responsibly, while upholding humanistic values. The value of justice within AIK is crucial in addressing the challenges of inequality and discrimination that may arise from technological advancement. A justice-oriented professional will not utilize technology to exclude or marginalize certain groups or to justify unequal access. Instead, they will strive to create systems and work environments that are inclusive, fair, and oriented toward the collective good (Basri, 2022).

In addition, social responsibility, a core value of Muhammadiyah, serves as a fundamental basis for the development of professional ethics. Professionals are not only accountable to their superiors or clients, but also to the broader society and the environment. This perspective aligns with the current global demand for socially conscious professionals who contribute to sustainable development. AIK values also emphasize the integration of knowledge and morality. In the era of information and artificial intelligence, many professionals may excel in technical competencies while lacking moral character. AIK addresses this gap by asserting that a true professional is one who integrates expertise with ethics, transforming their work into a means of doing good rather than a tool for oppression or exploitation (Friandi et al., 2021).

In conclusion, the values of Al-Islam and Muhammadiyah are highly relevant in shaping professional ethics in the era of the Fifth Industrial Revolution. AIK offers a holistic ethical paradigm that not only responds to contemporary moral challenges but also reinforces the spiritual and social foundations of professionalism. The relevance of these values becomes increasingly evident as the world faces a crisis of integrity and morality amidst the unrestrained acceleration of technological modernization.

### **Practical Implementation of AIK Values in Professional Ethics**

The integration of Al-Islam and Muhammadiyah values (AIK) into professional ethics must go beyond normative ideals; it requires tangible enactment in daily professional practices that reflect integrity, responsibility, and spiritual consciousness. Within increasingly complex and dynamic professional environments, AIK functions as a moral compass, guiding individual

behavior in alignment with holistic Islamic principles. This implementation necessitates internalization through education, habituation, and exemplary leadership (Anwar, 2021).

A concrete manifestation of AIK values in professional life can be seen in the commitment to honesty and transparency in fulfilling professional duties. In accounting, for example, an accountant who upholds AIK values will refrain from manipulating financial statements for the benefit of particular parties. The Islamic value of honesty (*ṣidq*) serves as a moral foundation, emphasizing that all conveyed information must reflect the truth and be accountable both professionally and spiritually (Elihami, 2021). The principle of *amanah* (trustworthiness) is also highly applicable across various professions. A doctor, teacher, or lawyer who embodies AIK values perceives their profession as a divine trust from Allah SWT that must be carried out with sincerity, integrity, and a commitment to public trust. In practice, this is demonstrated through adherence to professional codes of ethics, confidentiality, and the provision of non-discriminatory and non-exploitative services.

In the context of leadership and management, the values of *ta'awun* (collaboration) and *shūrā* (consultation) are essential in fostering collective ethical behavior in the workplace. A leader grounded in AIK values will promote a collaborative atmosphere, encourage participation, and avoid authoritarian tendencies. This not only ensures procedural justice but also contributes to the development of a healthy and morally grounded organizational culture (Yusutria et al., 2022).

The Muhammadiyah perspective on social responsibility is evident in professional practices oriented toward public benefit. Real-world examples include the involvement of Muhammadiyah professionals in philanthropic community service, educational, and healthcare initiatives. These practices illustrate that a profession is not merely a means of livelihood, but also a platform for *da'wah* (Islamic propagation) and social service. The implementation of AIK in professional ethics is also reflected in the promotion of simplicity and anti-corruption values. A professional who upholds modesty will avoid a consumerist lifestyle and will not exploit their position for personal gain. This value instills moral integrity in resource management and fosters strong accountability to both the public and God (Hidayat, 2024).

AIK education within Muhammadiyah universities plays a pivotal role in cultivating these values early on. Through AIK courses, student organization development, and a religious academic culture, students are shaped into competent professionals who are also guided by Islamic character. This approach ensures continuity between academic training and professional practice in fostering a robust ethical foundation (Basri, 2022).

In conclusion, the practical application of AIK values in professional ethics must be both systemic and contextual. It is not sufficient for these values to be memorized or preached; they must be embedded in work culture, organizational governance, and daily professional decision-making. When these values are genuinely internalized and enacted, the profession transforms from a mere economic activity into an act of worship and a contribution to human civilization.

## CONCLUSION

Amid the rapid advancement of technology and global dynamics in the era of the Fifth Industrial Revolution, the challenges surrounding professional ethics have grown increasingly complex. The modern workplace demands not only technical competence but also high standards of moral integrity and social responsibility. In this context, the values of Al-Islam and Kemuhammadiyah (AIK) demonstrate significant relevance as a foundation for developing a robust and sustainable professional ethic. Core principles such as trustworthiness (*amanah*), honesty, excellence (*ihsan*), justice, social responsibility, and the integration of knowledge with morality serve not merely as normative guidelines but as practical ethical standards across various professional fields. AIK values not only guide individuals toward ethical behavior but also frame professional engagement as a form of devotion to God and service to society. The descriptive-qualitative approach through a literature review employed in this study indicates that strengthening AIK values in the professional sphere offers a potential solution to the moral and ethical crises often triggered by technological misuse and spiritual decline. These values must be internalized early through education, habituation, and practical application within both academic and professional settings. Thus, AIK is not merely a set of religious doctrines; it constitutes an ethical and spiritual framework for engaging in meaningful professional practice. In this disruptive era, AIK emerges as a moral foundation for shaping professionals who are not only intellectually capable but also morally and spiritually grounded, contributing to the realization of an enlightened and progressive society.

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