Book Review:
Indonesia’s Digital-Based Economic Transformation: The Emergence of New Technological, Business, Economic, and Policy Trends in Indonesia
by Sri Adiningsih, Erna Maria Lokollo, Stri Nariswari Setiaji, Sofian Rendy Ardiaysyah, Muhammad Islam, & Umi Fitria Ridya Rahmawaty


Anika Widiana\textsuperscript{a,}\textsuperscript{*}

\textsuperscript{a}Indonesia Services Dialogue Council (ISD) and University of Prasetiya Mulya

The book is exceedingly insightful, due to lacking of book on digital-based economy that manages to portray the issue from various angles and explains its aspects comprehensively. The book also discusses several cases in digital-economic transformation taking place in several countries which are projected to be a lesson-learned for the digital transformation in Indonesia.

In chapter 1, the authors explain about the history of the industrial revolution and the position of many countries in terms of their progress and speed toward digitalization, respectively, through plotting the digital evolution index from the Fletcher School and Mastercard. There are two determinants, namely, four drivers in the digital evolution index (mobile internet, cloud computing, internet of things, and big data) and rate of change in digital evolution. These two determinants are then used in order to map the speed of each countries in its respective digital transformation, the mapping of which are carried out through four quadrants, viz., a) stand-out, which consists of countries considered as the digital elites, who have evolved far into the digital era and advanced it rapidly, b) stall-out, i.e. countries which have attained a high level of digital evolution, but with risks of being left behind due to their slow pace, c) watch-out, which consists of countries with the lowest rankings, and d) break-out, i.e. countries with relatively low scores but evolving through a swift pace, thus potential to become a country with strong digital-based economy. Indonesia itself belongs to the break-out quadrant, with a relatively low score, yet at the same time has the potential and possibility to become a leader in the digital-based economy as it enters the era of industrial revolution 4.0.

The mapping of digital transformation is followed by an interesting discussion by describing the digital transformation which has occurred in several countries, such as in China (stand-out quadrant), the US (stall-out quadrant), United Arab Emirates (stand-out quadrant), India (break-out quadrant), and Australia (stall-out quadrant), respectively. The differences and similarities experienced by these countries hence are being pinpointed, as well. The authors have identified several aspects that instilled such differences and similarities, including digital readiness and its contribution to the economy, as well as government roles and policies which support the development of digital economy. Furthermore, the five countries aforementioned are those which have demonstrated a higher-level progress in the digital economy. Only India here belongs to the break-out quadrant, as does Indonesia, a country taken into consideration as highly potential in developing its digital economy. Also stated in this chapter that no countries belong to the watch-out quadrant.
state, including Egypt, South Africa, Peru, Thailand, and Pakistan – although it is important to be able to identify aspects and factors that have instigated the country to be in watch-out situation, considering that Indonesia may as well learn from countries that are still lagging behind in their digital economy. What factors are causing the lags, inevitably, need to be examined closely.

Out of five developed countries mentioned, there are particular similarities that could be learned as best practices for Indonesia in order to move forward to a more advanced digital economy, namely, the government participation and comprehensive in advancing the country's digital technology. Not only the strategy, but also have the institutional aspects been established. As shown in the text, the Australian government had launched the “National Digital-Based Economy Strategy” Program, as the US also had released “the Digital-Based Economy Agenda” in 2015. These programs are carried out nationally under the coordination among ministries and institutions, strongly upheld by in-line policies among instances.

Chapter 3 explains about Indonesia's readiness to transform itself to the digital economy. There have been several digital-economic developments that support such transformation, i.e. digital startups, e-commerce, financial technology, and On-Demand Services (ODS). Furthermore, the Indonesian government has been anticipating and prepared for the digital transformation era, through three strategies, namely, preparing infrastructure (electricity and the internet), developing human resources through sufficient training, and issuing various policies relating to the industrial revolution 4.0. This chapter also explicitly elaborates Indonesia's successfully growing digital economy, including the success stories of some technology-based startups and unicorns.

However, this chapter could be developed further to answer the following questions: (1) Has the government, through its policies and regulations, played an active role in driving the growth of startups and unicorn companies in Indonesia?; and (2) Do startups and unicorn companies in Indonesia grow independently without government intervention? According to Ismail, Malone & van Geest (2014), in various countries, companies that grow and develop exponentially apparently make their own efforts without much government interference. The government only provides space for companies to do so. The company's internal strategies such as managing its resources, using information and data, and thinking big, are the only keys to success.

The authors also briefly mention about the challenges that Indonesia has to face in terms of digital economy in 2020. Through this brief explanation, the readers will be given several hints about the outline of such challenges. The first challenge is the unequal development of infrastructures across Indonesia, especially those related to digital technology. Western Indonesia has been served with more advanced digital-based services compared to its counterpart, eastern Indonesia. Therefore, the government must ensure that everyone must have a similarly equitable access to technology, especially in the telecommunication sector. The second challenge is the gap between supply and demand of digitally-skilled workforce. The massive growth of digital startups in recent years has not yet been accompanied by a supply of skilled labor. Higher-education graduates have not been able to meet the qualifications needed by the changing nature of jobs during this time. This mismatch can be minimized through collaboration between the business and academic sectors. The third challenge is the regulations that have not been able to balance the dynamics of the development of business startups and disruptive innovations.

I expect the book explained these three challenges more detail. Considering that Indonesia will face more hardship in 2020, these three chal-
Challenges should be the basis of this book's discussion, especially in Chapters 3 and 4 which explore more deeply about Indonesia's digital developments, along with the role of national and regional governments' supports for the digital economy establishment.

I also expect that Chapter 4 could look more closely as well as recommend policies that can hamper the development of the digital economy in Indonesia. As mentioned in this book, there are many regulations that have been obsolete, thus cannot compensate the disruptive dynamics of the economy that has been happening today. Such conditions result in the remaining digital-economic problems that cannot be solved through government regulations and policies, including issues related to cyber securities, data and consumer protection, digital taxation, and many more, as the book takes Facebook and GOJEK for an example of how two companies, respectively, have to face their typical problems and then take actions to tackle them.

Chapter 5 draws conclusion for all the discussion delivered in this book by explaining the trajectory of developing digital-based technology and digital-based economy. Some of the developments in digital technology, namely, Artificial Intelligence (AI), cloud computing and big data, the internet of things, blockchain, and advanced robotics and 3D printing are presented here. In addition, there has also been an elaboration in the extraordinary development of e-commerce, financial technology, logistics, industrial processing, health, education, and the future of work. This chapter becomes empirically proven with some figures, depicting the success of AI and robotics development in China. For visual-type readers, the more figures, charts, and tables, the easier they would reach a comprehension.

In the end, there are concluding remarks that briefly review the discussion of each chapter. In this book, the explanation is quite broad but not exhaustive.

Still, it would be more intellectually challenging if this book is to be continued with a more specific discussion; for instance of the role of government on the issue, hence its policies. However, overall, this book must be read by people who are unfamiliar with the digital-tech world, in order to reach comprehension about the development of digital technology and economy, and in turn acquire the basic knowledge and the big picture of the problems in today's digital economy.

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References