Preface

Utilizing ICT to deliver financial services as well as creating new financial products and services accessible through the Web/Apps has attracted much attention lately and it has marched to a new area called Financial Technology (FinTech), which can be considered as a disruptive innovation in financial sectors. Many innovations have been created in FinTech, and some of them are disruptive innovations that threaten the existing players in the financial industry. FinTech is now widely used around the world. Eventually, FinTech will either disrupt or complement existing financial services (Anshari et al., 2019a). The role of financial services in the financial industry is vitally important. As technology evolves, the delivery of the services is being shifted from traditional delivery systems to innovative delivery systems that heavily use information and communication technology (ICT) to serve the public in much better ways.

FinTech innovations have led to new business models, applications, processes, or products that affect financial markets and institutions and the provision of financial services. FinTech includes five major areas which are finance and investment, operations and risk management, payments and infrastructure, data security and monetization, and customer interface. It covers many types of financial services such as crowdfunding, money transfer, loan, Peer-to-Peer (P2P) lending, asset management, mobile payment, and fundraising.

Financial Inclusiveness refers to an effort to make financial services and products to be easily available and affordable to anyone irrespective of personal net worth or company size. Financial inclusion aims to create a strong, functional, diverse, efficient and flexible financial system in order to establish a market-driven, productive and competitive economy. Hence, financial inclusion attempted to eliminate barriers that exclude individuals from engaging with the financial sector services (Anshari et al., 2019b). So why are people outside of the system? In the context of financial exclusion, it refers to accessible, affordable and relevant financial solutions for all individuals, regardless of their nationality, gender, race or religion (Popescu, 2022).

The book *FinTech Development for Financial Inclusiveness* is expected to become a major literature and reference for FinTech development, especially in promoting financial inclusion, featuring conceptual, case studies, recent development, best practices, comparative assessment, business processes, as well as strategies and outputs in studies of FinTech from multiple domains of knowledge. To ensure the quality, each chapter in this book was reviewed in two rounds. Readers are likely to be academicians and students who can use chapters in this book for their references on the latest development of financial technology, researchers academia to gain perspective of disruptive innovation in the financial sector, government organizations who interested in the field of FinTech, business owners who need to understand the phenomenon of FinTech, technopreneurs who seek innovative ideas on FinTech, financial & banking practitioners who need to understand recent development of FinTech, policymakers who need to understand the major core of FinTech and Financial Inclusiveneness, and also general public who seek information the emergence of FinTech.

The book covers a wide range of topics from Overview of FinTech, FinTech as Decentralized Finance (DeFi) for Financial Inclusion, FinTech as Future Game-Changer, Digital Wallet Ecosystem, Financial Inclusion & SMEs, Digital Financial Knowledge, and FinTech's security, both in the Asia region and in several specific countries such as Bangladesh, Brunei Darussalam, China, Japan, Indonesia, Romania, and Malaysia. The book includes 12 chapters that address the recent FinTech development in promoting Financial Inclusiveness with respect to process, strategies, challenges, lessons learnt, as well as outcomes. The following is the summary of each chapter.

Chapter 1, titled "Understanding FinTech and Decentralized Finance (DeFi) for Financial Inclusion," by Andrei Dragos Popescu (Finance, University of Craiova, Romania & SCX Holdings Pte. Ltd, Singapore), stated that for a very long period of time, financial inclusion researchers have been addressing the barriers that prevent unprivileged people from accessing and using financial services. Financial exclusion is an underlying social problem that dates from the creation of the first financial system. Without access to the banking and financial infrastructures, the unbanked are perpetuating a vicious cycle of poverty. Blockchain is leading this transformation of allowing unbanked and underbanked people to have access and interact with the finance industry. The promise of a digital economy is starting to take shape, as Financial Technology (FinTech) companies are evolving the concept of democratization of access. Decentralized Finance (DeFi) is expanding the possibilities of financial technology by creating an ecosystem based on transparency, accessibility and efficiency. We are witnessing a paradigm shift for most of the financial services which are remodeling the accessibility and usability of these services, addressing the excluded and underserved population.

Chapter 2, titled "Financial Technology as a Future Game-Changer," by Nelson Lajuni (Universiti Malaysia Sabah, Malaysia), Avnner Chardles Wellfren (Universiti Malaysia Sabah, Malaysia), Noraini binti Abdullah (Universiti Malaysia Sabah, Malaysia), and Salumah binti Nain (Universiti Malaysia Sabah, Malaysia), stated that FinTech has emerged as a game-changer to complement and enhance how the millennial and Generation Z conduct transactions. Responding to calls of prior research, this study used the Unified Theory of Acceptance and Use of Technology (UTAUT) to understand how performance expectancy and effort expectancy factors influence consumers' intention to use financial technology. Performance expectancy (PE) and effort expectancy (EE) were investigated as exogenous variables towards the intention to use financial technology (FinTech) that act as endogenous variables in this study. We collected 284 millennial and Generation Z respondents and analysed the data using PLS-SEM. The result from the study's structural model suggested that FinTech continuance use intention was dependent on performance expectancy and effort expectancy on engaging with young vibrant consumers and establishing attractive FinTech elements. In addition, millennial and Generation Z consumers with a high-performance expectancy were found to emphasize FinTech components in the engagement process.

Chapter 3, titled "Digital Wallet Ecosystem in Promoting Financial Inclusion," by Siti NurulJannah Rosli (Universiti Brunei Darussalam), Muhammad Anshari (Universiti Brunei Darussalam, Brunei Darussalam), Mohammad Nabil Almunawar (Universiti Brunei Darussalam, Brunei Darussalam), and Masairol Masri (Universiti Brunei Darussalam, Brunei Darussalam), affirms that Digital wallet is expanding largely driven by the evolution of Internet and smartphone penetration. Numerous digital wallet providers have risen in many countries including Brunei Darussalam. However, the level of adoption is still low and a cashless society is still far from an expected target. There's no magic formula in deploying a guaranteed successful digital wallet but developing a digital wallet ecosystem that is tailored to the local markets will be expected to increase digital culture and a cashless society. The research assesses the existing digital wallet ecosystem, then analyse the extent of compatibility of local market demand. Furthermore, it introduces an improved digital wallet ecosystem model in order to support financial inclusion that can be achieved through a holistic digital wallet ecosystem. The paper also examines external factors that contribute to the digital wallet ecosystem's width of usage.

Chapter 4, titled "Financial Inclusion and Mobile Payment to Empower Small and Medium-Sized Enterprises: Post-COVID-19 Business Strategy," by Mia Fithriyah (Indonesia Open University, Indonesia), Masairol Masri (Universiti Brunei Darussalam, Brunei Darussalam), Mohammad Nabil Almunawar (Universiti Brunei Darussalam, Brunei Darussalam), and Muhammad Anshari (Universiti Brunei Darussalam, Brunei Darussalam), states that despite the increasing adoption of Financial Technology (FinTech), and the need for secure payment methods, mobile payments as a mode of settling daily business transactions have not received sufficient attention. To date, several business actors prefer to use conventional money payment modes. However, it is apparent that the need for a more effective payment method today is considered a basic necessity, considering the current complexity of consumers and the negative effect of COVID-19. Moreover, the crisis raised a wave of apprehension over a large number of business actors, particularly Small and Medium-size Enterprises (SMEs). The literature search indicated that the government should implement the correct policy to help create an acceptable environment for financial transactions for both the user and providers. It is also necessary to ensure that clients' security and privacy rights are protected during mobile payments transactions.

Chapter 5, titled "Financial Inclusion, P2P Lending, and MSMEs: Evidence From Indonesia," by Tulus T.H. Tambunan (Universitas Trisakti, Indonesia), discusses in Indonesia after the Asian financial crisis of 1997–1998 wide reforms have been carried out and "inclusive" economic development has been adopted. One component of inclusive economic development is "financial inclusion". This implies an absence of barriers that might deter micro, small and medium enterprises (MSMEs) from obtaining financial services. However, the portion of bank credit received by MSMEs is still small. Therefore, financial technology (fintech) is welcome, as an alternative source of funding for MSMEs. This chapter discusses three related issues, namely financial inclusion, MSMEs, and P2P lending. It concludes that Indonesia still has a long way to go to achieve full financial inclusion. This chapter suggests that with the presence of P2P lending, the number of MSMEs, especially MSEs, in Indonesia that have access to formal financing will increase. Even though aggregate data are not available, the interviews with a small number of owners of MSEs who (ever) received P2P loans suggest that the presence of P2P lending companies do give some benefits for MSEs.

Chapter 6, titled "An Overview of FinTech in Bangladesh: Problems and Prospects," by Sheikh Abu Taher (Jahangirnagar University, Bangladesh) and Masatsugu Tsuji (Faculty of Economics, Kobe International University, Japan), states that how the future financial industry is going to reshape by technological innovations. Financial technology (FinTech), a much-discussed topic around the globe, is changing the overall financial system. The trend is not an exception in developing countries like Bangladesh too. In this chapter, the authors aim to explore the current state of FinTech in Bangladesh in light with the possible challenges for growth, opportunities, and future prospects. The growth of FinTech helps a large percentage of people to become banked or has given possible access to formal finance. Having access to finance, a high rate of mobile phone penetration, smooth mobile internet access and a high cost of access to formal finance are some factors that enhance FinTech penetration in Bangladesh for the past few years. In line with the given prospects, there are problems that remain too. Therefore, using an in-depth study, this research addresses those issues, provide recommendations and look for a possible solution for the smooth operation of FinTech in Bangladesh.

Chapter 7, titled "Digital Financial Knowledge and Behavior of Generation Z in Indonesia: A Survey of Islamic FinTech Literacy Toward Digital Financial Inclusion," by Khairunnisa Musari (Kiai Haji Achmad Siddiq State Islamic University, Indonesia), and Sutan Emir Hidayat (Gunadarma University and National Committee for Islamic Economy & Finance, Indonesia), investigates that the majority of Indonesia's population is in the productive age group and dominated by Generation Z (27.94%). As the generation that currently dominates the population, Generation Z's characters are important to be learned. They are the future. Generation Z has the potency to accelerate Indonesia's financial inclusion through digitalization because they are adaptable to technology. Responding to the survey results which put Generation Z in Indonesia in the first rank for the levels of happiness and religious awareness, then a survey was conducted for Islamic financial technology literacy to find out how they face challenges as well as opportunities in the digital era to be in line with religious values and may accelerate financial inclusion. The great potential of Generation Z for technology as well as religious awareness, in turn, will support financial inclusion towards inclusive development in Indonesia. Hence, this chapter will describe the survey results of digital financial knowledge and behavior of Generation Z in Indonesia.

Chapter 8, titled "The challenges of FinTech Inclusion and Digitization of SMEs in Indonesia," by Syafrizal Helmi Situmorang (Universitas Sumatera Utara, Indonesia), explores that the COVID-19 pandemic has changed people's digital behavior and caused giant leaps in various digital businesses. SMEs face various challenging factors in the transformation of their business into a digital ecosystem. Currently, Indonesia is the country with the fastest-growing digital economy and FinTech in ASEAN. Fintech plays a vital role in the digital economy, especially helping SMEs go digital and accelerate their business performance, such as venture capital financing, digital payment services, and financial arrangements. However, the role of fintech has not been maximized in increasing financial inclusion. There are still various obstacles and challenges such as technology adoption, financial literacy, digital literacy, financial inclusion, and Fintech inclusion. Various program efforts from all stakeholders to bring SMEs into the digital ecosystem. Without cooperation, increasing financial literacy and financial inclusion, and fintech inclusion will be challenging to achieve.

Chapter 9, titled "How the Development of FinTech Can Bolster Financial Inclusion Under an Era of Disruptive Innovation? Cases Study on China," by Poshan Yu (Soochow University, China), Chenghai Li (Independent Researcher, China), Michael Sampat (Independent Researcher, China), and Zuozhang Chen (Soochow University, China), states that FinTech provides more inclusive financial services for individual users and companies. China, with the highest penetration rate of online payment around the world, enables individual users to enjoy in-depth inclusive lending services. This chapter will portray and assess FinTech's adoption, challenges, and its potentials to China. Based on previous literature, the characteristics of FinTech in China and the roles of government in promoting FinTech to Chinese business will be discussed. This chapter will also select cases from Hangzhou and the Greater Bay Area, in order to analyze the opportunities and challenges for Chinese companies integrating FinTech into its business operations.

Chapter 10, titled "Securing Financial Inclusiveness Adoption of Blockchain FinTech Compliance," by Heru Susanto (Tunghai University, Taiwan; LIPI, Indonesia; and University of Technology Brunei, Brunei Darussalam), Fahmi Ibrahim (University of Technology Brunei, Brunei Darussalam), Rodiah Rodiah (Gunadarma University, Indonesia), Didi Rosiyadi, Informatics (Indonesian Institute of Sciences, Indonesia), Desi Setiana (University of Brunei Darussalam, Brunei Darussalam), Alifya Kayla Shafa

Susanto (University of Technology Brunei, Brunei Darussalam), Akbari Indra Basuki (Informatics, LIPI, Indonesia), and Iwan Setiawan (Indonesian Institute of Sciences, Indonesia), explores FinTech as part of financial inclusion changes conventional business models to be information technology minded. The presence of FinTech in the wider community makes it easy access to financial service products; transactions, and payment systems more practically, efficiently and economically. Unfortunately, the security risk in transacting increases, cyber security in the financial services industry and FinTech service providers is considered a major target by cybercriminals. Leakage and misuse of personal data and financial data by irresponsible parties, and the lack of public knowledge about the processes that occur within FinTech. This study proposed a security management approach through a hybrid blockchain method that implemented through flask framework and encryption, to protect transaction data, which the accuracy determined based on the parameters of the user data sent. The results are promising. Refer to accuracy, this study successfully reduces data leakage and misuse of personal data and financial data at FinTech.

Chapter 11, titled "Government Challenges Over Global Electronic Commerce Using FinTech: Design of Consumer Payment Tax (CPT) System," by Yeoul Hwangbo (Asian Study Society & Tashkent University, Uzbekistan), examines the challenge over most countries have been legislating related acts and regulations on global electronic commerce taxation, but they have not implemented the consumption tax system for global electronic commerce so far, Consumer Payment Tax (CPT) is based on fintech and thereby proposed so that consumers can pay the consumption taxes to related taxation office of the countries in accordance with consumer country's jurisdiction principle, considering the CPT is assessed to satisfy most of the electronic commerce taxation criteria and has the potential to been applied to electronic commerce.

Finally, Chapter 12, titled "Crafting Strategies of Security Breaches: How Digital Ecosystem Works in Data-Centric," by Heru Susanto (University of Technology Brunei, Brunei Darussalam), Nurul Mardhiah (University of Technology Brunei, Brunei Darussalam), Alifya Kayla Shafa Susanto (University of Technology Brunei, Brunei Darussalam), discusses several approaches taken by government and agencies on cyber security in Brunei such as in terms of technical, and management include legal, organizational, education and awareness as well as collaboration. Then, compare approaches regarding cyber security between Brunei and other countries, namely Indonesia and Malaysia. It also focuses on several ways to protect individuals or organizations from becoming a victim on this digital platform, and cyber threats include types and impact.

After the summaries of the chapters included in the book, the book portrays and assesses FinTech Development for Financial Inclusiveness's overview, adoption, challenges, and future directions. The emphasis of the book is on quality, research-based studies which contribute to theory, lessons learnt and best practices, critical understanding and policy formulation on FinTech. We hope you all find them useful and interesting for research, teaching, and policy studies.

Thank you,

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