

IMPLEMENTING PROPHETIC VALUES IN THE ISLAMIC LIFE GUIDELINES FOR MUHAMMADIYAH CITIZENS: A QUALITATIVE ANALYSIS FOR TRANSFORMING SCIENCE AND TECHNOLOGY

Muhammad Qorib & Ahmad Afandi

Universitas Muhammadiyah Sumatera Utara
Jl. Kapten Mukhtar Basri, Blok BA No. 3, Medan, Sumatera Utara, 20238, Indonesia
e-mail: muhammadqorib@umsu.ac.id, ahmad.affandi@umsu.ac.id

Abstract: Rapid advances in science and technology have significantly changed various aspects of human life, so a humane and sustainable approach is needed in its development. This article aims to explore and analyze how the prophetic values contained in the Muhammadiyah Islamic Life Guidelines can guide the transformation of science and technology. Using a qualitative approach and desk research, this article analyzes key prophetic values such as tolerance, togetherness, brotherhood, and social care. The results show that these values provide a strong ethical and spiritual framework for the responsible and sustainable application of science and technology. The integration of these prophetic values in the development of science and technology can encourage more inclusive and harmonious progress, thus providing extensive benefits to society and the environment. Thus, this article emphasizes the importance of a holistic approach that incorporates prophetic values in dealing with the transformation of science and technology.

Keywords: Prophetic Values, Muhammadiyah Life Guidelines, Transformation of Science and Technology.

Corresponding Author	Ahmad Afandi
Articel history	Submitted : April 14, 2023 Accepted : May 14, 2024 Published : Juny 28, 2024
How to cite article	Qorib, Muhammad, and Ahmad Afandi. "IMPLEMENTING PROPHETIC VALUES IN THE ISLAMIC LIFE GUIDELINES FOR MUHAMMADIYAH CITIZENS: A QUALITATIVE ANALYSIS FOR TRANSFORMING SCIENCE AND TECHNOLOGY." MIQOT: Jurnal Ilmu-Ilmu Keislaman 48, no. 1 (2024): 1-14. https://doi.org/10.30821/miqot.v48i1.1129 .

Introduction

Science and Technology (Science and Technology) in recent decades has experienced rapid progress in various aspects of life. Science and technology have great potential to improve the economy. Science and technology, such as the Internet of Things (IoT), have great potential to open up many opportunities for users and industries and have a significant impact on growing the economy and¹ development Science and technology also closes the distance between people who are far apart so that they can stay connected, thus reuniting them in a sibling bond. However, the rapid development of Science and technology also has a complex and profound impact on human life. In ancient times, human life depended highly on spiritual and religious beliefs, with God as the epicenter of movement and life direction. However, as Science and technology progress, people tend to feel more independent and independent, changing their view of God as an object that is sometimes left behind. Along the way, Science and technology sometimes move without clear control or direction. Although it provides convenience and benefits for humanity, Science and technology also have negative potential losses. Often, Science and technology cause Social isolation and loneliness due to the excessive use of digital technology. ²Science and technology are often used as a medium of provocation in conflicts, including civil wars, wars based on religion, or wars for the hegemony of the nation and state. This shows that Science and technology can significantly affect the course of history and the dynamics of human life.

In the ever-evolving information age, Science and technology are becoming increasingly inevitable. However, many people still need to fully prepare mentally and implement actively to face the impact of science and technology transformation. Disproportionate and less civilized use can produce negative consequences, both in social and environmental aspects. Especially in the context of social media as an important part of information media, we often see how it turns into an asocial platform, triggering quarrels and hostility among its users. In order to face the ongoing transformation of Science and technology, there needs to be a more holistic approach that involves prophetic values in the use of Science and technology. Prophetic values provide an ethical and spiritual foundation that can guide the responsible, humane, and sustainable use of Science and technology. Prophetic values, such as tolerance, togetherness, brotherhood, and social care, can be a guide in utilizing the progress of Science and technology in a way that benefits humans and maintains harmony.

PHIWM guides Muhammadiyah members in living a life based on Islamic teachings. In PHIWM, prophetic values become the basis for interacting with fellow humans and the surrounding environment. These values include tolerance, togetherness, brotherhood, and social care. Tolerance is one of the prophetic values upheld in PHIWM.

¹ Ernita Dewi Meutia, "Dampak Sosial Internet of Things," *Seminar Nasional Dan Expo Teknik Elektro*, 2017, 102–6.

Muhammadiyah, as a modernist Islamic movement, has a high appreciation and tolerance for Javanese traditions and culture³. The movement also paved vast avenues for interfaith relations and dialogue. In the context of education, Muhammadiyah tries to find ways to translate Islam into a plural society. Therefore, tolerance is important in PHIWM to build harmonious relations between religious communities. Togetherness is also a prophetic value emphasized in PHIWM. Muhammadiyah teaches the importance of cooperation and solidarity among fellow members in carrying out life based on Islamic teachings. In the context of education, Muhammadiyah established educational institutions that encourage interaction and cooperation between students. This togetherness also plays an important role in the transformation of Science and Technology, where collaboration and cooperation between individuals and institutions is the key to achieving progress. Fraternity is another prophetic value that is upheld in PHIWM.

Muhammadiyah has an open social ideology and advocates a life based on pure tawhid and firmness guided by the Qur'an and Hadith. In PHIWM, brotherhood among Muhammadiyah members is strongly emphasized in the context of daily life and education. This brotherhood creates strong bonds between Muhammadiyah members and strengthens solidarity in carrying out Islamic teachings. Social care is also an important prophetic value in PHIWM. Muhammadiyah teaches the importance of caring for others and the surrounding environment. In education, Muhammadiyah encourages students to have social care through a learning model emphasizing personal and social responsibility. This social concern also plays an important role in the transformation of Science and Technology, where Science and technology must be used for humanity's social benefit and welfare.⁴⁵⁶⁷⁸⁹¹⁰

Through a qualitative approach and literature research, this article will explore prophetic values in the transformation of Science and technology, explore and analyze primary data taken from previous writings and research on prophetic values such as tolerance, togetherness, brotherhood, and social care and their implementation in the

² Christopher Burr, Mariarosaria Taddeo, and Luciano Floridi, "The Ethics of Digital Well-Being: A Thematic Review," *Science and Engineering Ethics* (Springer, August 1, 2020), <https://doi.org/10.1007/s11948-020-00175-8>.

³ (Mu'ti, 2016)

⁴ (Mu'ti 2016)

⁵ (Mu'ti 2016)

⁶ *The Oxford Dictionary of Islam* (Oxford University Press, 2003), <https://doi.org/10.1093/acref/9780195125580.001.0001>.

⁷ Dupri Dupri, "PENGARUH MODEL PEMBELAJARAN DAN GENDER TERHADAP KEPEDULIAN SOSIAL SISWA PADA PEMBELAJARAN PENDIDIKAN JASMANI," *Edusentris* 2, no. 1 (March 26, 2015): 22, <https://doi.org/10.17509/edusentris.v2i1.157>.

⁸ (Mu'ti 2016)

⁹ Dupri, "PENGARUH MODEL PEMBELAJARAN DAN GENDER TERHADAP KEPEDULIAN SOSIAL SISWA PADA PEMBELAJARAN PENDIDIKAN JASMANI."

¹⁰ (Dupri 2015).

context of Science and technology. Hopefully, this article can provide a deeper understanding of how using Science and technology based on prophetic values can provide wider and more sustainable human benefits.

Prophetic or Prophetic values can be defined as ethical values that include humanization, liberation, and transcendence. These values aim to guide individuals towards a more holistic understanding of their role as servants of Allah Almighty and promote positive behavior in society. The concept of prophetic values integrates Science and religion, emphasizing the importance of revelation, reason, heart, and senses in understanding aspects of ontology.¹¹¹²

In recent years, many studies have begun to examine the role and implementation of prophetic values in the transformation of Science and Technology (Science and Technology). These studies aim to understand how prophetic values can be applied in Science and technology to achieve optimal benefits for humans and the environment.

One of the relevant studies is research conducted entitled “¹³Prophetic Education and Its Role in Counteracting the Negative Impact of Technology in Mlangi Yogyakarta” In his research, prophetic values have a very important urgency for the use of technology so that it can fight the negative influence of technology. Strengthening spirituality and humanism can help individuals become self-reliant and understand the meaning of their existence in the world. This article emphasizes the importance of a critical approach to finding solutions to the negative impacts of technology on society. Therefore, the urgency of prophetic value towards the utilization of technology is to promote a balanced approach to technology that considers the spiritual and humanistic aspects of life.

Another research relevant to this theme was conducted under the¹⁴ title “Internalization of Prophetic Education Values by Habib Husein Ja’far Al-Hadar Through Digital Media .”This research highlights the urgency of prophetic values in promoting prophetic educational values, which include humanization, liberation, and transcendence. The paper suggests that digital media can help convey moral messages and values to the younger generation in a more interesting and contemporary way. It can help promote the values of prophetic education and be an effective tool for spreading moral values.

¹¹ Djoko Sulaksono, Budi Waluyo, and Dewi Pangestu Said, “PROPHETIC VALUES IN POST-REFORM MODERN JAVANESE NOVELS,” *EL HARAKAH (TERAKREDITASI)* 20, no. 1 (June 1, 2018): 81, <https://doi.org/10.18860/el.v20i1.4590>.

¹² Kelik Wardiono, “Prophetic : An Epistemological Offer for Legal Studies,” *Journal of Transcendental Law* 1, no. 1 (September 20, 2019): 17–41, <https://doi.org/10.23917/jtl.v1i1.8797>.

¹³ Sulhatul Habiba and Khotimatus Sholikhah, “Pendidikan Profetik Dan Perannya Dalam Menangkal Dampak Negatif Teknologi Di Mlangi Yogyakarta,” *AL-RIWAYAH: JURNAL KEPENDIDIKAN* 10, no. 2 (2018): 325–39, <http://ejournal.stain.sorong.ac.id/indeks.php/al-riwayah>.

¹⁴ (Nur’AFIIFAH & Misbah, 2022)

A study conducted by¹⁵ entitled “Prophetic Social Paradigm in Communicating on Social Media” also concluded that the use of social media should be guided by ethical and moral values, especially prophetic social values, to prevent social conflicts and promote positive interactions among users. In addition, a recent study entitled “¹⁶Prophetic Ethics in Using Social Media” showed that implementing prophetic values on social media use can improve the quality of social media use among young people. The study showed that the quality of social media use among respondents could have been better before implementing prophetic values. However, using prophetic values encourages increased politeness, positive behavior, and better quality in social media use. This research also emphasizes the need for Da’wah of Islamic values, the development of technological advances, and the importance of integrating prophetic values in social media.

¹⁷ It also conveys prophetic communication linking religious teachings to social, political, and economic realities, encompassing broader humanistic values such as humanization, liberation, and transcendence. Thus prophetic communication is essential to promote social responsibility and ethical behavior. Therefore, prophetic values are beneficial in encouraging a more just and just society based on ethical and moral values.

The implementation of prophetic values can encourage a nation to become more religious. According to ¹⁸, prophetic values that can form a religious nation include belief in the Oneness of God, good morals and ethics, social justice and equality, compassion and empathy for others, knowledge and wisdom, humility and decency, honesty and integrity, hard work and perseverance, and responsibility and accountability.

In an article written by Wafiqni and Nurani (2019), they explain the thematic learning model based on local wisdom. Thematic learning uses themes as its learning object. In the context of PHIWM, the themes raised can relate to tolerance, togetherness, brotherhood, and social care. Teachers can adapt this thematic learning model by incorporating PHIWM values into the content of learning materials. This aims to prepare the younger generation who are responsive to local excellence in their region and can face the challenges of the times. In addition, in research conducted, they examined the application of Islamic behavior of Polytechnic ‘Aisyiyah West Sumatra nursing students in personal and family life according to PHIWM. This study aims to determine how much nursing students apply PHIWM daily. The results showed that nursing students who applied PHIWM had better Islamic behavior in personal and family life. This shows that PHIWM can guide individuals in living their daily lives. In the context of the transformation of Science and Technology, PHIWM can also be a moral and ethical foundation for

¹⁵ Athoillah Islamy and Athoillahislamy@yahoo Co Id, “Paradigma Sosial Profetik Dalam Bermuamalah Di Media Sosial,” *Tadbir: Jurnal Manajemen Dakwah* 3, no. 1 (2021): 83–104.

¹⁶ (Fahruda&d & Azali, 2023)

¹⁷ (Sari, Son, and Suryandi 2022)

¹⁸ (Sharif, 2014)

scientists and technologists. In an article written by Wafiqni and Nurani (2019), they mentioned that teaching thematic models based on local wisdom can be a connection in understanding children to act appropriately in facing challenges. In this regard, PHIWM can guide scientists and technologists in developing and using Science and technology with full responsibility and awareness of its impact on society and the environment. Thus, the Islamic Living Guidelines of Muhammadiyah Citizens (PHIWM) are relevant to tolerance, togetherness, brotherhood, and social care in science and technology transformation. PHIWM can be a guideline for individuals living their daily lives and for scientists and technologists in developing and using Science and technology with full responsibility and awareness. Through the implementation of PHIWM, it is hoped that the community can live harmoniously, respect each other, and contribute to advancing Science and technology for the common welfare.^{19,20,21}

Based on previous studies mentioned above, it has explored the role and implementation of prophetic values in the transformation of Science and Technology (Science and Technology). However, there still needs to be more research that can be identified and need further attention. One of the research gaps that can be found is the need for more focus on social and human aspects in the use of Science and technology. Although technological advances provide various benefits and conveniences for humans, their social impact still needs to be fully considered. Therefore, it is important to explore how prophetic values, such as tolerance, togetherness, fraternity, and social care, can guide in harnessing technological advances in responsible and sustainable ways.

Methodology

This research carries a qualitative approach and literature research to explore and analyze prophetic values in the transformation of Science and Technology (Science and Technology). This approach is carried out by exploring primary data taken from previous writings and research, especially those related to the activities of the Muhammadiyah organization and its contribution to the transformation of Science and technology.

A qualitative approach was used in this study to gain an in-depth understanding of prophetic values in the context of science and technology transformation. This approach allows researchers to explore the complex qualitative aspects and nuances in prophetic values underlying the activities of Muhammadiyah organizations.

¹⁹ (Wafiqni and Conscience 2019)

²⁰ Desi Asmaret, Nurhaida Nurhaida, and Trisna Jayati, "PENERAPAN PERILAKU ISLAMIC MAHASISWA KEPERAWATAN POLITEKNIK 'AISYIYAH SUMATERA BARAT DALAM KEHIDUPAN PRIBADI DAN KELUARGA SESUAI PHIWM," *Menara Ilmu* 16, no. 2 (April 26, 2022), <https://doi.org/10.31869/mi.v16i2.3039>.

²¹ (Wafiqni and Conscience 2019)

Literature research is carried out by collecting and analyzing various sources of writing and previous research relevant to prophetic values in the context of science and technology transformation. The primary data obtained from these sources will be used to explore the values contained in the activities of the Muhammadiyah organization and its contribution to the transformation of Science and technology.

Results and Discussion

Disorientation of Science and Technology

Science and technology are currently inseparable from human life, entering the private sphere and potentially becoming public consumption. However, the position of Science and technology that was previously expected as a tool that facilitates human work and activities has changed drastically and sometimes threatens human values. The rapid development of Science and technology in various fields has significantly impacted human life. The use of technology in everyday life has become a necessity of modern society, whether in the fields of communication, transportation, health, or other activities. Modern man can no longer imagine life without the help of Science and technology. However, behind the convenience and benefits offered, some challenges must be overcome to address human values.

The use of Science and technology in the private sphere demands more serious attention. Technology originally intended for individual or limited group needs, such as personal communication devices, smartphones, or smart household devices, now has the potential to become public consumption. A study entitled “²²The Abuse of Technology in Domestic Violence and Stalking” showed the results of a survey that technology, including mobile phones, tablets, computers, and social networking sites, is generally not rarely used by perpetrators to stalk their victims. Perpetrators can also use digital media to constantly disrupt their targets regardless of location, expanding their scope of control beyond previous spatial boundaries.²³ Information and data collected through such technologies may be used by irresponsible parties, threatening the privacy and security of individuals. Science and technology in the private sphere require good management and proper rules to protect individual rights and prevent abuse.

Science and technology orientation also occurs in the context of the use of technology in the use of Science and technology which exacerbates a conflict and crisis. Although Science and technology can provide benefits in many aspects, the potential negative aspects of Science and technology are also vulnerable to abuse in conditions of conflict and crisis, as is often the case in social media which includes the spread of rumors, fake news, manipulation, cyber

²² Delanie Woodlock, “The Abuse of Technology in Domestic Violence and Stalking,” *Violence Against Women* 23, no. 5 (April 1, 2017): 584–602, <https://doi.org/10.1177/1077801216646277>.

²³ (Dragiewicz Et Al. 2018)

fraud, and information warfare.²⁴ This danger can lead to misinformation and manipulation of public opinion, exacerbating conflicts and crises. The use of technology in warfare and conflict also has serious consequences. Using advanced weapons and technology-based defense systems can result in great losses to civilians and violate humanitarian principles. Conflicts and quarrels often align with the use of Science and technology as the main tool, which can threaten peace and justice.

Misuse of social media is also a disorientation of Science and technology that often occurs, causing negative consequences, such as the spread of hoaxes and incitement to hatred and conflict. In addition, reliance²⁵ on social media for communication can disrupt social relationships and lead to decreased face-to-face interactions.²⁶

In facing the challenge of disorienting Science and technology, it is imperative to develop a comprehensive understanding of the impact of technology on human values. Strong regulations and effective supervision are also needed to ensure that Science and technology do not violate the rights of individuals, communities, and the environment. In addition, integrating prophetic values in technology and policy development can help steer the use of technology toward sustainable, equitable, and humane goals.

Prophetic Vision

The prophetic vision in the transformation of Science and technology involves a more holistic understanding linked to ethical values, social justice, and ecosystem balance. In developing and implementing Science and Technology (IPTEK), it is important to have a broader and more thorough vision underlying its use by considering the prophetic values contained in the Qur'an, Hadith, and the views of scholars. In this context, three approaches, namely B again, Burhani, and Irfani, become an important foundation for directing the use of Science and technology in a directed manner.

1. Bayani Approach: The Bayani approach refers to an attitude of courage and high enthusiasm in applying Science and technology with integrity. This approach encourages individuals to be strongly responsible for using Science and technology through prophetic values. The application of the Bayani approach in Science and technology can be seen in various fields, such as the application of environmentally friendly technology, the development of affordable health technology, and efforts to overcome social problems through technological innovation. Bayani's approach to Science and technology shows that courage and a positive spirit are the keys to making science and technology a tool that benefits humanity.

²⁴ (Reuter, Stieglitz, and Imran 2020)

²⁵ Debora Maya Mangadil, "DAMPAK YURIDIS PENGGUNAAN MEDIA MENURUT UNDANG-UNDANG NOMOR TAHUN 2008 TENTANG INFORMASI DAN ELEKTRONIK," *Lex et Societatis* 4, no. 1 (2016): 120–28, <http://unpas.ac.id/archives/597>.

²⁶ (Arianti 2017).

2. Burhani approach: The Burhani approach emphasizes the importance of using objective and tested scientific methods in developing Science and technology. In the face of complex and multifaceted challenges in the transformation of Science and technology, this approach emphasizes the need for deep understanding, careful experimentation, and rational assessment of the implications and impacts of the use of Science and technology. Through the Burhani approach, Science and technology development can be based on solid scientific evidence and objective analysis, resulting in effective and accountable solutions.
3. Irfani approach: The Irfani approach emphasizes the importance of the spiritual dimension in understanding and applying Science and technology. Through this approach, individuals are reminded to see Science and technology as a means that allows us to deepen our understanding of the greatness of God's creation and develop wisdom in its use. Irfani's approach teaches the importance of maintaining a balanced relationship between man, nature, and his creator. In the development of Science and technology, the infant approach encourages us to integrate spiritual values and pay attention to the long-term impact on human life and the universe.

In the context of prophetic vision, values such as tolerance, togetherness, brotherhood, and social care also play an important role in developing and using Science and technology. Tolerance in Science and Technology refers to recognizing differences and diversity and appreciating the contributions of various community groups in developing Science and technology. Togetherness and fraternity promote cross-disciplinary cooperation and collaboration between individuals, groups, and countries to produce innovations that benefit humanity. Social care encourages using Science and technology to address social problems and provide inclusive and sustainable solutions.

In the Qur'an, Allah says: "And do not do mischief on earth after it has been (created) well. Pray to Him with fear and hope." In addition, the Prophet Muhammad (peace be upon him) in From Abu Hurairah Radhiallahuanhu, from the Prophet Sallallahu 'alaihi Wa Sallam said: "Whoever helps to resolve a believer's difficulty from a difficulty among the difficulties of the world, Allah will undoubtedly facilitate one of his difficulties among the difficulties of the Day of Judgment. And whoever makes it easy for a person who is in trouble will surely make it easy for him in this world and the Hereafter and whoever covers (disgrace) a Muslim Allah will cover his disgrace in the world and the Hereafter. God will always help His servant as long as He helps His brother." These values reflect the urgency in the development and use of Science and technology that favors social justice, minimizes social inequality, and improves the quality of life of all humanity.

In the prophetic vision of the transformation of Science and technology, values such as tolerance, togetherness, brotherhood, and social care play a key role as the basis for the wise and responsible use of Science and technology. These values not only enrich moral and ethical aspects in the development of Science and technology but also pay attention to their impact on society and the environment.

1. Tolerance

In the context of PHIWM, the values of tolerance become an important foundation in the development of Science and technology. Tolerance allows cooperation and collaboration between individuals with different backgrounds, thus enriching understanding and innovation in Science and technology. In the same article, Pangalila and Mantiri (2020) also mentioned that the people of Tomohon City in North Sulawesi still live in an atmosphere of tolerance despite differences in religion, ethnicity, race, language, and culture. This shows that the values of tolerance applied in PHIWM can create harmony and harmony in society.²⁷

In the context of the development of Science and technology, the values of tolerance also play a role in ensuring that the development of Science and technology does not violate moral and ethical values. Tolerance allows for open dialogue and discussion, enabling critical thinking and evaluation of scientific and technological development's social, environmental, and humanitarian impacts. By applying the values of tolerance, scientists and technologists can develop solutions that are sustainable and beneficial to society.

In conclusion, the Islamic Living Guidelines for Muhammadiyah Citizens (PHIWM) have a strong relationship with the values of tolerance towards the development of Science and technology. The values of tolerance applied in PHIWM can create an atmosphere of harmony, harmony, and collaboration in society. In addition, the values of tolerance also play a role in ensuring that the development of Science and technology is carried out with due regard to moral and ethical values. Thus, PHIWM can guide individuals, including scientists and technologists, in living their daily lives and developing Science and technology with full responsibility and awareness of their impact on society and the environment.

Tolerance is important in developing Science and Technology (IPTEK) because it promotes inclusivity, respect for diverse perspectives, and collaboration. In medicine, for example, the Indonesian Code of Medical Ethics (KODEKI) emphasizes the importance of ethical behavior and accountability, including treating patients with respect and dignity. In education, instilling social care values in students fosters a sense of empathy and concern for others, leading to a more inclusive and harmonious society. Furthermore, in the family environment, the actualization of prophetic values such as love, protection, and economic justice can contribute to developing a tolerant and compassionate society. Therefore, tolerance plays an important role in developing Science and technology by fostering collaboration, empathy, and inclusivity.²⁸²⁹³⁰

²⁷ (Pangalila and Mantiri 2020)

²⁸ (Murdiani, Ks, and Noviana 2013; Afandi 2017)

²⁹ (Muzakka 2020)

³⁰ (Islamy and Istiani 2020)

2. Togetherness

The Islamic Living Guidelines of Muhammadiyah Citizens (PHIWM) is closely related to the values of togetherness in developing Science and technology. The Muhammadiyah organization, as one of the Islamic organizations in Indonesia, has shown the value of togetherness in various activities related to the development of Science and technology. One example of Muhammadiyah's organizational activities demonstrating the values of togetherness is Islamic religious education in universities. In research conducted by Sodikin and Ma'arif (2021), they examined the application of moderate Islamic values in learning Islamic Religious Education (PAI) at the University of Muhammadiyah Malang (UMM) and the Islamic University of Malang (UNISMA). This research shows that Islamic religious education applied in Muhammadiyah universities is based on moderate Islamic values, which encourage cooperation, tolerance, and togetherness in understanding and developing religious Science.³¹

In addition, another study examined students' attitudes and learning activeness towards Science in urban junior high schools. This study shows that mutual factors influence students' learning attitudes and activeness in science subjects in the learning process. Togetherness between students, teachers, and the learning environment can increase student learning motivation, active participation in discussions, and understanding of scientific concepts.³²³³ In the context of developing Science and technology, the values of togetherness also play an important role. Togetherness allows collaboration between individuals, research teams, and other stakeholders in developing Science and technology. The same study also mentioned that togetherness in the science learning process can improve critical thinking skills, creativity, and collaborative abilities, which are important skills in the development of Science and technology.³⁴

Thus, the Islamic Living Guidelines of Muhammadiyah Citizens (PHIWM) have strong relevance to the values of togetherness in developing Science and technology. The Muhammadiyah organization has demonstrated the values of togetherness in various activities related to the development of Science and technology, such as Islamic religious education in universities and science learning in schools. Through the application of shared values, the community can work together to achieve progress in the fields of Science and technology by paying attention to the moral and ethical values that are upheld.

Togetherness is a value that prioritizes cooperation and collaboration in developing Science and technology. Through strong collaboration, Science and technology can produce more effective, innovative, and comprehensive solutions that benefit humanity.

³¹ (Sodikin and Ma'arif 2021)

³² (Maison, Kurniawan, and Pratiwi 2020)

³³ (Maison, Kurniawan, and Pratiwi 2020).

³⁴ (Maison, Kurniawan, and Pratiwi 2020)

This is evident in various studies. Research on classroom teaching methods shows that combining different teaching methods, such as lectures, discussions, and exercises, can improve student learning outcomes. The study of Kyai leadership highlights the importance of integrating IMTAQ (Islamic values) with Science and technology to develop leaders with high emotional and spiritual intelligence. Research on science and technology facilities in Indonesia emphasizes the need for collaboration and investment in science and technology centers to raise awareness and preserve the marine environment. The study of technology transfer.³⁵³⁶³⁷³⁸ Cross-disciplinary and cross-sector collaboration is key to creating holistic and sustainable solutions in an increasingly complex and connected world. Togetherness allows individuals and groups to complement each other and leverage each other's expertise and experience in achieving common goals.

3. Brotherhood

The Islamic Living Guidelines of Muhammadiyah Citizens (PHIWM) are closely related to fraternal values in the development of Science and technology. The Muhammadiyah organization, as one of the Islamic organizations in Indonesia, has shown brotherly values in various activities related to the development of Science and technology.

One example of Muhammadiyah's organizational activities that demonstrate the values of brotherhood is through Islamic religious education in early childhood. Research conducted by Dozan and Fitriani (2020) examined the formation of solidarity values through the tradition of war in the Sasak tribal community in Pejanggalik Village. Imbung war is a hereditary tradition to realize unity and brotherhood between all communities, including Kyai and religious leaders. This research shows that Islamic values can be instilled in early childhood and form fraternal characteristics through this tradition.³⁹⁴⁰

In addition, another study examined the implementation of Al-Islam and Kemuhammadiyah education in early childhood in Bustanul Athfal Aisyiyah Ponorogo. This research shows that Al-Islam and Kemuhammadiyah education is directed at understanding and living Islamic teachings and a basic understanding of the Muhammadiyah movement and ideology. This education teaches children to respect each other, work together, and form brotherhood in everyday life.⁴¹⁴²

³⁵ Maski, "KOLABORASI METODE CERAMAH, DISKUSI DAN LATIHAN PADA MATERI PERKEMBANGAN TEKNOLOGI UNTUK MENINGKATKAN PRESTASI BELAJAR SISWA Maski," vol. 3, 2014.

³⁶ Hariadi, "KEPEMIMPINAN KYAI YANG BERORIENTASI PADA IMTAQ DAN IPTEK (Studi Kasus Di Pondok Pesantren Wilayah Ummah Kampung Damai Ponorogo)," *Jurnal Studi Islam Dan Sosial* 2, no. 1 (2011).

³⁷ (Ratna, Prianto, and Setioko, 2014)

³⁸ (Nur et al. 2014)

³⁹ (Dozan and Fitriani 2020)

⁴⁰ Dozan and Fitriani.

⁴¹ M Fadlillah, Dian Kristiana, and Muhibuddin Fadhli, "Pendidikan Al-Islam Dan Kemuhammadiyah Pada Anak Usia Dini Di Bustanul Athfal Aisyiyah Ponorogo," *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini* 4, no. 1 (December 17, 2019): 406, <https://doi.org/10.31004/obsesi.v4i1.362>.

⁴² Fadlillah, Kristiana, and Fadhli. 12

In the context of the development of Science and Technology, fraternal values also play an important role. Fraternity enables collaboration and cooperation between individuals, research teams, and other stakeholders in developing Science and technology. In the same study, Fadlillah et al. (2019) also mentioned that Al-Islam and Kemuhammadiyah education is directed at human relations with fellow humans, which includes fraternal values. By applying fraternal values, scientists and technologists can work together to achieve better goals and create sustainable and beneficial innovations.

Thus, the Islamic Living Guidelines of Muhammadiyah Citizens (PHIWM) have strong relevance to fraternal values in developing Science and technology. The Muhammadiyah organization has demonstrated fraternal values in various activities related to the development of Science and technology, such as Islamic religious education in early childhood. Through the application of fraternal values, it is hoped that people can work together in unity and cooperation to achieve progress in Science and technology, taking into account the moral and ethical values upheld.

Fraternity involves respecting, caring for, and helping fellow human beings. In the context of science and technology transformation, fraternity promotes the use of technology to improve social conditions and the welfare of society. Mutual respect in the use of social media can vary depending on the context in which social media is used. In some cases, on social media, the use of social media technology can improve social relationships and expand interaction between human beings. Therefore, it is important to understand that social media can have positive and negative impacts depending on its use.⁴³⁴⁴ Mutual respect with the principle of brotherhood ensures that the development of Science and technology is not only oriented towards individual or small group benefits but pays attention to the common interests and solidarity of humanity.

4. Social Care

The Islamic Living Guidelines of Muhammadiyah Citizens (PHIWM) are closely related to the values of social care in the development of Science and technology. The Muhammadiyah organization, as one of the Islamic organizations in Indonesia, has shown the value of social care in various activities related to the development of Science and technology. One example of Muhammadiyah's organizational activities that demonstrate the values of social care is through community service. In the research conducted, they examined collaborative service activities at the Koto XI Tarusan orphanage, Painan. This activity aims to foster a sense of concern and social responsibility to the community,

⁴³ Nilna Muna and I Putu Miartana, "Pemanfaata Media Sosial Dalam Memahami Perilaku Konsumen Terhadap Keputusan Pembelian" 15, no. 1 (2018), <http://journal.undiknas.ac.id/index.php/magister-manajemen/>.

⁴⁴ Bambang Arianto, "Pemanfaatan Aplikasi Drone Empirit Academic Dalam Menganalisis Opini Publik Di Media Sosial," *JSPG: Journal of Social Politics and Governance* 2, no. 2 (2020): 177–91.

especially to the residents of orphanages. This service activity is hoped to help meet the needs of orphanage residents and strengthen a sense of unity and brotherhood.⁴⁵⁴⁶

In addition, in another study conducted by (Pratiwi & Sukri, 2022), they examined the implementation of Islamic life guidelines and values of Muhammadiyah Citizens in the budgeting process at STIE Muhammadiyah Palopo. This research shows that the existence of Muhammadiyah as an organization based on social care is reflected in the budget management carried out by STIE Muhammadiyah Palopo. The employees and employees of Muhammadiyah feel satisfaction and welfare in working in Muhammadiyah charity institutions because they believe that the sincerity they do will be a blessing for them in the Hereafter.⁴⁷

In the context of the development of Science and technology, social care values also play an important role. Social care enables collaboration and cooperation between individuals, institutions, and society in developing Science and technology that positively impacts society's welfare. Through social care, scientists and technologists can direct their research and development to solve social problems society faces. Thus, the Islamic Living Guidelines of Muhammadiyah Citizens (PHIWM) have a strong relevance to the values of social care in the development of Science and technology. The Muhammadiyah organization has demonstrated the values of social care in various activities related to the development of Science and technology, such as community service and budget management. Through applying social care values, it is hoped that the community can work together to achieve progress in the field of Science and technology by paying attention to the needs and social welfare of the wider community.

Social care emphasizes the importance of paying attention to and overcoming social problems through Science and technology. Social care views Science and technology as a tool that can be used to fight poverty, reduce social inequality, and improve people's quality of life. By paying attention to the needs and aspirations of the community at large, the development of Science and technology can be more relevant and positively impacted. The impact of Science and technology on society has been a significant concern, with debates about the negative effects outweighing the positive ones. Studies have shown that Science and technology only sometimes achieve the goal of addressing injustice and can even exacerbate it. A multidisciplinary approach involving technology, natural sciences, and social sciences is required to solve complex social problems. There is a

⁴⁵ Tri Yuliana Wijayanti, Syukri Al Fauzi Harlis Yurnalis, and Ferki Ahmad Marlion, "PENGABDIAN KOLABORATIF DI PANTI ASUHAN KOTO XI TARUSAN, PAINAN," *Menara Pengabdian* 2, no. 2 (December 14, 2022), <https://doi.org/10.31869/jmp.v2i2.3885>.

⁴⁶ Wijayanti, Yurnalis, and Marlion.

⁴⁷ Indah Pratiwi and Sukri Sukri, "MEMAKNAI NILAI-NILAI PEDOMAN HIDUP ISLAMI WARGA MUHAMMADIYAH PADA PROSES PENGANGGARAN STIE MUHAMMADIYAH PALOPO," *CEMERLANG : Jurnal Manajemen Dan Ekonomi Bisnis* 2, no. 4 (November 3, 2022): 95–109, <https://doi.org/10.55606/cemerlang.v2i4.494>.

growing call for scientists and technologists to include social considerations in their scientific quests and contribute to national development. Addressing social issues through Science and Science and technology is essential to creating a more just and sustainable society.⁴⁸⁴⁹⁵⁰⁵¹

Through the values of tolerance, togetherness, brotherhood, and social care, Science and technology can be developed and used wisely and responsibly. By applying Bayani, Burhani, and Irfan's approaches to developing Science and technology, we can achieve a more holistic and comprehensive understanding of ethical values, social justice, and ecosystem balance. The prophetic vision in the transformation of Science and technology ensures that the development and implementation of Science and technology are carried out for the benefit of humanity, with attention to sustainability and justice for the entire community. Developing and using Science and technology based on this prophetic vision requires commitment and collaboration from various parties, including scientists, academics, religious leaders, and society. Education also plays a key role in correctly understanding prophetic values in using Science and technology. By combining Bayani, Burhani, and Irfan approaches and internalizing the values of tolerance, togetherness, brotherhood, and social care, we can develop and implement Science and technology wisely and responsibly for the benefit of humanity.

Prophetic Science and Technology

In the transformation of Science and technology, the concepts and principles of prophetic Science and technology play an important role. Science and technology have developed in an orderly manner based on the purpose of scientific research and have played an important role in human civilization. Islam encourages the development of Science and technology, considering it an attribute of faith, believing that knowledge will be valued in the Hereafter⁵²⁵³. Learning models that link Science, technology, and their benefits to society are important for comprehensive knowledge and the ability to analyze and respond to the negative impacts of technology. Prophetic Science and technology involve systemic thinking, environmental friendliness, social empowerment, and sustainability. The prophetic science and technology

⁴⁸ Andrew McClary, "Science-Technology and Society," *BioScience* 20, no. 10 (May 1, 1970): 612–13, <https://doi.org/10.2307/1295310>.

⁴⁹ Jameson M Wetmore, "Introduction to Special Issue on Science, Policy and Social Inequity," *Science and Public Policy* 34, no. 2 (March 1, 2007): 83–84, <https://doi.org/10.3152/030234207X196292>.

⁵⁰ R.Hoffer JOE, "The Relationship of Natural and Social Sciences to Social Problems and the Contribution of the Information Scientist to Their Solutions*," 1967.

⁵¹ Yogesh Atal, "Science and Technology for Social Development," *Science, Technology and Society* 1, no. 1 (March 1, 1996): 167–71, <https://doi.org/10.1177/097172189600100111>.

⁵² Alias Azhar, "Sains Dan Teknologi Dalam Ketamadunan Islam: Analisa Epistemologi Dan Metodologi," *UUM IRepository* 8, no. 1 (2013): 51–66.

⁵³ Datu Mohammed et al., "Assimilate The Qur'an's View with Science and Technology Perspectives," *Aptisi Transactions on Technopreneurship (ATT)* 3, no. 1 (March 31, 2021): 42–47, <https://doi.org/10.34306/att.v3i1.141>.

approach can help overcome the disorientation of Science and technology to ensure the use of Science and technology that aligns with prophetic values and provides maximum benefits for humanity and ecosystems.⁵⁴

1. Eco-friendly

Environmental friendliness is an important element in prophetic Science and technology. Prophetic Science and technology view the environment as a mandate that must be maintained and preserved. This perspective emphasizes the importance of balance, sustainability, and survival in managing the environment.⁵⁵ This shows the interdependence between living things and the environment and highlights the need for environmental preservation and conservation. This vision calls for a more integrated approach considering disciplinary knowledge, ethical values, and policy decisions in managing the environment⁵⁶⁵⁷. Thus, prophetic Science and technology combine technological advances with environmental sustainability.

2. Social Empowerment

Prophetic Science and technology focuses on technology development and pays attention to aspects of community empowerment. Prophetic Science and technology focus on meeting the needs of society, developing technologies relevant to the social context, and increasing community participation in the development and utilization of Science and technology. This approach recognizes the importance of incorporating societal needs and values into innovation. It emphasizes the role of stakeholder engagement and the inclusion of laypeople in Science, technology, and governance of forward-looking innovation. Prophetic Science and technology aim to co-create socially powerful knowledge that can guide policy and strategy programming by engaging diverse perspectives, including those of the public, policymakers, and experts. It also recognizes the importance of considering the technology's broader social, economic, and environmental implications. Overall, prophetic Science and technology seeks to ensure that the development of Science and technology is aligned with the needs and values of society and that the decision-making process is more democratic and participatory⁵⁸⁵⁹⁶⁰⁶¹⁶²

⁵⁴ (Bob and Suprihatin 2017)

⁵⁵ Zubir Nazira et al., *Natural Science from the Worldview of the Qur'an: An Introduction*, vol. 3, 2018.

⁵⁶ Mario Carmelo Cirillo, "Science and Environmental Stewardship," *Global Bioethics* 25, no. 2 (April 3, 2014): 114–24, <https://doi.org/10.1080/11287462.2014.922317>.

⁵⁷ (Bryan et al., 2018)

⁵⁸ Niklas Gudowsky and Walter Peissl, "Human Centred Science and Technology—Transdisciplinary Foresight and Co-Creation as Tools for Active Needs-Based Innovation Governance," *European Journal of Futures Research* 4, no. 1 (2016), <https://doi.org/10.1007/s40309-016-0090-4>.

⁵⁹ Datu Mohammed et al., "Assimilate The Qur'an's View with Science and Technology Perspectives," *Aptisi Transactions on Technopreneurship (ATT)* 3, no. 1 (March 31, 2021): 42–47, <https://doi.org/10.34306/att.v3i1.141>.

⁶⁰ Jin. Wan, "Technology Foresight: Strategic Science and Technology Planning & Policy Development," 2002.

⁶¹ Plenkovia. Mario, Hadžia Slobodan, and Plenkovia Juraj, "Society, Science and Technology," 2008.

3. Science and Technology as a Media for Da'wah

Prophetic Science and technology have an important role as a broad da'wah medium. This concept allows Science and technology to spread religious values (read: Islam) more widely and thoroughly. Prophetic Science and technology combine divine values with the friendly spirit of humanity.

Social media can be used as a medium of da'wah (propagation of Islam) by Muslims to interact, share information, and understand content more easily. This allows dissemination of valid and credible information to a wider audience, regardless of religion. Islam emphasizes ethics and moral aspects of communication and has a da'wah system in which content or messages must be identified and discussed before spreading to others. The advent of the internet has brought a new dimension to da'wah, enabling online communication alongside traditional face-to-face approaches⁶³⁶⁴⁶⁵. In its implementation, prophetic Science and technology can manage anger to be friendly, connect the distant to be close, and link the separated to meet.

Managing Anger to Be Friendly

Prophetic values have a role to play in helping to manage emotions, including anger, into a more friendly and controlled attitude. In this case, prophetic values serve as ethical guidelines to utilize Science and technology such as social media. These values emphasize the importance of communication ethics, such as not demeaning others, avoiding divisive tactics, and refraining from spreading false information. In addition, the values highlight the need to think critically and verify the veracity of news content before sharing it. The Islamic perspective also emphasizes the ethical use of social media, focusing on protecting important aspects of life, such as religion, privacy, and property. Overall, these values of Islamic teachings guide maintaining ethical behavior and promoting positive interactions in the digital sphere⁶⁶⁶⁷⁶⁸⁶⁹

In this context, prophetic Science and technology become a means to develop emotional intelligence and promote mutual understanding and peace among individuals. The Prophet (peace be upon him) said: *“Whoever restrains his anger when he is able to do so, Allah ‘azza wa jalla will fill his heart with security on the Day of Judgment.”* (HR. Ibn Asakir).

Prophetic Science and Technology: Connecting the Far to Close

It has the potential to connect far-flung individuals, both physically and socially. Humans can connect more easily and interact without knowing distance restrictions through increasingly developed communication technologies, such as social media, online communication platforms, and sophisticated telecommunication tools. The prophetic values of using social media to connect long to near distances can ethically be explored through Islamic law and principles. In the Qur'an Surah Al-Hujurat (49:13), Allah

Almighty says, “O man, verily We created you from a man and a woman and made you into nations and tribes so that you might know one another.” *Meanwhile, Prophet Muhammad (peace be upon him) also said, “The believer is a mirror for fellow believers”* (HR. Abu Daud).

Social media technology can transform and reshape basic human values such as contemplation, well-being, care, and connectedness. However, it is important to approach the use of social media with ethical considerations in mind.⁷⁰ The use of social media should be guided by ethical principles and values, considering Islamic law’s objectives and prioritizing positive communication and connectedness. By utilizing Science and technology wisely, humans can establish closer relationships and expand understanding across cultures and civilizations⁷¹

Conclusion

In this article, prophetic or prophetic values in the transformation of Science and Technology (Science and Technology) and the complex and profound impacts related to the development of Science and Technology have been explored. Even though Science and technology have provided many conveniences and benefits for humans, disproportionate use and lack of civility can produce negative consequences in social and environmental aspects. Therefore, a more holistic approach is needed in utilizing technological advances with attention to prophetic values.

Prophetic values, such as tolerance, togetherness, brotherhood, and social care, can guide in responsibly, humanely, and sustainably utilizing Science and technology. These values can help prevent social isolation, conflict, and misuse of technology. Implementing prophetic values can also encourage a nation to become more religious, focusing on belief in the Oneness of God, good morals and ethics, social justice, compassion for others, knowledge and wisdom, and responsibility and accountability. In the face of the disorientation of Science and technology, it is important to pay attention to the use of technology in the private sphere by protecting individual privacy and security. Appropriate regulations need to be implemented to prevent abuse and protect individual rights. In addition, it is necessary to be aware of the spread of misinformation and manipulatives through social media in the context of conflict and crisis. Prophetic values can guide the use of technology in such situations to prevent the spread of rumors, fake news, and information warfare.

PHIWM contains prophetic values such as tolerance, togetherness, brotherhood, and social care. These values are reflected in Muhammadiyah’s practices and views on social life, education, and interfaith interaction. Tolerance and togetherness within PHIWM create a framework that enables collaboration in science and technology transformation. Brotherhood in Muhammadiyah provides a foundation of solidarity that

supports the sustainable development of Science and technology. Social care in PHIWM underlines the responsibility of using Science and technology for society's common welfare and harmony. In a broader context, prophetic values in PHIWM provide valuable guidance for society in dealing with the impact of science and technology transformation. Awareness of these values can help humans use Science and technology responsibly, humanely, and sustainably.

This conclusion reinforces the importance of applying prophetic values in transforming Science and technology. The presence of PHIWM as a moral and ethical guide provides a solid foundation for individuals and society to utilize advances in Science and technology for the common good. In an era that continues to develop, prophetic values become a compass that can direct humans toward the application of Science and technology that is beneficial and harmonious for all. Thus, integrating prophetic values in the transformation of Science and technology becomes a real manifestation of the vision of Islamic life in PHIWM that can bring a sustainable positive impact on society and the world. To face the ongoing transformation of Science and technology, further research is needed to explore and implement prophetic values in the use of Science and technology. In addition, public education and awareness about prophetic values also need to be improved so that Science and technology can be more humane, responsible, and sustainable.

By integrating prophetic values in the transformation of Science and technology, society can take advantage of technological advances in ways that bring broad and sustainable benefits to humans and maintain harmony in social and environmental life.

References

- Afandi, Dedi. "Nilai-Nilai Luhur Dalam Profesi Kedokteran: Suatu Studi Kualitatif." *Jurnal Kesehatan Melayu* 1, no. 1 (September 19, 2017): 25. <https://doi.org/10.26891/jkm.v1i1.2017.25-28>.
- Aisy, Nur, Albar., and Ikbal, Hidayatullah Acep. "Komunida: Media Komunikasi Dan Dakwah." *Komunida: Media Komunikasi Dan Dakwah*, 2019, 18–30.
- Arianti, Gusmia. "KEPUASAN REMAJA TERHADAP PENGGUNAAN MEDIA SOSIAL INSTRAGRAM DAN PATH," 2017, 180–92.
- Arianto, Bambang. "Pemanfaatan Aplikasi Drone Empirit Academic Dalam Menganalisis Opini Publik Di Media Sosial." *JSPG: Journal of Social Politics and Governance* 2, no. 2 (2020): 177–91.
- Asmaret, Desi, Nurhaida Nurhaida, and Trisna Jayati. "PENERAPAN PERILAKU ISLAMIS MAHASISWA KEPERAWATAN POLITEKNIK 'AISYIAH SUMATERA BARAT DALAM KEHIDUPAN PRIBADI DAN KELUARGA SESUAI PHIWM." *Menara Ilmu* 16, no. 2

- (April 26, 2022). <https://doi.org/10.31869/mi.v16i2.3039>.
- Atal, Yogesh. "Science and Technology for Social Development." *Science, Technology and Society* 1, no. 1 (March 1, 1996): 167–71. <https://doi.org/10.1177/097172189600100111>.
- Azhar, Alias. "Sains Dan Teknologi Dalam Ketamadunan Islam: Analisa Epistemologi Dan Metodologi." *UUM IRepository* 8, no. 1 (2013): 51–66.
- Bryan B. Rasmussen. "Technologies of Nature: The Natural History Diorama and the Preserve of Environmental Consciousness." *Victorian Studies* 60, no. 2 (2018): 255. <https://doi.org/10.2979/victorianstudies.60.2.11>.
- Budiarti, Yesi, and Siti Suprihatin. "PENGARUH MODEL PEMBELAJARAN SAIN TEKNOLOGI MASYARAKAT (STM) TERHADAP KEMAMPUAN SOFT SKILL MAHASISWA." *Jurnal Promosi: Jurnal Pendidikan Ekonomi UM Metro* 5, no. 2 (2017): 131–44.
- Burr, Christopher, Mariarosaria Taddeo, and Luciano Floridi. "The Ethics of Digital Well-Being: A Thematic Review." *Science and Engineering Ethics*. Springer, August 1, 2020. <https://doi.org/10.1007/s11948-020-00175-8>.
- Cirillo, Mario Carmelo. "Science and Environmental Stewardship." *Global Bioethics* 25, no. 2 (April 3, 2014): 114–24. <https://doi.org/10.1080/11287462.2014.922317>.
- Desi Erawati, Lisnawati; "SOCIAL MEDIA AND COMMUNICATION ETHIC IN ISLAMIC PERSPECTIVE." *Epistemé: Jurnal Pengembangan Ilmu Keislaman* 14, no. 1 (June 25, 2019). <https://doi.org/10.21274/epis.2019.14.1.27-46>.
- Dozan, Wely, and Laily Fitriani. "Membangun Karakter Anak Usia Dini Melalui Nilai-Nilai Islam Dalam Tradisi Perang Timbung." *Murhum : Jurnal Pendidikan Anak Usia Dini*, July 6, 2020, 1–15. <https://doi.org/10.37985/murhum.v1i1.2>.
- Dragiewicz, Molly, Jean Burgess, Ariadna Matamoros-Fernández, Michael Salter, Nicolas P. Suzor, Delanie Woodlock, and Bridget Harris. "Technology Facilitated Coercive Control: Domestic Violence and the Competing Roles of Digital Media Platforms." *Feminist Media Studies* 18, no. 4 (July 4, 2018): 609–25. <https://doi.org/10.1080/14680777.2018.1447341>.
- Dupri, Dupri. "PENGARUH MODEL PEMBELAJARAN DAN GENDER TERHADAP KEPEDULIAN SOSIAL SISWA PADA PEMBELAJARAN PENDIDIKAN JASMANI." *Edusentris* 2, no. 1 (March 26, 2015): 22. <https://doi.org/10.17509/edusentris.v2i1.157>.
- Fadlillah, M, Dian Kristiana, and Muhibuddin Fadhli. "Pendidikan Al-Islam Dan Kemuhammadiyahana Pada Anak Usia Dini Di Bustanul Athfal Aisiyyah Ponorogo." *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini* 4, no. 1 (December 17, 2019): 406. <https://doi.org/10.31004/obsesi.v4i1.362>.
- Fahruda, Muhammad Anis, and Muhammad Tajudin Azali. "ETIKA PROFETIK DALAM MENGGUNAKAN MEDIA SOSIAL." *MINARET Journal of Religious Studies* 1, no. 1 (2023): 70–80.

- Gudowsky, Niklas, and Walter Peissl. "Human Centred Science and Technology— Transdisciplinary Foresight and Co-Creation as Tools for Active Needs-Based Innovation Governance." *European Journal of Futures Research* 4, no. 1 (2016). <https://doi.org/10.1007/s40309-016-0090-4>.
- Gul, Sumeer, and Shahina Islam B A Senior. "Adoption of Social Media by Online Newspapers of Kashmir." *Annals of Library and Information Studies*. Vol. 60, 2013.
- Habiba, Sulhatul, and Khotimatus Sholikhah. "Pendidikan Profetik Dan Perannya Dalam Menangkal Dampak Negatif Teknologi Di Mlangi Yogyakarta." *AL-RIWAYAH: JURNAL KEPENDIDIKAN* 10, no. 2 (2018): 325–39. <http://ejournal.stain.sorong.ac.id/indeks.php/al-riwayah>.
- Hariadi. "KEPEMIMPINAN KYAI YANG BERORIENTASI PADA IMTAQ DAN IPTEK (Studi Kasus Di Pondok Pesantren Wilayahul Ummah Kampung Damai Ponorogo)." *Jurnal Studi Islam Dan Sosial* 2, no. 1 (2011).
- Indah Pratiwi, and Sukri Sukri. "MEMAKNAI NILAI-NILAI PEDOMAN HIDUP ISLAMI WARGA MUHAMMADIYAH PADA PROSES PENGANGGARAN STIE MUHAMMADIYAH PALOPO." *CEMERLANG : Jurnal Manajemen Dan Ekonomi Bisnis* 2, no. 4 (November 3, 2022): 95–109. <https://doi.org/10.55606/cemerlang.v2i4.494>.
- Islamy, Athoillah, and Athoillahislamy@yahoo Co Id. "Paradigma Sosial Profetik Dalam Bermuamalah Di Media Sosial." *Tadbir: Jurnal Manajemen Dakwah* 3, no. 1 (2021): 83–104.
- Islamy, Athoillah, and Nurul Istiani. "Aktualisasi Nilai-Nilai Profetik Dalam Pendidikan Keluarga Di Tengah Pandemi Covid-19." *MAWA'IZH: JURNAL DAKWAH DAN PENGEMBANGAN SOSIAL KEMANUSIAAN* 11, no. 2 (December 10, 2020): 29–46. <https://doi.org/10.32923/maw.v11i2.1460>.
- JOE, R.Hoffer. "The Relationship of Natural and Social Sciences to Social Problems and the Contribution of the Information Scientist to Their Solutions*," 1967.
- Khasanah, Faizatun. "COMMUNICATION ETHIC IN SOCIAL MEDIA: Analitical Study of Surah Al-Hujarât." *Epistemé: Jurnal Pengembangan Ilmu Keislaman* 14, no. 1 (June 20, 2019). <https://doi.org/10.21274/epis.2019.14.1.209-228>.
- Maison, Maison, Dwi Agus Kurniawan, and Nur Ika Sandi Pratiwi. "Pendidikan Sains Di Sekolah Menengah Pertama Perkotaan: Bagaimana Sikap Dan Keaktifan Belajar Siswa Terhadap Sains?" *Jurnal Inovasi Pendidikan IPA* 6, no. 2 (December 8, 2020). <https://doi.org/10.21831/jipi.v6i2.32425>.
- Mangadil, Debora Maya. "DAMPAK YURIDIS PENGGUNAAN MEDIA MENURUT UNDANG-UNDANG NOMOR TAHUN 2008 TENTANG INFORMASI DAN ELEKTRONIK." *Lex et Societatis* 4, no. 1 (2016): 120–28. <http://unpas.ac.id/archives/597>.
- Mario, Plenkovia., Hadžia Slobodan, and Plenkovia Juraj. "Society, Science and Technology," 2008.
- Maski. "KOLABORASI METODE CERAMAH, DISKUSI DAN LATIHAN PADA MATERI

PERKEMBANGAN TEKNOLOGI UNTUK MENINGKATKAN PRESTASI BELAJAR SISWA Maski.” Vol. 3, 2014.

McClary, Andrew. “Science-Technology and Society.” *BioScience* 20, no. 10 (May 1, 1970): 612–13. <https://doi.org/10.2307/1295310>.

Meutia, Ernita Dewi. “Dampak Sosial Internet of Things.” *Seminar Nasional Dan Expo Teknik Elektro*, 2017, 102–6.

Mohammed, Datu, Qurotul Aini, Dedeh Supriyanti, Sulistiawati Sulistiawati, and Mey Anggraeni. “Assimilate The Qur’an’s View with Science and Technology Perspectives.” *Aptisi Transactions on Technopreneurship (ATT)* 3, no. 1 (March 31, 2021): 42–47. <https://doi.org/10.34306/att.v3i1.141>.

———. “Assimilate The Qur’an’s View with Science and Technology Perspectives.” *Aptisi Transactions on Technopreneurship (ATT)* 3, no. 1 (March 31, 2021): 42–47. <https://doi.org/10.34306/att.v3i1.141>.

———. “Assimilate The Qur’an’s View with Science and Technology Perspectives.” *Aptisi Transactions on Technopreneurship (ATT)* 3, no. 1 (March 31, 2021): 42–47. <https://doi.org/10.34306/att.v3i1.141>.

Muna, Nilna, and I Putu Miartana. “Pemanfaata Media Sosial Dalam Memahami Perilaku Konsumen Terhadap Keputusan Pembelian” 15, no. 1 (2018). <http://journal.undiknas.ac.id/index.php/magister-manajemen/>.

Murdiani, Heri, Yudiono Ks, and Fajria Noviana. “NILAI-NILAI EDUKATIF (NILAI KEPRIBADIAN DAN SOSIAL) DALAM NOVEL MADOGIWA NO TOTTO-CHAN KARYA TETSUKO KUROYANAGI.” *Japanese Literature* 2, no. 1 (2013): 27–36.

Mu’ti, Abdul. “Akar Pluralisme Dalam Pendidikan Muhammadiyah.” *Afkaruna* 12, no. 1 (2016): 1–42. <https://doi.org/10.18196/aijjs.2016.0053.1-42>.

Muzakka, Moh. “Nilai-Nilai Profetik Dalam Dua Lirik Lagu Karya Rhoma Irama Kajian Terhadap Lirik Lagu ‘Akhlak’ Dan ‘Virus Corona.’” *NUSA*. Vol. 15, 2020. www.harianbhirawa.co.id.

Napoli, Philip M. “On Automation in Media Industries: Integrating Algorithmic Media Production into Media Industries Scholarship.” *Media Industries Journal* 1, no. 1 (January 1, 2014). <https://doi.org/10.3998/mij.15031809.0001.107>.

Nazira, Zubir, Awang Zolkofli, Dani Mohd., Jannah, Hassan Nur, Sabri Sabrina, Mardziah Siti, and Hassan Kamal. *Natural Science from the Worldview of the Qur’an: An Introduction*. Vol. 3, 2018.

Nur ’afiifah, Isnaini, and M Misbah. “Internalisasi Nilai-Nilai Pendidikan Profetik Oleh Habib Husein Ja’far Al-Hadar Melalui Media Digital.” *Wardah: Jurnal Dakwah Dan Kemasyarakatan* 23, no. 1 (2022): 85–99.

Nur Aziz, Abdullah, and Mukhtar Effendi. “ALIH TEKNOLOGI PEMBUATAN TEROPONG BINTANG SEDERHANA UNTUK KEPERLUAN RU’YATUL HILAL BAGI REMAJA MASJID.” *Jurnal Fisika*. Vol. 4, 2014.

Pangalila, Theodorus, and Jeane Mantiri. “Nilai Budaya Masyarakat Sulawesi Utara

- Sebagai Model Pendidikan Toleransi.” *Jurnal Ilmiah Mimbar Demokrasi* 20, no. 1 (October 19, 2020): 55–64. <https://doi.org/10.21009/jimd.v20i01.15924>.
- Ratna, Desy A, Eddy Prianto, and Bambang Setioko. “GEDUNG PAMER DAN PERAGA IPTEK KELAUTAN DI SEMARANG.” *Jurnal IMAJI* 3, no. 4 (2014): 621–30.
- Reuter, Christian, Stefan Stieglitz, and Muhammad Imran. “Social Media in Conflicts and Crises.” *Behaviour and Information Technology* 39, no. 3 (March 3, 2020): 241–51. <https://doi.org/10.1080/0144929X.2019.1629025>.
- Rossanty, Yossie, Pipit Buana Sari, Mohammad Harith Amlus, and Thorique Akbar Maulana Nasution. “Islam, Opinion Leaders, and Social Media Influencer,” 66–84, 2021. <https://doi.org/10.4018/978-1-7998-6892-7.ch004>.
- Sari, Arti Wulan Sari, Danistiar Arif Putra, and Arfan Suryandi. “Komunikasi Profetik Dalam Media Komunitas Musisi Mengaji,” 2022.
- Shompa, Zohora Azmin, Aznan Zuhid Saidin, Husnayati Hussin, Muhd Rosydi Muhammad, and Elistina Abu Bakar. “A DESCRIPTIVE ANALYSIS OF VALUES AND MAQASID AL-SHARI’AH IN SOCIAL MEDIA USE AMONG STUDENTS OF IIUM.” *Journal of Information Systems and Digital Technologies*. Vol. 1, 2019.
- Sodikin, Ahmad, and Muhammad Anas Ma’arif. “Penerapan Nilai Islam Moderat Dalam Pembelajaran Pendidikan Agama Islam Di Perguruan Tinggi.” *EDUKASI: Jurnal Penelitian Pendidikan Agama Dan Keagamaan* 19, no. 2 (August 27, 2021): 188–203. <https://doi.org/10.32729/edukasi.v19i2.702>.
- Sulaksono, Djoko, Budi Waluyo, and Dewi Pangestu Said. “PROPHETIC VALUES IN POST-REFORM MODERN JAVANESE NOVELS.” *EL HARAKAH (TERAKREDITASI)* 20, no. 1 (June 1, 2018): 81. <https://doi.org/10.18860/el.v20i1.4590>.
- Syarif, Zainuddin. “PENDIDIKAN PROFETIK DALAM MEMBENTUK BANGSA RELIGIUS Zainuddin Syarif.” *Tadris: Jurnal Pendidikan Islam* 9, no. 1 (2014): 1–16.
- The Oxford Dictionary of Islam*. Oxford University Press, 2003. <https://doi.org/10.1093/acref/9780195125580.001.0001>.
- Wafiqni, Nafia, and Siti Nurani. “Model Pembelajaran Tematik Berbasis Kearifan Lokal.” *Al-Bidayah: Jurnal Pendidikan Dasar Islam* 10, no. 2 (May 11, 2019): 255–70. <https://doi.org/10.14421/al-bidayah.v10i2.170>.
- Wan, Jin. “Technology Foresight: Strategic Science and Technology Planning & Policy Development,” 2002.
- Wardiono, Kelik. “Prophetic : An Epistemological Offer for Legal Studies.” *Journal of Transcendental Law* 1, no. 1 (September 20, 2019): 17–41. <https://doi.org/10.23917/jtl.v1i1.8797>.
- Wetmore, Jameson M. “Introduction to Special Issue on Science, Policy and Social Inequity.” *Science and Public Policy* 34, no. 2 (March 1, 2007): 83–84. <https://doi.org/10.3152/030234207X196292>.
- Wijayanti, Tri Yuliana, Syukri Al Fauzi Harlis Yurnalis, and Ferki Ahmad Marlion. “PENGABDIAN KOLABORATIF DI PANTI ASUHAN KOTO XI TARUSAN, PAINAN.”

Menara Pengabdian 2, no. 2 (December 14, 2022). <https://doi.org/10.31869/jmp.v2i2.3885>.

Woodlock, Delanie. “The Abuse of Technology in Domestic Violence and Stalking.” *Violence Against Women* 23, no. 5 (April 1, 2017): 584–602. <https://doi.org/10.1177/1077801216646277>.

Zainudin, Zaheril, Mohd Yahya, and Mohamed Ariffin. “ISLAMIC FUNDAMENTALISM AS THE SUBSTRATUM OF NEW MEDIA ETHICS.” *Journal of Islamic Social Sciences and Humanities* 9, no. 1 (2016): 77–93.

Zubair, Talat, and Dr. Amana Raquib. “Islamic Perspective on Social Media Technology, Addiction, and Human Values.” *Journal of Islamic Thought and Civilization* 10, no. 2 (November 25, 2020). <https://doi.org/10.32350/jitc.102.14>.