


Chapter 7

Designing a FinTech Adoption Index: A Strategic Framework for Measuring Digital Transformation in Asian Banks

V. Lava Kumar

 <http://orcid.org/0000-0002-3539-9280>

GITAM (Deemed to be) University, India

Santhapalli Gautami

 <http://orcid.org/0000-0002-5667-1343>


Sri Venkateswara College of Engineering, India

E. Gnanaprasuna

 <http://orcid.org/0000-0001-5648-7004>

Madanapalle Institute of Technology & Science (Deemed to be University), India

N. Sathyanarayana

 <http://orcid.org/0000-0002-4185-7751>

Jain (Deemed to be) University, India

D. Srikanth Reddy

 <http://orcid.org/0009-0005-7308-924X>

REVA University, India

ABSTRACT

The emergence of Financial Technology (FinTech) as an accelerated phenomenon is reshaping the banking industry, particularly in regions such as Asia, where insti-

DOI: 10.4018/979-8-3373-6244-1.ch007

tutional varieties and regulatory regimes present both opportunities and challenges to digital transformation. The chapter presents a map of the FinTech Adoption Index (FAI), a comprehensive framework developed to measure the level of FinTech adoption among various banking organisations. The FAI measures various dimensions of adoption, including customer experience, regulatory compliance, technological infrastructure, and strategic alliances. The index provides banks, regulatory authorities, and policymakers with a crucial tool that helps measure progress, identify shortcomings, and inform future decision-making in digital projects. Although the adoption of FinTech has significant potential, the remnants of past systems, regulatory challenges, and concerns about consumer trust are among the graver obstacles that must be overcome.

1 INTRODUCTION

Financial services are being reinvented due to the widespread application of financial technology. The AI-driven risk models, blockchain-based compliance architecture and digital-only customer interfaces are transforming banking processes, competitiveness, risk management, and customer interaction (Omarini, 2018; Rahim et al., 2023). The Banking systems in Asia are institutionally heterogeneous and must be forced to absorb new technologies and work in the complex regulatory environment, which causes fast modernisation (Banna et al., 2021). The commercial banks in the area must adopt FinTech solutions since the consumer demands of digital services are ever increasing and new regulatory structures are open (Setiawan et al., 2021).

The entrepreneurship of FinTech implies a range of advantages, such as efficiency, enhanced customer experience, and the coverage of a greater number of customers in terms of financial services. Nevertheless, it is yet to be discovered to what extent the adoption is adopted and how it affects various banking institutions (Yan et al., 2022). The main challenge is in assessing the FinTech acceptance in the context of the typology of various banks, banks of different sizes, and the regulatory environment (Ali et al., 2021). The digital-first, state-owned and regional institutions (regardless of being digital-first) are encountering singular FinTech adoption issues and opportunities in the Asian banks (Bajwa et al., 2022). Regulators and policymakers need to pay closer attention to subtle appreciation of the digital transformation and the implementation of the relevant evaluation frameworks by banks, therefore.

The empirical research on the adoption of FinTech is often done at the level of the technology or type of institutions, like digital payments or blockchain applications, without offering a generalized and systematic method of evaluating the adoption of FinTech in the bigger picture (Banna et al., 2021). The existing literature tends

30 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/designing-a-fintech-adoption-index/413651

Related Content

The Islamic Studies Teachers' Perception of Integrating ICT Into the Teaching and Learning in the UAE Public Schools: Challenges, Opportunities and Practices

Gubran Saif Al-Gumaei, Khadeegha Alzouebi and Hamdy Ahmed Abdelaziz (2019). *International Journal of Technology Diffusion* (pp. 69-82).

www.irma-international.org/article/the-islamic-studies-teachers-perception-of-integrating-ict-into-the-teaching-and-learning-in-the-uae-public-schools/225060

Future Developments of E-Modules: The Role of Interactive Tools and Multimedia in Teaching European Studies Online

Alina Christova (2011). *International Journal of E-Adoption* (pp. 22-28).

www.irma-international.org/article/future-developments-modules/52581

An Empirical Study on Gamification Factors Influencing Autonomous Motivation in Learning Through Educational Technology Application

Ngoc-Hong Duong and Ngoc-Trung Nguyen (2026). *Fusing Art and Technology: Co-Creating Futures for New Generations* (pp. 23-50).

www.irma-international.org/chapter/an-empirical-study-on-gamification-factors-influencing-autonomous-motivation-in-learning-through-educational-technology-application/388870

E-Adoption of Emerging Technology in the Health Sector During COVID-19

Vidushi Mishra, Narendra Singh, Manisha Agarwal and Ajay Kumar Shrivastava (2022). *International Journal of E-Adoption* (pp. 1-15).

www.irma-international.org/article/e-adoption-of-emerging-technology-in-the-health-sector-during-covid-19/309999

Towards E-Society Policy Interoperability for Social Web Networks

Renato Iannella (2010). *International Journal of E-Adoption* (pp. 13-29).

www.irma-international.org/article/towards-society-policy-interoperability-social/41929