
The Effect of Digitalization on Food Purchasing Preferences: A Study on the Impact of the COVID-19 Pandemic

Gökçe Öztürk, Yeni Yüzyıl University Vocational School, Turkey
Burak Öçlü, Istanbul Kultur University Vocational School, Turkey

According to Maslow's Hierarchy of Needs, food is one of the physiological needs. Therefore, food is one of the main needs that people need to survive. Due to the fact that physiological needs can be more severe as a stimulant, they may come to the fore in consumption preferences compared to other needs. When faced with a stronger stimulus than the previously conditioned stimulus in Pavlov's experiments on dogs, dogs forget the old stimulus. Therefore, this situation is interpreted in the field of consumer behavior. In times of crisis, people's desire to meet their physiological needs can be intensified. With the COVID-19 pandemic, people can force themselves to change their lifestyle. Survival emerges as a dominant stimulus. With the development of today's internet technologies, food purchasing on the internet has been made possible. Thus, consumers can consider the internet channel as an option in food purchasing. In our study, the effect and preferences of digitalization in food purchasing before and after COVID-19 are interpreted. 72 volunteers participated in the study. The structured interview method was used in the research and the results were interpreted. Even though consumers state that hygiene is at the forefront in their purchasing preferences, we see that price comparison maintains its strength in the factors that determine preference.

Foods can spoil after a certain date and become unusable. Therefore, consumption of foods within the usage dates is important for human health. Consumer awareness is created with expiry dates on food packages. Along with the agile supply chain practices, food manufacturers have included technologies in their production processes. Thus, it is possible to follow up to the last point where it will meet with the consumer, especially the production process of food with internet technologies. With the shortened shipping processes, the internet has become a tool in food shopping. Thus, products can be delivered to consumers within expiry dates or without being exposed to deterioration conditions.

The COVID-19 virus, which has been declared as a pandemic and affects millions of people around the world, has made consumers reassess their purchasing behavior. At this point, it is thought that food consumption, which is vital for humans, is affected. This study consists of four chapters. These are literature review, the effect of digitalization on food purchasing, material and method, results and discussion.

Literature Review

If we evaluate factors that have impact on online purchase intention, there are 15 main factors which is mentioned frequently. According to the number of citations, they are stated as follows: trust, perceived risk, attitude, subjective norms, personal innovativeness, satisfaction, perceived self-efficacy, perceived behavioral control, emotions, perceived price, perceived compatibility, web navigation ability, involvement, cognitive adoption, and perceived observability (Akar, Nasir, 2015, p .218-219). We see many factors that push consumers to purchase behavior on the internet. This of course makes it impossible to formulate consumer behavior. Another study conducted on stimulants that consumers are exposed to is the S-O-R model. The stimulus-organism-response (SOR) model explains that various environmental aspects can act as a stimulus (S) that influences an individual's internal state (O), which subsequently derives the individual's behavioral response (R) (Zhai, Wang, Ghani, 2019). The model was first considered in the retailing context by Robert and John (1982). The model also use for to test environmental effect in consumer behavior. There are like store environment, social factor, and fashion involvement. Hetharie, Surachman, Hussein & Puspaningrum (2019) I shows that there are two significant factors which are the store environment and emotional gratification to the impulsive buying of the customer.

As a external stimulant, COVID-19 pandemic also has effects on consumer behavior. People forced to change their

lifestyle to save their life. Since people saw the pandemic as a powerful stimulus, they took strict precautions and forgot the stimulants that were relatively weaker than them. A research was made by Accenture says that 64 percent of people think “I am fearful for my health.” On the other hand, it also shows that also 64 percent of people says “I am worried about the impact on my personal job security.” (Accenture, 2020). Home isolation application and reduce on social activities forced companies to re-organize their marketing concepts. (Stanciu, Radu, Sapira, Bratoveanu and Florea, 2020, pp. 5)

The Effect of Digitalization on Food Purchasing

Internet technologies have shaped the food industry as well as many other industries. With the increasing awareness of consumers about food products, first of all suppliers have started to integrate with digital tools. In this century, where information is spreading very rapidly, people can learn about an event happening anywhere in the world, as well as easily receive negative news about any business with social media tools. In the health-sensitive food sector, this situation manifests itself more critically. Sensitivity in food products that are in direct contact with the body has increased even more during the COVID-19 pandemic. For example; Many e-commerce companies in Turkey have started to provide “contactless delivery” options. Thus, people can access the food they need without coming into contact with another person. Internet tools that have developed with digitalization have provided a rapid integration at this point.

Depending on these developments, the trends in the food industry are as follows: “Regulatory constraints like safety, quality, labelling”, “The need for efficiency”, “The rise of e-commerce in the food and beverage industry”, “ERP e-commerce: Meet new demands with an existing tool” (Castillo, 2020). Before the pandemic, many physical food markets that did not provide home-service service or did not make sales on the internet are trying to integrate themselves into the process by creating a website. Among the factors that accelerate the process are the person limitation brought to the physical food markets and the reluctance of people to go to the food markets.

Material and Method

Our research was carried out in a contactless manner in accordance with the nature of the process. Internet tools were used in the implementation of the research. The structured interview method was chosen. 10 questions prepared and sent to volunteers between the ages of 18-24. It was stated that they freely answered the questions and there was no right or wrong answer. The answers of the questions were collected, categorized and evaluated. The research was

carried out on 72 participants.

Research questions are as follows:

1. Have you purchased any product on the internet before? If you purchased, please write the product group you bought last (example: Supermarket, Clothing, Sports Equipment etc.)
2. In 2019 (last year), did you shop for food online? If so, which sites did you use and which food products do you think you buy? Who does food purchasing in the house you live in?
3. Did you shop for food online in March 2020 and after? If so, what sites did you use and what do you think you purchased frequently?
4. Imagine that you are going to do a food shopping right now. Please write 5 products that come to your mind first.
5. How do you decide which site to buy from when shopping for food online? What do you pay attention to? Write as a consumer
6. Write below the price comparison of the 5 products you have chosen from the two websites of your choice.
7. Which payment method would you like to shop with?
8. Which site did you decide to shop from?
9. What do you want the company to pay attention to while meeting your needs in terms of the virus epidemic of the website. Please write in detail if you have problems. Although there is no virus pandemic, what do you expect from the website to shop from these sites?
10. Which website did you choose according to your list? What is the reason? “

The 8th and 10th questions were directed as control questions.

Results and Discussion

Participants stated that they frequently order clothing, personal care, accessory, sports equipment, supermarket, sneakers products via internet tools. Thus, we see that consumers already have internet shopping experiences in certain product groups.

Food purchasing decisions in the houses where the participants live are mostly made by their parents. The main

factor in this situation is that the participants are still university students and live with their families.

Snacks, desserts, fruits, vegetables, pulses stand out in food-specific orders. At this point, we see that food orders are given for two main purposes. The first is to order ready-to-eat meals directly from restaurants, the other is to order food to be used as an input for home cooking.

Question number 5 which is “How do you decide which site to buy from when shopping for food online? What do you pay attention to?” state participants’ choices. Some of the prominent answers are as follows.

- I use web-sites that are more popular and that I have used at least once before and that I am satisfied with.
- I attach importance to being economical and reliable, as well as whether or not to give feedback in case of any problems and complaints.
- I pay attention to brand information when I do price research with other sites in terms of expiry date and price.
- I take customer satisfaction into consideration for the web-site's advertisements. I take care cleaning, the durable packing, the expiration date.
- While shopping online, price and fast transportation are important factors. In addition, the web-site's reliability and received good comments are also important factors.
- I prefer websites that have proven their reliability.
- We try to be careful not to shop for food from web-sites I have not heard of before.
- I expect the product to be packaged more carefully and hygienically than usual, to be disinfected and to leave a note that it has been disinfected, and the courier to comply with the social distance rules.

The websites used by the participants in food orders are stated as follows: getir.com, hepsiburda.com, migros.com.tr, istegelsin.com

Question number 9 which is “What do you want the company to pay attention to while meeting your needs in terms of the

virus epidemic of the website. Please write in detail if you have problems. Although there is no virus pandemic, what do you expect from the website to shop from these sites?” state participants expectation. Some of the prominent answers are as follows.

- I am careful not to shop during my pandemic period. However, before this period, it was more important that my orders were delivered to me quickly.
- I would like to pay attention to cleaning and hygiene rules.
- It is among my expectations that the price information is clearly specified, the cargo information and details are specified, and the confidentiality of the user information is ensured.
- I pay attention to the clean and tidy Packaging.
- In the pandemic period, strictness is very important. No matter how tidy and clean businesses are, we have to be very careful.
- Whether it is a pandemic or not, I would definitely prefer things to be done clean and tidy.
- It is enough that deliver my order with a mask and gloves.
- I expect my product to arrive fast. I want it to be contactless delivery. I care that it is properly packaged. But I would not use the product without disinfecting it.

Participants compared food products on the basis of price on two different websites they chose in lists of 5 products. Although price is still an important factor, if they know that they pay an acceptable fee difference for the products they will receive in the conditions they want, they can choose the expensive product. This situation has been an incentive for businesses that sell food on the internet to adjust according to customer expectations. Thus, companies know that their sales will increase if they meet customer expectations.

The food industry offers products that lead many health trends. The best known of these are organic and natural foods. Despite all this, consumers did not have to do much research while shopping for food. Consumers' encounter with a crisis has affected their behavior. The consumer, who collects more information through the tools offered by digitalization, has had to pay more attention to food purchasing during the pandemic.

References

Accenture. (2020). How COVID-19 will permanently change consumer behavior. COVID-19: What to do Now, What to do Next. Website:

Akar, E., Nazir V.A. (2015). A review of literature on consumers' online purchase intentions. *Journal of Customer Behaviour*, 14-3, 215-233

Castillo, D., 2020 trend outlook: E-commerce for the food and beverage industry. Sana-commerce. Website: <https://www.sana-commerce.com/blog/shorten-time-market-e-commerce-food-beverage-industry/>

Hetharie, J. A., Surachman, Hussein A.S., Puspaningrum, A. (2019). SOR (Stimulus-Organism-Response) Model Application In Observing The Influence Of Impulsive Buying On Consumer's Post-Purchase Regret. *International Journal Of Scientific & Technology Research*. 8-11, 2829-2841

<https://www.accenture.com/acnmedia/PDF-123/Accenture-COVID19-Pulse-Survey-Research-PoV.pdf>

Stanciu, S., Radu, R .I., Sapira, V., Bratoveanu, B.D., Florea, A.M. (2020) Consumer Behavior in Crisis Situations. Research on the Effects of COVID-19 in Romania. *Annals of "Dunarea de Jos" University of Galati Fascicle I. Economics and Applied Informatics*, 5-13

Zhai, X., Wang, M., Ghani U., (2019) The SOR (stimulus-organism-response) paradigm in online learning: an empirical study of students' knowledge hiding perceptions. *Interactive Learning Environments*. 28, 582-601.