

PROSPECT OF OLIGOPOLY MARKET IN DIGITAL ECONOMY

Frida Yanti Sirait¹
Mulyana Fitri²
Tsamara Balqis³
Isnaini Harahap⁴

^{1, 2, 3, 4} Faculty Of Islamic Economics and Business, Sumatera Utara State Islamic University,
Indonesia,
(e-mail: fridasirait9@gmail.com)

Abstract: *In terms of marketing company products and services, e-commerce has a significant impact on the industry as a whole, especially in the process of achieving the company's target market. The aim of this research is to present prospect of oligopoly market in digital economy, The method used in this research is literature review. This type of research is quantitative research which is flexible and open to modification by the author according to the needs of the author .The Result One form of oligopolii market that has a huge opportunity is the e-commerce market. Performance in e-commerce companies, which have recently grown rapidly, has not shown any real gains. In five to ten years, this fairly young effort will pay off. It is estimated that the development of this e-commerce market will continue to increase. Although currently there are still not many users due to the fact that only a handful of Indonesians shop online, The practice of oligopoli is considered to be one of the most common methods for assisting individuals and organizations in achieving their goals by determining the appropriate price, which means that the average price between the individuals and organizations that practice oligopoli does not exist.*

Keywords: *Marketing Company, E-Commerce, Oligopoly.*

Introduction

Market is a place where buyers and sellers can trade goods and services. The prices of these goods and services are determined by supply and demand (Ni'matul Fitria Mukaromah & Wijaya, 2020b). Every process that brings sellers and buyers together will produce a price that has been agreed upon by both. The market we often see is the market for goods and services (consumption market). Bringing buyers and sellers together to trade goods (Imronah, 2022) .

The Indonesian economy is dominated by the consumer sector, which has a significant impact on the economy. According to the 2017 BPS report, during the third quarter of 2017, the consumer goods sector increased by 2.65 percent from 5.06 percent of Indonesia's GDP. This shows that Indonesian consumers are among the most affluent in the world in terms of buying products for the purpose of buying new items. The digital economy has a significant impact on the individual economy. The use of information technology has a significant impact on the consumption sector which dominates economic activity.

The explosion in the number of internet users in Asia, especially in Indonesia, consists of special infrastructure for e-Commerce or transactions related to other trade pages on Maya. In terms of marketing company products and services, e-commerce has a significant impact on the industry as a whole, especially in the process of achieving the company's target market. E-

Commerce, on the other hand, is a very profitable business because many businesses or organizations specialize in selling these products (Prasetyo, 2018).

The practice of oligopoli is considered to be one of the most common methods for assisting both individuals and organizations in achieving their goals. The practice of oligopoli is also considered to be one of the most common methods for assisting individuals and organizations in achieving their goals by determining the appropriate price, which means that the average price between the individuals and organizations that practice oligopoli does not exist. The structure of the oligopolies is centered on industries with distinctive modes, such as the mobile, kertas, and garment industries. (Rahmawati, 2012) .

The most striking feature of an oligopolistic market is the strong attraction between businesses or sellers working together in that market (Taufan, 2017). This is because an oligopolistic market only has a few sellers. However, each of them will be able to produce at a low level of output and insist on a price above marginal cost if their market cooperation is compromised. Unfortunately, however, each of these businesses is attempting to maximize its own interests and benefits at the expense of those of its competitors. they will lose their power if they continue to live in this situation. - to share control over the production and/or marketing of goods or services, which could lead to monopolistic practices and unfair competition in the business world.(Hutagaol, 2022)

The performance of Indonesia's economy is significantly impacted by the presence of e-commerce. To evaluate the situation of e-Commerce, a survey was conducted among Indonesian producers and customers (trade pages). Businesses using many modes of transportation have significantly increased their use of e-commerce . A small number of business owners are compelled by the oligopoly nature of this sector to implement initiatives targeted at enhancing the user experience on websites or mobile apps.

Literature Review

An oligopoly market can be said to be a market that has several sellers. In an oligopoly market, only a few firms dominate the market, either working independently or together in secret. The prohibition of this oligopoly agreement is based on the reason that it creates unfair business competition and does not adhere to the principle of fair business competition, which among other things provides equal opportunities for all business actors to compete (Amalia, 2020).

In an oligopoly market, two main theories must be applied:

1. There is no specific bond between companies in carrying out independent actions.
2. There are certain relationships or ties that exist between companies in an oligopoly market. This may be due to the fact that there are only a few companies in this type of market, which gives them more power to work with.

To make a decision that will affect both companies, they must reach an agreement. Oligopolies can also be formed from economic ties stemming from standards of behavior to prevent economic losses. If the parties involved in the agreement benefit from it, they will be more likely to participate (Sittio, 2021).

In an oligopoly market, there are those who make standard goods, but there are also those who produce goods with a different style. Some examples of companies that produce standard goods are companies engaged in raw materials such as gasoline, steel, and cement. While industries that produce goods with different styles include the car and truck industry, the cigarette industry, the laundry soap industry, and others (Mukaromah & Wijaya, 2020).

The characteristics of the Oligopoly market are:

1. Selling standard goods or different goods in an oligopolistic market produces uniform goods. This problem is often found in industries that produce menthol-based products. In addition,

there are businesses that produce goods that differ between manufacturers. Typically, these items are considered "sophisticated" items, such as cars, cell phones, clothing, and other items.

2. The power to determine prices is very limited if sometimes weak or strong when there is no cooperation. If one company lowers its price, the other will do so in a more significant way. Thus, both will equal or fail to attract customers as a result of unfair pricing practices. However, if businesses in an oligopoly market cooperate to set prices, then prices can fluctuate at an unfavorable rate.
3. The need for promotion with an active marketing campaign.

As stated in both practice and theory, the elements that make up an oligopoly market are as follows:

1. The scale of economic operations is very large, so that the number of business actors acting as market makers is very small.
2. The need for large investments makes it difficult for other businesses to enter a competitive industry.
3. Some businesses have exclusive patent rights to produce certain types of goods.
4. Any company that can be trusted and has a loyal customer base because of its quality products and customer service. Therefore, it is difficult for new businesses to develop.
5. Few businesses control the export of raw materials to fulfill certain commodities.
6. The government gives a warning to related business actors to conduct trading aggressively (Hutagol, 2022).

One of the advantages of an oligopoly market is:

1. companies often implement new innovations in their product development because there is always unfriendly competition between them.
2. The price offered can be freely accepted by consumers due to intense competition which means producers have good marketing accuracy.
3. To accommodate customer demand, production areas in this market are now more active.
4. The products produced tend to be of higher quality and subject to government marketing because they are produced by large businesses that also understand the market.
5. Competition between producers can benefit consumers because it gives them the ability to judge whether a product is suitable for purchase.

The oligopoly market also has weaknesses, namely:

1. New companies will enter the market more firmly and actively.
2. An established business will more easily understand the market systematics that will be opened, making it easier for new businesses to sell their products to existing ones.
3. Since it is likely that companies with a long history of success will have persistent customers, there will be less risk for them to switch to a different brand of goods.
4. To increase consumer confidence, manufacturers often set competitive prices.
5. Because this company already has a patent, it creates uncertainty for other businesses. This means that once someone uses the current Haken Protocol, they will receive a Threat Penalty.
6. There are more business monopolies that can harm consumers.
7. You need a large amount of capital to fuel production growth (Kusuma, 2020)

Heterogeneous	MONOPOLY	MONOPOLISTIC COMPETITION
Goods	OLIGOPOLY	PERFECT COMPETITION

Method

The method used in this research is literature review. This type of research is quantitative research which is flexible and open to modification by the author according to the needs of the author. and the problems in this article are conceptual and theoretical.

Result and Discussion

An oligopoly market is a market that has several sellers. In an oligopoly market, few companies dominate the market, both working independently and together secretly. The ban on oligopoly agreements is based on the reason that it creates unfair business competition and does not adhere to the principle of fair business competition, which among other things provides equal opportunities for all business actors to compete (Lia Amalia, 2020).

In oligopoly, there are several sellers who sell the same goods. As a result, the actions of one seller must take into account the reaction of another seller. There are two types of actions that a seller can perform, namely:

1. The Cournot Quantity Competition model is used to determine the optimal quantity to produce.
2. The Bertrand Price Competition model is to determine how much price it will offer (Karim, 2022)

1. Cournot Model

Cournot developed this model on the assumption that there are only two sellers of the same goods. In the market, there are only two companies selling mineral water, Aqua and Ades. Both companies produce the same type of products, so they are forced to charge the same price. In the Cournot model, the strategic choice for the Aqua and Ades companies is to determine the quantity of goods produced by each company. Once they have determined Q_1 and Q_2 , they can set a price that allows them to sell all the units in the market.

Each function can be expressed as a mathematical function:

$$\text{Aqua: } TC = 10Q_1$$

$$\text{Ades: } TC = 10Q_2$$

In other words, both companies have marginal costs of \$10 per unit.

If:

$$Q_1 = Q_2 = 10, \text{ maka } TC_1 = TC_2 = 100$$

Assuming request D, we can say that:

$$P = 100 - Q_1 - Q_2$$

Aqua will produce Q_1 , given how much Ades produces (Q_2), to set the market price, which is determined by the quantity ($Q_1 + Q_2$) offered. The production of Ades (Q_2) is based on the production of Aqua (Q_1).

Cournot equilibrium (P^* , Q_1^* , Q_2^*) will occur if:

1. Aqua can help increase profits (π_1^*)
2. Ades can increase profits (π_2^*)
3. The entire production ($Q_1^* + Q_2^*$) is consumed by the market at the price level P^{***}

Aqua predicts profits (π_1) by estimating Ades Q_{2d} production, given that Q_{2d} is an estimate of Q_2 :

$$\begin{aligned}\pi_1 &= \text{Revenue} - \text{Total Cost} \\ &= P \cdot Q_1 - TC \\ &= (100 - Q_1 - Q_{2d}) Q_1 - 10Q_1 \\ &= 90Q_1 - Q_1^2 - Q_{2d} Q_1\end{aligned}$$

Let's say Q_{2d} is constant. If we take π_1 against Q_1 , we get. $\delta\pi_1 / \delta Q_1 = 90 - 2Q_1 - Q_{2d}$

To find the maximum profit rate for Aqua (π_1^*), the derivative must be set to zero ($\delta\pi_1 / \delta Q_1 = 0$):

$$0 = 90 - 2Q_1 - Q_{2d}$$

The maximum profit of Aqua occurs at the point where:

$$Q_1 = 45 - 0.5 Q_{2d} \text{ reaction function Aqua}$$

This function shows that if Aqua anticipates an increase in Ades production, then Aqua will adjust its own production. If Aqua maintains its production, it will face lower prices. Aqua decided to produce less of its products in order to maintain a high price, rather than receiving a lower price.

The maximum profit that will occur on Ades can be formulated in the same way:

$$Q_2 = 45 - 0.5 Q_{1d} \text{ reaction function Ades}$$

Well if Aqua suspects Ades produces $Q_2 = 50$, Aqua will produce $Q_1 = 20$. If Aqua's guess turns out to be wrong, then it turns out that Ades does not produce $Q_2 = 50$, but $Q_2 = 30$, then the production rate of Aqua $Q_1 = 20$ will not give Aqua the maximum profit. The reason Aqua increased his production was because he wanted to increase his chances of winning.

In this example, Aqua continued to adjust production and finally came to the conclusion $Q_1^{**} = Q_2^* = 30$. Then, enter the data into the equation $P = 100 - Q_1 - Q_2$, then it is obtained $P^* = 40$. When these numbers are entered into the equation $\pi_1 = 90Q_1 - Q_1^2 - Q_{2d} Q_1$, it will be obtained $\pi_1^* = 900$. In the same way it is obtained $\pi_2^* = 900$.

2. Bertrand Model

Sellers in this model set prices to achieve maximum profit, based on the prices they expect from their competitors. The seller does not take into account how his competitor will react when he knows the possible price, so each seller assumes that the price of his competitor is fixed.

Aqua and Ades illustrations used

Margin Cost $MC_1 = MC_2 = \text{Rp}10,-$

Request $P = 100 - Q_1 - Q_2$

Cournot Equivalent $Q_1 = Q_2 = 30$ and $P_1 = P_2 = \text{Rp}40,-$

Now let's say Ades believes that Aqua will sell at a price of $\text{Rp}40,-$ ($P_1 = \text{Rp}40,-$), To capture the entire Aqua market, Ades set a price of $\text{Rp}39,-$ ($P_2 = \text{Rp}39,-$) in hopes of capturing the entire Aqua market ($Q_1 = 0$). Enter this number into the equation:

$$\begin{aligned}P &= 100 - Q_1 - Q_2 \\ 39 &= 100 - 0 - Q_2\end{aligned}$$

$$Q_2 = 100 - 39$$

$$Q_2 = 61$$

Aqua is interested in retaining its customers and will lower the price to do so, for example by reducing costs by Rp38,-. Ades is also the case. What is the point at which both sides become equal? If Ades and Aqua stop lowering their prices when their prices are equal to their marginal costs. Ades and Aqua will not rationally produce if the price is less than the marginal cost. Therefore, equilibrium occurs in time:

$$P_1 = P_2 = MC = \text{Rp}10,-$$

Aqua and Ades will not increase their prices, as doing so will result in the loss of customers from competitors. Aqua and Ades won't lower the price because it means losing money ($PC < MC$). The price resulting from the interaction of two companies in the market is called *Bertrand's Equilibrium*

Mass production of starter packs at low selling prices (below the regular refill price) is one of the strategies carried out by the oligopoly market engaged in the mobile operator business to attract as many customers as possible. In an effort to attract more customers, almost all mobile service providers use this tactic. Companies are vying to offer attractive rates in an effort to attract more customers, which is likely to impact that growth. Since the company's goal is to increase revenue for the sake of business continuity, an increase in the number of customers will make a significant contribution to the company's revenue. In the telecommunications market, operators continue to compete with competitive strategies to win the hearts of customers due to the intense product competition. Companies should focus not only on increasing voice revenue but also making the features of multimedia-based services look better when competing for the market. MMS (Multimedia Mobile Service), SMS (Short Message Service), Internet browsing, and the latest 4G services are some of the current trends (Naeruz, 2020)

In the oligopoly market, some make standard goods, but there are also those who make goods of different styles. Some examples of companies that produce standard goods are companies engaged in raw materials such as gasoline, steel, and cement. Meanwhile, industries that produce goods with different styles include the car and truck industry, cigarette industry, laundry soap industry, and others (Ni'matul Fitria Mukaromah & Wijaya, 2020a)

There are many advantages of the oligopoly market, including:

1. Due to the large number of choices in the market, consumers can choose products based on their preferences.
2. Since producers have little control over prices, consumers will get standard prices. This is due to fierce competition.
3. Due to the fierce competition among sellers, manufacturers will put more emphasis on providing customers with the highest quality products at reasonable prices. Customers will benefit from this.
4. In addition, manufacturers will continue to carry out new product development and innovation to maintain product growth in the face of fierce competition.

In addition to the advantages mentioned above, the oligopoly market also has several disadvantages, including:

1. Due to the fierce competition, it will be difficult for new manufacturers to compete.
2. Manufacturers often engage in price wars to attract customers.
3. In an oligopoly market, the actions of dominant producers will have a significant impact not only on the market but also on other manufacturers. Regardless of whether it is beneficial or detrimental, this action must still be carried out for survival.

4. It costs a lot of money to run promotions so that customers can always recognize the brand and distinguish one product from another.
5. Economic resources are wasted (Hutagaol, 2022)

One form of oligopolii market that has a huge opportunity is the e-commerce market. Performance in e-commerce companies, which have recently grown rapidly, has not shown any real gains. In the next five to ten years, this fairly young effort will pay off. It is estimated that the development of this e-commerce market will continue to increase. Although currently there are still not too many users due to the fact that only a handful of Indonesians shop online.(Prasetyo, 2018)

In Indonesia, the growth of the e-commerce business has both positive and negative impacts. On the one hand, the expansion of this trade page will be beneficial for SMEs (small and medium-sized industries) that have been struggling in product marketing (Anggraeni & Baladinia, 2017). Therefore, many brokers (brokers) who use e-Commerce services can benefit by reselling IKM products through trading pages. This is what will cause a negative aspect, namely the number of new SMEs will decrease because more and more people are looking for money by becoming brokers in e-commerce. Therefore, the use of this trade page should be regulated with the help of the government. Errors in e-Commerce transactions have led to a number of customer complaints. Then consumer protection regulations for e-commerce are needed to protect consumers (Ayunda, 2022).

Indonesia has the necessary prerequisites to become the main country in charge of the global natural rubber market, a market structure that usually results in oligopoly and comparative and competitive advantages. In other words, Indonesia still has a chance to win the competition and increase its competitiveness. Indonesia can do business by distinguishing different types of natural rubber. In a market that tends to lead to oligopoly competition, usually competition is not focused on the price system but rather on commodity campaigns through promotion. The effort is adapted to the actual conditions of the global natural rubber oligopoly market structure. In an oligopoly market structure, price competition will only give rise to price wars. Thus, it is hoped that the promotion will make Indonesian natural rubber more attractive to the world natural rubber market.. (Lindung & Jamil, 2018) that's why The oligopoly model is more suitable for international trade (Lee, 2019).

Conclusion

In terms of marketing company products and services, e-commerce has a significant impact on the industry as a whole, especially in the process of achieving the company's target market. The practice of oligopoli is also considered to be one of the most common methods for assisting individuals and organizations in achieving their goals by determining the appropriate price, which means that the average price between the individuals and organizations that practice oligopoli does not exist. The most striking feature of an oligopolistic market is the strong attraction between businesses or sellers working together in that market.

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