UMER CHAPRA'S ISLAMIC ECONOMIC PHILOSOPHY AND RELEVANCE WITH FINANCIAL TECHNOLOGY

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Abstract

This research explores the intersection of artificial intelligence in financial technology and Umer Chapra's Islamic economic philosophy, focusing on ethical implications. Through a qualitative descriptive approach and comprehensive literature review, the study analyzes how AI-powered financial systems can be designed and implemented to uphold the Maqasid al-Shariah, emphasizing justice, equity, social responsibility, and fulfillment of human needs. Findings suggest that AI has the potential to enhance financial decision-making, promote ethical conduct, and address social issues like poverty and unemployment, aligning with Chapra's principles by improving credit assessments, fraud detection, and personalized financial advice. The study concludes that integrating AI in Fintech with the Maqasid offers an opportunity for greater economic stability and social responsibility by prioritizing the preservation of religion, life, intellect, lineage, and property, while acknowledging the need for robust governance frameworks to mitigate potential ethical challenges and ensure responsible AI development.

Keywords: Umer Chapra; Islamic Economic Philosophy; Financial Technology.

Abstrak

Penelitian ini mengeksplorasi titik temu antara kecerdasan buatan dalam teknologi keuangan dan filosofi ekonomi Islam Umer Chapra, dengan fokus pada implikasi etika. Melalui pendekatan deskriptif kualitatif dan tinjauan literatur yang komprehensif, penelitian ini menganalisis bagaimana sistem keuangan yang didukung oleh AI dapat dirancang dan diimplementasikan untuk menegakkan Maqasid al-Syariah, yang menekankan keadilan, kesetaraan, tanggung jawab sosial, dan pemenuhan kebutuhan manusia. Temuan menunjukkan bahwa AI memiliki potensi untuk meningkatkan pengambilan keputusan keuangan, mempromosikan perilaku etis, dan mengatasi masalah sosial seperti kemiskinan dan pengangguran, sejalan dengan prinsip-prinsip Chapra dengan meningkatkan penilaian kredit, deteksi penipuan, dan nasihat keuangan yang dipersonalisasi. Studi ini menyimpulkan bahwa mengintegrasikan AI dalam Fintech dengan Maqasid menawarkan peluang untuk stabilitas ekonomi yang lebih besar dan tanggung jawab sosial dengan memprioritaskan pelestarian agama, kehidupan, intelektualitas, keturunan, dan harta benda, sembari mengakui perlunya kerangka kerja tata kelola yang kuat untuk memitigasi potensi tantangan etika dan memastikan pengembangan AI yang bertanggung jawab.

Kata kunci: Umer Chapra; Filsafat Ekonomi Islam; Teknologi Keuangan.

INTRODUCTION

Artificial Intelligence (AI) has rapidly transformed various sectors, and finance is no exception. Fintech, the intersection of finance and technology, has witnessed a significant surge in AI adoption. AI algorithms are now integral to numerous financial operations, revolutionizing how financial institutions conduct business and interact with customers. Examples of AI applications in Fintech abound. Algorithmic trading

employs AI to execute trades at high speeds, leveraging complex mathematical models to identify and capitalize on market trends. Credit scoring models utilize AI to assess creditworthiness, automating the loan application process and improving risk assessment for lenders. Fraud detection systems employ AI to analyze vast datasets, identify suspicious patterns, and prevent fraudulent activities, enhancing security for both financial institutions and customers. Robo-advisory platforms leverage AI to provide personalized financial advice, offering automated portfolio management and investment strategies tailored to individual investor profiles and risk tolerances. Furthermore, AI is increasingly being used in personalized financial planning, analyzing individual financial goals and recommending customized investment strategies and financial products (Kouam, 2024, p. 2).

These advancements have the potential to significantly benefit the financial industry. AI can enhance efficiency by automating routine tasks, freeing up human resources for more strategic activities. It can improve risk management by identifying and mitigating potential risks more effectively. Moreover, AI can enhance customer experience by providing personalized and efficient services, such as 24/7 customer support and tailored financial advice (Kouam, 2024, p. 3).

This research delves into a critical question: "How can AI-powered financial systems be designed and implemented to uphold the ethical and economic principles espoused by Umer Chapra, ensuring justice, equity, social responsibility, and the fulfillment of the Maqasid al-Shariah?" To address this, we will examine the ethical implications of AI in Fintech through the lens of Umer Chapra's Islamic economic philosophy.

Umer Chapra is a renowned Islamic economist and scholar whose work has significantly contributed to the field of Islamic economics. He is a prominent figure in advocating for an economic system that is not only efficient but also just, equitable, and socially responsible. Chapra's economic philosophy, deeply rooted in Islamic principles, emphasizes several key tenets. Firstly, he strongly advocates for justice and equity, arguing that economic systems should prioritize fair distribution of wealth and resources, minimizing poverty and inequality. This necessitates policies that empower all members of society, regardless of their background. Secondly, Chapra emphasizes the social responsibility of businesses and financial institutions, advocating for economic activity that not only generates profit but also contributes to the well-being of society by addressing social issues such as poverty and environmental degradation through socially responsible investment and impact finance. Thirdly, Chapra strongly emphasizes ethical conduct in all economic activities, advocating for honesty, trustworthiness, and the avoidance of exploitation in all business dealings, prohibiting

practices such as usury and the exploitation of vulnerable individuals. Fundamentally, Chapra's philosophy is deeply rooted in the Maqasid al-Shariah, the higher objectives of Islamic law, which include the preservation of religion, life, intellect, lineage, and property. He contends that economic activity should be conducted in a manner that protects and promotes these higher objectives, ensuring that the pursuit of economic growth does not compromise human dignity and societal well-being (Rofiah & Ghozali, 2020, pp. 15–17).

While existing research on AI in Fintech primarily focuses on technological and regulatory aspects, a significant gap remains in understanding the ethical and societal implications of AI in finance from an Islamic perspective (Rabbani et al., 2022, p. 382). This research aims to bridge this gap by applying Umer Chapra's Islamic economic philosophy, with its emphasis on justice, equity, social responsibility, and ethical conduct, to the specific context of AI in Fintech. This involves analyzing how Chapra's principles can guide the development and deployment of AI-powered financial systems in a way that avoids exacerbating existing inequalities and social injustices. The research will investigate how algorithmic bias, discriminatory lending practices, and the lack of access to AI-powered financial services can disproportionately impact marginalized communities. Furthermore, it will explore the role of Islamic financial institutions, such as Islamic banks and takaful companies, in leveraging AI while adhering to Islamic principles and promoting social good. Ultimately, this research aims to develop a framework for ethical and responsible AI in Islamic finance by proposing a set of guidelines and principles for the development and deployment of AI-powered financial systems that are consistent with Islamic values and promote a just and equitable financial ecosystem. By addressing this research gap, this study aims to contribute to a more comprehensive understanding of the ethical implications of AI in Fintech and provide valuable insights for policymakers, regulators, and industry stakeholders in developing and implementing AI-powered financial systems that are both innovative and ethically sound. This section provides a detailed introduction to the research, including a clear statement of the research question, an introduction to Umer Chapra and his key principles, and a comprehensive analysis of the research gap. This foundation will serve as the basis for the subsequent sections, which will delve deeper into the application of Chapra's principles to specific AI applications in Fintech and explore strategies for developing ethical and responsible AI-powered financial systems.

RESEARCH METHODS

This research employs a qualitative descriptive approach to investigate the ethical implications of AI in Fintech through the lens of Umer Chapra's Islamic

economic philosophy. The methodology primarily relies on a comprehensive literature review, drawing data from various relevant sources, including academic journals, books, reports from reputable institutions, and online databases.

The steps involves a thorough collection of literature directly related to the research topic. This includes academic articles, books, and reports on AI in Fintech, Islamic economics, Umer Chapra's work, ethical considerations in AI development, and the Maqasid al-Shariah. Subsequently, a rigorous selection process will be undertaken to ensure the inclusion of only relevant, credible, and up-to-date sources. This research will utilize a combination of deductive and inductive reasoning. Deductive reasoning will be employed to apply Umer Chapra's principles to specific AI applications in Fintech, while inductive reasoning will be used to analyze case studies and identify emerging trends and best practices.

RESULTS AND DISCUSSION

Short biography of Umer Chapra

Muhammad Umer Chapra is a prominent figure in the field of Islamic economics, recognized for his extensive contributions to the development of economic theories that align with Islamic principles. Born on February 1, 1933, in Pakistan, Chapra's academic journey began in Karachi, where he completed his early education before moving to the United States. He earned a master's degree and subsequently a Ph.D. in economics from the University of Minnesota in 1961, graduating with honors. Upon returning to Pakistan, he joined the Central Institute of Islamic Research, where he dedicated himself to studying Islamic economic principles and their application in contemporary society. This period of dedicated research laid the foundation for his groundbreaking work in Islamic economics. His seminal work, "The Future of Economics: An Islamic Perspective," reinterprets classical economic theories through an Islamic lens, emphasizing the importance of ethical considerations alongside material wealth. Chapra further articulated his vision in his research on "The Islamic Vision of Development in the Light of Maqāṣid Al-Sharīʿah," emphasizing the alignment of economic activities with the higher objectives of Islamic law to ensure that economic growth benefits all of society (Arikha, 2018, p. 1).

Chapra's contributions have been recognized globally. In 1990, he received prestigious awards from both the Islamic Development Bank for his work in Islamic economics and the King Faisal International Prize for his contributions to Islamic studies. Additionally, he was honored with a gold medal by the President of Pakistan at the first conference of the Islamic Overseas Pakistanis (IOP) for his efforts in promoting Islamic economics (Kusnan et al., 2022, p. 586).

Umer Chapra's economic philosophy is characterized by its integration of traditional religious values with modern economic theories. He emphasizes that a just economy must be rooted in ethical principles derived from Islam. His thoughts often revolve around macroeconomic issues, particularly monetary policy and its implications for social justice. A distinctive feature of Chapra's thought is his critique of conventional economic systems, particularly capitalism and socialism, which he believes fail to address the moral dimensions of human life. He advocates for an Islamic economic system that prioritizes socio-economic justice and equitable distribution of wealth. His optimism about the potential of Islamic economics as a solution to global economic challenges has earned him recognition as a leading scholar in this field (Arikha, 2018, p. 5).

Chapra's professional career includes significant roles within various institutions dedicated to Islamic finance and economics. Since November 1999, he has served as an advisor at the Islamic Research and Training Institute (IRTI) of the Islamic Development Bank (IDB) in Jeddah, Saudi Arabia. Prior to this position, he spent nearly 35 years at the Saudi Arabian Monetary Agency (SAMA), where he held various advisory roles, contributing to monetary policy formulation and implementation. In these roles, Chapra has consistently advocated for policies that reflect Islamic values, focusing on sustainable development that adheres to maqashid al shariah principles. His work has influenced many policymakers and economists within Muslim-majority countries (Kusnan et al., 2022, p. 586).

Chapra's ideas have inspired numerous students and scholars who explore various aspects of his theories. His concepts regarding inflation control through moral improvement, equitable wealth distribution, and the prohibition of usury have been subjects of academic research at various universities. For instance, students have analyzed his views on inflation suppression strategies within an Islamic framework, demonstrating how his teachings can be applied to contemporary economic issues. Furthermore, academic discussions comparing Chapra's thoughts with those of Western economists like John Maynard Keynes highlight his unique approach to macroeconomic theory. Critics have noted that while Chapra's framework diverges from traditional Western models, it provides valuable insights into addressing modern economic crises (Arifin et al., 2023, pp. 136–137).

Umer Chapra's Islamic Economic Principles and Relevance to Fintech

At the core of Chapra's philosophy is the commitment to equitable distribution of wealth and resources, with the goal of eradicating poverty and inequality. He contends that traditional economic frameworks, whether capitalist or socialist, frequently fall short in addressing key social justice issues. The capitalist model often

emphasizes individual ownership and profit maximization, resulting in income inequality and monopolistic practices, while the centralized nature of socialism tends to overlook personal incentives and the contributions individuals make to economic productivity. In contrast, Chapra proposes an economic system rooted in Islamic values that prioritizes the collective good of society, striving to harmonize individual rights with social responsibilities. This approach fosters a more just and equitable economic environment that seeks to uplift all members of society, particularly those who are disadvantaged (Chapra et al., 2008, p. 10).

Umer Chapra's Islamic economic principles underscore the significance of justice and equity in achieving a fair distribution of wealth and resources, making them particularly relevant to the Fintech industry. AI can be thoughtfully designed to improve access to financial services for underserved communities, promoting fair credit, insurance, and investment opportunities to help alleviate poverty and reduce inequality. Nonetheless, there is a considerable risk that AI may intensify existing disparities, especially through biases in credit scoring and unfair lending practices. Thus, aligning AI advancements in Fintech with Chapra's vision for economic justice is critical to ensure that technological progress does not negatively impact marginalized groups (Chapra, 2001, p. 4).

The application of Chapra's principles in Fintech is guide the development of AI algorithms that promote equitable access to financial services. By integrating ethical considerations into algorithmic design, Fintech companies can work towards ensuring that all segments of society, including marginalized and underserved populations, have access to credit, insurance, and investment opportunities. For instance, AI systems can be programmed to analyze a broader range of data points beyond traditional credit scores, considering factors like income stability, community engagement, and personal circumstances. This approach not only democratizes access to financial resources but also aligns with Chapra's vision of economic justice, as it seeks to minimize barriers faced by those historically excluded from financial systems. By fostering inclusive financial services, AI can play a pivotal role in addressing systemic inequalities and promoting economic upliftment for all (Oseni & Ali, 2019, p. 37).

The integration of AI in Fintech is not without its challenges. While there is potential for AI to enhance equitable access, there is also a significant risk that it could exacerbate existing inequalities. For example, algorithmic bias in credit scoring can result in discriminatory lending practices that disproportionately affect certain demographics, particularly those from lower socioeconomic backgrounds or marginalized communities. If AI algorithms are trained on historical data that reflect societal biases, they may perpetuate these biases in their decision-making processes,

leading to unfair outcomes. Chapra's principles highlight the importance of ethical oversight in the deployment of AI technologies, urging stakeholders to actively identify and mitigate these biases. It is essential for Fintech companies to adopt transparent practices, ensuring that their algorithms are continually monitored and refined to promote fairness and equity (Umam, 2023, p. 140).

Relevance Chapra's Islamic economic philosophy with Fintech companies is the moral dimensions of their operations. The prevailing paradigm in conventional economics often overlooks the ethical implications of financial decisions, leading to practices that prioritize profit over people. Chapra's framework encourages a shift towards a more holistic approach that integrates moral considerations into economic behavior. This means fostering an environment where financial decisions are evaluated not just on their economic returns but also on their social impact. By embracing ethical principles, Fintech can support sustainable development and contribute to a more just and equitable economic landscape (Oseni & Ali, 2019, p. 40).

The emphasis on community engagement and social responsibility is crucial in implementing Chapra's principles within the Fintech sector. Companies should prioritize collaborations with local communities and stakeholders to understand their unique needs and challenges. By engaging with the communities they serve, Fintech firms can design products and services that genuinely address the financial needs of diverse populations. This participatory approach not only enhances customer trust and loyalty but also ensures that financial innovations are aligned with the broader goals of social welfare and economic justice (Chapra, 2007, p. 59).

Umer Chapra's Islamic economic principles provide a valuable framework for addressing the challenges and opportunities presented by AI in the Fintech landscape. By emphasizing justice, equity, and moral responsibility, Chapra's philosophy encourages the development of financial systems that prioritize the well-being of all individuals, particularly the marginalized and underserved. As Fintech continues to evolve, it is imperative that stakeholders remain vigilant in their pursuit of fairness, actively working to design and implement AI algorithms that promote equitable access to financial services while mitigating the risks of bias and discrimination. By integrating these principles into their operations, Fintech companies can play a pivotal role in creating a more just and inclusive economic future, ultimately contributing to the eradication of poverty and inequality in line with Chapra's vision (Chapra, 2007, p. 60).

Aligning AI-Powered Financial Systems with Umer Chapra's Maqasid al-Shariah: Ensuring Economic Stability and Social Responsibility

The advent of Artificial Intelligence (AI) has ushered in a new era for financial systems, offering innovative solutions that can significantly enhance the efficiency,

effectiveness, and accessibility of financial services (Xie, 2019, p. 4). The integration of AI into finance is not merely a technological advancement; it presents an opportunity to align financial practices with the "Maqasid al-Shariah", the fundamental objectives of Islamic law that focus on preserving religion, life, intellect, lineage, and property. By adhering to these principles, financial institutions can ensure that their AI-driven solutions contribute positively to society while promoting ethical conduct and social responsibility. This alignment is crucial in creating a financial ecosystem that respects human dignity and fosters economic stability, which are essential for the sustainable development of communities and societies (Chapra et al., 2008, p. 19).

AI-powered financial solutions can enhance decision-making processes in ways that honor the sanctity of human life and dignity. For instance, these technologies can analyze vast amounts of data to assess creditworthiness more accurately, reducing the likelihood of unjust lending practices that disproportionately affect marginalized groups (Xie, 2019, p. 4). By employing AI to ensure fair and transparent transaction mechanisms, financial institutions can better protect property rights, a cornerstone of Islamic economic philosophy. This approach not only aligns with the Maqasid al-Shariah but also enhances consumer trust in financial systems, ultimately contributing to a more stable economic environment. Furthermore, AI can facilitate the early detection of potential financial crises by analyzing market trends and consumer behavior, providing stakeholders with invaluable insights that help mitigate risks and safeguard against economic harm (Chapra, 2001, p. 13).

Central to Umer Chapra's philosophy is the idea of "social responsibility" within businesses and financial institutions. Chapra emphasizes that financial entities have a duty to contribute to the welfare of society, transcending the narrow pursuit of profit. This notion resonates profoundly with the capabilities of AI, which can be harnessed to tackle pressing social issues such as poverty, unemployment, and environmental degradation (Chapra, 2014, p. 102). For example, AI-driven analytics can identify investment opportunities that not only promise financial returns but also generate positive social outcomes, such as job creation and support for sustainable projects. By incorporating social responsibility into their investment strategies, financial institutions can address the needs of underprivileged communities while simultaneously contributing to broader economic growth (Oluwaseun Badmus et al., 2024, p. 625).

The role of AI in promoting sustainable development goals (SDGs) cannot be understated. By analyzing data on social and environmental impact, AI can guide financial institutions in allocating resources in ways that enhance social inclusion, reduce inequalities, and protect the environment. For instance, AI can help identify sectors that require investment to improve infrastructure, education, and healthcare in

underserved regions. By directing funds toward these areas, financial institutions can play a pivotal role in fostering equitable development that aligns with the Maqasid al-Shariah principles. Additionally, the ability of AI to monitor and evaluate the impact of investments can lead to more informed decision-making, ensuring that financial resources are utilized effectively for the betterment of society (Sætra, 2021, pp. 2–3).

In light of Chapra's emphasis on "ethical conduct," it is essential for financial institutions to uphold values such as honesty, trustworthiness, and the avoidance of exploitation in all economic activities. AI can serve as a powerful tool to enhance transparency and accountability in financial transactions, addressing concerns related to fraud and manipulation. By employing AI algorithms, institutions can track transactions in real-time, detect anomalies, and ensure compliance with ethical standards. This capability not only mitigates risks but also fosters a culture of integrity within financial organizations, aligning their operations with Islamic ethical principles (Mulyadi, 2019, p. 179).

The ethical implications of AI-driven financial products and services warrant careful consideration. Financial institutions must ensure that their AI solutions are designed and implemented in a manner that is fair, transparent, and beneficial to all stakeholders. This includes conducting thorough impact assessments to understand how AI technologies may affect various segments of society, particularly vulnerable populations. By prioritizing ethical considerations in the development of AI systems, financial institutions can create products that promote social good while minimizing the potential for exploitation or adverse effects on consumers (Oluwatobi Opeyemi Adeyelu et al., 2024, p. 611).

The alignment of AI-powered financial systems with the Maqasid al-Shariah also extends to the safeguarding of "intellect" and "lineage". In Islamic finance, the preservation of knowledge and the family unit is vital for societal stability. AI can be leveraged to provide educational tools and resources that enhance financial literacy and empower individuals to make informed financial decisions. By offering tailored financial education programs through digital platforms, financial institutions can equip consumers with the knowledge they need to navigate the complexities of modern finance. This approach not only supports individual empowerment but also strengthens the fabric of society by fostering informed and responsible economic behavior (Chapra et al., 2008, p. 19).

The integration of AI in financial systems presents an opportunity to address issues related to "lineage and family welfare". Financial products that promote family savings, investments, and insurance can be enhanced through AI technologies that analyze family dynamics and financial needs. By offering personalized solutions that

cater to families' unique circumstances, financial institutions can help ensure the well-being of future generations. This focus on lineage aligns with the Maqasid al-Shariah's objective of preserving family units and fostering stable, prosperous communities (Chapra et al., 2008, p. 20).

However, as financial institutions embark on this journey of integrating AI with the Maqasid al-Shariah, they must remain vigilant about the potential challenges and ethical dilemmas that may arise. The rapid advancement of AI technologies can lead to unintended consequences, such as increased surveillance or erosion of privacy. It is crucial for financial institutions to strike a balance between leveraging AI for efficiency and maintaining the ethical standards that underpin Islamic finance. By establishing robust governance frameworks that prioritize ethical considerations, transparency, and accountability, financial institutions can navigate these challenges while remaining true to their commitment to social responsibility and the Maqasid al-Shariah (Abdullah, 2018, p. 106).

The integration of AI-powered financial systems with Umer Chapra's Maqasid al-Shariah presents a compelling opportunity to foster economic stability and social responsibility. By designing financial solutions that prioritize the preservation of religion, life, intellect, lineage, and property, institutions can create a financial ecosystem that is not only innovative but also ethical and inclusive. AI has the potential to enhance decision-making processes, promote social responsibility, and uphold ethical conduct, ultimately contributing to the well-being of society as a whole. As financial institutions continue to embrace AI technologies, it is essential that they remain grounded in the principles of Maqasid al-Shariah, ensuring that their practices benefit individuals and communities while promoting sustainable development and social justice. Through this alignment, AI can play a pivotal role in shaping a more equitable and prosperous future for all (Kusnan et al., 2022, pp. 606–607).

CONCLUSION

Umer Chapra's Islamic economic principles provide a robust framework for addressing the ethical and social challenges posed by the rapid integration of AI in the Fintech sector. His emphasis on justice, equity, and social responsibility offers a moral compass to ensure that technological advancements are harnessed for the collective good rather than exacerbating existing inequalities. By aligning AI-powered financial systems with Chapra's vision and the Maqasid al-Shariah, Fintech companies can transcend profit-driven motives and prioritize inclusivity, transparency, and social welfare. This alignment is critical for democratizing access to financial resources, mitigating algorithmic biases, and fostering trust among underserved communities. Furthermore, embedding ethical considerations into AI design enables financial

institutions to address systemic disparities while supporting sustainable development goals. As Fintech continues to reshape global financial systems, Chapra's principles remain a timeless guide for ensuring that innovation upholds human dignity and contributes to the creation of a more just and equitable economic order.

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