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Global issues: utilization of e-commerce and increased use of mobile commerce application as a result of the covid-19 pandemic

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Abstract. Covid-19 is a global emergency epidemic that affect all areas of life including the economy. Growth in the world economy has decreased due to lack of purchasing power that lasts for only at home policy. This policy is carried out to prevent the spread of covid-19, which on the other hand actually increases the use of e-commerce and mobile commerce as means of shopping. The use of e-commerce and mobile commerce is considered capable of helping consumers to buy basic necessities and health that are needed during activities at home. Buying and selling transaction through e-commerce and mobile commerce have increases during covid-19. Which is then utilized by e-commerce and mobile commerce by providing various attractive offers for consumers. The consumer does not need to interact with the seller and the items needed will be sent home.

1. Introduction
Covid-19 is a deadly virus that is currently a global concern due to its rapid spread so-called pandemic. Data shows 215 countries in the world have been infected including Indonesia. In Indonesia alone, according to data from the government of the Republic of Indonesia covid-19 has infected nearly fifteen thousand inhabitants of Indonesia. However, a vaccine to cure covid-19 until April 2020 has not been found and is still in the research process. Therefore all countries infected with this virus can then only make policies to prevent its spread. Covid-19 spread can occur through direct physical contact, so that precautions are taken through social distancing.

Social distancing needs to be done to provide physical space between people to avoid disease [1]. One way to do social distancing according to WHO's recommendations is to do all activities from home. Which causes educational institutions to conduct online education, companies make work from home policies, as well as various other policies. Almost all activities were affected by covid-19, including economic activities. Demand for basic needs and health goods has increased while other goods have decreased. In this case, almost all requests for goods are carried out at home, which must then be sent via expedition service.

Demand for goods is done online by utilizing e-commerce and mobile commerce. In addition to e-commerce and mobile commerce that have existed since before covid-19, several large companies have
also begun implementing sales systems that utilize e-commerce and mobile commerce. This needs to be done because offline sales are likely to decline, so as long as the activities carried out at home product sales do not decline. The main purpose of this article is to describe how the use of e-commerce and mobile commerce has increased significantly during the Covid-19 pandemic, as an interesting solution to look into in online purchase transactions, which also shows potential business opportunities for the public. This is the impact of the covid-19 pandemic, which not only causes negative impacts and losses but there are positive sides and future opportunities and challenges that can be raised as new innovations in the era of the industrial revolution 4.0, so it is necessary to know what factors affect successful utilization of e-commerce and mobile commerce applications during the Covid-19 pandemic.

2. Literature Review
Covid-19 is a virus with a high transmission rate caused by a new type of coronavirus. This virus was first discovered in December 2019 in the city of Wuhan, China which is then currently infecting 215 countries in the world. People infected with covid-19 can be shown with symptoms of fever, feeling tired, and a dry cough. Some infected people experience pain and nasal congestion, colds, and sore throat or even diarrhea. Some infected people don't even show any symptoms like healthy people in general. People who are infected with covid-19 can transmit it to other people who intentionally or did not make physical contact. Covid-19 can spread through the saliva or breath coming out of the mouth or nose of an infected person. Saliva or breath can also fall into objects and surfaces that are around an infected person. Who intentionally or cannot be touched by another person, who then uses a hand that has touched an object to touch part of his face. Thus people who are not initially infected after making direct contact with infected people or infected objects can become infected. This then causes the spread of covid-19 to be faster than the spread of other viruses. Until April 2020 scientists have not been able to find a drug or vaccine specifically shown to cure covid-19. WHO only provides advice to prevent covid-19 transmission and cannot recommend certain drugs or vaccines. These precautions must then be obeyed by all people so as not to be infected with covid-19. One of the precautions that needs to be obeyed is social distancing which requires minimizing interaction with other people and doing various activities from home.

2.1. Impact of Covid-19 in the economic field
During the distribution of covid-19 all sectors were affected, including economics which required everyone to have a large contagion [2]. This is because it needs a lot of costs incurred for health both for prevention and for treatment. Besides that, the policies implemented during the Covid-19 dive at home alone can have an effect on decreasing productivity which can disrupt economic activities. Even the unemployment rate began to increase due to covid-19, thus it can be concluded that income could be reduced or even non-existent but expenditure continued to be carried out during covid-19.
Pendemi covid-19 caused a direct global destructive economic impact that occurred in all regions of the world [3]. Almost all economic sectors are affected by the impact of covid-19 starting from the stock market to MSMEs. Mrs. Sri Mulyani as Minister of Finance of the Republic of Indonesia revealed that Indonesia's economic growth is predicted to decline even in the worst-case scenario it could be in the minus number [4]. This was due to the decline in household consumption during the 19th period, a decline in investment growth, a decline in exports, and a decline in MSMEs. UMKM has become the worst-hit sector due to covid-19, even though UMKM is the leading sector in economic growth.

2.2. E-commerce and mobile commerce
The development of technology has a great impact on human life, including in business matters. Currently, almost all business activities have been carried out by utilizing technology, both in whole and in part. Businesses cannot leave technology in developing business, inevitably businesses must utilize technology. This development then gave rise to a term called e-business in which businesses not only used technology as a tool but also used the internet as a means. The internet is used in every business transaction, from making business strategies to buying and selling products. In its development the
emergence of e-business then gave rise to various other facilities that facilitate business with the use of the internet.

E-commerce is one of the impacts that occur due to the development of the world of technology, in this case business transactions. Initially it must be done face to face between the seller and the buyer, through e-commerce can be done by utilizing computers and the internet. The development of technology then also made this form of e-commerce develop into mobile commerce. That is a simpler form of e-commerce, because through mobile commerce business transactions can be accessed through mobile devices which are now always an inseparable part of humans. Consumers spend more time online purchasing via mobile devices than computers [5]. This is due to the use of the internet today which can be accessed through mobile devices not just computers. Because of practical reasons humans more often access cellular devices than computers.

The use of mobile applications allows consumers to search for products, categories, and brands which are then compared before making a purchase using a mobile device [6]. Here are some of the advantages of e-commerce and mobile commerce that make consumers make transactions:

1. Can be used anywhere connected to the internet
2. Allows to conduct transactions between countries
3. Using international standards
4. Easy to provide feedback during the transaction
5. Information on more diverse products that can be in the form of photos or videos

The use of e-commerce and mobile commerce is considered to have various conveniences that make consumers comfortable doing transactions online. Consumers are given various alternative choices according to their needs, then can do a comparison in a short time. This results in convenience to foster customer confidence [7].

Besides the development of technology makes the development of e-commerce and mobile commerce even higher. Currently, the use of e-commerce and mobile commerce is considered to be able to provide comfort and convenience in transactions carried out by consumers. Ease of transaction provides a pleasant experience for consumers which is then used as an excuse to become a new shopping habit. This shopping experience then becomes a trend that continues, even in covid-19 conditions this trend becomes the first and only choice that can be done from inside the house.

3. Methodology
This article was created using the library research method based on published literature. Library research is research that utilizes literature to obtain preliminary data to conclusions. The literature used is in the form of journals, books, and data found on the internet in accordance with the topic of the use of e-commerce and mobile commerce during covid-19. Data obtained through various books, journals, and the internet are then read and analyzed to draw conclusions written in this article included government direction and policy.

4. Result and Discussion
WHO's call for social distancing as a precaution to prevent the spread of covid-19 was also implemented in Indonesia. As the population of Indonesia continues to become infected with policies made by the Indonesian government regarding social distancing, it is becoming more assertive. Initially only started by educational institutions that carry out all teaching and learning activities at home. Then with a high level of distribution the government made a policy called the PSBB (Large-Scale Social Restrictions) in some areas. With the implementation of the PSBB policy, almost all activities must be carried out from home, including work.

Doing all the activities from home does not mean that it inhibits people from meeting their basic needs. By utilizing e-commerce and mobile commerce, people start shopping online. Almost all the necessities of life began to be available in e-commerce and mobile commerce, even some offline stores then made use of e-commerce and mobile commerce so as not to lose sales figures. The presence of e-commerce and mobile commerce helps people to continue to meet their needs even if they just stay at
home. The ease and variety of marketing strategies began to be carried out by various e-commerce and mobile commerce in Indonesia.

Several e-commerce and mobile commerce in Indonesia recorded an increase in transactions that occurred during covid-19. One e-commerce and mobile commerce that has increased is Shopee, visits and transactions that occur during covid-19 continue to experience significant changes [9]. Increased transactions can be found in almost all e-commerce and mobile commerce in Indonesia. With the necessity to carry out all activities from inside the house, it does not prevent the community from carrying out shopping activities. Figure 1.

![Figure 1. Impact of Covid-19 on e-Commerce](#)

This is also supported by various strategies carried out by e-commerce and mobile commerce to get increased transactions. From the observations made below are the strategies carried out by e-commerce and mobile commerce during covid-19:

4.1. Health products

Since covid-19 has infected Indonesian health products the prevention of covid-19 has become a product with high demand [13]. The high demand turned out to be used by product distributors to increase product prices resulting in the scarcity of certain products. The most sought-after products through e-commerce and mobile commerce are masks, hand sanitizers, vitamin C, even thermometers. Covid-19 prevention product purchases that occur in e-commerce and mobile commerce because in offline stores the product price is considered unreasonable. Meanwhile, e-commerce and mobile commerce are able to reduce prices through special prices or discounts so that the price of the product is more normal.

The reason for the reasonable price offered by e-commerce and mobile commerce is the high demand for health products. Besides that, the choices offered by e-commerce and mobile commerce are more diverse. So that consumers have a comparison of goods according to quality, price, or even brand. This makes it easier for customers to choose products in accordance with what is desired. The increase in demand for health products is also due to panic buying behavior by the community. The community thinks that by storing the sharing of health products related to the prevention of covid-19, the risk of infection is getting lower. Figure 2.
4.2. Products supporting work from home
WHO's call for social distancing has an impact on the implementation of work from home company policies. It turned out that work from home activities triggered customers to buy products supporting work from home. Products that have increased demand are computer accessories products. This is because work from home activities require the public to continue to be in front of the computer both to make reports and to conduct meetings. Thus the computer support accessories are needed for the convenience of work from home activities. So that consumer satisfaction becomes higher which results in the reappearance of demand through e-commerce and mobile commerce.

4.3. Food products
Appeals for the home turned out to have an impact on changes in people's food consumption. Activities that must be done at home make people start doing cooking activities that initially could not be done because they had to work. So that the demand for food is increasing to support cooking activities from home. Other food products that are affected at home are instant food products, with the most requests are instant noodles. Because of the high demand for food products e-commerce and mobile commerce put food products as product recommendations to consumers.

The PSBB policy also affected the closure of several traditional markets, while the community still needed fresh food. This is then utilized by e-commerce and mobile commerce in collaboration with supermarkets that provide fresh food. So that consumer choices in food products are not only instant, but there are also choices of fresh ingredients. From the description above it is known that covid-19 encourages transactions that occur in e-commerce and mobile commerce. Even e-commerce and mobile commerce are considered to be able to help the economic growth that has been affected by many economic activities that must be frustrated. Thus the public becomes more familiar with using e-commerce and mobile commerce which may become a trend that continues even until covid-19 is overcome. E-commerce and mobile commerce must be able to take advantage of this momentum to increase the number of existing customers to become loyal customers and add new customers formed due to conditions that are very likely to be obtained so that it becomes one of the company's strategies to competitive advantage in the era of the industrial revolution 4.0 at this time.
5. Conclusion
Pandemic Covid-19 from the socioeconomic side has changed people's behavior in the shopping activities of people who originally shopped conventionally or offline, to shop online through various entities providing e-commerce and mobile commerce services. This is possible because each individual has a shopping model platform through e-commerce and mobile commerce communities and has the capacity and competence in the use of these tools even though only doing activities from home. E-commerce and mobile marketing provide a lot of convenience and comfort for customers to get the desired product during the covid-19 pandemic. Even e-commerce and mobile commerce use the co-19 pandemic issues to get increased transactions by conducting free shipping promos, discounting products for basic needs and health, and updating information about covid-19. In addition, there is a change in customer motives for online shopping, which at first was a desire to become a necessity because of Covid-19. So it is understandable that the highest demand from the public at the time of the Covid-19 pandemic was for products that are directly related to health, work support products when done from home, and supplementary food products.

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