**Proceeding of International Conference on Islamic and Interdisciplinary Studies (ICIIS), 2024**
**ISSN:** 2963-5489
**Website:** https://jurnal.uindatokarama.ac.id/index.php/iciis/issue/archive

# Integration of Islamic Science and Technology for Empowerment

**Wizrah Wizrah**[*1]

[1] *Islamic Religious Education Study Program State Islamic University Datokarama Palu, Indonesia*

***Corresponding Author**: Wizrah, E-mail: wizrahiza28@gmail.com

**ARTICLE INFO**

Volume: 3

**KEYWORD**

**Islamic Science, Technology, Community Empowerment, Integration, Social Innovation**

**ABSTRACT**

This research examines the integration of Islamic science and modern technology in the context of community empowerment. Through a qualitative approach, this article explores how Islamic principles, such as ethics, justice, and social responsibility, can be applied in the development and use of technology. The main focus is on education, economy, health, and the environment. This study presents real examples of the application of Islamic principles-based technology, such as sharia-based e-learning, sharia fintech, Islamic telemedicine, and environmentally friendly agricultural technology. The findings of the study show that this integration not only supports community empowerment but also strengthens Islamic values in an increasingly digital context.

## 1. Introduction

The digital age offers great opportunities for technological innovation, but there are often concerns that technological advances can deviate from ethical and moral values. Islam, with its holistic teachings, offers guidance that can align the use of technology with moral values. This research aims to explore how the integration of Islamic science and technology can provide benefits in the context of community empowerment.

## 2. Literature Review

### 2.1. Islamic Science

Islamic epistemology, Knowledge in Islam involves revelation (Qur'an and Hadith) and ratio. This concept encourages the use of knowledge for the welfare of the people. The Philosophy of Science, Islam teaches that knowledge and technology must be used for purposes that are halal and beneficial to society.

### 2.2. Technology and Empowerment

Definition Technology Technology refers to the tools and techniques used to solve problems and improve the quality of life. Community Empowerment is a process that allows individuals and communities to increase their capacity to access and utilize resources.

### 2.3. Integration of Islamic Science and Technology

#### a. Education and Technology:

The Digital Learning Platform facilitates access to quality education with Islamic values through an online learning platform. For example, an application that teaches science with the integration of Islamic values. Islamic-Based E-

[*] **Wizrah** is a Student of Islamic Religious Education Program at Postgraduate School, State Islamic University Datokarama Palu, Indonesia. This paper was presented at the 3rd International Conference on Islamic and Interdisciplinary Studies (ICIIS) 2024, as a presenter, held by the Postgraduate School State Islamic University Datokarama Palu, Indonesia.

Learning courses and educational materials that integrate Islamic principles with technology curricula, such as Qur'an learning applications that use AR/VR technology.

**b. Economics and Technology**:

Sharia Fintech: Development of digital financial applications that are in accordance with sharia principles, such as financing without riba (interest) and an online zakat system. Smart Agriculture: Agricultural technology based on Islamic principles to improve crop yields and sustainability, such as water-efficient irrigation systems and soil monitoring technology.

**c. Health and Technology:**

Telemedicine A telehealth service that allows access to medical care in accordance with Islamic teachings, including an app for health consultations with Muslim doctors. Islamic Health Application, An application that provides health guidance, halal diet, and healthy living habits according to Islamic teachings.

**d. Environment and Technology:**

Environmentally Friendly Technology Technological innovations that support Islamic principles regarding environmental responsibility, such as waste management technology and renewable energy. Renewable Energy The development of clean and sustainable energy sources is in accordance with Islamic teachings on protecting the earth, such as solar panels and alternative energy generation technologies.

**e. Social Welfare and Technology:**

A Technology Fundraising Platform that facilitates online donations and zakat, ensuring transparency and accountability in accordance with sharia principles. Social Empowerment Application An application that supports social initiatives such as women's empowerment, poverty eradication, and community welfare improvement.

## 3. Methodology

This study uses a qualitative approach with literature study and case analysis. Data is collected from various sources such as scientific journals, research reports, and practical case studies. The analysis techniques used include content analysis and thematic analysis to identify the main patterns and findings regarding the integration of Islamic science and technology.

### *3.1 The Case of Islamic-Based E-Learning*

- Platform: Quran Companion, an application that combines learning technology with Islamic principles to assist users in learning and memorizing the Qur'an.
- Impact: Increasing access to quality religious education and ease in the learning process of the Qur'an.

### *3.2 Sharia Fintech Cases*

- Application: Kiva, a micro-lending platform that adopts Islamic finance principles to support small and micro businesses in developing countries.
- Impact: Increasing access to business capital for small entrepreneurs and supporting fair and sustainable economic development.

### *3.3 Telemedicine cases*

- Platform: Telenor Health, a telemedicine service that provides health consultations with doctors that integrate Islamic principles.
- Impact: Facilitating access to quality health services for underserved communities and supporting Islamic health principles.

### *3.4 Smart Farming Cases*

- Initiatives: Agricultural technologies developed to improve the efficiency of water use and land management, in accordance with Islamic principles on natural resource management.
- Impact: Increased crop yields, environmental sustainability, and reduction of negative impacts on ecosystems.

## 4. Results and Discussion

Knowledge and Technology in the Context of Islam, knowledge in Islam must be applied for the good and welfare of the ummah. The technology developed and applied must pay attention to sharia principles and Islamic ethics. The integration of technology with Islamic principles can create more holistic and sustainable solutions in various fields such as education, economics, health, and the environment. Technology that is in accordance with Islamic principles can support community empowerment and significantly improve the quality of life.

**5. Conclusion**

The integration of Islamic science and technology offers great opportunities for community empowerment. Technology developed and applied by paying attention to Islamic principles can improve the quality of life, advance education, and strengthen the economy and people's welfare. Further research is needed to explore and develop technology-based solutions that are more innovative and in accordance with Islamic teachings.

This article provides a basic guide to the integration of Islamic science and technology with a focus on community empowerment. It is hoped that the results of this study will motivate further research and the application of Islamic principles-based technology in a broader context.

**References**

Faruqi, I. R. (1982). *Studi Islam: Perspektif Modern.* International Institute of Islamic Thought.
Hassan, M. K., & Lewis, M. K. (2007). *Keuangan Islam: Teori dan Praktik.* Edward Elgar Publishing.
Nasr, S. H. (2002). *Inti Islam: Nilai-nilai Abadi untuk Kemanusiaan.* HarperOne.
Rauf, M. (2015). *Prinsip-prinsip Islam dan Teknologi: Sebuah Kajian Analitis.* Jurnal Studi Islam dan Teknologi.