ESIC 2024 Posted: 13/10/2024

Applications of Artificial Intelligence within the Framework of the Objectives of Islamic Sharia

Dr. Amna Ali Al-Bashir Muhammad

Assistant Professor - Principles of Islamic Jurisprudence, College of Sharia and Fundamentals of Religion, King Khalid University

Email: mamna@kku.edu.sa

Abstract

Engaging with artificial intelligence (AI) is no longer an option that societies can choose to adopt or ignore; rather, it has become a reality that compels us to integrate this technology into various aspects of life. This necessitates establishing a foundation for it from a Shariah perspective. Therefore, this study concludes with two primary questions:

- 1. To what extent are AI applications compatible with Islamic principles and ethics?
- 2. How well do the objectives of Shariah encompass the outcomes of artificial intelligence?

These are the two main axes around which the study revolves, through the examination and analysis of studies, research, and books related to the field. The conclusion highlights the comprehensiveness of Islamic Shariah, its suitability for all times and places, and its ability to address contemporary issues.

Keywords: Principles, Ethics of Artificial Intelligence, Objectives of Shariah, Islamic, Means.

1. Introduction

Problem Statement

This study seeks to understand the use of artificial intelligence within the framework of the objectives of Islamic Shariah and the principle that "the means take the rulings of the objectives." It does so by analyzing studies, research, and books related to the subject.

The main research question is: What are the applications of artificial intelligence within the framework of the objectives of Islamic Shariah? This central question leads to several subquestions:

- 1. What is the concept of artificial intelligence?
- 2. What are the objectives of Islamic Shariah in relation to the uses of artificial intelligence?

- 3. To what extent are AI applications consistent with the principles and ethics of Islamic Shariah?
- 4. How well do the objectives of Shariah and the principle "the means take the rulings of the objectives" encompass AI applications?

Importance of the Study and Reasons for Its Selection

The importance of this study and the reasons for selecting this topic can be summarized as follows:

Given the significance of this study's topic, especially in light of the modern information revolution and the contemporary challenges it has created through the information technology revolution such as the uses of artificial intelligence its importance in contemporary reality is clear to all. This importance is further affirmed by its contributions to various aspects of life. However, to avoid the risks and threats posed by increasing reliance on AI, it is essential to establish ethical foundations to govern the use of artificial intelligence, with Islamic Shariah as the reference.

Study Objectives:

The study seeks to achieve the following objectives:

Define artificial intelligence and the objectives of Islamic Shariah.

Examine the use of artificial intelligence.

Explore AI applications within the framework of the objectives of Islamic Shariah.

Scope of the Study:

Based on the research questions and objectives, the study can be outlined as follows:

Understanding the concept of artificial intelligence and the objectives of Islamic Shariah.

Exploring the ethics of artificial intelligence.

Understanding how the objectives of Shariah and the principle "the means take the rulings of the objectives" relate to AI outcomes.

Previous Studies:

After conducting a search in universities, research centers, and online search engines, no scientific study was found that specifically addresses the topic of AI applications within the framework of the objectives of Islamic Shariah. However, there are some studies that overlap with parts of the subject. These include:

Applications of Artificial Intelligence in Education and Their Impact on Educational Technology Research

Published in The Egyptian Computer Association Journal, 2022, by A. El-Sayed Abdel-Moula El-Sayed. This study explored the field of educational technology, focusing on AI applications for improving e-learning environments to enhance learning outcomes. It examined variables

related to the structural design of e-learning environments and their connection to AI components, revealing the most suitable designs for learner characteristics and needs to achieve educational goals efficiently and effectively. This differs from the current study, which addresses various AI applications within the framework of Shariah objectives.

Applications of Artificial Intelligence and Robotics

Published in The Egyptian Dar Al-Ifta Journal, by Ahmed Saad Ali Al-Bura'i, Issue 48, 2022. This study discussed the impact of autonomous robots on humans and emphasized the need for safety before allowing them to operate. It argued that AI projects must evolve according to strict ethical standards. This differs from the current study, which specifically addresses robots in the broader context of AI applications.

2. Research Methodology:

This study adopts the descriptive-analytical method, analyzing studies, research, and books related to the subject in order to understand the Islamic foundations for the ethics of artificial intelligence use within the framework of the objectives of Islamic Shariah and the principle that "the means take the rulings of the objectives."

Research Plan:

The research consists of an introduction, which includes the research problem, its significance, the reasons for choosing it, its objectives, its scope, previous studies, methodology, two main chapters, and a conclusion.

Chapter One: Explanation of the research terms and a discussion of the characteristics and importance of artificial intelligence. It contains two sub-sections:

The concept of artificial intelligence.

The objectives of Islamic Shariah.

Chapter Two: Examination of how well the objectives of Islamic Shariah encompass the outcomes of artificial intelligence. It contains two sub-sections:

The Islamic foundations for artificial intelligence.

The extent to which the objectives of Shariah and the principle that "the means take the rulings of the objectives" apply to the outcomes of artificial intelligence.

Chapter One

Explanation of Research Terms and the Characteristics and Importance of Artificial Intelligence

Section One: The Concept of Artificial Intelligence and the Objectives of Islamic Shariah

First: The Concept of Artificial Intelligence

Artificial intelligence (AI) is a compound term derived from two words: "intelligence" and "artificial."

Intelligence in Language:

In Arabic, the verb (Dhaka) is used to describe something that burns intensely or brightly. For instance, (the fire burned intensely) can be used to describe a strong, flaming fire (intelligence) can also refer to sharpness of mind and quick-wittedness. Thus, linguistically, intelligence implies sharpness of the mind and quick insight.

In this context, the term "artificial intelligence" reflects human attempts to create machines or systems that emulate this cognitive sharpness, allowing for rapid problem-solving, decision-making, and learning based on data.

This lays the foundation for understanding artificial intelligence as the creation of machines that can mimic human thought processes and reasoning, aligning with the broader goals of enhancing efficiency and innovation. 'Al-Jawhari said: "Al-Dhika' (intelligence) with an elongated vowel refers to the sharpness of the heart. A man is described as intelligent (Dhaka), he becomes more intelligent (Yadhka), with intelligence (Dhika'), and thus he is 'intelligent' (Dhakiyy) in the form of Fa'eel. '"That is, in the form of hyperbole (intensive form(."

"Artificial in language refers to something that is made and not natural. The term (sana'a) with a dammah is the noun derived from the verb (he did you a favor) and (he did a bad deed with him), meaning he acted or performed an action..

"And (industry or craftsmanship) refers to the craft of the artisan and their work. Additionally, (the horse's performance) means its good handling or skillfulness in carrying out its duties."
"They say: meaning he made it; thus, it is referred to as (manufactured) and (creation or work."

Definition of Artificial Intelligence:

As a title for a specific art.

Despite the increasing interest, there has not been a definitive definition of artificial intelligence. However, although the various concepts differ in their phrasing, they agree in content that artificial intelligence is one of the branches of computer science that focuses on developing machines capable of performing tasks and functions similar to those of humans. The first to provide a definition of artificial intelligence was John McCarthy in 1955, where he stated that the goal of AI is to develop machines that act as if they are intelligent. However, some scientists believe this definition is not entirely accurate. Some describe the term as the creation of computational models of human behavior. Since we believe that humans are intelligent, the task is to understand these models of intelligence, then simulate these behaviors using mathematics, and finally apply them to computers. (.

Artificial Intelligence in Terminology: It is defined as: "A branch of computer science that focuses on designing intelligent computer systems, systems that possess characteristics related to human intelligence and decision-making, similar to human behavior concerning languages, learning, thinking, and problem-solving.

It is also defined as: "A method for creating a computer or robot controlled by a computer, or a program that thinks intelligently in the same way that intelligent humans do. Alternatively, artificial intelligence is the science of creating machines that perform tasks requiring intelligence if done by human .

Definition of "Maqasid" in Language:

The term "Maqsad" has a collective meaning. Ibn Faris states that it has three root letters which indicate the coming of something and its origin, as well as accumulation within something. The primary meaning is to aim at something with intention and purpose. It can also mean to strike or kill at a specific spot, suggesting directness and focus. Additionally, it refers to breaking something, with a specific term for a piece of something when it breaks. The plural form is "Oasd."

Another interpretation refers to a stocky and well-fed she-camel. "The first meaning is what is intended by its usage among the scholars and jurists."

The Meaning of Maqasid in Terminology:

The term "maqasid" is often used by the usuliyyin (founders of Islamic jurisprudence) and fuqaha (jurists) to refer to "intentions," as seen in the general principle "Actions are judged by their intentions." This means that actions and behaviors vary based on the intentions behind them.

We find that Al-Shatibi, may Allah have mercy on him, did not strive to provide a definition or limit for the legal maqasid, perhaps because he considered the matter to be clear. It is also possible that his reluctance to define the maqasid stems from the fact that he wrote his book for scholars, specifically for those well-versed in the sciences of Sharia..

"However, I have found some definitions of the maqasid of Sharia among some of our contemporary scholars."

"In language, 'Sharia' and 'Shara'a' refer to the source from which people draw, especially when it flows continuously without interruption." .

"And 'Sharia' encompasses everything in the Quran and Sunnah regarding the rulings of beliefs, actions, and ethics. However, later scholars have reserved the term 'Sharia' specifically for practical rulings. There is no doubt that the usage found in the Quran and Sunnah is the best and most preferable, and limiting 'Sharia' to a specific terminology is acceptable as long as its meaning is understood."

"Sharia in terminology: It is the set of rulings that Allah has legislated for His worshipers and conveyed by the Messenger of Allah (peace be upon him), whether they pertain to beliefs, ethics, or practical rulings."

"The connection between the linguistic and legal meanings is that the Sharia encompasses all rulings regarding new issues, covering them until the Day of Judgment. Its provisions do not cease, just as the flowing water of a river does not stop. Glory be to Him who chose this name for it, as it reflects the essence of its reality in the most eloquent way."

Definition of the Term "Islamic":

The term "Islamic" is derived from the word "Islam." In linguistic terms, Islam means submission and surrender to Allah, the Almighty, by affirming His oneness, worshiping Him, obeying His commands, and avoiding His prohibitions.

The use of "Islamic" in relation to the objectives indicates that these objectives are grounded in Islam, stemming from it and branching out from it, rather than being independent of it or contrary to it. ((

The Terminological Definition of the Objectives of Islamic Law:

In the modern era, the objectives of Islamic law have received special attention from scholars and researchers due to their importance and role in the process of jurisprudential ijtihad (independent legal reasoning) and in addressing contemporary issues in light of evidences, texts, and legal principles. One aspect of this attention has been the documentation and compilation of these objectives, recognizing them as a legitimate branch of religious knowledge and a foundational discipline that, like other sciences and arts, has its own definitions.

Sheikh Muhammad al-Tahir ibn Ashour defined the objectives of Islamic law as: the meanings and wisdoms considered by the legislator in all situations of legislation or most of them; so that their observation is not confined to a specific type of legal ruling. This definition includes the characteristics and general purposes of Islamic law, as well as the meanings that legislation cannot overlook. It also encompasses meanings of wisdom that are not considered in all types of rulings, but are observed in many types of them.

The chosen definition by Nur al-Din al-Khadimi states that the objectives are: "The meanings considered in legal rulings and the consequences that arise from them, whether those meanings are specific rulings, general benefits, or an overall purpose. They are all gathered under a single aim, which is to establish the servitude to God and the benefit of humanity in both worlds." "

Chapter Two

Understanding the Extent to Which the Objectives of Sharia Comprehend the Outputs of Artificial Intelligence

Section One: Uses of Artificial Intelligence:

Definition of Foundations:

The foundations refer to the principles and criteria that encompass its definition, the beginnings of the thing and its origins, and the establishment of its parameters. Additionally, it includes comprehensiveness and the capacity to extend beyond a single issue.

Concept of Ethics:

Ethics in Language: In the Al-Qamus Al-Muhit, "Ethics (with a Dhamma and two Dhammas) refers to temperament, nature, nobility, and religion."

Ethics: The science of ethics is defined as "the science that pertains to the standards of behavior by which a particular stance is either admired or rejected, respected or condemned. These

standards may apply to the entire society, forming a code of honor, or they may only pertain to specific professional practices of a particular group within that society."".

Ethics of Artificial Intelligence:

It is defined as the ethics that focus on providing machines with the ethical principles and procedures necessary to discover ways to solve ethical dilemmas they may encounter, enabling them to operate in an ethically responsible manner by making their own ethical decisions.

It can also be defined as "the principles and values that shape the behavior of robots and govern the performance of intelligent systems, helping them to distinguish between right and wrong." ".

The Status of Ethics in Islam:

Ethics consists of principles and rules that organize human behavior, as determined by divine revelation to regulate human life in a way that fulfills the purpose of existence in this world in the best and most complete manner. This Islamic ethical system has two distinctive characteristics:

Divine Nature: It is derived from the will of Allah, the Exalted.

Human Aspect: It allows for human effort and input in defining this system from a practical standpoint.

This system aims at creating a virtuous life, characterized by a way of conduct and interaction with oneself, Allah, and society. It integrates theoretical and practical aspects, representing not just a part of the general Islamic system but its essence, core, and spirit that permeate all its aspects.

The Islamic system, in general, is fundamentally based on ethical principles, as ethics are indeed the essence of all divine messages. The Prophet Muhammad (peace be upon him) stated, "I was only sent to perfect good character." Thus, the purpose of his mission was to complete ethics, promote them, and enhance moral values. Ultimately, the goal of all divine messages is ethical, and religion itself is about good character .

This has led to the significant interest of scholars of Islamic law in it due to its great status in Islam.

The Most Important Islamic Principles for Artificial Intelligence:

Ethical engagement with the use of artificial intelligence and the goals it achieves is based on faith in God and adherence to the objectives of Islamic law, while also considering human and civilizational values. Based on the classification of these objectives into necessities, needs, and enhancements, they are regarded as fundamental principles in the use of artificial intelligence and its contemporary applications in the lives of individuals and communities. In this context, the five essential aspects that Islamic law came to preserve are defined: religion, life, intellect, wealth, and honor.

Artificial intelligence applications can be a double-edged sword; we can observe positive effects by linking it to the objectives of Islamic law, particularly represented by the five necessities.

These necessities serve as a standard basis for the ethics of using artificial intelligence and its applications. The necessary objectives that safeguard these five necessities—religion, life, intellect, lineage, and wealth—are considered the most important objectives, while others serve as complements to them. The preservation of these objectives, as mentioned by Al-Shatibi in "Al-Muwafaqat," is achieved through two means:

One of them: What establishes its pillars and affirms its foundations, which refers to considering it from the perspective of existence.

The second: What averts the disruptions that occur or are anticipated within it, which refers to considering it from the perspective of non-existence.

Subsection Two: The Comprehensiveness of the Objectives of Sharia and the Principle of Means in Relation to the Outputs of Artificial Intelligence:

Examples of Some Applications of Artificial Intelligence in Light of the Objectives of Sharia:

The necessities can be identified through two axes:

The first side: Existence: The objectives of Sharia, which aim to preserve the five essential values (preservation of religion, life, intellect, lineage, and wealth), reinforce the importance of protecting and safeguarding them through legitimate means. This includes endorsing the technological revolution that has contributed to improving the quality of life and safeguarding lives, minds, and wealth through its applications in various fields of life.

Preserving Religion: This is considered the highest and most important of the five essential values. It involves establishing the foundations and rulings of religion in human existence and the universe. Artificial intelligence can be used to develop applications and tools that help preserve and understand religion, such as applications for analyzing and interpreting the Quran using AI techniques.

For example, an AI application can allow users to determine their geographic location and receive tailored religious hints and reminders based on that. The application could provide information about prayer times and nearby mosques, in addition to reminding users of prayer times and offering various religious tips based on their geographic location, such as iftar times during Ramadan or reminders of good deeds that can be performed in their surrounding area. However, I cannot confirm with certainty whether these applications use artificial intelligence partially or fully.

The essential objectives for the preservation of life: The preservation of life is the second fundamental objective of Islamic legal purposes. Its meaning encompasses safeguarding the right of life, security, dignity, and honor. To ensure the preservation of life, numerous rulings have been legislated, including the obligation to consume food, drink, and undergo treatment necessary for the sustenance of life Example of preserving life: Artificial intelligence has been used in the medical field for diagnosing diseases through the expert system Mycin, specifically for diagnosing infectious diseases like blood infections. The system works to identify the bacteria responsible for the illness and suggests the appropriate treatment and dosage. This aligns with the objective of preserving life.

1- The preservation of intellect: It is the third fundamental objective of Islamic legal purposes, acknowledged and affirmed by Islam in numerous instances and contexts. Islam commands the pursuit of knowledge, its dissemination, and its generalization because leaving the intellect in a state of ignorance or illiteracy is considered one of its worst conditions.

One of the applications based on the use of artificial intelligence is its application in education and how humanity has benefited from big data and its methods in achieving a knowledge-based economy. Recently, there have been opinions advocating for the transformation of some public universities into smart universities to address the emerging challenges of this era. To fulfill this role, there is a need to correct the course of higher education. Smart universities aim to make the educational process more dynamic and effective, shifting students from being mere consumers of knowledge to producers of it., and transforming society as a whole into a knowledge-based society.

The second aspect is the necessity for AI users and its applications to adhere to the objectives of Islamic law (Maqasid al-Sharia). It is essential to comply with prohibitions and warnings to avoid anything that contradicts the creed, leads to polytheism, or threatens religion. Additionally, AI should not cause harm to life, damage the intellect, distort thoughts, or lead to moral corruption. It is also crucial to protect lineage and honor by avoiding all means that are prohibited by Sharia. Establishing ethics and guiding principles for the use of artificial intelligence in light of the Islamic framework is based on the objectives of Islamic law and aims to preserve the interests of individuals and society in terms of faith, law, and behavior.

Principle: "The means take the rulings of the objectives."

God Almighty has blessed us with the best of laws, delivered by the finest of messengers. It is a comprehensive Shariah that neither lacks nor falls short and is suitable for all times and places. It is founded on fixed principles, upon which its pillars are established, and from which its branches stem. God has provided it with scholars who refined, explained, interpreted, and wrote about it. They established rules that serve as the foundation of Shariah and its principles, upon which it is built and to which its countless particulars are referred. One of these foundational principles is: "The means take the rulings of the objectives".

"Al-Wasail" (Means) in the Arabic Language:

From the aforementioned, it becomes clear that the term "wasilah" in the Arabic language is used to denote several meanings, including: closeness, a connection, and a rank with God Almighty. In essence, a wasilah refers to that which is employed to reach something or to draw closer to it.

Al-Wasail (Means) in Terminology:

From the definitions provided by scholars of Islamic jurisprudence (usuliyyun), it appears that wasail (means) have two interpretations:

Some scholars have defined wasilah in a general terminological sense, as seen in Al-Qarafi's statement: "The areas of rulings are divided into two: maqasid (objectives), which inherently contain benefits or harms, and wasail (means), which are the ways that lead to them." He defines

wasail as the paths or methods that lead to benefits (masalih) or harms (mafasid), while maqasid are the things that inherently contain those benefits or harms.

Some scholars have defined wasail (means) in a more specific terminological sense as: "Actions that are not sought for their own sake, because they do not inherently contain either benefit or harm, but are intended as a way to reach other actions that do contain benefit or harm and lead to them ".

Means come in different types, and what concerns us in this study is the modern means, specifically artificial intelligence (AI), which refers to the new digital tools produced by the information technology revolution, and continues to evolve rapidly. There is no doubt about the significant role these means play in serving society. Building on this, artificial intelligence is simply a tool used to achieve the objectives of Sharia. A wasilah (means) is the pathway to a goal or purpose, and this principle is foundational for many subsidiary principles of Islamic jurisprudence.

What we aim to address here is assessing the permissibility of using AI in Sharia-related fields, as well as highlighting some of its applications and justifications for its use, such as in judiciary, trade, contracts, fatwas, testimony, education, and more. In addition to the benefits AI brings, such as saving effort, money, and time, it also has a positive impact on refining and advancing knowledge.

Thus, it can be argued that based on this consideration, AI can be employed in Islamic sciences in general, and particularly in jurisprudence. By "matters," we refer to the general scope of all actions and statements, which are the subject of rulings and objectives in Sharia. The science of jurisprudence is concerned with the rulings on actions, not their inherent nature. Some jurists have interpreted this principle by stating: "The ruling that follows from an action is based on what is intended from that action." This implies that any permissible means intended to achieve a legitimate benefit without leading to harm is permissible according to Sharia law.

As a result of the rapid and growing technological advancement that the world is experiencing and will continue to witness in the near future, the field of artificial intelligence (AI) is set to undergo even faster and more significant developments, which will profoundly impact many human principles and values. Studies and published research suggest that AI is more influenced by Western values and traditions than by those in the southern hemisphere. Experts and scientists in the field of AI from Western countries will likely dictate the type of values and ethics that AI and its applications will carry in the near future, based on the principles and human values that these experts and specialists believe in.

Given that we, as Arabs and Muslims, have little to no influence in this area, there is a risk that certain Western principles and values will be introduced into the domain of AI and its applications, potentially conflicting with our Islamic values. Consequently, we may be forced to coexist with these values, or some applications may be prohibited to mitigate their negative impacts and preserve Islamic values.

This raises the question: What plans do we have to benefit from and invest in AI across various aspects of life while minimizing its negative effects on the lives of Arab and Muslim individuals and their principles and values? Therefore, it is essential to take the following actions (:(

In my opinion, the solution lies in enhancing communication and collaboration among scholars and thinkers in the fields of Islamic ethics and artificial intelligence. This partnership is crucial for developing a comprehensive ethical framework that ensures technology aligns with the objectives (maqasid) of Islamic law.

3. Conclusion

We find that Islamic foundations provide a robust ethical framework that can guide the use of artificial intelligence in alignment with the objectives of Islamic law and the principle that "means have the rulings of their ends." By focusing on the five essential ethical principles, Islamic teachings can help direct AI users toward practices that do not harm these fundamental values. Moreover, working with a spirit of scholarly diligence and collaboration between the scientific and religious communities can contribute to building a sustainable ethical future that reflects Islamic values and achieves the objectives of Sharia in the modern technological era.

Key Findings

Faith in God: The belief in God gives value to the use of these computational technologies, serving as a foundation for organizing human life and directing it toward noble goals and purposes.

Understanding the Objectives of Sharia: The integration of Sharia objectives in AI applications is evident in the five necessities (daruriyyat).

Comprehensiveness and Flexibility of Islamic Law: The Islamic Sharia is comprehensive and adaptable, suitable for all times and places, and capable of encompassing all contemporary issues and developments.

Inclusivity of the Means Principle: The principle of means is inclusive of all types of means, both old and new, through which rulings can transition from objectives to means.

Recommendations

Increased Use of AI in Islamic Jurisprudence: The use of artificial intelligence in the field of Islamic jurisprudence and its principles remains modest. There is a need for the efforts of scholars, researchers, and students of knowledge to equip this field with Islamic foundations and legal rulings.

Establishing Centers for AI Ethics: It is crucial to create centers focused on the ethics of AI use that set guidelines and Islamic foundations in accordance with Sharia to ensure the safety of society from its negative impacts.

Funding:

The authors extend their appreciation to the Deanship of Scientific Research at King Khalid University for funding this work through the Research Groups Program under grant number R.G.P.45/309/2.

WORKS CITED

The Holv Quran.

The Sunnah (Prophetic Tradition).

Ibn Manzoor, Abu al-Fadl Jamal al-Din Makram. (n.d.). Lisan al-Arab. Dar Sader, Beirut. (Book of Waw and Ya of the Defective - Chapter of the Dhal with a Dot), Vol. 14, p. 287.

Al-Jawhari, Abu Nasr Ismail ibn Hamad al-Jawhari al-Farabi (d. 393 AH). Al-Sihah: The Crown of Language and the Correct Arabic. Edited by Ahmad Abdul-Ghafour Attar. 4th ed., Dar Al-Ilm Lilmalaeen, Beirut (6/2346).

Ahmad Mukhtar Omar, Dictionary of Contemporary Arabic, 1st ed., Alam Al-Kutub, Cairo, 1429 AH.

Al-Jawhari, Al-Sihah: The Crown of Language and the Correct Arabic, Vol. 3, p. 1245.

A group of researchers, Taj Al-Arus Min Jawahir Al-Qamus, Dar Al-Hadiya, Vol. 21, p. 363.

Ahmed Issam Al-Najjar, Human Intelligence vs. Artificial Intelligence. Link.

Thaer Muhammad Mahmoud, Sadiq Faleej Atiyat, Introduction to Artificial Intelligence, 1st ed., Al-Mujtamaa Library, Amman, 1426 AH, p. 9.

Abdullah Moussa, and Ahmed Habib Bilal. (2019). Artificial Intelligence: A Revolution in Modern Technologies. 1st ed., Arab Training Group, Cairo, p. 20.

Ibn Faris, Ahmad ibn Zakariya Al-Qazwini Al-Razi (395 AH). Al-Ma'jam fi Maqais Al-Lughah, Edited by Abdul Salam Muhammad Harun, 1399 AH - 1979 AD, Dar Al-Fikr (5/95).

Abed Al-Sufi, Stability and Comprehensiveness in Islamic Law, Publisher: Al-Manara Library, Makkah, Kingdom of Saudi Arabia, 1st ed., 1408 AH - 1988 AD, pp. 50-56.

Ahmad Fouad Riyadh, "Scientific Symposium on the Role of Sharia Policy in Developing Judicial Systems Related to Combating Terrorism", Riyadh, 3/5/1427 AH.

Al-Khadimi, Nour Al-Din ibn Mukhtar, Science of Legal Maqasid, Publisher: Al-Obikan Library, 1st ed., 1421 AH - 2001 AD, Vol. 1, p. 14.

Ibn Ashour, Muhammad Al-Tahir ibn Muhammad ibn Muhammad Al-Tahir (d. 1393 AH), Maqasid Al-Sharia Al-Islamiyah, Edited by Muhammad Al-Habib Ibn Al-Khujah, 1425 AH - 2004 AD, Ministry of Awqaf and Islamic Affairs, Qatar (3/165).

Muhammad Ibrahim Hasanine, Artificial Intelligence and Liability for Its Application Damages, Legal Journal, p. 189.

Ghunaim Abdul Rahman Ibrahim, Applications of Artificial Intelligence and Protection of Civil Rights, International Journal of Jurisprudence and Law, Issue 120, October 2022, p. 65.

Al-Babli, Ammar Yasser Zahir, Employing Artificial Intelligence Techniques in Security Work, Journal of Security and Law, Vol. 28, Issue 1, 2020, p. 17.

Al-Rajraji, Abu Abdullah Al-Hussein ibn Ali ibn Talha Al-Shushawi (d. 899 AH), Removing the Veil from the Refinement of Al-Shihab, 1st ed., 1425 AH - 2004 AD, Al-Rushd Library for Publishing and Distribution, Riyadh - Kingdom of Saudi Arabia (2/157).

Ahmed Issam, Programming Artificial Intelligence, 1st ed., Bloumania Publishing and Distribution, Cairo, 2021, p. 16.

Salah Othman, Ethics of Machines: Artificial Intelligence Technologies and Decision-Making Challenges, Center for Arab Research and Studies, 2022, Issue 88.

Dhaki Bot, "What are the Disadvantages of Artificial Intelligence?" Link.

Ghunaim Abdul Rahman Ibrahim, Applications of Artificial Intelligence and Protection of Civil Rights, International Journal of Jurisprudence and Law, Issue 120, October 2022, p. 67.

Muhammad Al-Hadi, Artificial Intelligence: Its Features, Applications, and Developmental and Societal Impacts, 1st ed., Egyptian Lebanese Publishing House, Cairo, 2021, p. 1.

- Adel Muhammad bin Nour, Artificial Intelligence, 1st ed., King Abdulaziz City for Science and Technology, Riyadh, 2005, p. 9.
- Khadija Muhammad Darar, Ethics of Artificial Intelligence and Robots, International Journal of Library and Information Sciences, Vol. 6, Issue (3), 2019, p. 244.
- Khadija Muhammad Darar, Ethics of Artificial Intelligence and Robots, International Journal of Library and Information Sciences, Vol. 6, Issue (3), 2019, p. 234.
- Ethics in Islam: The book is published on the Saudi Ministry of Awqaf website without data. Link.
- Al-Kattani, Mahmoud, The System of Reference Values in Islam, Dar Abi Ruqaq for Printing and Publishing, Al-Ma'rif, 2011, p. 16.
- Al-Khairi, Talal bin Aqil, Islamic Foundations of Artificial Intelligence, Journal of Tabuk University for Humanities and Social Sciences, Vol. 1, Issue 4, 2021, p. 201.
- Bonnet Alan, Artificial Intelligence: Its Reality and Future, Translated by Ali Sabri Farghali, World of Knowledge, Issue 172, National Council for Culture, Arts, and Letters, Kuwait.
- Al-Dahshan, Jamal, Teaching Aids and Educational Technology Developments, 3rd ed., Riyadh.
- Bakro, Khaled, The Importance of Technical Infrastructure in Transitioning to a Smart University, International Sciences Journal, 2017, Vol. 4, Issue (1).
- Dr. Muhammad Al-Dweihis Link, Tuesday, April 29, 2024.