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## **Introduction** Digital Transformation in Southeast Asia

## Lurong Chen, Archanun Kohpaiboon and Cassey Lee

Digital transformation entails the integration of digital technology into all areas of a business. It fundamentally changes how a business operates and delivers value to customers by expanding choices and lowering transaction costs (World Bank 2016; UNCTAD 2017; Graham 2019). Digital technologies also create new ways of integrating organizations and accessing markets. This allows domestic companies to be more globally integrated. At the societal level, digital technologies can address developmental and social challenges such as access to basic needs including healthcare, education and financial services. The application of digital technologies in government machinery can foster greater transparency, increase efficiency and lower corruption (UNCTAD 2017).

From a research perspective, studies on digital transformation have mushroomed in recent years. The scope and coverage of these studies are broad, covering diverse topics such as the impact of e-commerce (e.g., OECD 2019c; Cohen and Kallirroi 2006; Numberger and Rennhak 2005), adoption of digital technologies such as robotics, Big Data and Internet of Things (OECD 2019b), drivers of digital transformation in organizations (Nadkarni and Prugl 2020) and the application of new technologies in everyday life (MGI 2016; OECD 2019a). In addition, quite a number of studies have examined policy changes and legal reforms that have been necessitated by digital transformation. These policy-oriented publications have focused on topics such as privacy, data standards and protection, intellectual property rights, internet governance and cybersecurity (OECD 2012; OECD 2019c; Acemoglu and Restrepo 2016; Arntz, Gregory and Zierahn 2016; Acemoglu 1998). International organizations have also published flagship reports that address the importance and impact of digital transformation but with different foci. These reports have highlighted digital infrastructure, finance (digital currency and digital payment), market competition, taxation and trade, and have fed into policymaking for digital transformation.

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Policymakers from around the world have formulated and implemented numerous initiatives and programmes to harness the potential benefits of digital transformation. Historically, earlier policies focused on investment in basic "hard" infrastructures for the digital economy such as mobile communications, Internet backbone and satellites. More recent policies and programmes have emphasized the "soft" infrastructure to support digital infrastructure such as legal and regulatory frameworks, investment regimes and human resource development. These strategies often need to address the unequal impact of digital transformation. The digital divide can worsen socio-economic inequalities (UNCTAD 2019; ITU 2020). In fact, digital transformation brings about structural change in the economy that also affects labour markets. The adoption of digital technologies, including those involving automation, can lead to the displacement of some jobs while creating new ones. The educational system and labour market policies will need to be adjusted to drive the process of digital transformation while at the same time providing support to assist workers to adjust to the emerging new realities.

Policymakers in Southeast Asian countries have also jumped on the digital transformation bandwagon in recent years. The COVID-19 pandemic has accelerated digital transformation in the region as consumers and businesses extensively used digital technologies to overcome the mobility and cross-border restrictions imposed to control the health crisis and mitigate its adverse impacts. The pandemic also highlighted the economic unequal effects of digital transformation arising from the digital divide.

There is a lack of comparative country studies on the state of digital transformation in Southeast Asia. Such studies are important to highlight differences in policy approaches and outcomes, which are often shaped and constrained by country-specific and historical factors. This special issue of the *Journal of Southeast Asian Economies* hopes to fill this research gap. Six country studies have been selected and featured in this issue. They are, in alphabetical order, Cambodia, Indonesia, Malaysia, Singapore, Thailand and Vietnam. This set of countries is very diverse, both in terms of the level of development (income per capita) and economic structure. In terms of contents, each country study will discuss and assess the current state of digital transformation as well as the policies and programmes that have been—and are being—implemented. It is hoped that this special issue will provide useful insights for policymakers in the Southeast Asia region and beyond. Finally, the guest editors of this special would like to acknowledge the funding provided by the Economic Research Institute for ASEAN and East Asia (ERIA) to execute the country studies.

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