

## **Integrating Islamic Morality into Technological Innovation: Towards Ethical Pathways for Sustainable Economic Growth**

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### **Abstract**

This study explores how integrating Islamic morality can be applied to technological innovations for sustainable economic growth. As Technology has become central to human life, shaping communication, economy, education, healthcare, and governance, while, its benefits are immense, technology also raises ethical concerns such as privacy violations, job displacement, environmental degradation, misuse of AI, and moral corruption through digital platforms. Islam, as a complete way of life, offers a comprehensive ethical system derived from the Qur'an, Sunnah, and the principles of Maqasid al-Shari'ah. Concepts such as amanah (trust), adl (justice), ihsan (excellence), maslahah (public good), and khalifah (stewardship) can guide the development, deployment, and use of technology in a way that preserves human dignity, promotes social justice, and ensures sustainability. The study aims to explore the principles of Islamic morality relevant to technology development and examines how Islamic values can be applied to contemporary technological challenges. The methods apply in the process of this study are Qualitative which involve interviews with relevant stakeholders and Quantitative which involve surveys assessing attitudes, norms, and perceived behavioral control. The study uncovers number of challenges, some of which include: mass collection of data without consent (privacy and surveillance); spread of misinformation; fraud; addiction, among others. The study recommends among others, establish ethical guidelines that patronize Islamic moral values, incorporate moral, cultural and religious principles in technological innovations.

Keywords: Islamic Morality, Ethics, Technological Innovation, Sustainable Economic Growth

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### **Introduction**

Technology has become the engine of modern economic development, shaping every dimension of human activity from finance and communication to governance and healthcare. However, while technological innovation accelerates material progress, it also produces ethical tensions such as inequality, exploitation, and moral disconnection. The unrestrained pursuit of innovation has often ignored spiritual and moral dimensions that ensure justice and welfare for all. Islamic morality offers a holistic framework that integrates the material and spiritual spheres. Unlike secular ethical systems that rely solely on human reasoning or utilitarian calculus, Islamic ethics grounds

innovation within divine accountability and social responsibility. The Qur'an and *Sunnah* emphasize justice, stewardship, and communal welfare as central to human activity, including the use of knowledge and technology. Therefore, the integration of Islamic moral values into technological innovation can guide societies toward sustainable and inclusive economic growth. The aim of this paper is to establish how Islamic morality rooted in the objectives of Shari'ah can serve as an ethical compass for the design, deployment, and governance of emerging technologies. The discussion connects classical Islamic thought to contemporary challenges in technological innovation, fintech, and sustainability, and concludes by offering recommendations.

### **Morality in Islam**

Various scholars have defined morality in different ways to adequately reflect its meanings and functions. Some of these definitions are cited below. From their point of views it can be said that:

Morality is the norm, code of rules and principles of human conduct at personal, interpersonal and societal levels. It determines right and wrong actions (dos and don'ts) and carries with it consequences of man's choice of actions (Asaju, 1997).

In this regard any matter concerning habits, attitudes, customs, ways of life, especially when assessed as good or bad, right or wrong falls within the context of morality. As an educational subject, morality is the sciences of virtues and the way to acquire them, of vices and the way to guard against them". (Paramole, 2000). "Morality is the simplest etiquette of behaviour accepted as norm by society ... the lubrication which enables the various machineries of human community to operate and interact with ease" (Mawdudi, 1978).

From the above definitions of morality cited, it should be understood by that morality is very important aspect of human life. It is a means of attaining perfection in this life and greatness in the life after. Most of the definitions of morality hint on human actions and dispositions in relation to good or bad, right and wrong.

Abdul (1983) suggests that, "The *Qur'an* is the sacred Book of Muslims that consists exclusively of the revelations and commands which Muhammad, the Prophet (SAW), received from time to time, as a message from Allah (SWT), and which under divine guidance, the prophet delivered to those around him". The Glorious Qur'an while reaffirming the truth of all previous revelations, itself comprises of all truth for the whole of mankind for all times, ages, colours, creeds and languages" (Rahman Doi, 1981).

The importance of the Glorious *Qur'an* as a book of guidance for humanity cannot be underestimated. Its inclusive and integrative discussions combine and span across faith in Allah (SWT), religious rites, spiritual observances, social conducts, decision making, intellectual pursuits, habits of consumption, manners of speech and all other moral teachings. Glorious *Qur'an* gives basic moral norms and values with wide range of behaviour for the individual, and shows him the way to the highest possible moral excellence which can save the entire humanity from the chaos and anarchy that have overtaken it today (Rauf, 1973). It abounds in excellent moral suggestions and precepts. One cannot turn to a single page of its fragmentary compositions without finding moral

topics which all men must approve. This fragmentary construction yields texts and norms complete in themselves suitable for common men in any of the incidents of life (Draper, 1875).

In the view of James Michener, “*Qur’an* is remarkably down-to-earth in its discussion of good life. For it combines dedication to one God and practical moral instructions. In one memorable passage it directs: “When you deal with each other in transactions involving future obligations, reduce them to writing and get two witnesses, so that if one of them errs the other can remind him. This is juster in the sight of Allah (SWT), more suitable as evidence, and more convenient to prevent doubts among people”. (The Reader’s Digest, American edition, 1955).

The *Qur’an* is undoubtedly the Book of morals. In it, we find a comprehensive moral guidance which can assure human progress to the highest pinnacle in every sphere of human life and activity (Paramole, 2000). The Glorious *Qur’an* is very explicit on moral issues relating to politics, law, economics, social relations and interactions, public administration, education, etc” (Rauf, 1979). In the spirit of the Glorious *Qur’an*, it is an obligation of a Muslim to be a vivid example of honesty and perfection, of seeking knowledge and virtue; to correct his mistakes and repent his sins, develop a good sense of social consciousness and human feeling.

وَإِنَّكَ لَعَلَىٰ خُلُقٍ عَظِيمٍ ﴿٤﴾

*And Verily, you (O Muhammad صلى الله عليه وسلم) are on an exalted (standard of) character. (Q.68:4)*

In another verse, Allah (SWT) states:

لَقَدْ كَانَ لَكُمْ فِي رَسُولِ اللَّهِ أُسْوَةٌ حَسَنَةٌ لِّمَن كَانَ يَرْجُو اللَّهَ وَالْيَوْمَ الْآخِرَ

وَذَكَرَ اللَّهَ كَثِيرًا ﴿٢١﴾

*Indeed in the Messenger of Allah (Muhammad صلى الله عليه وسلم) you have a good example to follow for him who hopes for (the Meeting with) Allah and the Last Day, and remembers Allah much (Q.33:21).*

These include qualities such as God-consciousness, guarding against evil; extreme trust in Allah (SWT), justice and fair play; perseverance and peaceful co-existence with non-Muslims, simplicity and generosity; beneficence and good treatment of women, etc. (Adetona, 2000). Islamic ethics derives from divine revelation and rational reflection.

In the context of technology, moral norms as portray in *maqasid ash-Shari’ah* ensures that innovation in *mu’amalah* serves public welfare (*maslahah*) rather than harm (*mafsadah*). Islamic moral principles such as *amanah* (trustworthiness), *adl* (justice), and *rahmah* (compassion) set boundaries for human creativity, emphasizing accountability to Allah (SWT) and responsibility toward creation. Contemporary technological ethics often dominated by secular and Western perspectives focuses on privacy, fairness, and autonomy. However, scholars like Boddington

(2017) and Stahl (2021) argue that these frameworks often lack moral universality and spiritual grounding. Islamic morality contributes an additional moral dimension: the recognition of divine purpose in human action.

Recent studies by Elmahjub, (2020) and Abdelnour, (2024) highlight that Islamic morality can strengthen the governance of Artificial Intelligence (AI), biotechnology, and digital finance by embedding accountability and communal welfare into design processes. For instance, Islamic fintech models based on profit-sharing (*mudarabah*, *musharakah*, *murabahah* etc.) promote risk equity and ethical finance, contrasting speculative and exploitative digital economies.

### **Principles of Islamic Morality**

Islamic morality comprise a collection of values and principles that Muslims endeavour to adhere to in their conduct and relationships (Siddiqui, 1997). At its core, Islamic ethics aim to promote virtuous behaviour, honesty, social responsibility, and spiritual development. Rabi, et.al, (2025) portrays that morality foster harmony and justice in society, guiding individuals in making ethical decisions. He further discussed the key principles of Islamic morality, which include:

***Tauhid (Monotheism)***: This principle emphasizes the unity and oneness of Allah (SWT), forming the foundation of Islamic ethics. It underscores the ultimate accountability to a single divine authority, guiding Muslims in their ethical conduct (McKechnie et al., 2007). The Qur'an states, "Say, 'Obey Allah and obey the Messenger. But if you turn away, then he is only responsible for his duty and you are responsible for yours.'" (Qur'an 24:54).

***Adl (Justice)***: Justice is a central tenet of Islamic morality (Mirakhor & Askari, 2019). Muslims are called to uphold justice in all aspects of life, ensuring fair and equitable treatment of others and promoting social harmony.

***Ihsan (Excellence)***: The principle of *ihsan* encourages Muslims to strive for excellence in all endeavors, demonstrating sincerity and excellence in their actions and interactions.

***Amanah (Trust) and Responsibility in Islam***: The concept of *amanah* underscores the importance of trustworthiness and responsibility that Muslims are expected to uphold in their roles and duties. In addition to trust, Islamic morality places a strong emphasis on personal responsibility and accountability before Allah (SWT). As Siddiqui (1997) notes, Muslims are encouraged to be conscious of their actions and the consequences they carry, both in this life and the hereafter.

***Itqan (Perfection and Precision)***: The principle of *itqan* emphasizes the importance of performing tasks with precision, thoroughness, and excellence. *Itqan* encourages Muslims to approach their duties and responsibilities with dedication and care, ensuring that their work reflects the highest standards of quality (Harahap et al., 2024). This principle is rooted in the belief that all actions should be carried out with sincerity and a commitment to excellence, as a reflection of one's faith and devotion to Allah (SWT).

By adhering to these principles, whether in physical or virtual life, Islamic morality provides a robust framework for individuals to navigate moral challenges and contribute positively to society.

### **Technological Innovation**

Technological innovation is an extended concept of innovation. While innovation is a rather well-defined concept, it has a broad meaning to many people, and especially numerous understanding in the academic and business world. Innovation refers to adding extra steps to developing new services and products in the marketplace or in the public that fulfil unaddressed needs or solve problems that were not in the past. Technological Innovation however focuses on the technological aspects of a product or service rather than covering the entire organization business model. It is important to clarify that Innovation is not only driven by technology, but can also be driven by various other factors, including market demand, social and environmental factors, and process improvements.

Technological innovation is the process where an organization (or a group of people working outside a structured organization) embarks in a journey where the importance of technology as a source of innovation has been identified as a critical success factor for increased market competitiveness. The wording "technological innovation" is preferred to "technology innovation". "Technology innovation" gives a sense of working on technology for the sake of technology. "Technological innovation" better reflects the business consideration of improving business value by working on technological aspects of the product or services. These advancements would show improvement for the businesses that adapt to this new technology. Moreover, in a vast majority of products and services, there is not one unique technology at the heart of the system. It is the combination, integration, and interaction of different technologies that make the product or service successful.

Technological innovation will impact prices of stock in companies. This can be due to new inventions in technology which make it easier for jobs to be done in the market. Investors see bigger returns on investments of companies with new technology due to innovations that have changed the market. Although companies that can't keep up with the pace of change and adapt to disruptive innovation often find themselves floundering. With new innovations being added to companies value this in turn will create an increase in profits of the company thus increasing stock prices for the company.

The stock market is a way that companies can raise money for the company's production or operations by selling shares of stock in the company. With newly raised money, companies can invest that money into new advancements which will bring more profit's in the future. Although companies do adopt technological innovations often, some decide to not which leads to major gaps between what is the new "normal" and what used to be "old fashioned". Innovations benefit companies but leave those who do not adapt to them become outpaced. Companies that do not respond to different market changes from innovation, tend to miss out on opportunities which could end up ruining a company.

The digital age has been marked by rapid technological breakthroughs that have fundamentally transformed how people communicate, access information, and interact with the world. An overview of some of the major technological developments that have shaped the digital age include:

**Artificial Intelligence (AI):** AI involves the development of computer systems capable of performing tasks that typically require human intelligence, such as speech recognition, decision-making, and problem solving. Technologies like machine learning and robotics have seen significant advancements, impacting a wide range of industries including healthcare, finance, transportation, and customer service (Furman & Seamans, 2018). A notable example of AI is generative AI tools like OpenAI's ChatGPT, Google's Gemini, Islamic AI chatbot, 'Ansari', Microsoft's Copilot etc. which can generate human-like text and assist in tasks ranging from customer support to content creation. Other AI tools include image recognition software, autonomous vehicles, and virtual assistants like Siri and Alexa, which enhance user interaction and automate routine tasks.

**Social Media:** Social media platforms have become powerful tools for communication, connecting individuals across geographical boundaries. Platforms such as Facebook, Twitter, Instagram, and LinkedIn have revolutionized the way people interact, share information, and engage in social and political discussions (Boulianne et al., 2024). These platforms have facilitated global connectivity, allowing for real-time information exchange and the mobilization of social movements, while also raising concerns about privacy, misinformation, and the impact on mental health.

**Data Analytics:** In the digital age, data analytics plays a crucial role in extracting valuable insights from the vast amounts of data generated daily. Organizations leverage advanced analytics technologies and algorithms to analyse data, enabling them to make informed decisions, improve efficiency, and personalize user experiences (Alonge et al., 2024). Data analytics is used in various sectors, from optimizing supply chains and enhancing marketing strategies to predicting consumer behaviour and improving public services.

**iv. Internet of Things (IoT):** The Internet of Things (IoT) represents a significant technological advancement, connecting everyday devices to the internet, allowing them to collect and exchange data. This interconnected network includes everything from smart home devices like thermostats and refrigerators to industrial sensors and wearable health monitors. IoT technology enhances efficiency and convenience by enabling real-time monitoring and control of devices, improving energy management, and facilitating predictive maintenance in industries (Gubbi et al., 2013). However, the widespread adoption of IoT also raises concerns about data privacy, security vulnerabilities, and the potential for increased surveillance, necessitating robust ethical and regulatory frameworks to protect users' rights and data integrity. These technological advancements have brought about significant benefits, enhancing convenience, efficiency, and connectivity. However, they also pose ethical challenges and require careful consideration to ensure that their impact aligns with societal values and ethical standards.

### **Tackling Challenges of Technological Innovation for Sustainable Economic Growth**

The rapid technological advancement experiencing has introduced a multitude of ethical challenges that require careful examination through the lens of Islamic morality. While technological advancements bring forth numerous benefits, they also give rise to moral challenges that warrant careful consideration. Among the key moral challenges in technological innovation that necessitate thorough examination within the Islamic moral framework are privacy and surveillance, social media and online behaviour, artificial intelligence and automation, digital divide and access, intellectual property and copyright, and data privacy and security (Rabiu, et.al, 2025).

Privacy and Surveillance Islamic ethics place great emphasis on the significance of privacy and the protection of personal information. The concept of "satar" (concealment) encourages individuals to safeguard their privacy and respect the privacy of others. Islamic ethics advocate for informed consent and prohibit unauthorized intrusion into personal affairs. Muslims can draw upon these principles to advocate for robust privacy protections and promote responsible data collection and usage. The increasing collection, storage, and analysis of personal data raise concerns about privacy and surveillance through CCTV camera and its modern variant chipsets. Issues such as data breaches, unauthorized access, and the commodification and commercialization of personal information pose ethical dilemmas regarding individual autonomy, consent, and the protection of personal privacy. Hence, privacy and surveillance has become critical ethical challenges in the digital age. In both principle and practice, Islamic ethics underline the preservation of privacy rights and the sanctity of personal information. The Qur'an and Hadith provide guidance on respecting individual privacy and maintaining confidentiality. For instance, the Qur'an states in Surah Al-Hujurat (49:12): "O you who believe! Avoid much suspicions, indeed some suspicions are sins. And spy not, neither backbite one another. Would one of you like to eat the flesh of his dead brother? You would hate it (so hate backbiting). And fear Allâh. Verily, Allâh is the One Who accepts repentance, Most Merciful." As such, Muslims can leverage this verse to advocate for responsible use of technology, promoting transparency, informed consent, and safeguarding individuals' privacy rights. Islamic ethics encourage individuals to strike a balance between the benefits of technological convenience and the preservation of privacy, ensuring that the collection and use of personal data adhere strictly to ethical principles.

Social Media and Online Behaviour Undoubtedly, social media platforms have become a prominent lifewire of our lives, raising ethical concerns related to privacy, cyber bullying, and the spread of misinformation. As a safety net, Islamic ethics provide valuable guidance in navigating these challenges and promoting ethical online behaviour while safeguarding digital footprints. Islamic ethics emphasize virtuous conduct and place significant emphasis on values such as kindness, respect, and integrity in interpersonal relationships (Al-A'ali, 2008). Thus, Muslims can employ these ethical teachings to foster a positive and ethical online environment. They are encouraged to responsibly use social media platforms, refraining from engaging in cyber bullying, spreading misinformation, or participating in hate speech. Sterling Islamic teachings on constructive communication, truthful speech (*sidq al-qawl*) and excellent manners (*husn al-khulq*) can guide individuals in promoting ethical and respectful online behaviour. The ubiquity of social media platforms has raised a multitude of ethical concerns pertaining to digital behaviour and online conduct. Issues such as cyber bullying, harassment, misinformation, and the dissemination of hate speech challenge societal norms, values, and the psychological well-being of individuals (Swenson-Lepper & Kerby, 2019).

This trend gives rise to numerous ethical questions concerning individuals' digital footprints, which often diverge significantly from their real-world actions and behaviours. Observably, the pervasive use of social media platforms has consequently resulted in ethical challenges associated with people's online behaviour. In the Qur'an, Allah (SWT) highlights the importance of truthful speech and discourages spreading false information. He says in Surah Al-Hujurat (49:6), "O you who have believed, if there comes to you a disobedient one with information, investigate, lest you

harm a people out of ignorance and become, over what you have done, regretful." This verse reminds Muslims of the ethical responsibility to verify information before sharing it and to refrain from engaging in spreading false rumours or misleading content.

Intellectual Property and Copyright, Islamic morality recognize the significance of safeguarding intellectual property rights and honouring the entitlements of content creators in the face of the double-edged implications of digitalization and open access resources. The concept of "*haq al-mal*" (right to property) is applicable to digital content and creative works. In this guise, Muslims should promote ethical practices by adhering to copyright laws, attributing, and acknowledging sources properly, and supporting fair compensation for creative endeavours (Abdillah et al., 2022). The ease of digital reproduction and distribution of creative works raises ethical issues related to intellectual property rights and copyright infringement (Asari et al., 2022). On the basis of fair play, balancing the interests of creators, users, and the public domain becomes a crucial consideration.

Data Privacy and Security Data privacy and security present pivotal ethical concerns in the digital age. Islamic ethics emphasize the protection of personal information and prohibit unauthorized intrusion into individuals' affairs. Instrumental in this regard, is the Qur'anic verse where Allah (SWT) says in Surah Al-Hujurat (49:11): "O you who believe! Let not a group scoff at another group, it may be that the latter are better than the former; nor let (some) women scoff at other women, it may be that the latter are better than the former, nor defame one another, nor insult one another by nicknames. How bad is it, to insult one's brother after having Faith [i.e. to call your Muslim brother (a faithful believer) as: "O sinner", or "O wicked", etc.]. And whosoever does not repent, then such are indeed *Zalimun* (wrong-doers, etc.)." By reflecting on this verse, Muslims are obliged to advocate for ethical data practices, including informed consent, transparency in data collection and usage, and the implementation of robust security measures. Islamic ethics guide individuals to handle personal data with integrity and respect, safeguarding the dignity and privacy of individuals.

Similarly, it is imperative for relevant government agencies to implement robust cyber security measures to effectively combat the rising tide of cyber robbery and address the prevalent issue of digital financial insecurities. Taking into cognizance the ethical challenges of technology in the digital age through the lens of Islamic ethics, Muslims can navigate these challenges while upholding their religious values. Islamic ethical principles, such as justice, responsibility, accountability, and compassion, provide a solid foundation for addressing the ethical implications of technological advancements (Astra et al., 2024). Furthermore, scholars and religious leaders should continue to play a vital role in providing guidance and engaging in ethical discourse surrounding technology, ensuring that the Muslim community remains ethically grounded in an ever-evolving digital terrain.

## **Recommendations**

To overcome these challenges and advance integrating morality into technological innovation, the following strategies are proposed:

1. Government should establish Islamic Tech-Ethics Councils at national and geopolitical zones comprising *Ulama'*, technologists, and economists to guide emerging technologies using Islamic-based frameworks.
2. Governments should incorporate *maqasid al-Shari'ah* principles into national innovation and governance policies to ensure balance between progress and moral accountability.
3. Government should encourage collaboration between Islamic financial institutions, economists and other stakeholders to fund ethically compliant technological solutions.
4. Religious organizations should collaborate between Muslim and non-Muslim scholars to develop globally relevant models of ethical technology that respect cultural diversity while maintaining moral integrity.
5. Islamic Institutions should promote research on Islamic techno-ethics and publish practical frameworks applicable across industries.
6. *Ulama'* should strengthen in teaching as well as the application of Islamic morality into technological innovation.
7. Academicians should expand their researches toward application of Islamic morality to technology.

### Conclusion

Technological progress without moral guidance risks deepening inequality and moral decay. Islamic morality, rooted in revelation and rational ethics, offers a comprehensive framework that aligns innovation with justice, trust, and public welfare. By integrating principles of *maqasid al-shari'ah* into every phase of technological innovation societies can achieve not only material prosperity but also spiritual and social harmony. Sustainable economic growth thus becomes an ethical enterprise grounded in faith, responsibility, and collective well-being. The paper concludes that the true measure of progress lies not merely in the sophistication of technology, but in how faithfully it serves humanity and honors divine trust.

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