

# Enhancing Digital Competitiveness Through the Lens of Digital Government Among Asian Economies

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## ABSTRACT

This paper aims to thoroughly investigate the role of the digital government, digital competitiveness, and future readiness. A significant amount of research and literature reveals the benefits of digitizing governments as well as digital economy on development. This paper aims to measure digital economy by several digital competitiveness indicators, reflecting on the conceptual framework. The main focus is on the extent to which the implementation of the digital variables, in the context of digital competitiveness across countries, promotes the development of a digital future readiness. The sample of this study included the panel data of 12 countries in the Asia Pacific region from the World Digital Competitiveness Ranking Reports. Fixed-effect multiple regression analysis was used to explain variations in a dependent variable impacted by two or more independent factors. The results clarify that technology plays a crucial role in determining future readiness implying more policy focus in this matter.

## KEYWORDS

Digital Competitiveness, Digital Economy, Digital Government, Future Readiness

## INTRODUCTION

As the world economy and society today are undergoing a transition to the so-called “fourth industrialization” era, large numbers of new technologies have emerged rapidly and continuously, such as the Internet of Things (IoT), 3D printing technology, and artificial intelligence (AI), which were mostly initialized by the complexity of digital platforms and digital ecosystems. These major changes were derived from both macro and micro-level concepts that are likely to impact the form of trade, financial, employment, and social issues, as well as the regulatory system as a whole.

In terms of the private sector, digital platforms drive business growth by helping to reduce various operational costs and benefiting from online networking and the digital ecosystem (Jacobides et al. 2019). This trend, therefore, has led to changes in business models of organizations in many industries, including finance, healthcare, trading and marketing, as well as the media. Although most changes and growth of digital technology follow an organization’s goal of establishment, process, and development, they directly affect the overall economic and social structure.

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However, it is not every country across the world being ready to absorb benefits presented by the growing digital economy, numbers of developing country reported facing challenges and limitations in making their ways to participate in the digital environments. The governments also have been making efforts to cope with such challenges, especially by encouraging the application of digital technologies in the public sector, to promote the digital government, which expected to help leverage the quality of public services delivery in order to meet the population's expectations ever more effectively. It is also expected that the digital government would play an important role in the country's transition to a digital economy and society.

While several factors are considered to be the key to digital economy success as Bukht and Heeks (2017) claimed, the development of digital economy is dependent on a country's ICT infrastructure as well as the ability of consumers, industries, and government departments to use digital technologies for their benefit, the focus of this paper will place on factors in relation with the digital government development. Therefore, the framework was particularly designed to test the correlations between independent and dependent variables contributing to a country's digital economy readiness index. An ultimate assumption being the development of digital government will result in a better place in digital competitiveness ranking.

This study can make significant contributions by uncovering the relationship between these domains, identifying factors influencing digital readiness assessing the impact of digital variables on readiness, uncovering challenges to digital transformation, and providing policy recommendations. By generating new knowledge in these areas, the research study can inform policymakers and practitioners about the interplay between digital government and the economy, guide strategies to enhance digital competitiveness, and offer insights into addressing barriers and fostering successful digital transformation.

## LITERATURE REVIEW

The term "digital economy" was originally coined in 1996 by Don Tapscott to describe the link between a new economy, a new business model, and new technology. However, the extent of the digital economy may be regarded from a variety of perspectives, including people's daily living, making transactions, inventing innovation, and setting social standards. This is in line with the study of Mesenbourg (2001), from the United States Census Bureau, who divided the digital economy into three components, namely:

1. **e-Business Structure:** The key economic infrastructure driving the transactions of e-Business and e-Commerce.
2. **e-Business:** The business model that allows organizations to conduct activities over a computer network.
3. **e-Commerce:** The value of goods and services obtained through computer network sales. These concepts are in direct relation to the socio-economic structure driven by the computer technology (Alaerds and Grove 2017).

A comprehensive literature review discovered that information and communication technology (ICT) can help public agencies improve their working processes and overall efficiency, enhance citizens' access to public services and information, as well as increase public sector accountability on the population (Pacific Council on International Policy, 2002). In other words, using ICT such as the internet in public communication is an ultimate tool for a transition to a good government (OECD, 2013). According to Sagarik et al. (2018), "Digital Government" refers to the application of digital technology as a tool for government and public services management by strengthening the administration and integration of government information and activity to be consistent and linked

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