

A User Study of E-commerce during the Covid-19 Pandemic

Anika Krishnan¹ and Kavana Ramesh[#]

¹The overlake High School, Redmond, WA, USA

[#]Advisor

ABSTRACT

Covid-19 has forced most people around us with access to the internet to begin shopping online. For some, it is the efficiency, and for others, it is the fear of the virus. Items that were rarely bought online, are now becoming a commodity for viewing online. Groceries and thrifted items are some examples. Most websites have increased traffic because of how prevalent shopping at online sites has become in the past year and a half. For this experimental study, I interviewed multiple people and deduced some central ideas about online shopping during and following the pandemic. I interviewed each person about their day to day lives and how online shopping has played a role in it during the pandemic. I recorded these responses and found surprising similarities between each person. Everyone that I interviewed said that they would continue online shopping after the pandemic. Most people found that the pandemic had been an “eye-opener”, in that, online shopping saved an astounding amount of time. Overall, buying things online has become somewhat of a habit for people during the pandemic.

Introduction

COVID-19 has impacted e-commerce throughout the world. COVID-19 served as an extreme accelerator to U.S. e-commerce growth, as it grew 10 years worth in just 3 months (Fastcompany). Because of this, customers are choosing to shop at home even though stores are open, due to the efficiency. Multiple businesses and commerce websites have facilitated new users during the pandemic. Some examples include: thredUP, Instacart, Amazon Fresh, Doordash, UberEats, Amazon, Home Depot, Etsy, etc. Being aware of what the pandemic has entailed for the online shopping world is incredibly important as it has caused multiple people to change their ways. What are the reasons for people sticking with online shopping? What are the reasons that online shopping is better? By interviewing multiple people, it is possible to gauge on a higher level what those of ages 15-60 are doing in terms of online shopping? More so, the trends shown during the pandemic in terms of online shopping can be used to determine what those who online-shopped during the pandemic will do, following it.

Description of the experiment

Experiment goals

In my experiment, I interviewed 15 people and asked each one of them a set of 11 questions (each one serving the purpose of determining the long-term effects of the pandemic in online shopping). The goal for the interview was to get an input on online shopping from individuals in a wide age range, to prove or disprove whether age made a difference in the impact that the pandemic made on online shopping. While I only had one goal, I believed that the qualitative data that I would collect from the interviews would be enough to make claims about online shopping during the pandemic.

Methods

Participants

15 interviewees were recruited to participate, mostly all warm contacts. The intent was to have participants who lived in different households explain to me, their different experiences with online shopping. Not only how they felt about it as a whole, but also how they felt the pandemic changed their views on it. My target population was anyone ages 15-60. There were no expectations for each of the interviewees. Some online-shopped very often, and others online-shopped infrequently, if at all. This gave diversity to my experiment and made it so that any results that came out of the study were not biased, and were in fact impacts of the pandemic.

Hypotheses

Being someone in the age range that I had chosen, I took a stab at what people might say in their interviews. I figured that a lot of people might enjoy shopping in person with their friends and family more than shopping while on their bed/desk, using an electronic screen. It was difficult to determine what those on the older side of the age range might say, as they might find it easier to shop online. I also figured that a lot of them might have discovered ways to do their regular shopping online, as stores had become unsafe.

Focal points

The focal points of these interview questions covered a wide range of topics including: Delayed packages, shopping habits, efficiency, trust, etc. The focal points are below:

1. What are things that people are shopping for online now, that they didn't before?
2. What are things that people are more likely to shop for online?
3. Why are people continuing to shop online even as more stores open?
4. What websites are most widely used?
5. Have packages been delayed?
 - a. Are they continuing to be delayed even after almost a year of the pandemic?
6. Do people have more trust in online shopping now?
 - a. What types of things do they have more trust in?
 - b. Why?

Questions

Participants were asked to answer a set of 11 questions (each with multiple parts), to the best of their ability. The set of interview questions is below:

1. How do you feel about shopping online? How often do you shop online?
 - Why do you like or not like to shop online?
2. Can you describe the types of things you typically buy online?
 - What criteria do you use before you shop for something online?
3. Can you describe the types of things you shop for online nowadays (during this year in a pandemic)?
 - Out of these, are there items you shop for now, that you really didn't shop for before the covid-19 pandemic?
 - Are there things you wouldn't want to shop for online? Why?
4. How often do you go to physical stores?
5. What kinds of things do you prefer to get in person? Rather than online?
 - Do you prefer online shopping to shopping in person? Why or why not?

- Do you find that shopping online is more convenient?
 - What kinds of things do you prefer to get in person?
6. What are your most used websites for online shopping?
 - Why are those your most used?
 - What do you like/trust about these sites?
 7. Have your packages been coming on time?
 - If they are delayed, then by how much time are they delayed
 8. What do you think you might do in terms of your shopping in the future without the pandemic?
 - Do you think that you will shop in person after the pandemic ends, or will you continue to shop online for everything.
 9. Have you discovered any new websites for shopping in the pandemic?
 10. How likely do you think you are to/ will you continue to use those new sites?
 11. How have you felt about the price of items during the pandemic?
 - Have you started to pay a lot more in your day-to-day shopping?
 - Why or why not?

Procedure

The experiment was conducted by one interviewer (me), and one participant per observation in an online meeting.

1. The participant was introduced to the experiment, the study, and the purpose. They were also asked for permission to record the interview.

2. Each participant was asked a set of 11 questions (See *Questions* section above).

Results

Quantitative Results

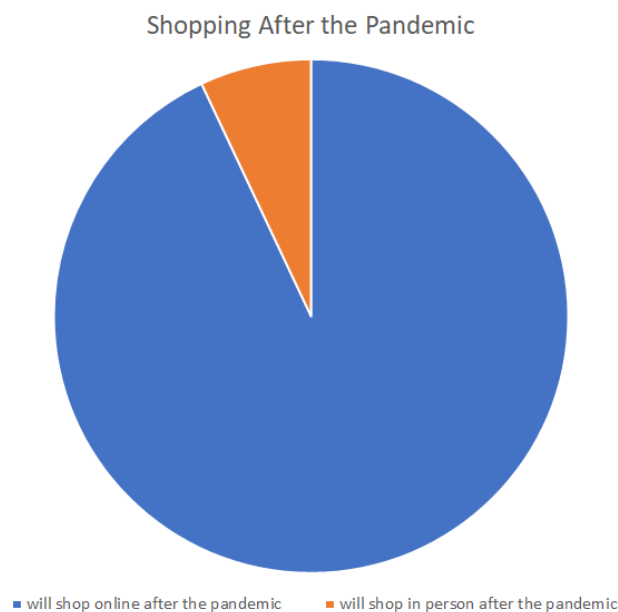


Figure 1: Shopping after the pandemic

The graph in Figure 1 above shows that 7.7 percent of interviewees decided to shop in person after the pandemic, but 93.3 percent of interviewees decided to continue shopping online (but not limited to). The percent shown shopping in person made it clear that they would, for the most part, stop shopping online.

Quantitative Results reporting

(for this section, the interviewee's initials are stated after the quotes in parentheses in MLA format)

Convenience and efficiency

Many people said that online shopping is extremely convenient but it is not a social activity. One interviewee said she might shop online "a little less," because she will "feel more comfortable going in person after COVID-19. However, online shopping is still very convenient, and (she) would order online a lot to save time (T.W.)." Another interviewee stated that she shops online "all the time, but never actually buys anything (S.W.)." Going to the mall requires a lot of time and effort for most people, so to go there just to window shop can be a waste of time. However, to window shop online takes a quick minute - open one's computer and go to a shopping website.

Amazon

One interviewee stated that she and her family "use amazon multiple times a week" (S.A.S.). Her family is one of many that have been buying from amazon. Amazon is being used by 115 million households in America (time.com). In addition, each month, over 197 million people open devices and use Amazon to buy goods (bigcommerce.com). Amazon sales and profit have skyrocketed and will continue to steadily increase, as, now, people are hooked onto their website. "9 out of 10 people price check their items on Amazon" (bigcommerce.com). Amazon has become somewhat of a necessity in most people's lives. Throughout the pandemic, Amazon gained 50 million Prime users. This proves not only the extreme growth in Amazon that took place during the pandemic, but, using Amazon as a blueprint, we can assume that most online businesses increased their profits during the pandemic.

New websites and social media

All 15 interviewees found new websites during the pandemic, and while some of them only found one, others found 10-30, which suggests that it was a universal experience. All 15 interviewees also said that they would continue to use these websites, which overall increases profit for small businesses. According to Fast Company, 75% of U.S. consumers have tried different stores, websites, or brands during this crisis. And out of that 75%, 60% of them expect to integrate the new brands and stores in their post-COVID-19 lives. Social Media has also advanced e-commerce by an abnormal amount. Instagram, Facebook(Meta), etc. have added shopping features in their apps. According to Fast Company, 17-28% of consumers are now purchasing from social media.

Clothing, the outlier

During the pandemic, most people have started to buy clothing online. This is the only thing that the majority of the interviewees said that they like buying in person. The reasons included: the correct sizing, varying size in different stores, sales, texture of the clothes can only be known in person, more fun to do with friends, etc. However, even though this was the case, during the lockdown, people were still forced to buy their clothing online since all malls were closed. So, sales still began to steadily rise in the clothing area.

Limitations

In this study, there could have been behavioral factors that I failed to take into account. The study design was only interviews with a set group of questions and interviewees. No followup questions off the list were asked (to keep consistency), and therefore, it made it hard to dive deep into why people answered the way they did.

Conclusions

Online shopping has become an efficient solution compared to spending 2-3 hours in stores shopping each week for the same items. The benefits of online shopping have been thoroughly expressed by each interviewee. Efficiency, saving money, different stores all on one computer, more variety, etc. are just some of them. Most people think that they will mostly shop online after the pandemic ends (93.3% of interviewees). As a final, recurring point in this paper, most people were already online shopping before the pandemic, but the pandemic served as an accelerator to e-commerce. It affected almost every online business in the world. People began to see that it saved at least 2 hours every instance, and eventually became a substitute, if not the only source to buying things that we would normally buy in stores. Consumers are now choosing to shop at home even though stores are open. E-commerce will now continue to grow, as the pandemic has acted as a trigger for an extremely widespread use of online shopping.

Acknowledgments

I would like to thank my mentor for providing helpful guidance on this paper.

References

- Bigcommerce. 2020, www.bigcommerce.com/blog/amazon-statistics/. Accessed 23 Oct. 2021.
- Fast Company. 8 Sept. 2020, www.fastcompany.com/90547627/how-covid-19-created-a-new-kind-of-consumer-in-just-90-days. Accessed 23 Oct. 2021.
- Time. 28 July 2020, time.com/5870826/amazon-coronavirus-jeff-bezos-congress/. Accessed 23 Oct. 2021.
- W, T., et al. Personal interview with the author. 2020.