

TECHNOLOGICAL INNOVATION IN FINTECH SECTOR TAXATION: STRATEGY, IMPLEMENTATION, AND CHALLENGES

Fittry Megasari Sijabat

Gunawan Widjaja Learning Centre

fittry_sijabat@yahoo.co.id

Abstract

The rapid development of the financial technology (fintech) sector demands technological innovation in the taxation system to improve the effectiveness of tax administration and compliance. This study aims to examine the strategies and implementation of technological innovation in fintech sector taxation and identify the challenges faced in its application in Indonesia. The method used is a literature review with descriptive-qualitative analysis of literature, regulations, and official publications related to taxation and fintech. The results show that the main innovation strategies include electronic data integration, the use of big data analytics, blockchain, and artificial intelligence to improve transparency and automation in taxation. The implementation of tax technology needs to be supported by adaptive regulations, adequate digital infrastructure, cross-agency collaboration, and strengthening human resource capacity. Despite its great potential, there are significant challenges in the form of regulatory barriers, infrastructure limitations, data security risks, and socio-economic resistance, especially from small and medium-sized businesses. This study recommends an integrated approach in the form of strengthening digital and tax literacy, incentives for innovative fintech players, and international cooperation to support effective and inclusive digital tax management. Thus, technological innovation in fintech taxation can drive an increase in state revenue while creating a sustainable digital financial ecosystem in Indonesia.

Keywords: Technological innovation, fintech taxation, big data analytics, blockchain, artificial intelligence, tax regulation, technology implementation, taxation challenges, Indonesia, digital taxation.

Introduction

The development of digital technology in the last two decades has brought major changes to almost all sectors of life, including finance. This phenomenon has given rise to financial technology, or fintech, which is the use of digital technology to support and facilitate financial services such as electronic payments, digital loans, and platform-based investments (Skandalis, 2025). The rapid growth of fintech in various countries, including Indonesia, has changed people's transaction patterns from conventional to digital. The impact is not only felt in increased financial inclusion, but also presents new challenges for the taxation system, which must be able to keep up with the dynamics of the digital economy (Alshannag & et al., 2025).

In Indonesia, fintech has experienced significant growth in the last five years, as reflected in the increasing number of digital payment service providers, peer-to-peer