P-ISSN: 2790-6795	Annals of Human and Social Sciences	Jan-Mar 2024,Vol. 5, No. 1
O-ISSN:2790-6809	http://doi.org/10.35484/ahss.2024(5-I)10	[99-114]

Annals of Human and Social Sciences
www.ahss.org.pk

RESEARCH PAPER

Analysis of the Islamic Law and its Compatibility with Artificial Intelligence as a Emerging Challenge of the Modern World

[1]Shabana Kausar*, [2]Ali Raza Leghari and [3]Abdul Salam Soomro

1. PhD Scholar, Dada Bhoye Institute of Higher Education Karachi and Lecturer at Institute of Law University of Sindh Jamshoro, Sindh, Pakistan.
2. Assistant Professor, Institute of Law, University of Sindh, Jamshor, Sindh, Pakistan.
3. Lecturer, Department of Law Shaheed Zulfiqar Ali Bhutto University of Law Karachi, Sindh, Pakistan

***Corresponding Author** shabana.kausar@usindh.edu.pk

ABSTRACT

This research article explores the complexities surrounding Islamic law and the challenges it encounters in the contemporary Era of Artificial Intelligence in global landscape. It examines issues related to preserving tradition while embracing modernity, compatibility with Artificial intelligence, women's rights and gender equality, human rights and religious freedom, pluralism and minority rights, modern finance and ethical practices, technology and bioethics, and engagement with international law. Islamic law, known as Sharia, is a comprehensive legal framework derived from the Quran, Hadith, and interpretations by Islamic scholars. It has guided Muslim societies for centuries, providing guidelines for various aspects of life. However, in the modern world, Islamic law faces numerous challenges that demand critical analysis and thoughtful responses. For the purpose to explore ground reality, Doctrinal research method is employed and relied on already available data. Present research results are given by descriptive method. No one can avoid to use modern technology but Muslim world is facing many issues in present situations. Researcher recommends that only reinterpretation of Islamic laws, awareness, unity on common intrest issues and Ijtehad can save integrity and soul of Islamic Law.

Keywords: Artificial Intelligence, Ethical Problems, Ijtehad, Islamic Law, Legal Norms, Principals of Islam, Quran, Sunnah

Introduction

Islamic law, or Sharia, has been an integral part of Muslim societies for centuries, providing a comprehensive legal and ethical framework to guide various aspects of life. Rooted in the teachings of the Quran and the Hadith, Islamic law has evolved over time, adapting to changing circumstances and cultural contexts. However, in today's dynamic and interconnected global landscape, Islamic law faces several challenges and here researcher made a thoughtful analysis and nuanced responses. Researcher believe there's a critical issue with the dominance of Western norms in shaping ethical standards for AI technologies. We're witnessing AI's global expansion across various sectors, presenting both transformative potential and concerning implications. While these technologies offer tremendous benefits, their autonomous nature can also lead to biases, privacy breaches, unemployment, and concentrated power. There's a worldwide push from governments, private sectors, and researchers to balance these risks and advantages through ethical discussions and standard-setting. However, the overwhelming presence of Western ethical theories in these debates and policy documents creates a significant imbalance. In response, paper in hand aims to anchor AI ethical uncertainties within Islamic normative discourse. Researcher hope to establish Islamic principles that guide ethical considerations in addressing AI's societal challeng. This contribution is crucial in the landscape of comparative AI ethics research, especially at a time demanding exploration of pluralist views on AI ethics and policies. The study utilizes principles from Islamic jurisprudence,

known as uṣūl al-fiqh, to analyze ethical uncertainties in AI and aims to devise solutions based on Islamic principles.

Uṣūl al-fiqh typically considers the Qurʾān and the Hadith, the traditions of the Prophet (PBUH), as the main sources for moral guidance. However, when these sources don't explicitly address certain ethical dilemmas, al-Masādir al-'Aqliyya, reason-infused methodologies, can be used within the Islamic framework to determine morally appropriate choices. These methodologies include legal analogy (Qiyās), juristic preference (Istihsan), presumption of continuity (Istishab), public welfare or interest (Maṣlaḥa), blocking the means to an evil end (Ṣadd al-ḍharaiʿ), and customary traditions (Urf). The study explores the significance and application of these methodologies in addressing ethical uncertainties posed by AI(Abdullah S. 2008). According to philosopher Jürgen Habermas, it's not acceptable to sideline religious ethical viewpoints in public discourse. However, he suggests that individuals with religious beliefs should express their ethical positions in a manner understandable to those without religious inclinations.

Moreover, Islamic ethical discourse inherently encompasses ideas of utility and duty, as outlined in specific sections of this paper. Many Islamic scholars have connected the concept of maṣlaḥa to morality based on duty or utility, a notion explored in this paper concerning AI technologies from an Islamic standpoint(Chaudhary M.Y.2020). It's crucial to note that this exploration doesn't mean disregarding the distinctiveness of Islamic thought. Instead, this paper consistently emphasizes that maṣlaḥa originates from divine sources and has a metaphysical orientation. This exercise aims to grasp an Islamic normative tool (maṣlaḥa) within the framework of contemporary comparative philosophy.

Islamic virtue-based ethics for artificial intelligence (AI) draw on Islamic principles and values to guide the development, deployment, and use of AI technologies. These ethics emphasize the importance of upholding moral virtues and promoting the well-being of individuals and society at large. Some key principles and considerations from an Islamic perspective include:

Justice (Adl): AI systems should be designed and utilized in a just and fair manner, treating all individuals with equality and impartiality. Bias or discrimination based on race, religion, gender, or any other factor is unacceptable. Integrity of autonomous system should be made foolproof to avoid any future confusions (Intelligence,2021).

Compassion (Rahma): AI should be developed with consideration for human welfare and compassion. It should not cause harm to humans or other living beings and should aim to enhance human lives (Carroll, 1996).

Beneficence (Ihsan): The development and use of AI should prioritize the well-being of individuals and society, promoting positive outcomes and preventing potential harm (Chaudhary, M.Y, 2020).

Accountability (Muhasabah): Developers and users of AI technologies should be held accountable for their actions and the consequences of AI applications. Transparent and responsible practices should be followed.

Amanah: Respecting individuals' privacy is crucial in AI development and deployment. Personal data should be handled with care and consent, following Islamic principles of trustworthiness. Islamic ethical frameworks are intricate and multifaceted, differing from a straightforward divine command theory where morality is solely dictated by divine mandates. Instead, Islamic ethics encompass various abstract and sometimes conflicting meta-ethical and normative ideas. While rooted in divine commands, uncertainties arise when translating these commands into value criteria and normative

principles. A notable similarity between Islamic and Western philosophical ethics lies in their presentation of two ethical value formulas: one emphasizing maximizing favorable consequences for the majority and another highlighting the duty to uphold intrinsic values, which in Islamic ethics includes religion, human life, and dignity. However, these systems diverge in their sources and ultimate goals of ethical evaluation. Islamic ethics draw from Islamic revelation's textual sources and consider metaphysical dimensions of desired values, while Western normative ethics primarily involve rational assessments of behavior to discern moral and immoral actions, aiming to advance worldly interests or values for moral agents.

Autonomy (Ikhtiyar)

AI systems should not be given complete autonomy, and humans should always retain control over critical decision-making processes. The concept of maṣlaḥa, rooted in maqāṣid Al-Sharīʿa, stands as a pivotal Islamic ethical source in navigating the ethical complexities posed by emerging AI technologies. However, explicating the ethical values it entails isn't straightforward. Should our grasp of maṣlaḥa prioritize maximizing welfare in the development and deployment of AI applications, or should it focus on safeguarding a specific set of imperatives? This paper contends that an optimal approach might necessitate considering both alternatives. The concept of maṣlaḥa, arising from maqāṣid Al-Sharīʿa, arguably emerges as the most relevant Islamic ethical framework in addressing the ethical ambiguities introduced by new AI technologies and their applications.

Transparency (Shura)

The decision-making process and the inner workings of AI systems should be transparent and understandable to avoid opaque and unjust results. However, employing this concept doesn't straightforwardly yield a definitive set of ethical values to pursue. It prompts inquiries about whether our understanding of maṣlaḥa should prioritize maximizing welfare in AI design and implementation, or if it should predominantly concentrate on safeguarding a specific set of imperatives (Imber, 1997). This paper proposes that the most effective approach likely involves a more nuanced perspective—one that views welfare maximization and the protection of specific imperatives as interconnected and complementary elements within a comprehensive ethical framework. Acknowledging the nuanced nature of maṣlaḥa allows for a deeper grasp of Islamic ethics, facilitating the alignment of AI technology with universally pertinent ethical considerations.

Sustainability (Mizan)

AI should be used to promote environmental sustainability and responsible resource management. Maqāṣid Al-Sharīʿa provides valuable ethical anchors for this suggested blended perspective of maṣlaḥa. Scholars like Al-Ghazālī, both in classical and modern times, have outlined five core objectives of Sharīʿa: the safeguarding of religion, human life, lineage, intellect, and wealth. Pursuing each of these objectives embodies maṣlaḥa—an ethical state of affairs. Notably, the ethical significance within these objectives spans a spectrum, with darurāt (essentials) considered most vital to preserve and promote, followed by secondary needs (ḥājiyyāt) and enhancements (taḥsīnīyyāt)(Johansen, 1999).

Approaching maṣlaḥa as a normative framework that encompasses both welfare-driven and duty-based orientations urges us to steer clear of binary choices between prioritizing welfare or adhering to specific duties. Instead, we can pinpoint intrinsic values—such as religion or human life—at the level of essentials or darurāt to serve as foundational principles. In such contexts, the morally imperative decision would be one that advances these fundamental values, irrespective of the outcomes or consequences(Al-Raysoni, 2005).

Truthfulness (Siddiq)

AI systems should be designed to provide accurate and truthful information, avoiding misinformation and deception (Abdallah S. 2010)

Respect (Ithar)

The development of AI should consider the dignity and rights of all individuals, avoiding dehumanizing or disrespectful applications.

Humility (Tawadu)

Developers and users of AI should remain humble in their pursuit of knowledge and power, recognizing the limitations and potential risks of AI technologies.

Litrature Review

Islamic virtue-based ethics for AI are not limited to the above points and can be further elaborated based on Islamic teachings and scholars' interpretations. It is essential to involve diverse perspectives, including ethical scholars, technologists, policymakers, and the broader community, to ensure comprehensive and thoughtful ethical guidelines for AI aligned with Islamic values.

Material and Methods

Research in hand is conducted by using Doctrinal method and relied on secondary data. Results are discussed by descriptive method in doctrinal style. It is pure research and proposed solutions are doctrines in nature.

Identify the Relevance of AI in Islamic Context: Explain the growing importance of artificial intelligence in various sectors and how it intersects with Islamic principles, ethics, and legal frameworks.

Explore Ethical Dilemmas: Delve into the ethical challenges posed by AI in light of Islamic teachings, such as issues of accountability, fairness, transparency, and the preservation of human dignity.

Analyze Legal Implications: Examine how current Islamic legal frameworks apply to AI technologies and identify areas where there might be a need for new interpretations or guidelines.

Examine Privacy and Data Protection: Analyze the implications of AI on privacy and data protection from an Islamic perspective, and how these concepts align with modern AI practices.

Consider Economic and Social Impacts: Investigate how AI adoption may impact the economy, employment, and social structures, and discuss approaches that align with Islamic economic principles.

Evaluate AI in Military and Security Applications: Explore the ethical concerns surrounding AI's use in military and security contexts, considering Islamic principles of warfare and the use of force.

Propose Ethical Guidelines: Offer recommendations for policymakers, developers, and users of AI systems to ensure adherence to Islamic ethical principles while promoting AI's responsible and beneficial use.

Promote Awareness and Education: Encourage public awareness and understanding of AI challenges within the Islamic context, fostering informed discussions and ethical decision-making.

Address Global Perspectives: To Acknowledge that AI challenges in Islam are part of broader global discussions on AI ethics and consider potential areas of collaboration and harmonization with international standards.

Highlight Case Studies: Provide examples of AI applications and initiatives that raise ethical questions within the context of Islamic principles.

Emphasize Ongoing Research and Dialogue: Recognize that the field of AI ethics is continually evolving, and encourage ongoing research, open dialogues, and engagement with scholars, experts, and stakeholders in the Islamic world.

AI in Ethical context

AI encompasses software and hardware that autonomously collect, analyze, and reason through data to perform tasks in digital and physical realms without explicit human guidance. While AI offers significant potential benefits across various sectors, its increased integration into our societal framework raises concerns about potential societal harms. These harms encompass a range of issues including fairness, autonomy, dignity, privacy, and safety for humans.

Identified risk domains involve unintended misuses such as gender and racial discrimination, privacy breaches, damage without clear liabilities, as well as intentional abuses like the creation of deep fakes, political propaganda, fake news, and cyberattacks. A significant portion of AI ethics research focuses on analyzing the ethical implications of AI technologies. This aims to develop ethical and policy frameworks that harness AI's benefits while establishing efficient methods to assign moral and legal responsibilities for various AI-related risks.

The core technology driving most AI capabilities is machine learning (ML), which includes systems like deep learning, generative adversarial networks, and reinforcement learning. ML systems excel in data collection, pattern recognition, and digitizing decision-making processes among other functionalities. Advancements in machine learning have significantly enhanced decision-making precision, scale, and speed, addressing a broad spectrum of questions from diagnosing diseases like cancer to predicting legal outcomes or determining appropriate actions. However, the ability of these systems to process data and draw conclusions holds immense moral and legal significance.

Since the 1990s, scholars have raised concerns about machine learning exacerbating societal fairness issues by automating discrimination and perpetuating existing biases. Despite these concerns, recent years have seen widespread adoption of machine learning systems across social, political, and economic domains due to the availability of extensive datasets, improved algorithms, and heightened connectivity. Presently, a substantial body of literature documents unprecedented privacy risks, biases, and harms inflicted by machine learning systems on historically disadvantaged groups in areas spanning privacy invasion, facial analysis, online ad targeting, search engine biases, employment opportunities, and law enforcement practices.

Numerous prominent cases underscore ethical apprehensions regarding AI applications across various societal sectors. For instance, the Cambridge Analytica scandal involved the use of machine learning to analyze vast datasets of Facebook users without consent, crafting and disseminating deceptive political advertisements to influence public opinion. Amazon’s hiring algorithm faced discontinuation due to its bias toward hiring more

men than women. In the United States, educators contested a machine learning application utilized for evaluating teaching performance and recommending teacher dismissals without transparent explanations due to its proprietary nature. Moreover, a sentencing and probation assessment algorithm was found to inaccurately predict higher recidivism rates for black individuals compared to white individuals (Yilmaz, 2017).

Additionally, concerns have been raised since 2014 regarding social networks employing AI systems to manipulate users' moods and perceptions. Algorithms capable of filtering user feeds could potentially influence attitudes and augment targeted advertising effectiveness by leveraging the data generated in this process.

Ethical and Normative Response of AI

In response to both the promises and potential risks associated with AI, various stakeholders from governments, private sectors, and academia have conducted studies aiming to align AI systems with the ethical and normative frameworks of society. The primary objective of these analyses is to establish ethical imperatives that guide the creation and utilization of AI systems. These efforts generally fall into two evaluative frameworks.

The first framework draws upon classical Western ethical theories, such as consequentialism, deontology, and virtue ethics. These theories seek to define ethical values and normative statements that can steer the ethical considerations surrounding AI.

The second framework comprises broader pragmatic normative principles that governments, organizations, and companies adopt to shape the design and operation of AI technologies. These principles hold significant sway in discussions around AI ethics, given that they largely originate from the creators and users of AI systems. Notably, among the most common normative principles proposed to underpin ethical and responsible AI are transparency, justice, fairness, nonmaleficence, responsibility, and privacy.

However, deeper theoretical assessments reveal foundational ambiguities within the ethical terms used to evaluate and justify AI ethics within existing frameworks. One significant ambiguity revolves around determining the ethical value that should drive moral judgments concerning AI applications. For instance, those advocating for utilitarian arguments in AI often fail to precisely define the form of utilitarianism they are applying. Merely pursuing increased efficiency doesn't encompass the entirety of utilitarian or consequentialist analysis.

Utilitarianism as a moral theory asserts the existence of some intrinsic good that ought to be maximized. However, debates among utilitarians persist regarding the nature of this intrinsic good at the metaethical level. Some scholars uphold a hedonistic theory of value, emphasizing pleasure and happiness as the primary holders of intrinsic value, echoing classical utilitarians like Jeremy Bentham and John Stuart Mill. Conversely, others propose a non-hedonistic theory of value that posits intrinsic good should be based on objective ideals such as knowledge, virtue, or beauty. This perspective, known as ideal utilitarianism, finds support in the works of scholars like G. E. Moore and Hastings Rashdall.

AI and Islamic world

Numerous countries within regions predominantly composed of Muslim populations have shown substantial interest in localizing and advancing the integration of AI technologies within their societal frameworks. An example is the Government of Saudi Arabia's decision in 2017 to grant citizenship to the Sophia robot, marking it as the world's first 'robotic citizen'. Additionally, several Gulf states have made significant investments in constructing smart cities operated by AI applications.

Between 2017 and 2021, countries across the Middle East and North African (MENA) region released multiple documents outlining strategies aimed at harnessing AI for economic growth, security, education, healthcare, transportation, and various other sectors. These strategies consistently emphasize the policy priority of developing the technical infrastructure necessary for AI implementation. However, the extent of commitment to integrating an ethical and normative component within these strategies varies significantly. For instance, some AI strategies within this region might prioritize technical development without equal emphasis on ethical considerations

In the context of AI strategies in the Islamic World, there's a notable discrepancy in approaches regarding the integration of local norms and values within these frameworks. While the UAE and Saudi Arabia documents from 2017 and 2020, respectively, prioritize policy and legislative reforms to welcome AI technologies without explicitly considering local norms and values in determining ethical and normative content, Qatar's (2019) and Egypt's (2021) AI strategy documents emphasize aligning technical policies with local concepts of welfare and ethics.

Qatar's strategy, in particular, underscores the significance of aligning AI frameworks with Qatari social, cultural, and religious norms. However, these documents are more aspirational and lack comprehensive ethical benchmarks for integrating and deploying AI technologies. There's an observed inclination to replicate normative principles from Western AI strategies, such as fairness, accountability, and transparency, with Qatar even considering using the EU's GDPR as a model for local AI guidelines.

One significant challenge faced by Islamic World countries is the need to develop AI systems that align with their religious and cultural beliefs. This alignment is crucial for fostering acceptance among the population, as perception significantly impacts the successful implementation of new technologies. Failure to align AI systems with local beliefs might lead to them being perceived as a threat to local values and traditions.

Furthermore, there's a caution against uncritically adopting foreign normative principles while neglecting local norms and realities. The involvement of the private sector in producing many of these comparative policy documents raises concerns, as profit maximization often drives private companies' primary normative values. Such involvement might risk overlooking the social and ethical challenges of AI, reducing them to technical problems or evading significant government regulation. Therefore, optimizing AI standard-setting within the local context, considering local norms and challenges, is strongly recommended to address these complexities.

Islamic Approaches to Evaluating Ethical Implications of Technology

Since the 1980s, scholars have delved into the relationship between Islam and technology. Ziauddin Sardar was an early advocate, stressing the importance of evaluating the impact of technology in Muslim societies through Islamic traditions found in textual sources. He cautioned against blindly adopting modern technology without considering Islamic norms.

Other scholars, like Salam Abdallah, highlighted the necessity of using classical sources of shariʿa (Islamic law), such as the Qurʾān, Sunnah, Ijmaʾ, and Qiyās, to examine ethical concerns in information technology. Abdallah proposed a framework guided by these sources to analyze ethical challenges in this field.

Amana Raquib introduced a broader Islamic ethical structure for technological advancement. Drawing from Islamic traditions' core values like justice, compassion, and balance, Raquib developed a framework to assess technological developments' ethical implications from an Islamic standpoint.

Recent scholarly discourse has turned to Islamic virtue ethics to address ethical uncertainties linked with various AI applications. Scholars like Raquib, Channa, Zubair, and Qadir critique unchecked AI development's assumed inherent goodness and challenge the prevalent market logics governing the tech industry. They advocate for Islamic virtue ethics as a comprehensive alternative to current ethical frameworks for AI, suggesting that virtues like kindness, charity, honesty, and justice are integral to AI's ethical development.

However, this paper follows a different methodological approach. While acknowledging the significance of virtue ethics in shaping AI ethics, it leans toward an act-centered approach to morality rather than the agent-centered perspective of virtue ethics. Established normative theories like consequentialism and deontology, or their hybrid versions, offer clearer guidance for actions, which is crucial in the AI context where specific, actionable rules and principles are needed.

AI and Islamic Sources of Normative Ethics

In addressing ethical uncertainties, Muslims derive Islamic moral judgments (ḥukm al-sharʿi) from established principles of Islamic jurisprudence (uṣūl al-fiqh). For instance, when evaluating issues like bias or opacity in algorithms or advocating for privacy rights from an Islamic perspective, primary sources of moral guidance include the Qurʾān and the recorded traditions of the Prophet. These sources offer broad normative principles supporting fairness, transparency, and privacy while condemning biases, opacity, and privacy violations.

However, it's important to note that these sources may not directly address modern challenges presented by AI. Uṣūl al-fiqh acknowledges the limitation of texts in addressing limitless emerging issues.

Muslims often seek guidance from a mufti when facing moral questions or dilemmas. The mufti issues a fatwa (religious opinion) based on Islamic sources to address these moral dilemmas. With the emergence of AI technology, fatwas could potentially be applied to various AI domains, such as determining morally required choices in designing algorithms for autonomous vehicles or deciding on the deployment of machine-learning algorithms with marginal biases in favor of overall security and law enforcement.

Muftis primarily rely on textual sources but may also resort to rational sources of Islamic jurisprudence (masādir ʿaqliyya), like legal analogy or general normative analysis, to identify interests that need safeguarding. In contemporary times, muftis increasingly integrate rational input to address emerging questions stemming from social, economic, and technological shifts. To determine the morality of an act, muftis argue that Islamic sources endorse choices promoting societal interests and preventing harm, provided they do not violate specific textual prohibitions such as those against murder, adultery, or usury.

***Maṣla**ḥa (administration of justice)* **as Standard for AI Ethics**

Islamic normative frameworks have a deep-rooted focus on social good, public interest, and human welfare, a principle traced back to scholars like Imām al-Ḥaramayn al-Juwaynī and Abū Ḥāmid al-Ghazālī in the eleventh century. Across centuries, Muslim jurists have aimed to establish a robust ethical framework guiding human conduct within evolving contexts. This led to the emergence of a specialized branch of Islamic jurisprudence, known as maqāṣid al-sharīʿa, focusing on the objectives of Islamic revelation.

This approach emphasizes that the divine order's ultimate purpose is to serve human interests, referred to as maṣlaḥa, for the benefit of humanity. Textual sources embody overarching principles aimed at nurturing societal well-being, promoting benefits,

and averting harm. The commitment to promoting well-being and preventing harm is consistent throughout Islamic scriptures.

The concept of maṣlaḥa holds significant relevance in the analysis of AI's ethical implications. It serves as a flexible and comprehensive ethical theory, rooted in maqāṣid al-sharīʿa, balancing potential harms and benefits posed by emerging ethical and legal challenges, even when these issues are not explicitly addressed in Islamic texts.

While maṣlaḥa is pivotal, it's just one of several sources used by Muslim jurists in shaping Islamic jurisprudence. Different schools have developed principles (uṣūl) serving as the basis for deriving moral judgments. Many of these sources are pertinent to the ethical dilemmas raised by AI.

Textual sources emphasize values like fairness, privacy, and honesty, guiding the governance of AI technologies by establishing equitable decision-making processes, promoting data privacy, and prohibiting harmful AI use against humans or other living entities.

Non-textual sources, such as the principle of "Blocking the Means" (Ṣadd al-ḍharaiʿ), play a significant role in assessing AI ethics from an Islamic perspective. This principle serves as a preemptive measure to prevent actions that could potentially lead to harm or wrongdoing, even if the actions themselves may not seem harmful initially. The principle of Ṣadd al-ḍharaiʿ, known as "Blocking the Means," offers a way to assess the broader societal and economic implications of specific AI technologies. This principle is instrumental in evaluating the potential impact of AI technologies like deepfakes, considering their potential for misinformation, political manipulation, and reputation damage. Scholars like Amana Raquib and colleagues suggest applying this principle to decision support systems in criminal justice to prevent potential miscarriages of justice arising from AI-based recidivism-risk scoring systems (Kamali, 2021).

Maṣlaḥa, often translated as public interest or welfare, is a pivotal concept in contemporary Islamic studies. It asserts that the Quranic texts' instructions and prohibitions aim to promote choices that bring about good and prevent harm. Classic scholars consistently associated maṣlaḥa with promoting well-being and avoiding harm.

However, defining Maṣlaḥa solely in contemporary social or economic terms oversimplifies its nuanced application in Islamic normative analysis. Viewing Maṣlaḥa merely through the lens of material gain in a secular context falls short of capturing its depth. It's more appropriate to perceive Maṣlaḥa as a state adhering to ethical standards aligned with divine will. This perspective allows for a deeper exploration of AI's diverse ethical challenges beyond conventional welfare metrics.

Regarding AI, Maṣlaḥa serves as an evaluative framework to assess its compatibility with Islamic notions of good and evil, right and wrong. It informs essential AI concepts like fairness, transparency, accountability, and privacy. However, the core essence of Maṣlaḥa remains a matter of debate. Should it prioritize maximizing overall human welfare through technological and economic progress, or should it emphasize intrinsic human values regardless of utility and welfare calculations? Exploring the potential for a hybrid ethical standard that effectively promotes both objectives is a potential avenue of inquiry (Kamali,2021).

AI, Effectiveness and Wellbeing Metrics in Islamic Conscience

In contemporary Islamic studies, there's a perspective that views maṣlaḥa as a construct aligned with utility maximization. Scholars such as George Harouni suggest that the Muʿtazila may have developed an ethics system akin to classic Benthamite utilitarianism.

Sari Nusseibeh and Andrew March argue that maṣlaḥa embodies a consequentialist-utilitarian reasoning, emphasized by reformers aiming to modernize Islamic law in the 19th and 20th centuries.

Modern Islamic reform movements support interpreting maṣlaḥa in a utility-based framework. Figures like Muḥammad ʿAbduh advocated for a rational approach to ethics, emphasizing practical and empirical moral knowledge, aligning with the intrinsic value of human well-being. Muḥammad Rashīd Riḍā echoed similar views, prioritizing Muslims' welfare in ethical reasoning and challenging traditional interpretations when necessary.

Their welfarist approach gained attention in contemporary Islamic jurisprudence. Muhammad Abū Zahra saw parallels between Islamic legal theory and the utilitarian ethics of Mill and Bentham, advocating for lawmaking to maximize overall welfare. Yūsuf al-Qaraḍāwī introduced a strand in Islamic jurisprudence emphasizing calculations in worldly affairs to weigh consequences and maximize good while minimizing harm.

This welfarist perspective finds support in mainstream Islamic jurisprudence. Figures like Fakhr al-Dīn al-Rāzī suggested that revelatory norms were justified through reason. They argued for a rational evaluation of actions in line with the broader welfare of society.

Al-Razi defined the rational evaluation of actions based on human nature, suggesting that actions resulting in benefit and avoiding harm are key considerations. He linked benefit (manfaʿa) to pleasure and harm (mafsada) to pain, proposing that an action should be pursued if it generates more good than harm. Similarly, al-ʿIzz ibn ʿAbd al-Salām aligned ethical value with human welfare, advocating for maximizing happiness while minimizing sadness to determine the right course of action.

In Islamic jurisprudence, this welfarist perspective may support evaluating AI applications based on utility. Algorithms and autonomous systems that contribute more to societal welfare than harm could be deemed ethical. Factors like privacy, transparency, fairness, and accountability become crucial in assessing the overall utility of AI. For example, a predictive algorithm used by law enforcement to enhance security might be considered ethical if its benefits outweigh its potential negative effects on privacy and fairness.

However, the consequentialist approach, though used to gauge ethical conduct, presents challenges. It relies on defining a clear intrinsic value to maximize, which can be elusive due to subjective ethical values influenced by personal perspectives and biases.

Consider an environmentalist's viewpoint: they might highlight AI's significant carbon footprint, citing emissions equivalent to five times that of an average American car for certain AI applications. Additionally, the immense energy usage in data centers supporting AI operations could exceed the energy consumption of entire nations. Conversely, others argue that AI contributes positively to sustainability efforts by optimizing energy use, improving waste management, and aiding environmental monitoring and conservation.

Furthermore, AI's predictive capabilities hold promise in aiding scientists to foresee climate changes, potentially enhancing strategies for mitigation. Therefore, when applying consequentialist evaluations – which might align with the concept of maṣlaḥa – it's crucial to ground assessments in the notion of general public welfare, termed maṣlaḥa kullyia in Islamic jurisprudence.

Mere economic justifications, focusing on benefits for developers, users, or particular societal segments, prove inadequate. Instead, a thorough evaluation is essential, encompassing a comprehensive analysis of broader societal and economic impacts. This

comprehensive assessment seeks to verify that the AI application in question indeed contributes to the overall well-being of the community, prioritizing the holistic welfare of society over the narrow interests of specific groups or sectors

Al-Ghazālī aligns with al-Juwaynī in emphasizing the significance of textual sources in delineating good and evil. Yet, he perceives no conflict between maṣlaḥa and the human good intended by revelation. Al-Ghazālī argues that the textual sources advocate values beneficial to humanity and operate under design principles guiding moral agents to foster good and avoid evil. He suggests that human reasoning about good and evil should be guided by an inductive and deductive interpretation of textual sources, as discerning values outside this environment is beyond human intellect. Al-Ghazālī identifies five ethical values—promoting religion, human life, dignity, intellect, and wealth—that should govern normative analyses in the Islamic worldview.

Al-Ghazālī's rejection of utility-based calculations is evident in his stance on the primacy of individual human life regardless of consequences. He advocates for upholding individual life as a first-order principle, refraining from consequentialist cost-benefit calculations even in situations where sacrificing one life could potentially save others. His viewpoint, similar to the trolley problem, maintains that sacrificing one life for the greater good is impermissible as each life holds sacred value and cannot be sacrificed.

In Islamic jurisprudence, this perspective highlights ethical values and obligations beyond typical welfarist or utilitarian frameworks. In the realm of AI ethics, this outlook supports a duty-centric model, emphasizing unwavering commitment to principles like fairness, privacy, transparency, and accountability. It guides AI designers and users to prioritize safeguarding individual rights and intrinsic values over calculations based solely on welfare or utility. This perspective underscores the significance of upholding moral responsibilities and respecting human dignity, even when it doesn't always maximize collective welfare.

Results in Descriptive format

Maqasid al-Shariah, also known as the objectives or purposes of Islamic law, provide a framework for understanding the ultimate goals and intentions behind Islamic teachings. These objectives include the preservation of religion, life, intellect, progeny, and property. Modern technology can both positively and negatively impact these objectives, depending on how it is developed, used, and regulated. Here are some ways modern technology may disturb or affect Maqasid al-Shariah:

Preservation of Religion (Hifz al-Din)

Technology can be used positively to facilitate access to religious knowledge, connect people with religious communities, and promote religious practices. However, it can also be used to disseminate harmful ideologies, misinformation, and extremist views.

Preservation of Life (Hifz al-Nafs)

On the one hand, technology has advanced medical science, leading to improved healthcare and saving lives. On the other hand, certain technologies can be misused, leading to weapons of mass destruction or other means of violence.

Preservation of Intellect (Hifz al-Aql)

Technology has the potential to enhance education, critical thinking, and problem-solving skills. However, excessive reliance on technology or its misuse can lead to distraction, misinformation, and a decline in intellectual growth.

Preservation of Progeny (Hifz al-Nasl)

Technology, such as assisted reproductive technologies, has enabled advancements in reproductive health and family planning. However, it may also raise ethical questions about the manipulation of human life or issues related to privacy and data protection.

Preservation of Property (Hifz al-Mal)

Technology has revolutionized commerce and trade, making transactions more accessible and efficient. However, it also brings challenges related to cybersecurity, intellectual property theft, and digital fraud.

Social and Moral Impact

Modern technology, particularly social media and online platforms, can influence societal values, behaviors, and norms. It may lead to issues such as cyberbullying, privacy violations, and the erosion of traditional social structures.

Environmental Concerns

Certain technologies may have a negative impact on the environment, contributing to climate change and ecological degradation, which can disrupt the balance of nature and harm living beings.

To address these potential disturbances to Maqasid al-Shariah caused by modern technology, it is essential for individuals, societies, and policymakers to adopt a responsible and ethical approach to technology development, use, and regulation (An-Naim, 1990). This requires considering the potential benefits and risks of new technologies, incorporating Islamic ethical principles, and ensuring that technology serves the greater good and the well-being of humanity while preserving Islamic values. Additionally, continuous dialogue between Islamic scholars, ethicists, and technology experts can help in navigating the ethical challenges posed by modern technology from an Islamic perspective.

Conclusion

The rise of AI has triggered significant changes across human life, raising ethical dilemmas linked to crucial societal values like autonomy, privacy, fairness, and transparency. Despite being heavily influenced by Western moral concepts, this paper advocates for a more inclusive understanding of AI ethics, incorporating an Islamic perspective crucial for a globally applicable ethical framework.

Islamic ethical systems are intricate and multifaceted, not solely reliant on divine command theory. Similar to secular ethical discourse, Islamic ethics encompass abstract and sometimes conflicting meta-ethical and normative propositions. While rooted in divine directives, Islamic morality encounters uncertainties when deriving value criteria and normative rules from God's commands. Notably, Islamic and Western philosophical ethics propose two approaches to ethical value and moral action. One emphasizes maximizing favorable consequences for the majority, while the other upholds intrinsic values such as religion, human life, and dignity. However, these systems differ in their sources and ultimate objectives of ethical evaluation. Islamic ethics draw from Islamic revelation's textual sources and consider metaphysical aspects of desired values, while Western normative ethics primarily engage in rational assessments for moral agents to promote worldly interests or values.

The concept of maṣlaḥa from maqāṣid Al-Sharīʿa emerges as a pertinent Islamic ethical framework in addressing ethical uncertainties posed by new AI technologies.

However, it doesn't straightforwardly outline the ethical values to pursue. This raises questions about whether interpreting maṣlaḥa should prioritize maximizing welfare in AI design and deployment or focus on safeguarding specific imperatives. This paper suggests a nuanced approach, considering both welfare maximization and safeguarding imperatives as interrelated aspects of an ethical framework. Acknowledging the multifaceted nature of maṣlaḥa can help align AI technology with universally relevant ethical considerations.

Recommendations

Solving problems faced by Islamic law in the modern world requires a multifaceted approach that considers the complexities of contemporary challenges while staying true to the principles of Sharia. Here are some strategies that can be adopted to address these issues effectively:

Contextual Interpretation

Encourage contextual interpretation of Islamic law that takes into account the changing realities of the modern world. Scholars and jurists should employ Ijtihad, the process of independent legal reasoning, to derive rulings that are relevant to contemporary circumstances while remaining grounded in Islamic principles.

Gender Equality and Women's Rights

Promote a reinterpretation of Islamic texts to ensure gender equality and women's rights. This can involve reexamining traditional interpretations of marriage, divorce, inheritance, and personal status to uphold principles of justice and equality for women. Always by modern thinker misinterpreted the rights and respect given to Women by Islam and create doubts in minds of new generation. Resultantly Muslim young generation never knew about a Great picture of Islamic rules (Arabia, 2013)

Human Rights and Religious Freedom

Engage in dialogue with international human rights standards to identify areas of convergence between Islamic law and universal human rights. Emphasize the protection of religious freedom and individual rights within the framework of Islamic principles.

Pluralism and Minority Rights

Foster an inclusive approach that respects the rights of religious and ethnic minorities within Muslim-majority societies. Emphasize the Quranic principle of "No compulsion in religion" (Quran 2:256) to promote coexistence and harmony.

Ethical Finance and Economic Practices

Develop and promote Islamic finance as a viable alternative that aligns with ethical and socially responsible principles. Encourage innovative financial products that adhere to Islamic principles while being compatible with global economic systems.

Technology and Bioethics

Formulate ethical guidelines based on Islamic principles to address the challenges posed by technological advancements and bioethical dilemmas. Engage Islamic scholars, scientists, and ethicists in discussions to find solutions that align with Islamic teachings.

Education and Awareness

Promote education and awareness about Islamic law and its principles among Muslims and non-Muslims alike. This can foster better understanding and appreciation for the relevance of Islamic law in the modern world.

Interfaith Dialogue

Engage in interfaith dialogue with representatives of other religious traditions to foster mutual understanding and cooperation. This can help address misconceptions about Islamic law and promote a more inclusive and peaceful coexistence.

Reforms and Legal Revisions: Advocate for legal reforms and revisions that align with the spirit of Islamic law while addressing contemporary challenges. This can involve reviewing outdated laws and adapting them to suit current societal needs**Invalid source specified.**.

Open Discourse and Research

Encourage open discourse and research within Muslim communities to address the challenges faced by Islamic law. Scholars, jurists, and community leaders should collaborate to find relevant and practical solutions.

References

Abdalla, M. I. (2018). *Islam and Modern Challenges: Revelation and Reason in Islam.* Palgrave: Palgrave Macmillan.

Abdallah, S. (. (2008). *Information ethics from an Islamic perspective. In M. Quigley (Ed.),.* Encyclopedia.

Abdallah, S. (. (2010). Islamic ethics: An exposition for resolving ICT ethical dilemmas. *Journal of Information,* 8(3), 289–301.

Abdallah, S. (2010). Islamic ethics: An exposition for resolving ICT ethical dilemmas. *journal of information, Communication and Ethics in Society, 8(3),* 289-301.

Adams, R. (2021). Can artificial intelligence be decolonized? *Interdisciplinary Science Reviews*, 46(1-2).

al-Būti, M. S. (1965). *Ḍawābit al-maslạ ḥạ fi al-Sharīʿa al-islāmīyya. In PhD Thesis, Faculty of Sharīʿa.* thesis.

al-Raysuni, A. &.-S. (2005). Theory of the higher objectives and intents of Islamic law (International institute of Islamic Thought 2005). *International institute of Islamic Thought 2005*.

An-Na`im, A. A. (1990). *Toward an Islamic Reformation: Civil Liberties, Human Rights, and International Law.* syracuse: Syracuse University Press.

Arabia, I. L. (2013). *Islamic Law and the Legal System of Saudi Arabia. .* BRILL: BRILL.

Carroll, L. (1996). Qurʾān 2:229: 'A Charter Granted to Wife?' Judicial Khulʿ in Pakistan. *Islamic Law and Society 3 (1)*, 91-126.

Chaudhary, M. Y. (2020). *Initial considerations for islamic digital ethics. .* Philosophy & Technology,.

Chaudhary, M. Y. (2020). Initial considerations for islamic digital ethics. Philosophy & Technology,. *Philosophy & Technology,*, 639-657.

Gerber, H. 1. (1994). *State, Society and Law in Islam: Ottoman Law in Comparative Perspective.* New York: State University of New York Press.

Hallaq, W. B. (2009). *An Introduction to Islamic Law.* Cambridge: Cambridge University Press.

Hashmi, S. H. (1990). *Islamic Political Ethics: Civil Society, Pluralism, and Conflict.* Princeton: Princeton University Press. (An-Na`im, 1990.

Heinrichs, W. P. (2002). *"Qawāʿid as a Legal Genre." In Studies in Islamic Legal Theory, edited by Bernard G. Weiss, 365-384.* weiss: Leiden: Brill.

Imber, C. E. (1997). *The Islamic Legal Tradition. Edinburgh:.* Edinburgh: Edinburgh University press.

Intelligence, E. N. (2021). *Egypt's National Artificial Intelligence.* Retrieved 12 10, 2022, from https:// mcit. gov. eg/ en/ Publi cation/ Publi cation_ Summa ry/9283

Jobin, A. I. (2019). The global landscape of AI ethics guidelines. Nature Machine intelligence. *1(9)*, pp. 389–399.

Johansen, B. (1999). *Secular and Religious Elements in Hanafite Law: Functions and Limits of the Absolute Character of Government Authority." In Contingency in a Sacred Law: Legaand Ethical Norms in the Muslim Fiqh, by Baber Johansen, 189-218.* Leiden: Brill.

Kamali, M. H. (2008). *Principles of Islamic Jurisprudence.* malaysia: The Islamic Texts Society.

Rahman, F. (2001). *Islam and Modernity: Transformation of an Intellectual Tradition. .* chicago: University chicago pree.

Ramadan, T. (2012). *The Quest for Meaning: Developing a Philosophy of Pluralism.* England: Penguin UK.

S.k, A. R. (2022). Use of Digital technologhy to Provide womens Inheritance Right under Islamic law. *Human Nature Journal Of Social Sciences*, 207-215.

Sachedina, A. A. (1998). *The Islamic Roots of Democratic Pluralism.* oxford: Oxford University Press.

Sonn, T. (. (2018). *The Wiley Blackwell Companion to Islamic Spirituality.* John Wiley & Sons.

Vahdat, F. (. (2018). *Islamic Legal Revival: Reception of European Law and Transformations in Islamic Legal Thought in Egypt, 1875-1952.* england: Oxford University Press.

Yilmaz, I. H. (2017). *Islam and the Modern World: Challenges and Perspectives.* Palgrave Macmillan.