


Chapter 10


Green Fintech Meets DeFi: A Path to Digital Sustainability

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ABSTRACT

This chapter explores the interconnection between Green Finance and Digital Ecology, highlighting their potential in advancing sustainability through technological innovation. Emphasis is placed on how green FinTech can mitigate these challenges by designing low-carbon financial systems and promoting sustainable investment practices. The methodology involves a review of scholarly literature to assess how digital finance and ecology contribute to global sustainability efforts.

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Findings suggest that the integration of green FinTech, digital money, and ecological practices can enhance transparency, reduce costs, and expand access to sustainable finance, ultimately leading to more resilient financial ecosystems. The chapter calls for increased awareness, financial literacy, and robust regulatory frameworks to manage associated risks.

INTRODUCTION

Big data analysis, neural networks, blockchain technology, DEFI (decentralized finance), and wireless internet are examples of revolutionary financial technologies that are referred as “fintech.” FinTech inventiveness, institutions have embraced AI technologies due to which the usage of technological innovations by banks and other fintech businesses will have the potential to revolutionize consumer interaction and demand analysis. This process can be aided by chatbots and predictive modelling, which will alter how banks engage with clients (Mohan. Devie, 2020; Phadke, 2020). Financial technology and Blockchain innovation have a wide range of real-world ramifications and great potential to transform the banking industry. Fintech are widely adopted by institutions and financial firms due to the emergence of revolutionary technology and consumer desire for a safer and easier banking experience. This study shows that Fintech companies have the power to drastically alter the financial industry by offering cutting-edge goods and services that satisfy consumers' demands for security, speed, affordability, and trust. Regulators must, however, carefully weigh the trade-offs between stability and efficiency. They must be guaranteed that dangers to financial integrity and safety brought on by money laundering, cyberattacks, and terrorist funding can be successfully handled without impeding innovation. To guarantee the integrity of data, systems processes, and platforms as well rules and standards must be created (Zeidy, 2022). (Offiong et al., n.d.) revealed that operational effectiveness, customer satisfaction, and financial inclusion are the main drivers of FinTech adoption in microfinance firms. Blockchain and artificial intelligence (AI) simplify procedures, while data analytics and AI customize services to meet the demands of each user. Beyond conventional financial success indicators, the study also examines social and technical aspects. The study highlights the strategic significance of digital technology in microfinance by identifying important themes, gaps, and future research objectives. It does, however, recognize its limits and recommend that future study address ethical, technical,

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