

## THE EXAMINED OF THE INFLUENCE OF COVID-19 ON E-COMMERCE AND CONSUMER BEHAVIOUR: A STUDY ON TURKEY<sup>1</sup>

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### ÖZET

*İnsanlık tarihinde pandemiler, geçmişten günümüze büyük değişimler meydana getirmiştir. Yakın tarihte gerçekleşen en büyük pandemi, Çin Halk Cumhuriyeti'nin Wuhan kentinde ortaya çıktığı düşünülen Koronavirüs (Covid-19) salgınıdır. Covid-19 pandemisinin getirdiği olumsuz etkinin ne kadar süreceği tam olarak bilinmemektedir. Bu bilinmezlik içerisinde birçok ülkede tedbir amaçlı getirilen kısıtlamalar sebebiyle birçok alanda olduğu gibi tüketici davranışlarında da bir takım değişimlere neden olmuştur. Bu çalışmanın amacı, Covid-19 pandemisinin e-ticaret sektöründe tüketici davranışlarında nasıl bir değişim yarattığını tespit etmektir. Çalışma nitel araştırma yöntemlerinden literatür taraması şeklinde yapılırken burada, literatürde pekte rastlanmayan ve birçok alanla bağlantılı şekilde yorumlama olanağı sağlayan PESTE analiz yöntemi kullanılmıştır. Sonuç olarak, salgın sırasında sağlık, hijyen ve kişisel bakım ürünlerine olan talep artmıştır. Öte yandan giyim, aksesuar ve lüks tüketim ürünlerinin talebinde ise azalma meydana gelmiştir. PESTE analizinin sonucuna bakıldığında pandeminin politik, ekonomik, sosyolojik, teknolojik ve ekolojik davranışları geliştirdiği/değiştirdiği gözlemlenmiştir.*

### ABSTRACT

*Pandemics in human history have brought about great changes from the past to the present. The most serious outbreak in recent history is Coronavirus (Covid-19), which is thought to have started in Wuhan, People's Republic of China. How long the negative effects of the Covid-19 pandemic will last is unknown. In this obscurity, some changes have been observed in customer behaviour as well as several areas due to the precautionary restrictions in many countries. This study aims to identify what kind of changes the Covid-19 pandemic has caused in e-commerce and customer behaviour. While the study was conducted with a literature review, one of the qualitative research techniques, PESTE Analysis which is rare in literature and provides the opportunity to evaluate the results in an interdisciplinary manner was also used. As a result, has increased demand for health, hygiene and personal care products during the pandemic. On the other hand, demand for several services such as travel and entertainment has decreased. When we look at the result of the PESTE analysis, Pandemic has been observed to develop/change political, economic, sociological, technological, and ecological behaviours.*

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## 1. INTRODUCTION

Pandemics have always brought about great changes in human history. The largest outbreak seen in recent history is Coronavirus (Covid-19), which is thought to start in Wuhan, People's Republic of China. How long the negative effects of Covid-19 pandemic will last is unknown. Within this obscurity, the precautionary restrictions imposed by several countries have resulted in changes in consumer behaviour. Decision making and purchasing attitudes of all consumers all over the World have passed through a profound change during the Pandemic. Individuals tend to postpone purchasing something for the sake of self-protection. This attitude is believed to have increased the demand for food, health and hygiene products and stockpiling.

Individuals are apt to avoid being in crowds so that they can reduce the risk of infection. This anxiety leads to a negative impact on consumption needs (Del Rio et al., 2020: 103). The sector is facing restrictions due to the Pandemic. While the challenging conditions resulting from the Pandemic cause several enterprises to shut down, the economic uncertainty evokes various anxieties among consumers. Curfew restrictions and mandatory quarantine practices increase individual's time spent at home for a compulsory reason. Consumers are turning to online shopping with the obligations brought by the pandemic process. This, in return, it can be stated that the e-commerce market has helped to gain great momentum during the pandemic process.

Several studies on the influence of Covid-19 on consumer behaviour are available in literature (Addo et al, 2020; Aydın and Doğan, 2020; Çakıroğlu et al., 2020; Çevik and Tekin, 2020; Duygun and Şen, 2020; Güven, 2020; İnce and Tor Kadioğlu, 2020;

Kirk and Rifkin, 2020; Özkan, 2020; Sheth, 2020; Stanciu et al., 2020; Torun Kayabaşı, 2020; Zwanka and Buff, 2021).

The aim of this study is to determine the influence of Covid-19 on e-commerce and consumer behaviour. The research method is literature review consisting of primary and secondary sources. Moreover, consumer behaviour is analysed with PESTE which was developed by Aguilar (1967). We believe that this analysis will fill an important gap in the literature and will contribute to the literature.

## 2. E-COMMERCE

According to the definition of World Trade Organization (WTO), e-commerce can be defined as "production, distribution, marketing, sale and delivery of goods and services through electronic means" (WTO, 1998). Today, e-commerce enterprises are improving their technological infrastructure to meet the needs of the customers. A fast digitalization has taken place in our country and all over the World with the effect of COVID-19 pandemic (Local data, 2020). With the widespread use of Internet and the increase in the number of mobile devices, various payment options and improvements in product delivery have appeared, which forms the basis for the rapid escalation in e-commerce.

E-commerce is widely preferred by all segments of the society thanks to the facilities it provides compared to traditional commerce. The main reason for this preference is that e-commerce is instantly accessible and online. E-commerce is used in most areas of economic life owing to its features (Gökmen, 2019: 30). Traditional commerce and e-commerce differ from each other in many ways. In traditional commerce, the other important thing spent is time besides money. Apart from that, there are several other differences which are given in the Table 1. below.

**Table 1.** The Differences between Traditional Commerce and E-Commerce

	<b>Traditional Commerce</b>	<b>E-Commerce</b>
Shopping Speed	Might cause waste of time	Faster
Information Gathering Method	Magazines, catalogs, advertisements	Web Sites
Payment	Via Bank/cash	Internet Banking
Transactions (price research, shipping)	Has to be written	Via the Internet
Sales Representative	Needed more	Needed fewer

**Resource:** Yılmaz and Bayram, 2020: 39.

There are 8 different methods for an e-commerce activity to take place (Gugu, 2020). These are; from business to business, from business to consumer, from consumer to consumer, from business to government, from consumer to government, from consumer to business, from government to business and from government to consumer.

**Business to Business (B2B) E-Commerce:** It is the commerce conducted between two businesses. The businesses might obtain the raw material or intermediate goods they need to produce goods from another business and they can do this through e-commerce. The firms can carry out many transactions online such as ordering from the supplier, production of the product, payment of invoices, sales, shipping and after-sales support (Bozkurt, 2000: 6). “alibaba.com” can be given as example of the world’s largest B2B e-commerce platform.

**Business to Consumer (B2C) E-Commerce:** It is the most common e-commerce method. The sales are made by offering products and services to the consumers via the Internet. “Hepsiburada.com, biletix.com, trendyol.com, yemeksepeti.com, amazon.com” are examples of B2C e-commerce platforms.

**Consumer to Consumer (C2C) E-Commerce:** In this commerce model, consumers generally sell second-hand products or their own products and services through intermediary firms (Zerenler, 2013: 93). The most popular e-commerce site throughout the

World is “ebay.com”. “Gittigidiyor.com, sahibinden.com” can also be given as examples to large C2C sites making second-hand sales.

**Business to Government (B2G) E-Commerce:** Commercial transactions between businesses and public administrations, customs procedures, social security, taxes and announcements on public tenders can be given as example to B2G e-commerce practices (Erdağ and Batuman, 2006: 10).

**Consumer to Government (C2G) E-Commerce:** This e-commerce method is based on consumers’ carrying out their transactions with the State via the Internet. The operations between consumers and the State such as tax payment, insurance operations, legal operations are conducted online (Erdağ and Batuman, 2006: 11). Student Selection and Placement Center (SSPC) transactions, ID and passport operations can be given as example.

**Consumer to Business (C2B) E-Commerce:** This model includes customers offering the companies for the products or services that they sell and companies responding to the customers after evaluating the offer. Plane tickets and hotel reservations are commonly used examples (Gugu, 2020: 27).

**Government to Business (G2B) E-Commerce:** In this e-commerce method, state administrations offer several services to the businesses. Business agreements are provided with tender and similar methods. Eximbank loans given for export and import purposes, government supports given to the

businesses, corporate taxes and similar services can be given as examples (Gugu, 2020: 28).

Government to Consumer (G2C) E-Commerce: This e-commerce model includes products and services provided by state administrations for the customers. Operations such as motor vehicle and real-estate payments can be mentioned as examples (Gugu, 2020: 28).

### 2.1. E-Commerce during Covid-19 Pandemic

While COVID-19 pandemic influenced several sectors negatively, certain e-commerce enterprises have been affected positively. E-commerce has gained a great momentum due to some reasons including individuals' avoiding physical contact and curfew restrictions whereas traditional commerce has started to look for ways to cope with these changes. Retail sector has been one of the most affected sectors by the Pandemic due to curfew restrictions and slowdown in the supply chain.

**Table 2.** Sectors Gaining Momentum in E-Commerce in the First Six-Month Period in 2019-2020

Increasing Sectors	Rate of Increase (%)
Food – Supermarket	434%
Software	116%
Housing – Gardening	95%
Domestic Appliances	90%
Electronics	58%
Clothing	45%

**Resource:** (E-Commerce Information Platform, 2020)

E-Commerce data related to the first 6-month period in 2019 and 2020 can be found in Table 2. The biggest increase was seen in the food sector

(434%) during the Pandemic. We can conclude that the Pandemic has affected food, housing-gardening, domestic appliances, electronics and clothing sectors positively.

**Table 3.** E-Commerce Sectors Losing Momentum in the first Six-Month Period in 2019-2020

Decreasing Sectors	The rate of Decrease (%)
Travel	51%
Airlines	42%
Accommodation	42%
Recreation – Art	24%
Car-Rental	10%

**Resource:** E-Commerce Information Platform, 2020.

E-Commerce data related to the first 6-month period in 2019 and 2020 can be found in Table 3. The biggest decrease has been seen in travel sector (51%). The car-rental industry had the minimum damage. So, we can conclude that the pandemic affected travel, airlines, accommodation, recreation-art and car-rental sectors negatively.

### 3.CONSUMER BEHAVIOUR

Individuals are in need of consumption in many areas from food to clothing, from place to time, from service to values. In this context; consumer behaviour can be defined as “everything that consumers do to satisfy their wishes and needs” or “all types of behaviour that consumers exhibit

during purchasing” (İslamoğlu and Altunışık, 2013: 8-9).

When the concept of need is evaluated under marketing notion, it is seen that there are five different types of need. These are; determined and defined needs, vital needs, undefined needs, hedonic needs and hidden needs (Korkmaz et al., 2009: 25). The form of these needs shaped by personality and culture is called wish. Two different people from two different culture both feel hunger, but they might crave for different foods. That is why understanding the needs and wishes of the customers is of vital importance in identifying consumer behaviour (Kotler and Armstrong, 2018: 6). The psychological factors, socio-cultural factors and demographic factors have a deep impact on consumer behaviour (Yürük, 2010: 161).

### **3.1. The Factors Affecting Consumer Behaviour**

Kotler and Armstrong (2018: 143) classify consumer behaviour according to cultural, social, personal and psychological factors.

Cultural factors; the main determinant of consumer's wishes is culture. Culture is defined as the mixture of customs, traditions, beliefs, attitudes, morality, art, behaviour and symbols shared in the society. Since most of our activities in our daily lives are affected by our cultural values, so are our purchasing decisions (Mucuk, 2014: 76).

Social factors; the reference groups like family, roles and social status affecting consumer behaviour are evaluated under social factors (Korkmaz et al., 2009: 255). Reference groups are the communities which influence the point of view, thoughts and behaviour of consumers. These communities might be composed of one's family or the groups in his close surrounding as well as the groups he does not know at all.

Personal factors; these factors are age, life style, economic opportunities, personality type and occupation (Durmaz et al., 2011: 118). Luxury and expensive brands maintain their value in the eye of their target audience by repositioning, design and pricing, especially in the time of economic

recession. The occupation of the individual is influential on the consumer behaviour as it is closely related to his economic condition.

Psychological factors; these factors are defined as motivation, learning, perception, belief and attitude (İslamoğlu and Altunışık, 2013: 35). These motives that activate the consumers are expressed by many researchers with different aspects. The most widely accepted of these is Maslow's hierarchy of needs (Tekin, 2009: 91). According to Maslow (1943: 4-10), people generally meet their physiological, safety, love and belonging, esteem and self-actualization needs respectively.

### **3.2. Literature Review: The Changes in Consumer Behaviour During Covid-19 Pandemic**

Consumer's behaviour has changed very rapidly during Covid-19 Pandemic. In many research done, it was stated that some product groups have been positively affected besides the increasing demand on food products. The individuals who already have arisen one TV and a computer in their homes needed to buy an extra TV and computer so that their children could have an easy access to the online lessons after the transition to the distance education in schools. As a result of the curfew restrictions announced by the government and the cessation of some workplaces, it was seen that there was a great demand for personal hygiene products such as hair cutting and shaving equipment and hair dye (E-commerce data has been interpreted by authors).

Nguyen et al. (2020: 6), searched the effects of the Pandemic on the intention of the consumers of purchasing e-books. As a result of the research, it was highlighted that the Pandemic had a positive effect on consumers' intention of buying e-books. With the effect of the Pandemic, consumers purchased e-books through online means rather than going to the shops.

During COVID-19 Pandemic, consumers have had to spend time at home for a long time owing to the restrictions. This period has resulted in several behavioural changes for the sake of obeying rules and avoiding the risk of infection. These changes

mostly stem from the product they have bought and the means of shopping. Consumers have largely tended to purchase their basic and vital needs through online shopping means. In the studies related to the field (Danışmaz, 2020; He and Harris, 2020; Knotek et al., 2020), it has been seen that most of the products bought are chiefly food, health and hygiene products. On the other hand, the sectors like housing, automotive and etc. have been negatively affected. During the Pandemic, although consumers have limited their purchasing preferences to local markets, sales points and products, the production in this areas has decreased (He and Harris, 2020: 180).

Wetter et al. (2020), in the study they conducted, confirmed that the consumers in Italy bought food more than expected during the Pandemic. It was stressed that the stocks reached the point of exhaustion on 16 March.

Goddard (2020) examined the impacts of the Pandemic on food retailing and services in Canada. He stated that there was an increase in the markets' product delivery and online sales during the Pandemic period.

Permanent changes are expected in consumers' online food purchasing habits. For online grocery shopping, it is necessary to create distribution networks through distribution centers, integrate with physical stores and expand geographic access. Owing to this situation, it is thought that small-scale enterprises cannot compete against large chain stores. (Richards and Rickard, 2020: 6)

Wen et al. (2020: 7) examined the impact of Covid-19 pandemic on the life style and travel of Chinese people. Chinese consumers traveled with small groups because of the pandemic conditions. It was also observed that they preferred visiting isolated places to well-known places. The abundance and quality of the medical facilities in tourism destinations will strenghten the image of the destination.

The behavioural changes observed during Covid-19 pandemic period are listed below (Zwanka and Buff, 2021: 61-65):

- Because of the possibility of another outbreak due to the lack of sufficient information from China, production of basic goods and services have continued within the borders of China.

- Consumers have started to embrace the notion of stocking. In this period, most of the orders have been given online. There has been an increase in the demand for the products with long shelf life and medical supplies, especially like disinfectants, masks and gloves. The main factor behind the increase in online shopping has been the belief of fewer contacts with the product.

- Interpersonal interaction styles have also changed. In particular, the isolation preferences of the individuals, maintaining the interaction with smaller and more intimate circle of friends, increased awareness on the presence of the virus in public areas, having fun at home, and not going to the concerts or gyms are the determining factors in these interaction changes.

- The reputation of teachers, shop assistants, owners of small-scale enterprises and especially health workers has increased.

- The policies implemented by the government during this period, transparency and crises management methods have affected the public's trust in the government.

- The consumers who want to experience their touristic visits face-to-face have had these experiences through virtual reality.

- The fact that restaurants and cafes have been closed for a long time has increased the habit of consumers to cook at home.

- Consumers have been offered various loan opportunities with low interest rates and increasing maturity options.

- Long-term psychographic changes in beliefs have occurred. In other words, people have started to embrace spirituality.

#### **4.METODOLOHY**

In this study was used PESTE analysis that developed by Aguilar (1967). This analysis has entered the literature as PEST and examines

political, economic, social and technological factors (Ho, 2014: 6480-6481; Koumparoulis, 2013). Johnson et al. (2009) used this analysis in a broader framework called the PESTEL analysis. PEST analysis is a powerful and widely used tool for understanding strategic risk. Defines the changes and effects of the external macro-environment (Sammut-Bonnici and Galea, 2015). Also, it is used in different forms in the literature. Many areas can be added to the PEST analysis depending on the area to be investigated. Since the effect of the pandemic examined in this study, ecology was also added to this analysis and refined as PESTE.

#### 4.1. Interpretation of Changes in Consumer Behaviour During the Covid-19 Pandemic Period with PESTE Analysis

Online experience gained by consumers during the Covid-19 Pandemic period will have a long-term impact on online shopping, e-learning, digital payments, examination services via phone, and mobile entertainment. Basic technologies which are thought to gain momentum are artificial intelligence, machine learning, the internet of objects, location and navigation technologies, artificial reality, drone technology, robots, cloud and entertainment technologies (Elavarasan and Pugazhendhi, 2020: 15). Treatment via phone, working from home and distance learning can be given as examples of innovation brought by advanced technology (Yang et al., 2020: 2). These technological and innovative products generally facilitate the daily work of consumers (Javaid et al., 2020: 420).

**Table 4.** The Analysis of the Impact of Covid-19 on Consumer Behaviour with PESTE Analysis

Political Behaviour	Economic Behaviour	Sociological Behaviour	Technological Behaviour	Ecological Behaviour
<ul style="list-style-type: none"> <li>• Restrictions on common public places</li> <li>• Obligation to wear a mask</li> <li>• The rule of maintaining social distance</li> </ul>	<ul style="list-style-type: none"> <li>• Inflation</li> <li>• Savings</li> <li>• Stocking</li> <li>• Innovative behaviour in E-Commerce</li> </ul>	<ul style="list-style-type: none"> <li>• Establishment of social support groups</li> <li>• Restrictions of home visits</li> <li>• Restrictions of collective commemorations like funeral, wedding and etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Regulations on teleworking and distance learning</li> <li>• Digitalization               <ol style="list-style-type: none"> <li>1-Use of digital tools</li> <li>2-Use of digital currency</li> </ol> </li> <li>• E- security</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in medical waste</li> <li>• Increase in water consumption</li> <li>• Decrease in carbon emission</li> </ul>

**Resource:** Collated by the authors.

Restrictions on Common Public Places: With the published circular, smoking is banned at bus stops, in front of public buildings and etc, and administrative fines and sanctions are imposed. This can be seen as a deterrent factor in cigarette buying behaviour of consumers.

Obligation to wear a mask: With the published circular, the obligation to wear a mask both in open and closed places have been introduced. That is why there has been an enormous increase in the demand for masks by consumers.

The rule of maintaining social distance: The rule of maintaining social distance in public transportation vehicles, and all open and closed places has resulted in changes in consumer behaviour. Cafeterias, restaurants and recreation centers have been negatively affected by these restrictions. Takeaway service has been widespread.

Inflation: Inflation is in a downward trend in developed and developing countries due to the decrease in demand during the pandemic period. However, it is just the opposite in Turkey. The main reason for the increase in inflation is that most of

the needed goods and services are exported from abroad (Nar, 2020: 370).

**Savings:** Lyhagen, in his study, concluded that uncertainty for the next period has reduced the consumption behaviour of consumers and increased their savings (Aydoğan, 2020: 68). Since the feelings of anxiety and concern caused by Covid-19 pandemic in consumers have led them to feel obliged to do make savings, consumers' spending has seriously decreased and this negatively affected the economic activities of good and service producers, suppliers, and sellers (Kartal and Şentürk, 2020: 164).

**Stocking:** A consumer might feel the need to buy a product whose price he believes to increase excessively to stock if he feels negativity in the general structure of the economy and has anxiety about his future (Özden, 2007: 28). Baker et al. (2000: 11) examined the household expenditures in America during the pandemic period. It was determined that the consumers tended to stock products of food, health and hygiene. With this stocking attitude, there were sudden increases in demand on retailing sector. Rude (2020: 2) examined the impact of Covid-19 pandemic on the meat industry in Canada. It was observed that the consumers bought meat at a level that will empty almost all meat sections, supposing that they would remain in quarantine in the future. Gerhold (2020: 8) studied the risk perception of German population and their methods of dealing with Covid-19. 1242 people participated in the study. 14% of the participants stated that they stocked a large amount of durable food (pasta, rice, regumes, canned food etc.) due to the Pandemic. Long and Khoi (2020: 6), in their study conducted in Vietnam, determined that there was a positive correlation between the risk perception of the consumers and their tendency to stock up on food during the pandemic process.

**Innovative Behaviour in E-Commerce:** The emergence of individual and social changes as a result of the current pandemic crises seems to be possible. Consumers will vary their interaction patterns. Lots of companies have developed "contactless delivery" method during the Covid-19

pandemic. Consumers take their orders left at the door without coming face-to-face with the courier. It can be thought that this ordering method will be permanent after the Pandemic as well.

In this period, as consumers turned to online shopping, they learned how to use and download many online applications. While the pandemic made the consumers embrace the innovations in manufacturing industry (market and food sectors), it also caused small enterprises to improve in online shopping and provision of courier service. Online market and food shopping which can be considered as the creative destruction theory of Schumpeter (1934) and an example of innovation, accelerated with the effect of Covid-19. Based on this situation, it can be claimed that the Pandemic increased the effects and acceptance of the innovations and pushed the manufacturers to adapt to the changes. As a result, it has been observed that the pandemic is also a compelling factor for the formation of innovation. It is obvious that small markets and cafeterias will not be able to withstand this process unless they are integrated into the online shopping.

**Establishing Social Support Groups:** A curfew has been imposed so as to protect the individuals at the age of 65 and over and the ones with underlying chronic diseases from the Pandemic. "Vefa Sosyal Destek Grubu" was established to meet the needs of the elderly who have difficulty in meeting their basic needs due to the ban and the households with chronic diseases or the individuals they are responsible for. With "Vefa Sosyal Destek Grubu" application, the daily needs of individuals with disabilities, the elderly and the ones with chronic diseases are met as well as some hygiene materials such as cologne, disinfectants and masks (Bilge, 2020: 109). Some members of non-governmental organizations and public employees voluntarily participate in the activities of "Vefa Sosyal Destek Grubu" and deliver their needs to the elderly (Gencer, 2020: 39).

**Digitalization:** Elavarasan and Pugazhendhi (2020) state that these adopted technological changes will have an effect on life styles and working arrangements in near future. This situation might cause the consumers to adopt to various life styles over the years. During and after the pandemic

period, there might be a tendency in consumer behaviour to healthy life, online education, online shopping and digitalization.

- The Use of Digital Currency: Consumers have avoided direct contact with sellers and suppliers during Covid-19 pandemic. Therefore, the use of electronic payment tools have been widespread rather than the use of paper money which might facilitate the spread of the virus (Widayat and Arifin, 2020: 43). In this period, there has been an increase in the preference or use of cryptocurrency as well as credit cards. It is stated that the use of cryptocurrencies and transactions as a payment method positively affects the intention of consumers to shop (Çapar, 2020). In this period, there has been an increase in the preference or use of cryptocurrency as well as credit cards.

- The Use of Digital Tools: The use of various online platforms such as Zoom, WebEx, Adobe connect, Skype, FaceTime and Loom has increased (Zwanka and Buff, 2021: 62).

E-Security: Offline activities are carried out online during Covid-19 period owing to the restrictions. During these online activities, digital records about the consumers have been collected. Such sensitive data might be used by various institutions in unexpected situations and times (Brough and Martin, 2020: 1). This increases the concerns of the consumers about online shopping. It can be said that "Personal Data Protection Law (KVKK)" applied in our country is of great importance in terms of the protection of the rights of consumers.

Remote Work and Education Regulations: It is possible that distance learning might result in decrease in quality and inequality of opportunity in education (Sharma, 2020). During the Pandemic period, the demand for working from home by employees has increased. Moreover, the cost of transportation and the time spent commuting have decreased. The employees have used this time efficiently. This situation has increased the work life (Zwanka and Buff, 2021: 62).

Increase in Medical Waste: According to some research, 200 tons of medical waste is generated daily in China. Besides, it has been stated that 467

thousand garbage collection workers are at risk of infectious diseases due to the increase in medical waste (Özdoğan, 2020).

Increase in Water Consumption: During the pandemic period, the prolongation of stay at home and the increasing needs of hygiene and cleaning have raised water consumption. For instance, general water consumption has increased by 14% while the household water consumption has increased by 30% (Türetken, 2020).

Reduction in Carbon Emission: Reduction in greenhouse gas emissions has been identified because of the rapid decrease in travel and economic activities. Consumers have traveled less during this period. Moreover, the increase in tendency to work from home has caused reduction (25%) in carbon emissions (Özdoğan, 2020).

## 5. RESULTS AND RECOMMENDATIONS

It is seen that global spread of hygiene rules, increased sensitivity towards nature, calming the consumption frenzy make nature breathe. In this aspect, there are positive effects on global goods as externality. The benefit or harm between the increase in medical waste and the reduction of waste disposed in nature is not clearly known. If carbon emission is taken as a reference, it is obvious that Covid-19 is environmentally-friendly.

Many measures like curfew restrictions, quarantine at home, closing schools, banning sport competitions, closing work places, closing international border crossings are implemented both in our country and all around the World within the scope of fighting with the pandemic. Most of the sectors, from tourism to education, agriculture to energy, civil aviation to finance institutions have been affected negatively. The measures taken have socio-cultural, economic and psychological implications. According to the estimates of International Labor Organization (ILO), it is estimated that 5-25 million people will be unemployed at the end of this process. The increase in emotions like restlessness, fatigue, exhaustion, loneliness, fear and anxiety in many individuals will cause psychological problems. Uncertainty and economic conditions seem to be the main factor

behind these problems. On the other hand, the process of working from home will accelerate digitalization of the world. In addition to this situation, it is expected that there will be many changes in the consumption habits of the consumers with the Pandemic process that the society has been in and affected recently.

Consumers have done shopping online during Covid-19 process. The fact that the consumers have preferred doing shopping through online platforms has led to an increase in the volume of e-commerce. The reasons why consumers have preferred e-commerce are listed below:

- Can be done practically without leaving home
- Can save time
- Web sites having easy interfaces
- Availability of many alternative products
- More campaigns, promotions and discounts
- Maintaining social distance
- Contactless payment options

During the Pandemic, it is thought that companies' integrating institutional social responsibility programs into their agenda during the Pandemic might be appreciated by consumers. According to He and Harris (2020), consumers will admire the companies helping their employees by donating equipment and money during the crises. In this context, the bond formed between companies and consumers will probably be strong and permanent. In the study conducted by Wen et al. (2020), it is anticipated that there will be differences in consumers' travel preferences. That consumers take precautions for hygiene and security during this period might lead to changes in their travel preferences. On the other hand, the factors like sanitation conditions, provision of hygienic foods and effective health infrastructure will be the criteria for the consumers while selecting the places to accommodate. That is why it will be vital for the accommodation facilities to adopt communication strategies that will emphasize these factors. It is thought that companies providing product variety in their websites, offering diverse campaigns and

promotions to their customers will affect purchasing decisions of the consumers.

That the demand for e-commerce boomed during the Pandemic required the companies operating in this direction to give importance to cyber security, radical innovation and digitalization. Crises like pandemics not only increase the impact of innovations with creative destructive effect but also ensures the adoption of such innovations. That the firms directing R&D budget to the developing innovations and the Pandemic indicates that innovations will be rewarded faster. The changes taking place during the Pandemic are thought to be permanent. It is predicted that some behaviours, especially behavioural changes in consumption will be inherited.

At the end of this study, recommendations for researchers and practitioners are stated in items:

- Businesses can be prepared for new disasters and pandemics in terms of workforce and production capacity.
- Businesses should prepare their strategic plans against new crises that may occur. Long-term plans should be made besides short-term ones. These plans should generally be for the moments of crises.
- Enterprises, especially private educational institutions, can strengthen their technological infrastructure by investing more in digitalization.
- Consumers can pay attention not to share their personal information concerning Personal Data Protection Law with other institutions and investments can be made for new cyber security. In this way, the cyber incidents can be prevented so that the consumers won't lose their trust.
- Some comprehensive research can be done on both shrinking and growing sectors.
- The impact of the pandemic on consumer behaviour can be examined with different research methods.

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