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Analysis of Logistics Technology, Logistics Infrastructure and Quality of logistics services on E-Commerce Growth

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Abstract: The Influence of Logistics Technology, Logistics Infrastructure, and Logistics Service Quality on E-commerce Growth is a scientific literature review article within the scope of the field of study. The purpose is to identify factors influencing online sales in the e-commerce sector in Indonesia, such as gender and income. The secondary data used in this paper is obtained from the kaggle.com web platform, which provides various datasets relevant to various topics. The results of this article show: 1) Logistics Technology influences E-commerce Growth; 2) Logistics Infrastructure influences E-commerce Growth; and 3) Logistics Service Quality influences E-commerce Growth.

Keywords: E-commerce Growth, Logistics Technology, Logistics Infrastructure, Logistics Service Quality

INTRODUCTION

Background of the Problem

The background provides preliminary information on the entire research activity that includes the issues or topics raised. The background also gives an idea of whether or not the researcher is an expert on the topic and a careful user of language. Developments in the field of communication and information have made connecting to global markets, including online markets, easier. In today's digital era, conventional businesses have turned into digital businesses, including e-commerce businesses. With the emergence of e-commerce platforms such as Shopee, Tokopedia, Lazada, and Bukalapak, it has certainly replaced conventional methods with digital models for business operations. The increasing demand of the online market has increased competition between e-commerce companies. This is due to the changing behavior of customers who want convenience and flexibility when shopping. Therefore, to

become more competitive, e-commerce managers and sellers must understand all aspects that affect online sales. Before the advent of e-commerce and its impact, the world of commerce had undergone a transformation (Laurence et al., 1994).

This article analyzes the influence of Logistics Technology, Logistics Infrastructure, and Quality of logistics services on the Growth of E Commerce, a literature review study in the field of science.

Based on the background, the author's goal is to recognize the factors that influence online sales in the e-commerce sector in Indonesia, such as gender and income. The reasons for using logistic regression include that the dependent variable is a binary category where the variable has two categories (yes and no) or (0 and 1), and the output is easy to interpret because the results are probabilities, this makes it easy to interpret compared to linear regression in the context of binary classification this article is to build hypotheses for further research, namely to formulate: 1) The effect of Logistics Technology on E Commerce Growth; 2) The effect of Logistics Infrastructure on E Commerce Growth; and 3) The effect of logistics service quality on E Commerce Growth;

METHOD

The method of preparing the literature review article is by using the literature review method! Previous articles that are relevant to the discussion of variables are analyzed qualitatively based on findings from Google Scholar, Semantic Scholar, Elsevier and other online journal publication media. The design used in this research is a literature review or literature review. Literature review is a literature search and research by reading and analyzing various journals, books, and various other published manuscripts related to the research topic to produce a writing related to a particular topic or issue.

RESULT AND DISCUSSION

Result

E Commerce Growth

According to (Sangkereng et al., 2021) Improving service quality in e-commerce is one of the key factors that lead to success or failure in the e-retailer supply chain. Service quality in the context of electronic commerce has been broadly interpreted. Such as, an efficient way to gain and maintain a competitive advantage.

According to (Ni Made Yulia Dewati Ayu & Jakaria, 2023) e-commerce transactions are also beneficial for both sellers and buyers, such as effective producers who have the ability to learn about the cost of goods offered in the global market and the advantage of buyers to find lower prices through price comparisons in e-commerce stores or through social media.

According to (Safitri, 2019) E-commerce logistics are activities that ensure that customers get what they need at the right time, in the right place, and at the minimum cost. Some of the elements in e-logistics include consumers, manufactures, intermediaries and service providers. One thing that distinguishes it is the use of computer networks, namely the internet, in the work process.

From some of the theories above, the researcher synthesizes that e commerce growth is One of the main factors that determine the success or failure of an electronic retailer's supply chain is improving service quality; in electronic commerce, service quality has been broadly defined. E-commerce logistics is the process that ensures that e-commerce transactions remain competitive, which benefits both sellers and buyers. For example, manufacturers can know the

price of products in the global market and buyers can find lower prices by comparing prices in e-commerce stores and social media. Some of the components of e-logistics are

The growth of e-commerce has previously been researched by (Yasmin, 2019), (Dianari, 2019) (Safitri, 2019).

Logistics Technology

According to (Ayunia et al., 2021) Logistics has an important role which is also considered as one of the pillars in the economic growth of a country.

According to (Purbasari et al., 2023) Logistics is a combination of the words logic and statistics, and was first used in military affairs. In military terms, logistics involves "all activities undertaken to provide operational units with supplies for strategic and tactical complaints and service support." In civilian terms, logistics is the movement of goods, information, people, and services between the point of production and the point of delivery.

According to (Anandhita & Dwiardi, 2018) logistics and technologies that contribute to the optimization of the supply chain include supply management, warehouse management, stock management, order management and distribution.

Logistics is a combination of the words logic and statistics and was first used in the military. It has an important role and is considered one of the pillars of a country's economic growth. Military logistics includes "all activities undertaken to provide operational units with supplies for strategic and tactical complaints and service support". In civilian terms, logistics is the movement of goods, information, people, and services between production points and delivery points; there are also technologies that help optimize the supply chain, such as supply management, warehouse management, stock management, demand management, and distribution.

Logistics technology has previously been widely researched by (Ayunia et al., 2021), (Purbasari et al., 2023), (Anandhita & Dwiardi, 2018)

Logistics Infrastructure

According to (Widiatmaka et al., 2023) logistics infrastructure, namely roads and ports, from Indonesia and trading partners to Indonesia's export performance in total and based on three commodity groups, namely minerals, basic metals, and manufacturing.

According to (Fajar et al., 2023) logistics infrastructure is an important link to increase international trade, increase competitiveness and play an important role in economic growth and country development.

According to (Prasidi & Rifni, 2020) infrastructure is the right strategy in stimulating the economy and increasing the income of all household groups, through economic improvement.

From some of the theories above, the researcher synthesizes that Logistics Infrastructure is Logistics infrastructure, which includes roads and ports from Indonesia and trading partners, has an impact on Indonesia's overall export performance and based on three commodity groups, namely minerals, basic metals, and manufacturing, is an important link to increase international trade, increase competitiveness, and play an important role in economic growth and state development. The right strategy to implement logistics infrastructure is to increase international trade and improve competitiveness.

Logistics infrastructure has previously been widely researched by (Widiatmaka et al., 2023), (Fajar et al., 2023), (Prasidi & Rifni, 2020)

Logistics Service Quality

According to (Sangkereng et al., 2021) the quality of logistics services in the context of electronic commerce is product availability and quality as measured by product availability and product condition and quality.

According to (Winata & Ellitan, 2023) buyers decide to place an order using the delivery method, then later there will be staff from the restaurant who come to deliver their order. This activity is closely related to the use of logistics services. Logistics itself can be defined as all materials, goods, tools, and facilities needed and will be used by a company to achieve their goals.

According to (Murgani & Hasibuan, 2022) the most important customer service quality is professional performance as an added value to your company's logistics process and the lowest is the fast response of the customer service team.

From some of the theories above, the researcher synthesizes that logistics service quality is product availability and quality as measured by product availability and conditions. Buyers choose to order via the delivery method, and restaurant staff will come to deliver their orders. The use of logistics services is closely related to this activity. Logistics can be defined as all the materials, goods, tools, and means needed by a company to achieve their goals. Professional performance as an added value to your company's logistics process is of utmost importance, and the lowest is the quick response of the customer service team.

Discussion

Based on the theoretical study, the discussion of this literature review article is to conduct an in-depth analysis of previous relevant articles, analyze the influence between variables and create a research plan thinking structure:

The Effect of Logistics Technology on E Commerce Growth.

According to (Anandhita & Dwiardi, 2018) Logistics Technology is Technology assists in integrating the management of logistics activities including purchasing goods, selling to storing goods.

The concept of Logistics Technology is The concept of logistics technology involves the use of technology to optimize and improve logistics processes, including transportation, storage, inventory management, and distribution. This technology includes various tools and systems that help logistics companies increase efficiency, reduce costs, and improve customer service.

Logistics Technology has an effect on E Commerce Growth, if Logistics Technology is perceived well then E commerce growth will be perceived well. That in an effort to increase E Commerce Growth indicators E Commerce growth indicators are metrics used to measure and analyze the development and performance of e-commerce businesses.

Some of the factors that affect Logistics Technology are Technological Advances, Customer Needs and Expectations, Globalization and Supply Chain Complexity, Regulation and Compliance, Cost and Efficiency, Infrastructure Availability, Innovation in Ecommerce.

To increase the growth of e-commerce by paying attention to Logistics Technology, what must be done by the leadership is Improving Customer Service.

Logistics technology affects the growth of E Commerce, many have examined this, including those conducted by previous researchers: (Sangkereng et al., 2021), (Ni Made Yulia Dewati Ayu & Jakaria, 2023), (Safitri, 2019)

The Effect of Logistics Infrastructure on E Commerce Growth.

According to (Fajar et al., 2023) Logistics Infrastructure is logistics infrastructure is an important link to increase international trade, improve competitiveness and play an important role in economic growth and country development.

The concept of Logistics Infrastructure is that logistics infrastructure, which includes roads and ports from Indonesia and trading partners, has an impact on Indonesia's overall export performance and based on three commodity groups, namely minerals, basic metals, and manufacturing, is an important link to increase international trade, improve competitiveness, and play an important role in the country's economic growth and development. The right strategy to implement logistics infrastructure is to increase international trade and improve competitiveness.

Research Conceptual Framework

Based on the findings of the problem formulation, highly relevant previous research and research discussion, the conceptual framework of this article is arranged as shown in Figure 1.

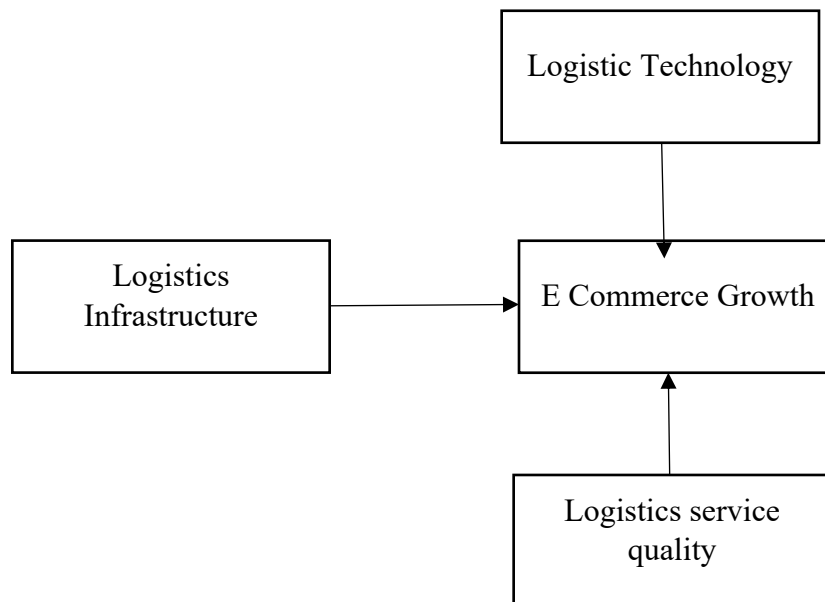


Figure 1: Conceptual Framework

Based on the conceptual framework above, then: Logistics Technology, Logistics Infrastructure, and Quality of logistics services affect E Commerce Growth. Apart from the three independent variables that affect the dependent variable, namely E Commerce Growth, there are still several other variables that can affect E Commerce Growth, including the following

1. Customer Satisfaction:
 - The level of customer satisfaction with the products and services received.
 - Positive reviews and recommendations can increase trust and interest in new consumers.
2. Security and Privacy
 - Protection of personal data and customer transactions.

- Consumer confidence in the security of e-commerce platforms can influence purchasing decisions.

3. User Experience (UX)

- Intuitive and user-friendly website design and navigation.
- Ease of searching for products, making purchases, and completing transactions.

4. Digital Promotion and Marketing

- Effective marketing strategies, including SEO, SEM, social media, email marketing, and influencer marketing.
- Engaging and relevant marketing campaigns can increase visibility and attract more customers.

5. Price and Deals

- Competitive pricing and discount promotions.
- Special offers such as free shipping or discounted prices can attract more customers.

6. Delivery Speed and Efficiency

- Fast and accurate delivery times.
- Efficiency in order processing and delivery affects customer satisfaction and the desire to shop again.

7. Payment Flexibility:

- Availability of various safe and convenient payment methods.
- Flexibility in payment methods, such as credit cards, e-wallets, and COD, can attract more customers.

8. Customer Support:

- Responsive and helpful customer support services.
- The ability to handle customer queries, complaints and problems quickly can increase customer satisfaction and loyalty.

9. Product Availability:

- Adequate product stock and product diversity.
- The availability of products that customers want can drive increased sales.

10. Product Innovation:

- New and innovative product offerings that appeal to consumers.
- Maintain a sustainable product portfolio to meet evolving market needs and trends.

11. Legal and Regulatory:

- Compliance with applicable regulations and laws related to e-commerce.
- Overcoming legal and regulatory obstacles may affect the growth of e-commerce business.

12. Economy and Consumer Buying Power:

- General economic conditions and consumer purchasing power.
- Economic stability and an increase in people's income can increase online shopping.

13. Payment Technology:

- Adoption of the latest payment technologies such as mobile, blockchain and crypto payments.
- Secure and easy-to-use payment technologies can attract more customers.

CONCLUSION

Based on the objectives, results and discussions, the conclusion of this article is to formulate a hypothesis for further research, namely:

1) Logistics Technology has an influence and is significant to the Growth of e-commerce.

- 2) Logistics Infrastructure has an influence and is significant to the Growth of e-commerce.
- 3) The quality of logistics services has an influence and is significant to the Growth of e-commerce.

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