

ISLAMIC ECONOMIC POLITICS AND POLICY FOR THE USE OF ARTIFICIAL INTELLIGENCE IN THE DEFENSE SECTOR



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Abstract

Artificial Intelligence (AI) is a controversial issue. Technological progress that is in harmony with efforts to create convenience and speed in human work is inevitable, even though it also creates an impact of vulnerability in the existence and function of humanity. It is worth asking how important is the existence and usefulness of AI for humans. What is the concept of AI development from an Islamic political and economic perspective? This article aims to explain the urgency of the existence of AI in national and state life and to describe the concept of state policy from an Islamic political-economic perspective relating to the development of AI. To obtain a comprehensive analysis, this article uses a literature study approach by collecting, categorizing, classifying, and concluding the subject matter. The references used are studies of Islamic economic politics, Islamic jurisprudence rules, and Islamic history, as well as references related to facts about the use of AI. The results of the study show that the use of AI is very urgent for the life of the nation and state for valid, accurate, and fast military information and decision-making. So, the policy of utilizing AI from an Islamic political economic perspective emphasizes its support through state budget allocation in developing information technology and the military industry.

Keywords: AI, Islamic Political Economy, Information Technology, Military Industry

INTRODUCTION

The media has been focusing on stories lately concerning robots taking over human occupations; one such story is ChatGPT, which is well-liked by academics (Suryadi et al, 2022). Concerning the future and whether their talents will remain valuable in the job market in the years to come, several employees express anxiety. According to a Goldman Sachs report released in March 2023, 300 million full-time employees could be replaced by AI (Valance, 2023).

According to almost one-third of participants in PwC's annual global workforce survey conducted last year, they were concerned that technology would replace their jobs within the next three years (Nurliana et al, 2024). The father of artificial intelligence, Geoffrey Hinton, startled the public lately by resigning from Alphabet Inc., Google's parent company, and he is now actively advocating for the risks associated with AI. Hinton warned that the current state of AI research could become dangerously unmanageable. Hinton frequently discusses villains who can manipulate AI to carry out tyrannical acts like mass murder and warfare, which are ultimately attempts to subjugate people (Ardiyansyah, 2023).

Artificial Intelligence is the study of creating computer systems and programs that can carry out activities comparable to human intelligence is known as artificial intelligence (AI). Making computers understand, learn, plan, and do these activities in a way that is comparable to human intellect is the primary objective of artificial intelligence. Weak AI and strong AI are the two main categories of AI. Systems like speech or facial recognition that are created to carry out certain tasks without consciousness or general understanding are referred to as weak artificial intelligence (AI). Robust AI emulates every aspect of human intellect, including reasoning, complicated problem-solving, and language understanding (Cox, 2023).

Artificial Intelligence (AI) comprises diverse methodologies and strategies, such as computer vision, natural language processing, machine learning, artificial neural networks, and intelligent logic (knowledge representation and reasoning). AI systems are capable of data analysis, pattern recognition, decision-making, and change adaptation when they are equipped with a combination of these skills. Applications for it can be found in many

different domains, such as speech recognition, natural language processing, driverless cars, industrial automation, virtual assistants, healthcare, and finance. AI is still developing quickly, and there are a lot of new advancements made each year.

The following traits apply to AI: First, intelligence is comparable to human intelligence in that both share the capacity for learning, thought, adaptation, and decision-making. Secondly, to enhance performance over time, assimilate knowledge from current data, and identify pertinent trends. AI is trained using machine learning techniques like pattern recognition and learning algorithms. Third, complex data processing, or the ability to swiftly and effectively process and analyze massive and complex volumes of data, enables AI to find patterns that humans cannot see or to make judgments based on a wealth of information. Fourth, AI is capable of logical reasoning and complicated issue solving in the areas of reasoning and problem-solving. Artificial Intelligence (AI) can break down an issue into manageable steps, assess the circumstances, and find the best solution. Fifth, AI may communicate with people using an intuitive interface, such as a chatbot, virtual assistant, or voice recognition software. They can comprehend human instructions, react appropriately, and complete the necessary jobs. Sixth, AI is capable of digesting and analyzing data at rates significantly faster than humans. AI is capable of carrying out jobs effectively, decreasing human error, and boosting output. The seventh feature is adaptation and flexibility, or AI's capacity to adjust to novel circumstances or changes in the environment. AI can also modify its behavior in response to experience and data updates, which helps it become more effective and efficient over time.

AI has been used in a variety of fields, including technology and software. The technology and software industry uses AI in a variety of ways, from virtual assistants such as Siri and Alexa to natural language processing algorithms and complex data analytics. AI industrial automation, such as robotics and automated control, includes the use of robots and automated systems in manufacturing, logistics, agriculture, and more. AI in healthcare is used in medical data analysis, helping diagnose diseases, predicting treatment outcomes, and studying trends in medical research. AI is also used in drug development, personalized medicine, and medical robotics. In the automotive field, AI functions in the development of autonomous vehicles, including autonomous cars and drones. AI is also used in smart

transportation systems to predict traffic, optimize routes, and improve road safety. In addition, the widespread use of AI includes:

1. In the financial sector, AI is used for financial data analysis, fraud detection, risk management, and automated trading. Chatbots are also used to provide better customer service in this sector.
2. Advertising and marketing for customer data analysis, content personalization, advertising campaign optimization, and relevant product recommendations.
3. Energy and environment to optimize energy use, organize smart power grids, and predict and prevent damage to energy infrastructure. AI is also used in environmental monitoring and modeling to support sustainability.
4. Apart from that, AI is also used in education, law, agriculture, creative industries, customer service, science, and many other fields. AI continues to develop, and more and more sectors are integrating this technology into their operations.

RESULTS AND DISCUSSION

AI Implementation in Various Sectors

Robots and artificial intelligence (AI) are frequently associated because, within the framework of contemporary technology, they are closely related. The relationship between AI and robotics can be explained by the following points. Robotics development uses artificial intelligence (AI) to give the robot intelligence capabilities. Robots can learn, adapt, and respond to their surroundings more effectively by using machine learning and natural language processing techniques. AI gives robots intelligence, allowing them to function independently and make judgments. AI-enabled robots are capable of comprehending human directions, interacting with their surroundings, and finishing challenging jobs.

Certain jobs and processes can be automated thanks to the integration of robots and artificial intelligence. Both are capable of doing jobs independently, which lowers the need for human intervention and boosts productivity in industries like manufacturing, logistics, and services. autonomous robot. Autonomous robots function either fully or partially without

human aid. the capacity to observe one' surroundings, identify objects, avoid obstacles, and make decisions quickly (Yuldashevna & Khurana, 2024).

An further application of AI is to enhance human-robot interactions. Artificial intelligence (AI)-enabled robots can read facial expressions, comprehend and react to human language, and interact more naturally. This makes the use of robots in healthcare, education, personal assistants, and other social interactions possible. It's crucial to remember that not every robot employs AI. Additionally, some robots are managed by more basic algorithms and programming. However, the incorporation of AI into robots has resulted in notable advancements in terms of autonomy, adaptability, and interactivity (Gonzalez & Zalewski, 2017).

To What Extent Is the Development of AI Important?

The history of the creation of artificial intelligence (AI) began in the 1950s with the development of the concepts and thoughts that underlie this field. The term "artificial intelligence" was first used by John McCarthy at the Dartmouth Conference in 1956. At that time, researchers believed that intelligence could be replicated through computer programming. In the 1950s and 1960s, early AI research focused on problems of thinking and problem-solving, such as programming chess games and solving mathematical problems. In the 1980s, AI reached the peak of its popularity. High hopes for artificial intelligence led to massive investment, but then a period known as "AI winter" occurred where development and research funding declined. In the 1990s, advances in modeling neural networks, better computing capabilities, and the availability of abundant data opened up new opportunities for the development of AI (Triatmaja & Fithrayudi, 2019).

In the last ten years, the development of increasingly complex machine learning techniques and more effective data processing has drawn a lot of interest from the AI community. Artificial neural network-based techniques like deep learning have made substantial progress in image identification, natural language processing, and other related domains. The goal of developing systems that can mimic or even outperform human intelligence in a range of tasks is what drives the development of artificial intelligence. Artificial Intelligence (AI) is being implemented in various industrial areas to solve

complicated problems, boost efficiency, and make better judgments through research and technology advancement.

Advantages and Disadvantages of AI

Supporters argue that AI provides the potential to create technology that can improve human lives, increase efficiency, and help solve complex problems. Processing and analytical capabilities, namely processing and analyzing data on a scale that far exceeds human capabilities, This enables the identification of patterns and valuable information from large and complex volumes of data. AI can automate routine tasks and help improve efficiency in various industrial sectors, which can save time and resources. In the healthcare field, AI can be used in disease diagnosis, personalized healthcare, drug research, and the development of new therapies, helping to improve the quality of life and provide better medical solutions.

Opponents counter that if AI is widely used, human jobs may be replaced by automated systems, which could have a detrimental effect on unemployment and economic inequality. The disregard for privacy and security is the second justification. Security and privacy issues are also brought up by AI advancements, particularly when sensitive data is gathered and utilized. There may be hazards from data abuse and security issues. Bias coming from the data utilized for learning may be reflected in the unfairness and bias that follows, leading to discrimination. For AI to be equitable and free from discrimination, this must be considered, and mitigating measures must be put in place.

The trust and responsibility aspects resulting from reliance on AI raise questions about trust and responsibility. The important decisions that AI executes raise ethical questions about who is responsible if an error occurs or negative impacts become relevant. Therefore, AI development needs to consider the challenges and risks involved and take steps to ensure that its development and use are carried out ethically and responsibly (Kunaifi & Fachruddin Syah, 2023). There is no absolute certainty about how a future world war will play out. However, there is speculation and concern regarding the use of technology and artificial intelligence in conflict contexts.

One of the many topics that is frequently discussed is the serious threat posed by cyberwarfare. Technology can be used by ill-intentioned nations or organizations to attack

communications, financial systems, infrastructure, or elections. Concerns about ethics and security are raised by the development of autonomous weapons, or weapon systems that can function without the need for human interaction. On the battlefield, the employment of autonomous weaponry may result in loss of control and poor judgment (Cycleback, 2020).

Artificial intelligence is used in the collection and analysis of military reconnaissance data. Advances in AI can provide strategic advantages to countries in terms of monitoring, surveillance, and intelligence analysis. Information warfare involves the use of media and technology to influence public opinion, manipulate narratives, or spread propaganda to achieve political or military advantage. However, it is important to remember that the use of technology and artificial intelligence in the context of war does not only have negative potential. Technology can also be used to prevent conflict, build security, and support humanitarian efforts (Kunaifi, 2017). International regulations and rules are being discussed to manage the use of technology in a military context, taking into account ethics and possible impacts. Ultimately, the future of war depends on the complexity of politics, relations between countries, and international policies that involve a variety of factors that cannot be reduced to technological developments alone.

In the context of positive law, AI technology can carry out actions and deeds like humans; of course, this is the basis for legal regulations in a country to have regulations specifically related to AI. Based on the legal sources in force in Indonesia relating to technology regulation, namely Law Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Electronic Information and Transactions, hereinafter referred to as "UU ITE," This arrangement is a way for the state to respond to rapid technological developments. However, the ITE Law does not clearly define AI in its regulations, which has given rise to several opinions from many groups who are trying to interpret AI and link AI to the regulations in the ITE Law. In it, AI is classified as an electronic system and an electronic agent. If we look at the characteristics of AI with the definition of an electronic system in the ITE Law regulations, this has many similarities and compatibility, where one of the ways AI works is to collect data, then process it, and even analyze it, and be able to display and send electronic information (Rahmawati et al., 2021). This is explained in "Article 1 Number 5 of the ITE Law."

The basis for classifying AI as an electronic agent is not much different from classifying AI as an electronic system, where the suitability of AI's actions is related to the definition of an electronic agent, namely a device from an electronic system whose aim is to carry out actions on electronic systems automatically based on human commands. which, of course, is following the characteristics of AI itself based on the understanding of "Article 1 Number 8 of the ITE Law." (Haris & Tantimin, 2022). According to Indonesian legal standards, artificial intelligence is merely a legal object rather than a legal subject. Because artificial intelligence (AI) is a technology that is implemented by humans and is governed by positive law, AI is managed by electronic system administrators. This is in line with the explanation provided in Government Regulation Number 71 of 2019 (PP 71/2019), which deals with the implementation of electronic systems and transactions. Electronic system operators bear the responsibility for implementation in this scenario as legal subjects (Purwaningsih & Islami, 2023).

AI under Review *Hadharah-Madaniyah*

From the standpoint of Islamic law, the process of developing and applying AI products can be divided into two categories: the activity of the offender and the feature of the item or product. The criteria are applicable because using AI involves human activities that are intimately connected to the law of human actions:

الأصل في الأفعال التقيد بالأحكام الشرعية

“The original law of human actions is bound by sharia law” (Isa & Kurniawan, 2023).

Thus, every use of AI must refer to the purpose of its use, so that every Muslim must know and understand sharia law regarding AI use activities. The activities in question include whether the use of AI can create benefits for itself, such as helping with work tasks or helping speed up services and convenience for the community.

On the other hand, the use of AI that causes *dharar* or immorality, such as manipulating data, disturbing or hacking public information, or being used to commit theft or fraud, is recorded as immoral behavior. The process of utilization, transactions, functions, and ethics in AI are the legal domain of human actions, which are bound by sharia law.

Meanwhile, from the aspect of AI products (whether in the form of robots, hardware, or software), this is related to the law of objects, as a rule:

الأصل في الأشياء الإباحة ما لم يرد دليل التحريم

The law on the origin of objects (goods) is permissible as long as there are no arguments that prohibit it (Rasytah (al), 1990).

This demonstrates that in Islam, people are free to use their creativity to create things that help meet human needs, except those that are expressly forbidden by sharia in terms of the physical object, the manufacturing process, and the purpose of manufacture—such as applications—which specifically contravenes sharia law. creating sex toys or statues.

However, in the current period, people are frequently drawn into immoral, un-Shar'i, or un-Islamic activities due to the quick growth of technology that permits diverse product engineering. When the Naqli arguments fail to offer definitive legal suggestions, this issue becomes more concerning (Kunaifi & Syam, 2021). To apply the appropriate ijihad while punishing an activity, one must have a precise comprehension of the relevant facts and conduct a thorough examination of the reasoning. To make this easier, it is vital to have a basic yet precise understanding to prevent unneeded resistance or hindrance of human creativity.

Human creativity for production can be helped by understanding the law of origin of objects (*mubah*) in the *hadlarah* and *madaniyah* review (Kunaifi, 2016). *Hadlarah* is civilization, namely a collection of perceptions or understandings about life. Therefore, a civilization that is the result of human thinking is usually influenced by the ideology or beliefs held by certain humans. So the civilization produced by Muslims will be different from the civilization produced by non-Muslim communities. These differences usually include ideology or faith, measures of actions, assessments of the meaning of happiness, and views on society (Taqiy al-Din al-Nabahni, 1953). Meanwhile, *madaniyah*, or culture, are physical forms of sensory objects that are used in various aspects of life. *Madaniyah* is a tool or technology created by humans to make their work easier in meeting their needs.

All of the object forms under discussion are products of advancements in human knowledge as a whole. For instance, machinery used in production, automobiles and their equipment, agricultural technology, communication technology, and so forth. These are all items that are acceptable for usage by everyone to improve their output and caliber of work in any sector; taking them is forbidden, regardless of whether they are non-Muslim or from the West (Hizbut Tahrir, 2013).

AI Development in Islamic Economics and Industrial Politics

The study of AI can be focused on its development as part of the strategic industrial sector, namely the development of information technology, communications, and public services, even in the defense industry. Currently, the scope of discussion is limited to the legal umbrella for AI-based electronic transactions, civil law, and business disputes (Ghazmi, 2021). Even though the issue of using AI has spread to espionage and more complex proxy wars, AI has become a force that is changing various industrial sectors and the military field. Its use is to increase the efficiency, precision, and effectiveness of operations (Muttaqin, 2019). AI's ability to process and analyze large amounts of data quickly and accurately is reliable and can even help make timely and informed decisions in often complex and high-stakes situations.

In addition, AI also enables the automation of various tasks that previously required human intervention. This could mean increased operational speed and efficiency, as well as reduced risks for military personnel. For example, with the use of AI drones, reconnaissance missions can be carried out without exposing military personnel to dangerous environments (Editor, 2023). Thus, AI is a strategic product that has a big influence on technological development, industrial development, and especially military development, which is the basic instrument of national defense.

The industry department is responsible for managing strategic industries like artificial intelligence (AI). This includes light industries like personal needs and household goods as well as heavy industries like transportation machinery and equipment, raw materials, and electronics. According to Hizbut Tahrir (2014), the state must exercise independent authority over its administration through development and control. This policy rests on debates:

وَأَعِدُّوا لَهُمْ مَا اسْتَطَعْتُمْ مِنْ قُوَّةٍ وَمِنْ رِبَاطِ الْخَيْلِ تُرْهَبُونَ بِهِ عَدُوَّ اللَّهِ
وَعَدُوَّكُمْ وَآخَرِينَ مِنْ دُونِهِمْ لَا تَعْلَمُونَهُمُ اللَّهُ يَعْلَمُهُمْ ۗ وَمَا تُنْفِقُوا مِنْ شَيْءٍ فِي
سَبِيلِ اللَّهِ يُوَفَّ إِلَيْكُمْ وَأَنْتُمْ لَا تُظْلَمُونَ

“And prepare to face them with whatever force you can, and from horses tethered for battle (with that preparation), you will frighten the enemies of Allah, your enemies, and those other than them whom you do not know, while Allah knows. Whatever you spend in the way of Allah will surely be repaid to you adequately, and you will not be persecuted” (Al-Qur’an Surah Al Anfal verses 60).

Industrial independence—that is, the ability to produce machinery, motors, power, and other critical technology domestically—is referred to in the nation's industrial politics. Control over the heavy industrial sector is essential to preserving the nation's existence, even though achieving this takes time. Consequently, the industrial revolution must proceed despite several challenges; financial resources must even be allocated to the growth of the machinery sector (Kunaifi et al., 2021).

CONCLUSION

Without a manufacturing sector, nations will be dependent on other nations, putting their security and sovereignty at risk in the event of a confrontation between those nations manufacturing weapons and equipment and those importing it. For Muslims, the state, and the populace, developing a machinery industry is a fardhu (Rasytah (al), 1990). The following justifications underpin this conclusion: The nation will grow dependent on other nations, particularly the military industry if it does not have a machinery industry. "And Allah will never give way to unbelievers to dominate believers." (Surah An Nisa, Al-Qur'an: 141). Artificial Intelligence is also necessary for jihad, the ultimate manifestation of Islam's might and a means of extending Islam overseas.

The West always takes nasty and crafty tactics to prevent third-world countries or Muslims from falling behind in industrial and technical growth through the following things:

1. Spreading the notion that lengthy steps and procedures are necessary for independent industrial control. Traditionalism gives way to the take-off stage, maturity, and ultimately high mass consumption in the evolution of society.
2. The fraudulent transfer of technology or knowledge, unless industrialized nations have been successful in exporting their industrial goods, which are of course quite expensive. The people will be burdened by this since it will require significant financial resources. Financing for technological and industrial progress will ultimately never materialize, or at most will go extremely slowly.
3. Concentrate the industry solely on the home or consumer goods market. This will only lead to a host of legal lawsuits and toxic business rivalry.
4. Establishing the transit industry, a new industrial pattern. Developed nations continue to be the ones in charge of manufacturing industrial goods and employ transit nations as locations for production at a fixed profit margin.

Implication

The four conclusions mentioned above frequently arise in nations where Muslims make up the majority of the populace. These nations rely heavily on industry and technology in the fields of military weaponry, automobiles, equipment, and airplanes. In this sense, industrialized or developed nations constantly maintain control over the state of the nation.

Clear budgeting policies fully complement Islamic industrial politics, which is centered on the autonomous control of the whole heavy industry sector, particularly the military, and has a solid foundation in Sharia law. In the Islamic state, methodical expenditure is just as important to budget politics as maximizing revenue. The jihad division of the Islamic State, comprising the military-industrial bureau, ammunition and weapons bureau, and troops bureau, was the exclusive recipient of the resources amassed in the APBN (Baytul Maal) (Zallum, 2015). Baytul Maal/APBN provides funding to the three bureaus in the jihad sector from *fay'*, *kharaj*, public ownership, and Zakat sources. As stated in Allah SWT's word:

إِنَّمَا الصَّدَقَاتُ لِلْفُقَرَاءِ وَالْمَسْكِينِ وَالْعَامِلِينَ عَلَيْهَا وَالْمُؤَلَّفَةِ قُلُوبُهُمْ وَفِي الرِّقَابِ وَالْغَارِمِينَ
وَفِي سَبِيلِ اللَّهِ وَابْنِ السَّبِيلِ فَرِيضَةً مِّنَ اللَّهِ ۗ وَاللَّهُ عَلِيمٌ حَكِيمٌ

“Zakat is only for the needy, the poor, zakat administrators, converts who are persuaded by their hearts, for (freeing) slaves, people who are in debt, for the cause of Allah, and for those who are on the way, as a decree required by Allah, and Allah is All-Knowing, All-Wise” (Al-Qur’an Surah At Taubah verses 60).

This is the development of artificial intelligence as a crucial component of the strategic industry, particularly in the administration of a more powerful and advanced military sector. The Islamic State must set aside money in its budget expressly for its development and production. In reality, to facilitate da'wah and jihad and preserve the state's existence, the state must construct laboratories and auxiliary infrastructure to foster industrial independence and military technology.

REFERENCES

- Cycleback, D. (2020). Examining the Intelligence in Artificial Intelligence. *Center for Artifact Studies*.
- Ghazmi, S. F. (2021). Urgensi Pengaturan Artificial Intelligence pada Sektor Bisnis Daring di Indonesia. *Jurnal Hukum Lex Generalis*, 2(8), 782–803. <https://doi.org/10.56370/jhlg.v2i8.104>
- Gonzalez, F., & Zalewski, J. (2017). Teaching Joint-Level Robot Programming with a New Robotics Software Tool. *Robotics*, 6(4), 41. <https://doi.org/10.3390/robotics6040041>
- Haris, M. T. A. R., & Tantimin, T. (2022). Analisis Pertanggungjawaban Hukum Pidana Terhadap Pemanfaatan Artificial Intelligence Di Indonesia. *Jurnal Komunikasi Hukum (JKH)*, 8(1), 307–316. <https://doi.org/10.23887/jkh.v8i1.44408>
- Hizbut Tahrir. (2014). *Struktur Negara Khilafah (Pemerintahan dan Administrasi)*. HTO Press.
- Isa, M., & Kurniawan, A. (2023, September 25). *Prinsip dan Bisnis Syariah Berbasis Digital [Modul PPT]*. Training of Trainers Etika Bisnis Gigital Kominfo dan KNEKS, Jakarta.
- Kunaifi, A. (2016). *Manajemen Pemasaran Syari'ah Pendekatan Human Spirit; Konsep, Etika, Strategi, dan Implementasi* (1st ed., Vol. 1). Maghza Pustaka.
- Kunaifi, A. (2017). Peran Strategis Pedidikan Islam Dalam Mewujudkan Islamic Good Governance. *FIKROTUNA*, 4(2). <https://doi.org/10.32806/jf.v4i2.2749>

- Kunaifi, A., Rahman, F., & Dwiaryanti, R. (2021). The Philosophy and Authentication of Welfare Equalization in the Islamic Economy. *Jurnal Kajian Peradaban Islam*, 4(2), 54–62. <https://doi.org/10.47076/jkpi.v4i2.67>
- Kunaifi, A., & Syam, N. (2021). Business Communication in Developing the Halal Tourism Industry. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, 4(1), 1–17. <https://doi.org/10.31538/ijse.v4i1.1305>
- Muttaqin, H. (2019). Politik Ekonomi Pertumbuhan Dalam Perspektif Taqiyuddin An-Nabhani. *Imanensi: Jurnal Ekonomi, Manajemen Dan Akuntansi Islam*, 1(2), 111–116. <https://doi.org/10.34202/imanensi.1.2.2014.111-116>
- Nurliana, D. P., Hafel, M., & Herningsih, H. (2024). The Influence of Human Resources, Communications Information Technology (ICT), and Leadership on The Quality of Passport Issuance Public Services in Manokwari Class I Non-TPI Immigration Offices. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, 7(2), 2243-2258. <https://doi.org/10.31538/ijse.v7i2.4799>
- Purwaningsih, E., & Islami, I. (2023). Analisis Artificial Intelligence (Ai) Sebagai Inventor Berdasarkan Hukum Paten Dan Hukum Islam. *Jurnal Ilmiah Galuh Justisi*, 11(1), 1. <https://doi.org/10.25157/justisi.v11i1.8915>
- Rahmawati, N., Muslichatun, M., & Marizal, M. (2021). Kebebasan Berpendapat Terhadap Pemerintah Melalui Media Sosial Dalam Perspektif UU ITE. *Widya Pranata Hukum : Jurnal Kajian Dan Penelitian Hukum*, 3(1), 62–75. <https://doi.org/10.37631/widyapranata.v3i1.270>
- Rasyah (al), A. A. (1990). *Politik Perindustrian dan Membangun Negara Industri dlam Pandangan Islam (Terj)*. tp.
- Redaksi. (2023, Mei). *AI dalam Bidang Militer: Strategi Pertahanan dan Teknologi Senjata*. <https://ratu.ai/ai-dalam-bidang-militer/>
- Suryadi, Y., FoEh, J., & Manafe, H. (2022). Employee Productivity Determination: In Work Life Balance (WLB), Work From Home (WFH), Information Technology (IT) and Work Flexibility. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, 5(2), 730-750. <https://doi.org/10.31538/ijse.v5i2.2533>
- Triatmaja & Fithrayudi. (2019). Dampak Artificial Intelligence (AI) pada Profesi Akuntan. *UMS*.
- Yuldashevna, I. A., & Khurana, K. (2024). The Impediments to the Process of Implementing Robotics in the School Education System in Uzbekistan. *Sage Open*, 14(2), 21582440241254595. <https://doi.org/10.1177/21582440241254595>
- Zallum, A. Q. (2015). *Sistem Keuangan Negara Khilafah*. HTI Press.