

Chapter 7

The Impact of Information and Communication Technologies (ICT) on Islamic Economy and Finance

Funda Hatice Sezgin

 <https://orcid.org/0000-0002-2693-9601>

Istanbul University-Cerrahpasa, Turkey

ABSTRACT

Digitalization has brought a significant transformation to the Islamic finance sector, enabling it to reach a wider audience. Traditional Islamic finance models were primarily based on physical branches, face-to-face customer interactions, and paper-based transactions. However, with digitalization, banking, investment, and trade processes have accelerated significantly. In particular, internet banking, mobile applications, and blockchain-based solutions have made Sharia-compliant financial transactions more accessible and secure. This transformation has increased interest in Islamic finance while also sparking new discussions on how traditional methods can be sustained in the digital environment. The aim of this study is to examine the role of ICT in Islamic finance from different perspectives and to make future-oriented

DOI: 10.4018/979-8-3693-8079-6.ch007

inferences.

INTRODUCTION

Islamic finance has been steadily gaining a stronger position in the global financial system, relying on fundamental principles such as interest-free banking, risk-sharing, and ethical investments. Information and Communication Technologies (ICT) play a critical role in making this system more efficient, transparent, and accessible. In particular, digital banking, blockchain-based smart contracts, and AI-powered financial analysis tools enable Islamic financial institutions to offer their customers faster, more secure, and Sharia-compliant services (Nabi et al., 2017). Additionally, fintech solutions allow investors and customers to assess interest-free financial products more easily and manage their funds more effectively.

The impact of ICT on Islamic finance is not limited to digitalizing services; it also plays a crucial role in enhancing financial inclusion. Mobile banking and digital wallets facilitate the integration of individuals in regions with limited access to financial services into the Islamic finance system. Furthermore, big data analytics and artificial intelligence provide more solid evaluation processes for making Sharia-compliant investment decisions (Biancone et al., 2020). ICT-based solutions enhance the competitiveness of Islamic finance in global markets by fostering the development of more innovative financial instruments that align with the principles of transparency and trust.

One of the most significant effects of digitalization on Islamic finance is the improvement of customer experience and the inclusivity of financial services. Thanks to mobile banking and internet-based financial platforms, Muslim individuals living in different parts of the world can access Sharia-compliant financial services more easily. For instance, interest-free credit systems and digital investment instruments based on profit-and-loss sharing offer new financing opportunities for both individual and corporate customers (Hendratmi et al., 2020). This development enables individuals without access to traditional financial institutions to be integrated into the financial system.

Technological advancements have also increased the transparency and reliability of Islamic finance. Distributed ledger technologies such as blockchain ensure that financial transactions in compliance with Islamic law are traceable and immutable. As a result, the collection and distribution of zakat,

34 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/the-impact-of-information-and-communication-technologies-ict-on-islamic-economy-and-finance/379853

Related Content

Individualist Motivators and Community Functional Constraints in Social Media: The Case of Wikis and Wikipedia

Sorin Adam Matei and Robert J. Bruno (2012). *Networked Sociability and Individualism: Technology for Personal and Professional Relationships* (pp. 1-23). www.irma-international.org/chapter/individualist-motivators-community-functional-constraints/60489

A Conceptual Organization for Websites Metrics and E-Government Websites: A Case Study

Izzat Alsmadi, Mohammed Al-Kabi and Abdullah Wahbeh (2012). *International Journal of Information Communication Technologies and Human Development* (pp. 93-117). www.irma-international.org/article/conceptual-organization-websites-metrics-government/63030

A Theory for Knowing in the Network Society: Connectivism

Murat Ertan Dogan (2014). *International Journal of Information Communication Technologies and Human Development* (pp. 21-31). www.irma-international.org/article/a-theory-for-knowing-in-the-network-society/119065

Unveiling AI's Dual Impact: Analyzing Creativity, Application, and Decision-Making Skills in Education

Varanasi Rahul, Y. Fathima, L. B. Muralidhar, R. Manju Priya, N. Sathyanarayana and G. Srividhya (2026). *Value of ICTs in Facilitating Educational Development and Reform* (pp. 159-186). www.irma-international.org/chapter/unveiling-ais-dual-impact/409068

Factors Affecting Perceived Effectiveness of Local E-Government in Egypt

Hisham M. Abdelsalam, Christopher G. Reddick, Hatem A. ElKadi and Sara Gama (2012). *International Journal of Information Communication Technologies and Human Development* (pp. 24-38). www.irma-international.org/article/factors-affecting-perceived-effectiveness-local/63025