Chapter 1
Developments in Financial Technologies for Achieving the Sustainable Development Goals (SDGs):
FinTech and SDGs

Thinh Gia Hoang
https://orcid.org/0000-0001-5010-931X
School of Business and Management, RMIT University, Vietnam

Giang Ngo Tinh Nguyen
Faculty of Business and Law, The University of Newcastle, Callaghan Campus, Australia & School of Business and Management, RMIT University, Ho Chi Minh City, Vietnam

Dat Anh Le
Asia Commercial Bank, Vietnam & Centre for Applied Economics and Business Research, Hanoi, Vietnam

ABSTRACT

The Sustainable Development Goals (SDGs) can be seen as the critical goal for every country in the world. In this vein, a stable global financial system is needed these days to satisfy its duty to boost the private capital mobilisation to achieve sustainable development and steady economic growth. Nevertheless, several obstacles limiting such financial mobilisation have been identified by scholars, practitioners, and standard setters. Recently, digital transformation and advancement, specifically in the finance sector, include a wide range of technological developments, and applications such as blockchain, internet of things, big data, artificial intelligence are promised to enhance performance in the financial sector. The potential of digital applications in the finance sector to resolve critical obstacles in financing for inclusive and sustainable growth becomes evident. This chapter aims to provide a summary and a detailed discussion of the latest developments in financial technologies that both facilitate the SDGs and also contribute to future sustainable international business.

DOI: 10.4018/978-1-7998-8900-7.ch001

1. DIGITAL FINANCE AND SUSTAINABLE DEVELOPMENT GOALS (SDGS)

The Sustainable Development Goals (SDGs) were approved in September 2015 as a collective aim for the 194 participating countries in the United Nations to eradicate poverty, conserve the world and secure the prosperity for human beings. Scheyvens et al. (2016) stressed the long-term demand for driving sustainable and inclusive economic growth in the SDGs and the 2030 Agenda for Sustainable Development report. Furthermore, the G20 Sustainable Finance Study Group (SFSG) (2018) emphasises that, besides the environmental perspective, additional aspects of sustainable development must also be considered in order to gain benefits from private capital mobilisation to pursue sustainable development and the stability of the financial system. It is therefore proposing that the term sustainable finance should be adopted more broadly (Allen et al., 2016). The report indicates that, through direct and indirect support of the SDG framework, sustainable finance can be widely acknowledged as funding, related institutional and market arrangements which combine to lead to the achievement of solid, stable, healthy and inclusive growth. This movement was aimed at achieving the beneficial influences of investments for social and economic gains, such as job creation, technical innovation, poverty alleviation and social integration (Allen et al., 2018). A major problem in today's global financial environment is mobilising private capital to stimulate economic growth and stabilise the finance sector. Digitalisation, especially its nexus with finance (digital finance or financial technology), encompasses a wide variety of technology innovations, including big data, artificial intelligence (AI), mobile platforms, blockchain and the Internet of Things (IoT). Digital transformation is not a recent feature of the financial system. For the past twenty years, automated technologies and transformation have greatly increased performance in the financial industry (Collste et al., 2017; Hinson et al., 2019). Digital finance is increasingly demonstrating its potential to address obstacles relevant to the growth of finance for sustainable development.

In general, the term 'digital finance' represents the digitalisation or application of digital technologies in the financial sector. This trend covers digital advancement, services and applications in the financial services sector, such as online banking, chip cards, online payment, mobile wallets and payment apps (Zhou et al., 2018). Ozili (2018) describes digital finance enterprises as companies developing technologies for the incorporation of integrated digital banking, mobile applications and distribution networks, microfinance, payment solutions, peer-to-peer loans and crowd-funding. Although parts of the above-mentioned digital systems and services are well-developed (e.g. chip cards and online banking), there are several other services and business models that are innovative, yet not commonly employed, and also lead to the transformative potential for the financial sector. These creative services and business practices are focused on emerging technology, are at the forefront of recent debates and are also called "FinTech" solutions. Although there is no standard consensus on a definition, the term 'digital finance' is widely used in academia and the private sector, to represent a large number of the latest financial products, enterprises, applications and innovative ways of digital consumer engagement and interaction. Several definitions of digital finance have also been provided by international organisations and the private sector. George et al. (2020) defined digital financial services as any financial process involving information technology, namely digital money, mobile and online financial platforms, teller services and branchless banking. Meanwhile, according to the study by Przychodzen & Przychodzen (2015), it is characterised as the employment of the Internet and related innovative technology in the finance market.

In the same vein with "digital finance", the term "FinTech" is a terminology that derives from the terms "financial" and "technology" and generally explains the relationship between digital, in particular, the Internet-related technologies (including cloud technology, mobile technology, wireless technology,