

Factors Influencing Individuals' Online Shopping Behavior: A System Review

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Abstract. In the information era, people's online consumption has been increasingly common. In recent years, since COVID-19 has affected people's shopping behaviors offline to avoid unnecessary social contact, online shopping has become an essential part of people's lives. Researches suggest that there are plenty of factors that have an effect on people's action of consuming on the Internet. Those factors influence people's behavior in a different way from offline shopping. This research aims at the cause that influences people's online shopping behavior. In this review, an analysis based on present research will aim at people's behavior affected by the online shopping model. Unlike offline stores, online shopping can offer people the unique consumption practice and shopping experiences. This article provides cohesive knowledge about research on how online shopping influences and changes people's shopping behaviors. The results reveal people's changes in shopping behaviors during consumption online and provide basic information for further studies.

Keywords: Shopping behavior; online consumption; online shopping.

1. Introduction

During the long history of trade, many technological changes have affected people's shopping behavior, and online buying could be judged as the latest and most significant one. Online shopping could be considered huge progress in commercial activities since it changes the shopping behavior and consumption habits of consumers. Online shopping does not only provide businesses and consumers platforms for direct communications and transactions but also brings consumers a wide selection of products and detailed information about all merchandise, creating an entirely new way of consumption. People could easily find advantages of online shopping. For example, big data can recommend goods people are interested in for them, and other consumers' evaluations about the products help them compare products from different shops. With the development of logistics transportation, online buying offers people additional convenience, which is especially valuable in the fast-paced modern society. Also, because of the influences of Covid-19 in many countries all over the world, offline shopping seems gradually lost its position as people's first choice of ways to consume. During online shopping, people can continually be stimulated by information about products recommended by big data.

In this case, online shopping provides not only a method of consumption as an intermediary between consumers and businesses but also a window for buyers to find their interests by recommending goods according to products they viewed before. The special features of online buying create a unique attraction for consumers, which gives it an advantage over offline consumption. When it comes to the attraction created by online buying, researches indicate that consumers would have the impulse of buying when viewing and buying goods online. Additionally, about features of online shopping, people are supposed to change their shopping behaviors. For instance, one of the features of online shopping is the uncertainty of products due to the products being opaque to consumers. In order to get the best product at the lowest price and avoid being swindled by online stores or online shopping platforms, consumers need to judge carefully to ensure they can get the wares that are to their liking. All the factors related to online shopping may change consumers' shopping behavior. This paper aims at how those factors shape people's habits of buying. In order to further study the factors that affect people's online shopping behavior, this paper provides an overview and brief analysis and gives convenience for later research.

2. Method

Synthetic literature research was conducted in this research using the scholarly database *Jstor*. The following search terms, as well as their derivatives, were entered in the research: “online consumption,” “purchasing habits,” and “shopping behavior.” Studies were included in this paper if they fit the following requirements: (i) include research about online shopping behavior, (ii) contain convincing researches (include analysis of previous studies) and data (need to be able to provide empirical evidence for conclusions of the researches), (iii) make a clear conclusion about which factors of online shopping influence people’s shopping behavior, and (iv) contain clearly a description of the relevant analysis of the cause of changes on people’s shopping behavior. A total of 15 available articles were identified and used in this review.

3. Literature review

Four main factors that influence online shopping were measured. They are: (i) physical personal traits of customers (gender, economic condition, consumption preference, e-channel using, mental conditions, acceptability to online shopping etc.), (ii) big data recommendation during viewing (the strategy of utilizing advertising and recommendation of products during consumers viewing online shop), (iii) merchandise display (the ways online shops showing products to customers), and (iv) experience through online social activities (online social communications that may motivate people’s consumption behavior preference, for example, online chatting, online communities etc.).

3.1 Personal physical traits of customers

Online shopping, compared with traditional shopping, is still a new and unresearched field that needs further study about its attraction to consumers [1]. Online shopping could form a particular impulse of consumption for different groups of people. It has been proved that the gender of consumers could have little influence on consumption behavior. There is an online survey that collects data from people and got 332 available responses from the survey. Among all the usable responses, there were 163 responses from females (49.1 percent). Among these female respondents, 96.1 percent of those people had a purchase history on the Internet. That is, almost 97 percent of female respondents answered that they had already shopped online. For male respondents, the data is just slightly lessened. More than 95 percent of respondents reported that they had bought merchandise on the Internet [2].

Consumers who are more interested in innovative Internet technologies and more open to new shopping channels are more likely to buy things from online stores. Different kinds of electronic advices can provide various of shopping experiences [3]. Data collected from a survey with 117 available responses from college students was analyzed through the model. The results show that global innovativeness, involvement with the Internet, and Internet innovativeness all contribute to the motivation of the consumption behavior of purchasing online. These results are in accord with previous ideas that online shopping attracts customers who are more creative and are willing to take some risks because these kinds of customers are more likely to try innovative things like online shopping [1].

The psychological condition of consumers can also contribute to online shopping [4]. Since the impulse of online shopping is motivated by the need for material resources and arousal, Internet addiction could be a factor that promotes online shopping. Internet addiction makes people become less self-disciplined, which is the major cause of impulse consumption online. People with Internet addiction are not only more likely to view online stores, which increases purchasing opportunities but also may consume self-regulatory resources, increasing the chance of impulse consumption [5].

3.2 Big data recommendation during viewing

Online shopping behavior is influenced by many complex factors. The most important factors are the concept of the object being purchased, that is, the product, and the position purchase behavior

happens, that is, the website. These two factors influence the result of people's browsing the website, thus affecting their decision of shopping behavior. The result of affecting shopping behavior is shown by developing an empirical model that shows the complex factors of products and websites [6]. Online shopping behavior is positively correlated to the scale of products and the longevity of viewing but negatively correlated to the total amount of viewing different websites. This shows that advertisements and recommendations that can make people focus on the same kind of product play a positive role in the production of online shopping behavior.

Online shopping has convenience provided by Internet technologies, that is, during the process of browsing a website. This convenience could be extended to online shopping. After analyzing information about Japanese Internet users, it could be identified that for price and brand browsers, the convenience provided by online viewing could also stimulate purchase [7]. The convenience of online shopping relates to features of the Internet that reduce the time consumers spend on viewing products, that they tend not to spend time on brand explorations, and are more likely to have repetitive behavior. In this case, pop-up advertising allows for brand trials, which encourage more online shopping [8]. This kind of advertisement helps people find more interest rather than keep loyalty to a few brands, which is really helpful for expanding people's purchase impulse to more brands.

When recommending merchandise to consumers, "behavioral targeting" is used in this process. This kind of advertising sends digital advertisements to individuals by features of their online behavior (e.g., search, shopping), which are collected by big data. Research has studied how consumers respond to this targeting advertising compared with traditional ways of advertisement and shows that this advertisement could act as a social label even if it contains no explicit labeling information [9]. Targeting advertising can stimulate people's shopping interests continually. By summarizing people's interests into labels, and recommending products according to these labels, people can always get information about goods they are interested in, which increases the opportunities for online shopping behavior. In this case, targeting advertising not only concludes hints about people's online social behavior but also provides evidence to brands information about how to promote people's online shopping by recommending merchandise that cater to their interest.

3.3 Merchandise display

Due to the uncertainty caused by indirectly showing consumers the products, that is, so-called product-level uncertainty, people are likely to feel unsure about online shopping. This inability for control is a limited factor of online shopping. In this case, if the consumer did not have experience buying a certain kind of good before, this doubt can be made up by the brand. When it comes to the factors related to price, these factors can also affect shopping choices. Research collected data from online shopping situations shows that the average and highest prices of market baskets drop by around 1% at the same time as the online shopping experience increases by 10%. The result shows that when facing expensive merchandise, people are tended to choose cheaper products based on their previous shopping experiences because of the uncertainty of online shopping [10]. Because people cannot see the merchandise when shopping online, they tend to choose the surer and better products. This is the reason which explains why consumers are likely to choose merchandise based on their previous shopping experiences. This could explain why brands play an important role in the process of choosing merchandise. Also, in order to avoid being cheated by businesses, besides choosing products according to existing shopping experiences, people also tend to buy many cheap products rather than buying a few products that are expensive. By using this strategy, even if people receive merchandise of poor quality, they are more likely to lose less money on a single product.

Research shows that online shopping can encourage people to keep a healthier diet when shopping for foods because of the change in shopping channels. The reason why consumers perform fewer vices during online shopping is because of online shopping's way of showing products. Different from traditional stores, which show foods physically, online shopping shows consumer goods in a symbiotic way, which decreases the vividness of products [11]. During the era of online shopping, although physical stores are not as popular as they were before, some people still enjoy shopping in offline stores because they directly show merchandise to people. For online shopping, people usually

can only get information about goods through texts and pictures, which means they cannot directly touch the products and make the display of products less lively.

3.4 Experience through online social activities

Compared with offline shopping, online shopping provides more pragmatic value than social value [12]. For online social activities, online communities are contributed to ethical consumption to some degree. These online communities provided significant information about ethical consumption and are likely to expand this influence into offline ethical consumption [13]. When discussion about online social activities, the use of social medias is also considerable. Research has shown that social media could help people find commodities through conversations with others. Also, using social media can increase the likelihood of contact with information related to shopping, which may be even more efficient than viewing online stores. However, this phenomenon tends to be long-term and would not have an essential change in a short time [14]. Online social behavior increases the likelihood of people contacting with information about merchandise, and this convenience of receiving the information has facilitated an effect on online shopping behaviors.

Social shopping communities evolve from the connections between online shopping and the social Internet, and provide social-shopping features based on consumers. From analyzing the logit model includes about 2.73 million visiting, it is clear that social shopping communities influence online shopping behaviors in both positive and negative side, which depend on the lists and style of the website used: the number and complexity of lists and style are inversely proportional with the likelihood people will click it. Also, members of social communities are more likely to click, reflecting the difference in purchasing tendency due to participation [15]. The result shows that when attending online social communities, people are more likely to receive information about online shopping and thus produce a desire for purchasing behavior. The process of producing this kind of desire relates to the style of the website, and for online social communities, the identity of members of the communities provides an additional increase in the likelihood of online shopping behavior.

4. Implications

It is obvious that online shopping has already changed people's lives. In the time period of quickly developing digital technology, online shopping has already become an essential part of shopping behavior. As an attractive way of shopping, there are many factors that can influence people's behavior when purchasing online. Many studies have been conducted on the topic of online shopping. Many studies about factors related to online shopping behavior always focus on a few topics, which makes these studies more accurate and specific, and this paper aims to make the previous study results cohesive. To analyze them, classify available research on different factors influencing online shopping behavior. This paper summarizes factors that affect online shopping behavior and provides a reference for further research.

The previous study on this topic provides evidence and materials for analysis in this research. Existing model analysis and observational statistics provide data for this paper. Rather than focus on one point, this paper analyzes the conclusions of previous research and provides a brief understanding and cohesive ideas about which factors could impact consumers' online shopping behavior. By doing so, this paper gives essential background information for future studies on the same topic and other themes that are related to online shopping behaviors.

5. Conclusion

This review aims at the factors that influence online shopping behaviors according to previous studies. From this research, the factors that affect consumers' online shopping behaviors. The research shows that these factors could be classified into the following aspects: features of physical conditions of consumers themselves (e.g., acceptance of online shopping, use of the Internet), recommending and advertisement by big data during viewing (e.g., pop-up advertising, targeting

advertising), the ways online stores show their merchandise (digital showing), and experiences about relative online social activities (e.g., online social communities).

In terms of the personal physical traits of customers, unlike some traditional cognition, the difference in gender has little contribution to the chances of online shopping [2]. People who are more accepting of new and innovative technologies are more likely to be used to online shopping, which is a totally new way of purchasing [1]. When it comes to psychological features, people who are addicted to the Internet are more likely to shop online [5]. Because they lack self-discipline when facing electronic devices, they tend to spend more time viewing websites, thus increasing the chances of producing impulse online shopping.

Another factor affecting online shopping behaviors is big data, which provides recommendations and advertisements according to people's interests. The longer time a website can attract customers' attention, the more likely customers would purchase online [6]. By contraries, customers' attention is dispersed by many different kinds of websites, and the likelihood of online shopping would decrease. When viewing websites, advertisements can increase people's chances of online shopping. Pop-up advertising increases people's possibility of exploring more brands since they usually buy merchandise only on a relatively small scale of brands and stores online [8]. Targeting advertising recommends customers products that the big data assume customers would like [9]. By collecting information on labels from people's activities online, big data recommend products that fit people's interests, thus increasing people's impulse for online shopping.

How online stores show products with digital information provides unique factors that affect online shopping. Because people cannot see the merchandise directly, the uncertainty of shopping increases [10]. In this case, people tend to choose products based on their personal experiences and to buy more cheap products in order to minimize potentially lost. Also, because online stores show merchandise symbolically, which means people cannot directly see and touch the products, the vividness of merchandise decreases compared with traditional offline shopping [9]. This may influence people's desire for online shopping negatively.

Online social activities increase the likelihood of finding information about merchandise for customers [14]. In certain conditions, this obtaining of messages related to products has a positive influence on people's desire for online shopping. Also, for a certain website, besides information and styles of the website, members of online social communities tend to have more possibility of clicking the website [15]. Frequently online social behaviors encourage people to find more information about products in online stores and increase people's interest in online shopping due to social shopping features.

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