

IMPACT ANALYSIS OF COVID-19 PANDEMIC ON E-COMMERCE IN INDONESIA BUSINESS AND RECOVERY STRATEGIES IN THE ERA OF NEW NORMAL

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Abstract

The purpose of the study was to analyze the impact of the covid-19 pandemic on E-commerce business in Indonesia and recovery strategies in the era of the new normal. This study uses the qualitative method. Collecting data using observations, interviews, and focus group discussions with research subjects including E-commerce business actors, logistics practitioners, and employees in shipping services companies. The result showed that the covid-19 pandemic had an impact on E-commerce businesses. There was a decline in income for 85,83% of E-commerce business actors. The decline in smoothness distribution occurred in almost all provinces in Indonesia.

Keywords

E-commerce; Pandemic; Covid-19; Logistics

INTRODUCTION

Indonesia has experienced various losses due to the pandemic, both sectoral, individual, and corporate losses (Hadiwardoyo,2020). The impact of the covid-19 pandemic on the Indonesian economy includes termination of employment, a decrease in imports, inflation, and losses in the tourism sector due to a decrease in the number of tourists resulting from restrictions on both regional and national. (Yamali and Putri,2020). As for business owners, the losses faced include reduced income and the emergence of unexpected costs.

The types of businesses that are significantly affected are mainly conventional businesses. Therefore, conventional businesses are advised to switch to digital business. (Awali and Rohmah, 2020; Taufik and Ayuningtyas, 2020). However, it does not mean that E-commerce business actors are not facing the impact of the covid-19 pandemic. One of the problems that occurred was due

to the delay in distribution as a result of the large-scale social restriction policy to prevent the spread of covid-19.

Based on this, it can be seen that the covid-19 pandemic has had an impact on E-commerce businesses. It is necessary to know more deeply about the impacts then formulate the right strategy for E-commerce businesses to be implemented in the era of the new normal.

LITERATURE REVIEW

Logistics Management

Logistics has the ultimate goal of meeting consumer needs through a planning process to effective and efficient control of the procurement, management, storage, service, and distribution of information from starting point to downstream. (Siagian, 2005). In short, logistics management is an activity to regulate the flow of goods from origin to destination to meet requests from individuals or groups/companies. (Li, 2014)

Logistics plays an important role in international trade because in the era of globalization. So logistics is not just about moving goods from one point to another but also about added value and competitive advantage that can be provided. (Salim, 2015)

In general, logistics management includes three major parts, namely transportation, warehousing, and distribution. Transportation includes modes of transportation, customs, exports and imports, material handling equipment, and others. While warehousing is not only about a warehouse management system but also about material handling, storage, inventory, and cross-docking. Then distribution talks about the concept, basis, and method of distribution and is also equipped with route selection and consolidation. (Siahiya, 2012)

E-commerce

Kotler and Armstrong (2012) define E-commerce as an online channel used by business owners to offer their products to consumers and can be reached with the help of computers. Turban et al (2015) state that E-commerce is all types of sales and purchases or trade activities carried out via the internet. Meanwhile, according to the Organization for Economic Co-operation and Development (OECD), E-commerce is the sale or purchase of goods/services, which is carried out through a computer network with a method specifically designed for the purpose of receiving or placing orders, but the main payment and delivery of goods/services does not have to be done online (BPS, 2020).

Kotler (2012) divides E-commerce according to its characteristics into four parts, namely B2B (Business to Business), B2C (Business to Consumer), C2C (Consumer To Consumer), and C2B (Consumer to Business). While Laudon and Traver (2017) divide E-commerce into six types of models that is B2C, B2B, C2C, Mobile E-commerce, Social E-commerce, and Local E-commerce.

Indonesia has a fairly large potential for the development of E-commerce, so a strategic work plan is needed to be able to take advantage of the demographic bonus to improve the welfare of its people (Aribawa, 2016). The huge potential of E-commerce in Indonesia was even

more evident during the Covid-19 pandemic with industry growth of 92% in 2020, which far exceeded the predictions of the previous year. The number of E-commerce transactions was recorded at 98.3 million transactions with a valuation reaching USD 1.4 billion. Tokopedia noted that there was an increase in the number of users who opened new stores throughout 2020 that focused on selling health products. (Sirclo and Ravenry, 2020).

METHODS

Types of Research

This study uses a qualitative method with a descriptive approach to determine the impact of the covid-19 pandemic on E-commerce business and its recovery strategies in the era of the new normal. Qualitative methods are considered appropriate because this method can provide more detailed data about the problem under study. (Prastowo, 2011)

Place and Time of Research

The research locations cover several provinces spread throughout Indonesia. The research was carried out from March 2020 to August 2020.

Research Subject

The research subjects were identified through a purposive sampling procedure where the researcher determined the data source considering that the data obtained could reflect the general condition (Sugiyono, 2010). Therefore, the informants in this study were E-commerce business actors, logistics practitioners, and employees of freight forwarding companies. The criteria for E-commerce business actors are: 1) registering a company in at least one marketplace in Indonesia; 2) they have marketed their business for at least one year; and 3) are willing to take an interview

Data Collection Technique

Data collection techniques in this study are: 1) Interview (in-depth interview); 2) Observation; 3) focus group discussion; and 4) Documentation.

Data Analysis Technique

The data analysis technique used is an interactive model (interactive model) from Miles and Huberman in Prastowo (2011). namely data collection, data reduction, data presentation, and verification or drawing conclusions.

RESULT AND DISCUSSION

The Impact of The Covid-19 Pandemic on E-Commerce Business

E-commerce is an important part of the Sustainable Development Goals (SDGs). E-commerce helps businesses of various scales to get involved in domestic and international trade by simplifying supply chains, making it easier to find goods, facilitating transactions, and so on (UNCTAD, 2021). With various restrictions due to the covid-19 pandemic, shopping activities are increasingly shifting from brick and mortar to E-commerce. As happened in the United States

where total retail E-commerce, although it decreased at the end of 2019 and early 2020, in the following quarter it increased by 5% to an increase of 16.1%.

Not only in the United States but the same trend can also be found in Europe, for example in the United Kingdom, which experienced a significant increase of 31.3% in E-commerce sales since the second quarter of 2020. The Asian country that recorded a fairly high increase in E-commerce sales was China with an achievement of 24.6%. (OECD¹, 2020) Although in general E-commerce sales have increased, this has not happened evenly across all product categories. The product category that was recorded to have experienced the most significant increase in sales was undoubtedly health products such as masks or gloves. Another example in South Korea, an increase was also found in sales of food and beverage (F&B) and household appliances, while the category of entertainment or travel products decreased significantly (OECD², 2020).

The impact of the covid-19 pandemic on various categories of E-commerce businesses was found to be varied. since the covid-19 pandemic hit Indonesia, there has been a decline in income for 85.83% of E-commerce business actors. Other business actors (4.58%) experienced an increase in income and the remaining 9.59% were not affected. (BPS, 2020)

The increase in the income of E-commerce business actors varies from 25% to more than 75%. Meanwhile, a percentage decrease in revenue of more than 50% occurred in 45.55% of the total number of E-commerce actors in Indonesia. E-commerce business sectors that experienced the largest decline in revenue (about 75%) were corporate services, education, as well as transportation, and warehousing. There are at least 91.81% of business actors from the accommodation, food, and beverage sector experienced a decline in income. The same trend is also found if you look at the volume of transactions and also the smoothness of distribution.

Table 1. Percentage of E-Commerce Businesses Based on Smoothness Distribution

Numbers	Provinces	% Number of business		
		increase	Not affected	Decrease
1	DKI Jakarta	3.34	19.27	77.39
2	Jawa Tengah	2.60	25.10	72.30
3	Bali	1.36	13.95	84.69
4	Sumatera Utara	3.67	12.30	84.03
5	Kalimantan Selatan	4.82	23.85	71.33
6	Sulawesi Utara	4.20	10.75	85.05
7	Nusa Tenggara Timur	3.89	22.73	73.38
8	Papua	-	7.69	92.31

(BPS, 2020., has been reprocessed)

From the table above, even the overall data shows that almost all of the E-commerce business actors in Papua experienced a decrease in the smooth distribution of their business, and none of them even experienced an increase. Before the pandemic, the smooth distribution of goods was quite low and logistics costs to the Papua region and even other areas in Eastern Indonesia were quite high. This situation was further exacerbated by the covid-19 pandemic.

All forms of changes that occur due to the covid-19 pandemic require people to be able to adapt to the era of new normal. The increase in internet users which reached 40 million people,

as well as the increase in the number of digital service users in 2020, indicate that E-commerce will continue to grow in the future (Google, Temasek, Bain & Company, 2020). Based on research results from Nielsen (BrandinAsia.com, 2020) the number of customers who shop online has doubled compared to 2018, or around 7.8 million people.

before the pandemic, the most purchased products in E-commerce were fashion, skincare, and travel, while since the pandemic period there has been an increase in food & beverage products (33%) and health products (33%). The E-commerce sector has also received the impact of the covid-19 pandemic, but in general, E-commerce helps the country's economy run amid a bad situation.

Recovery Strategies of the E-commerce in the Era of New Normal

The effectiveness and efficiency of the E-commerce business logistics system will be the key for E-commerce to maintain its business continuity and advance its business in the new normal era.

1. Consumer and Marketplace Analysis

This study focuses on business actors who already have products and have done their business through E-commerce. Even though you already have a business, it doesn't mean the research process has to stop because consumer changes happen very quickly and there is no other way to find out other than doing research. Therefore, the strategy that must always be applied by E-commerce business actors to achieve the effectiveness and efficiency of the logistics system is to conduct research on a regular basis.

E-commerce business people can basically serve all parts of Indonesia and can analyze production needs and sales forecasting. This will also affect the entire E-commerce logistics system such as inventory and facility requirements. Furthermore, E-commerce business actors need to understand the marketplace used and the purpose and use of each marketplace. In general, you will find an E-commerce business using various marketplaces with the same function, for promotions, transactions, building engagement, and so on.

2. Supplier Selection Strategy

Determining suppliers will help E-commerce businesses in various aspects. E-commerce business actors must consider other things in determining suppliers, such as the supplier's hometown and the number of suppliers. The farther distance between the supplier and the business owner will certainly increase the logistics costs so that the seller will inevitably consider increasing the price of the product.

Determining the number of suppliers for a business will depend on the needs, goals, and priorities of each business actor. So before determining the number of suppliers, must first determine the goals and priorities

Table 2. criteria for determining the number of suppliers

Description	Single Supplier	Multiple Supplier
Easy transaction	√	

Raw materials are easy to obtain		√
Easier and better communication	√	
High demand anticipation needs		√

(Martono, 2018., has been reprocessed)

After determining the number of suppliers, E-commerce business actors can start assessing potential suppliers based on the specified criteria

Table 2. supplier selection criteria

Numbers	criteria	scale	Supplier A		Supplier B	
			value	result	value	result
1	Track Record	7	3	21	5	35
2	Quality Product	10	5	50	4	40
3	Punctuality	8	4	32	4	32
4	Flexibility	6	2	12	5	30
5	Prices	9	4	36	3	27
			151		164

(Martono, 2018., has been reprocessed)

After determining the supplier, between the E-commerce business actors and the supplier, a commitment must be built for good and sustainable cooperation.

3. Inventory Strategy

In this study, it was identified how many items were ordered by the business owner in one order. The answers given were varied and no similar trend or pattern was found even for E-commerce businesses with the same product category. Therefore, it is necessary to discuss strategies for effective and efficient inventory. The number of items ordered must be considered carefully because if the number of items ordered is too large and sales are not balanced, then there will be inventory costs that will arise, risk factors for damage, loss, expiration, and so on.

There are several methods for the number of orders that are generally used by companies, namely Lot-for-Lot (L4L), Fixed Order Quantity (FOQ), Economic Order Quantity (EOQ), P-system, Periodic review, and visual aids (Martono,2018). For use in the E-commerce business, the fixed order quantity (FOQ) or Periodic Review method can be used.

Based on the results of this study, demand forecasting activities have also not become a concern for E-commerce business actors. Demand forecasting also has its techniques, namely qualitative and quantitative techniques. E-commerce business actors can apply the pyramid technique with the force down method if the business has a variety of products.

The pyramid technique is done by estimating the number of sales for each unit and then multiplying by the product price. After knowing the estimated total sales, E-commerce business actors can choose whether they want to increase the target or sales or stick to the sales forecast. If they later want to increase the total sales target, then the amount will be divided back into product units proportionally so that the estimated sales amount will be known.

4. Facilities and Goods Handling Strategy

Facilities and goods handling strategies for E-commerce businesses in the era of new normal must prioritize cleanliness and compliance with health protocols. In general, changes that have been made by E-commerce business actors in handling goods such as regular spraying of disinfectants, provision of masks, hand sanitizers, and handwashing facilities are new strategies taken to ensure the sterility of goods.

The process of handling goods is carried out following the SOP that is owned by the business itself by implementing new habits to ensure the cleanliness of the goods. At the stage of receiving the goods, the previous business actor had to take into account the estimated time the goods ordered from the supplier would arrive at the seller's facility. Therefore, the seller can prepare other facilities for the arrival of the package.

When the product from the supplier arrives, the first step is to spray disinfectant on the item. Then checks the ordered goods, whether the specifications and quantity are appropriate, whether there is damage, and so on. The next process is the storage process if the goods are not directly used for the production process. The storage process as described earlier requires adequate facilities so that it is not placed in any place and results in the risk of damage. To support the effectiveness and efficiency of goods storage, the goods are stored in a location that is following the nature and nature of the goods and the size of the goods. If a business person has a variety of products in their inventory, the fast-moving products are placed closest to the exit or packaging locations, while the slow-moving items can be placed farther away.

5. Distribution Strategy

The strategy to achieve the effectiveness and efficiency of the logistics system through the distribution or delivery of goods can be realized through the selection of shipping services in the marketplace. The development of the E-commerce business in Indonesia has had a positive impact on shipping service companies by increasing shipping transactions both within and outside the country. The number of freight forwarding companies is also increasing. Indonesian people are familiar with Pos Express, Tiki, JNE, J&T, Sicepat, Wahana, Ninja Xpress, Antaraja, Lion Parcel, Kargo Tech, and so on. E-commerce business actors need to select delivery services that will be activated in the marketplace.

Before deciding to determine which delivery service to activate, E-commerce business actors must consider the type of product and need to identify the delivery service that will be used. Understanding the type and nature of products is important so that the products they send to consumers can arrive properly. Perishable goods or products that are easily damaged, of course, cannot last long in transit, so they require a delivery service that provides a choice of a day to arrive or one that provides a thermal box. Meanwhile, for the types of products that are not easily damaged, there are no special requirements for the choice of delivery.

E-commerce business actors also consider the services provided by shipping service companies. For example, there are delivery services that provide package pickup at home, and there are also delivery services that provide cars on the main road as a package reception counter. If business people can more easily reach the location of delivery services, then business people tend to choose to activate it.

CONCLUSION

The covid-19 pandemic has had a major impact not only on the Indonesian economy as a whole but also on the e-commerce business. The impact is a decrease in income, a decrease in the volume of transactions, and a decrease in the smoothness of distribution that occurs in almost all provinces in Indonesia with the greatest impact being felt by the people in Papua Province. Several product categories from E-commerce businesses that experienced increased sales or at least survived amid the covid-19 pandemic were food & beverage products and health products.

The recovery strategies for E-commerce businesses start from a strategy to analyze consumers, target markets, and marketplaces used. Supplier determination strategy, inventory strategy, facility strategy, and goods handling and distribution strategy.

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