



Chapter 7

The Challenges and Opportunities of E-Commerce Data Collection in Indonesia Compared to BRICS Countries

Muhammad Basorudin

 <https://orcid.org/0000-0003-4711-4067>
BPS-Statistics Indonesia, Indonesia

Khalilur Rahman

 <https://orcid.org/0000-0001-6672-0324>
BPS-Statistics Indonesia, Indonesia

Nadra Yudelsa Ratu

BPS-Statistics Indonesia, Indonesia

Easbi Ikhsan

BPS-Statistics Indonesia, Indonesia

Wida Siddhikara Perwitasari

BPS-Statistics Indonesia, Indonesia

ABSTRACT

The development of e-commerce business in Indonesia is very rapid. The rapid development of e-commerce in Indonesia will make Indonesia the largest digital economy in Southeast Asia in 2020. However, there are several obstacles, one of which is the provision of a trusted e-commerce database. Data has an important element in development in developing an e-commerce business in Indonesia. As the National Statistics Organizations, BPS Statistics Indonesia was pushed to collect the e-commerce data. BPS has developed several methods of collection e-commerce data using e-commerce survey and crawling technique in 2018 but still has a weakness. As a comparative study, there are several countries of G-20 that have high development in e-commerce and associate themselves as BRICS countries. With SWOT Analysis and Maturity Assessment, this study wants to analyze strength, weakness, opportunity, and thread, also measure the maturity from each method of collection used. Based on the result, Indonesia has better maturity in technology implemented, but worse regulation and people cooperation.

INTRODUCTION

The growth of e-commerce business in developing countries has been increased rapidly, including in Indonesia as one of the developing countries in South-east Asia. According to research by Google and Temasek regarding “e-Conomy SEA 2018”, GMV (Gross Merchandise Value) in e-commerce sector in South-east Asia reached 23 Billion US Dollar equal to 333 Trillion ID Rupiah in 2018. This value growth indicates growth of 60 percent compared to last year. For Indonesia, GMV in e-commerce sector reached 12.2 Billion US Dollar equal to 176 Trillion ID Rupiah in 2018.

Indonesian e-commerce contributes 1 US Dollar for each 2 US Dollar spent in South-east Asia. Indonesian e-commerce contributes 50 percent of online shopping transactions in these regions. This value is the greatest in South-east Asia. In 2025, Indonesia’s GMV value is predicted to increase 334,43 percent by 53 Billion US Dollar equal to 768 Trillion ID Rupiah.

As the largest e-commerce market in Southeast Asia, Indonesia has transformed in this changing digital era. In 2016, the Indonesian e-commerce Association (idEA) noted that around 24.74 million Indonesians bought products via online or around 9.47 percent of the population of Indonesia. Growth in the value of electronic commerce (e-commerce) in Indonesia reached 78 percent. The growth rate is the highest in the world.

Based on the latest data from Bank Indonesia (BI) in 2016, e-commerce transactions reached 75 Trillion ID Rupiah per year. That value includes e-commerce transactions not a market place. While over the past 10 years, the average growth in the value of e-commerce transactions has reached 17 percent, so that in 2018, the value of e-commerce transactions is estimated to be around 102 Trillion ID Rupiah. If you receive 10 percent VAT, then the potential tax revenue is already 10 Trillion ID Rupiah per year. The amount is very small towards Indonesia’s GDP (Gross Domestic Product), which is assumed to reach 13,588 Trillion ID Rupiah. The contribution of e-commerce to the GDP is only 0.75% or around 1.34% of total household consumption.

According to BPS-Statistics Indonesia in 2016, the digital economy sector was able to contribute 7.3 percent of the total GDP with a value of Rp 225 trillion, growing 10 percent annually. The driving factor for the high contribution of the digital economic sector is supported by information and communication technology, especially the internet. According to a survey conducted by the Indonesian Internet Service Provider Association (APJII), in 2017 internet users in Indonesia increased to 143.26 million people and the use of mobile devices for internet surfing reached 44.16 percent. With the increasing number of internet users, it will affect the number of e-commerce agents in Indonesia. Since 2017 the number of e-commerce agents has been 81.5 million or around 30.87 percent of Indonesia’s population. This number is predicted to increase until 2022 by 241.5 million users.

Based on e-commerce user side, when viewed from the label generation of their birth year, namely: X generation (1960 - 1980), Y generation (1980 - 1995), Z generation (1995 - 2010), alpha generation (> 2010). Based on data from the STATISTA, the biggest percentage is Y generation, which is 41.58 percent. Meanwhile, Z generation has also a percentage that is not much different from Y generation, which is 34.41 percent. The rest of it is X generation by 23.7 percent. Y generation dominates with almost half of e-commerce users in Indonesia. When viewed from the characteristics of gender, most e-commerce users are men (around 52.3 percent), while the rest are women (47.7 percent). When viewed from the level of income, the e-commerce user group is mostly found in the high-income population with a percentage of 34.83 percent. This number is not much different from middle-income e-commerce users, which is 33.7 percent.

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/the-challenges-and-opportunities-of-e-commerce-data-collection-in-indonesia-compared-to-brics-countries/260688

Related Content

Managing SaaS Risk in Higher Education Organisations: A Case Study

Indrit Troshani, Giselle Rampersad and Nilmini Wickramasinghe (2013). *International Journal of E-Business Research* (pp. 8-23).

www.irma-international.org/article/managing-saas-risk-higher-education/78294

Sustainability Reporting in IT Sector vs. Other Sectors: The Impacts on Multidimensional Performance

Amina Buallay (2024). *International Journal of E-Business Research* (pp. 1-23).

www.irma-international.org/article/sustainability-reporting-in-it-sector-vs-other-sectors/339916

EBBSC: A Balanced Scorecard-Based Framework for Strategic E-Business Management

Fen Wang and Guiseppe Forgionne (2009). *Electronic Business: Concepts, Methodologies, Tools, and Applications* (pp. 1797-1820).

www.irma-international.org/chapter/ebbsc-balanced-scorecard-based-framework/9382

Convergence in Mobile Internet with Service Oriented Architecture and Its Value to Business

Marco Garito (2009). *Handbook of Research in Mobile Business, Second Edition: Technical, Methodological and Social Perspectives* (pp. 584-594).

www.irma-international.org/chapter/convergence-mobile-internet-service-oriented/19579

Assessing the Quality of a Decision Support E-Service

Mark Springer, Craig Tyran and Steve Ross (2013). *International Journal of E-Business Research* (pp. 61-80).

www.irma-international.org/article/assessing-quality-decision-support-service/78297