

Chapter 10

Digital Economy: The New Engine of Growth for Society 5.0

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ABSTRACT

Digital technology-enabled business processes are integrated into the digital economy. Such technologies also enable the internet to conduct digital commerce in a trustless network and decentralized environment. This chapter also draws attention to the new form of economy, which focuses on the development and functions of the digital economy as a new growth engine for Society 5.0 and sheds light on emerging technologies and how the disruptive element of blockchain technology challenges the status quo of the old economy and the underpinning digital disruption imposed by decentralize platformisation. The core components of the digital economy, including digital technologies that serve as the new engine of growth for Society 5.0, were identified. The chapter concluded by highlighting the implications of digital technologies, and how standardisation, upgrading curriculum, legislative frameworks, and policies remedy the impediment of growing the digital economy for Society 5.0.

INTRODUCTION

Digital disruptions led to huge wealth from small businesses and countries. Digitization has also led to fundamental challenges for policymakers in countries at all levels of development. The exploitation of its potential for the many, not just the few, requires

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imaginative thinking to design and develop legislative frameworks and policies to exploit its full potential by the developing countries.

Due to the spread of new digital technologies, the world economy rapidly transforms societies and business practices, and digitization of economies and societies is crucial to creating new means of tackling global sustainable development. However, there are risks that digital disruptions will not favour underserved populations who do not have access to the digital economy, thereby affecting digital isolation due to insufficient access to knowledge and information in developing countries. Hence, digital disruption could favour those well-prepared to create and capture value in the digital era in developed countries, rather than contribute to more inclusive digital development globally.

The digital economy is progressing at a breakneck pace, driven by the ability to collect, use and analyse enormous amounts of machine-readable information. These huge amounts of machine-readable digital data stem from the digital footprints of companies, social and personal activities on various digital platforms. Accordingly, Global Internet Protocol (IP) traffic reported that a proxy for data flows increased in 1992 from 100 gigabytes per day to 45,000 GB per second in 2017. But only in the early days of a data-driven economy. Similar, IP traffic is expected to reach 150,700 GB per second by 2022.

Due to global lockdown during the COVID-19 pandemic, more businesses and people started coming online for the first time in developing countries. As such, a new “data value chain” evolved to support data collection, insights from data, storage, analysis and modelling, to enable companies and government to make informed decisions decisively. For example, the United Kingdom only depends on the COVID-19 data to lift the restriction on national lockdown. In this way, the value creation arises when the data could be transformed into digital intelligence and perhaps monetized through commercial usage by the businesses.

Over the last decade, a wealth of digital platforms have emerged worldwide, disrupting existing businesses with data-driven business models. Seven of the world’s top eight companies by market capitalisation use digital platform-based business models. This reflects the power of digital platforms and centralised platformisation.

Digital platforms provide the mechanisms for bringing together businesses and societies in different geographical locations to interact and make transactions remotely. There are two distinctions between innovation and transaction platforms. Innovation platforms create environments for digital technologists to develop software applications and systems that enable users to operate and control machines, including operating systems (e.g. iOS, Android, Linux, Windows etc). In addition, this could be technology standards, like MPEG video or MP3 for content producers.

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