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Post-pandemic consumer behavior towards e-commerce and retail stores in United States

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Abstract

COVID-19 profoundly impacted consumer behavior and psychology; this impact is perceived in social habits and shopping changes. Online stores have successfully boosted their sales, to the detriment of retail stores. This article aims to provide statistical analysis and evaluate consumers' buying behavior by age groups toward retail and online stores for showing recommendations at online store entrepreneurs and retail store owners; thus, optimize costs and have higher sales projections. The methodology used is based on statistical data from various sources and databases such as Statista, United States Census Bureau, and international organizations, contrasted with the information obtained from 314 surveys conducted with consumers in different cities of the United States. In this study, statistical data and surveys upon groups of people were between twenty-two (22) to eighty (80) years old were analyzed. As a result, an increase in online shopping preferences was obtained, where the youngest population group leads the consumption in virtual platforms due to their familiarity with technology. In conclusion, there is a significant increase in online shopping, which is exacerbated by the pandemic.

Keywords: e-commerce; retail stores; consumer behavior; post-pandemic; United States.

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Comportamiento del consumidor hacia el comercio electrónico y las tiendas minoristas en los Estados Unidos posterior a la pandemia

Resumen

El COVID-19 causó un impacto profundo en el comportamiento y la psicología del consumidor, este impacto se percibe en cambios de hábitos sociales, y de compras. Las tiendas online han impulsado con éxito sus ventas, en detrimento de las tiendas minoristas. El objetivo de este artículo es proporcionar un análisis estadístico y evaluar el comportamiento de compra de los consumidores por grupos etarios, frente a las tiendas online y las tiendas minoristas con el fin de presentar recomendaciones a los emprendedores de tiendas online y dueños de tiendas minoristas para optimizar costos y tener mayor proyección de ventas. La metodología empleada se basa en investigación de datos estadísticos tomados de diversas fuentes y bases de datos como Statista, United States Census Bureau y organismos internacionales, contrastada con la información obtenida de 314 encuestas realizadas a consumidores en distintas ciudades de Estados Unidos. Para este estudio se analizaron datos estadisticos y de encuentas sobre grupos de personas entre veintidós (22) y ochenta (80) años. Se obtuvo como resultado un incremento en las preferencias de compras online, donde el grupo poblacional más joven lidera el consumo en plataformas virtuales debido a su familiaridad con la tecnología. Como conclusión, se observa un importante incremento en el uso de los medios electrónicos para realizar compras online, factor que se exacerba debido a la pandemia.

Palabras clave: comercio electrónico; tiendas minoristas; comportamiento del consumidor; postpandemia; Estados Unidos.

1. Introduction

Trade-in goods and services play an essential role in the growth of the world economy; now, global events such as the COVID-19 outbreak have the power to modify population behaviors and trends in the consumption of goods and services. Companies and entrepreneurs seek to reach a greater number of consumers and increase their sales and profit margins. With these concerns and needs in mind, it is convenient for businesses to statistically analyze consumer preferences and future trends in product purchases within retail stores and online platforms.

Retail stores have seen a reduction in consumer traffic and, therefore sales, the opposite has been the case in the e-commerce sector. In the United States,

total retail sales fell in recent years, as Americans reduced furniture, clothing, food, toys, electronics, and appliances purchase. Since 2019, important franchise stores in all sectors have closed their doors due to high costs and reduced sales revenue (Whiteman, 2020). United States Census Bureau (2021) shows that retail stores decreased their sales compared to e-commerce in the years before the pandemic. Additionally, some chain stores announced more than 8,500 business closures in 2019.

Consumer behavior changes according to environmental conditions and acquires newly learned behaviors based on experiences, recommendations, and knowledge (Cueva et al. 2021). The movement of consumers towards online stores has considerably affected the economy of retail stores; even when stores seek to retain their customers, there is a trend towards digitization (Kumar & Nayak, 2018). On the other hand, consumers have found advantages when buying in online stores, and the pandemic has accentuated a trend that was already on upwards. This trend is not surprising since human beings adapt their lifestyle to the environment and their own needs. In this COVID-19 period, the consumer faced social distancing, health risks, and economic losses. However, these challenges made it possible to increase awareness, take care about, and consumption movements.

This article aims to provide statistical analysis and evaluate consumers' buying behavior by age groups towards online and retail stores for presenting recommendations at online store entrepreneurs and retail store owners to optimize costs and increase sales projection. It is also proposed some suggestions that benefit

both sectors, to gain consumers' trust and increase sales revenue. Statistical data extracted from various sources and databases such as Statista (2020), United States Census Bureau (2021), and international organizations were systematically reviewed and analyzed. The information was contrasted with data obtained from surveys on 314 consumers between 22 and 80 years old; on the other hand, effective data management was carried out through business intelligence tools. The pertinent variables for statistical analysis were assigned in the codebook.

The scopes are framed within information from business to consumer (B2C) and consumer behavior. This document does not include business-to-business (B2B) information, even though it is an important e-commerce marketplace. However, its fundamental focus is on the consumers, their psychology, behavior, and relationship with e-commerce and retail stores.

The article is divided into four sections: 1) background, 2) method and materials, 3) results, and 4) discussion.

The background provides a brief look at the changes that previous pandemics have driven in human behavior; current data on the infected population in the United States and worldwide are released. The advantages and disadvantages of online and retail stores and their influence on consumer preferences and purchasing decisions are shown.

The method and materials section shows the data analysis obtained from different statistical information bases in the United States. The data were processed using Power BI and compared with the surveys conducted about the consumers' behavior divided by age groups between 22 and 37, 38

to 53, 54 to 69, and over 70. Further, the selected hypothesis, survey's design, variables, and parameters are shown in this section.

The result section shows tables and graphs of the 314 surveys; it reveals in a summarized way the incident factors for decision-making in purchases and the categories of preference online vs. offline, by age ranges according to statistical data compared with the surveys conducted.

The discussion section reflects on the proof that substantiates the hypothesis; therefore, the data contrasted between the databases and the surveys, determining that buying in online stores increases as the age ranges decrease. It also shows graphs that reflect consumer buying behavior during the pandemic, future expectations, and consumption by sectors among online stores vs. offline. Finally, recommendations are offered to retail and online stores to have a greater sales projection.

2. Background

History shows that pandemics have led to economic and human losses, social protests, increased migration, changes in land tenure, increased anger, xenophobia, and changes in business patterns. However, they are also a factor of reinvention, creativity, and innovation of the population (Bell, 2020).

In March 2020, the World Health Organization declared COVID-19 a pandemic. As of July 2021, COVID-19 has infected 35,215,745 people and caused 626,187 deaths in the United States. On the other hand, COVID-19 has infected 193,639,510 people, with 4,155,075 deaths worldwide (Worldometers, 2021). Countries have implemented different public health

measures and fiscal stimulus packages to overcome the population's economic, health, and psychological effects (Chen, 2020). In addition, based on past pandemics, the Center for Disease Control and Prevention published "Community Mitigation Guidelines to Prevent Pandemic Influenza" (CDC, 2017: 1-34). A guide to assist with emergency planning and decision-making, thus providing recommendations for interrupting the transmission of infections and implementing prevention measures.

It is especially important to note that electronic commerce had gradually increased by around 30% in the five years before the pandemic. However, according to statistical studies by the United States Census Bureau (2021), only in the middle of the year 2020 electronic commerce made an exponential increase of 30% compared to 2019.

As of late, retail stores have found it difficult to compete with most web-based businesses because the latter gained greater flexibility to adapt to customer behavior during COVID-19. However, some consumers still prefer to buy from a retail store.

2.1. What does it depend on as a consumer opts for retail stores?

The word commerce comes from the Latin commercium. Word composed of com (with) and merx (merchandise). Trade means exchange of goods and services. Hence, traditional commerce and e-commerce are derived from this word. The term "traditional commerce" or "brick and mortar" refers to a conventional street business that offers

products and services to its customers face-to-face in a physical store.

Traditional retail companies have faced obstacles compared to their digital peers because online stores tend to have lower operating costs, greater geographic reach, and flexible shopping hours. Despite this, consumers who prefer to opt for a physical store when buying their products and services do so because they also offer advantages that online stores cannot cover. Some consumers prefer to buy their products in local stores (Quartier et al., 2021); in this manner, they can touch, see and ask questions about the product directly. Physical stores can offer shopping experiences whereby consumers can try out a product such as a video game, laptop, have lunch while shopping within the store, or read a book. Traditional businesses also provide consumers with instant gratification when a purchase is made.

There are multiple advantages that retail stores offer, despite the difficulties they have faced in recent years and the changes they have had to apply to adjust to growing demand from consumers who hope to obtain a rewarding experience in the purchase process (Burt & Sparks, 2003). Companies need constant innovation and leadership to attract and keep their consumers loyal (Álvarez, 2021; Sánchez et al, 2021). That is what retail stores have done; thus, innovating allows them to open opportunities and reach new markets.

The psychology of each person is different, and for the same reason, some consumers need to connect their senses to the shopping experience. Customers who choose retail stores to make their purchases expect, as mentioned above, to touch, see, smell, taste, and feel the product before buying it. This experience generates emotional gratification, so many people make purchases to distract when they are bored and connect and interact with other people. Companies from all sectors such as supermarkets, liquor, vehicles, and real estate know this and offer events, testing, tastings, open house, and discount days to attract the public.

In retail stores, consumer wait times are instantaneous, which is one of the main reasons consumers visit stores. There, acquiring a product stand for instant gratification by taking the item home with just one decision: "Buy." In addition, consumers usually buy more than planned, which means an advantage for retail companies. According to a report by the consulting firm Kearney (2021), 40% of buyers spent more than their initial intention while buying in physical stores.

Purchases made in physical stores allow generating a greater identification of the product or service. It enables a personal experience where the consumer tries the product and receives assistance and immediate communication with sales collaborators. For this reason, it is easier to be faithful to an offline store than to an online store because most people establish their routines in these shopping centers and identify the personnel who work there as trustworthy.

However, there are downsides to running a retail business; most of these involve costs. The effects suffered by companies are mainly determined by environmental, technological, logistics, and human resources risk variables, which in turn bring associated several expenses such as rent, payroll, training, software and equipment update, inventory, transportation, among others.

The physical establishment of a retail store has disadvantages that have

become more palpable than ever in the current context of COVID-19 (Bhatti et al, 2020). Currently, space and location limitations of a business generate a great disadvantage; due to the rules of distancing and hygiene implemented by the World Health Organization that have reduced the capacity of service within the establishments. Rules that the government authorities of the countries have followed to protect the population (World Health Organization [WHO], 2020; as cited in Morales, 2020). On the other hand, it should be noted that local businesses cover a smaller geographical area and restricted opening hours to the public, which causes them great disadvantages compared to their online competitors. However, the World Health Organization also presented information on fiscal measures and incentives offered by different countries to help companies overcome the crisis (Chen, 2020).

Rental and service costs are important disadvantages points to consider, since these are considered essential expenses and one of the largest in this type of business. High maintenance costs make it difficult for stores to offer discounts to attract loyal consumers and achieve higher long-term revenues (Ganesha et al, 2020). The business is responsible for paying rent and utilities, along with machines maintenance and repair costs.

Additionally, human capital costs and inventory management can be pointed out as part of the loss of competitiveness compared to companies in the same sector but based on online platforms. Physical companies need more employees to perform functions such as recording sales, storing inventory, cleaning facilities, and providing customer service (Madhani, 2021). In many cases, companies must purchase insurance to protect their employees against workplace accidents, provide uniforms, training, perform benefit calculations, and more.

Besides, in inventory management, costs will depend on the level of turnover, variety, and amount of inventory that retail stores want to keep. Storage availability impacts logistics, frequency of purchase, inventory replenishment, and the choice of suppliers and distributors. In contrast, e-commerce companies can offer a more varied portfolio of products and better discounts.

Therefore, it can be said that a consumer opts for a retail store because it offers them a shopping experience where they can interact with the product and the store staff. That creates security for customers, to whom the store's geographic location is convenient, and it is close to their work or home, and usually become loyal customers.

2.2. Why does e-commerce lead to consumer preferences?

The term electronic commerce came from electronic mail; or, electronic plus the word commerce. Electronic commerce refers to the effort of people to produce and commercialize a product or service for profit, satisfying the needs of society through an electronic network that transmits funds or data mainly through the Internet (Pride, 2014).

These electronic transactions of goods and services occur by mutual agreement, from business to business (B2B), business to consumer (B2C), consumer to consumer, or consumer to business (Irawan et al, 2020). The benefits to online stores came with creating online tools and a faster web

network that has resulted in a new commercial arena that is more profitable and with greater advantages for the parties.

Electronic commerce offers favorable circumstances to organizations and customers, allows greater flexibility in prices (Hillen & Fedoseeva, 2021) and facilitates purchase procedures, encourages faster and more effective sales by providing greater simplicity to find a great range of products at affordable prices. Online stores have reached growth records due to the COVID-19 pandemic (Mäki & Toivola, 2021) and have had multiple advantages over their offline competitors (Keenan, 2021); As these entail lower expenses than their peers, they have a greater scope and sales projection due to the fact that they are constantly open, without the restriction of hours to the public, which allows reaching a greater number of users and expanding their geographical influence; likewise, it enables businesses to scale quickly.

The ease of access to online marketing is a point that drives sales; ads are designed tailored to consumer preferences such as activities, age, education, and geographic location. Automation and follow-up through affiliate marketing, email marketing, and social media marketing make it a personalized experience and improves the shopping experience (Gilly & Wolfinbarger, 2021) within reach of a click. This system can process numerous orders without a large payroll, which can be contracted anywhere globally. Workers in online sales companies are mostly teleworkers and provide customer service, systems maintenance, network management remotely. Both sellers and buyers access the products without difficulty, only with the use of search engines.

Electronic commerce has a minimum number of disadvantages compared to a large number of advantages. However, it is important to consider these to make adjustments and mitigate the effects they may cause. Disadvantages can be broadly classified into two main categories: technical and non-technical.

Technical disadvantages are outlined within business risks: 1) system standards and security risks due to poor system implementation; 2) accelerated changes in the software development industry; 3) problems due to network bandwidth; 4) software or server requirements by the provider, and 5) software and hardware compatibility issues between hosting and user devices.

Non-technical disadvantages are those perceived by the user when interacting impersonally with the system. Among these: 1) consumers perceive a risk of identity fraud and security dangers on personal information every time they enter their data on a site; 2) lack of tact or interaction with products; 3) insecurity about product quality; 4) waiting times and delay in delivery due to third parties, and 5) high costs in the design and construction of electronic commerce applications.

E-commerce, despite the disadvantages mentioned above, flags the consumer's purchasing preferences because it allows flexibility in terms of shopping hours and payment methods. It also allows access to a wide range of products at discount prices; compare and quickly choose the best alternative among the different options according to the reviews and opinions of other consumers.

3. Methodological considerations

The process was carried out through a systematic review of statistics and data belonging to Statista (2020) and United States Census Bureau (2021) in the United States and other international databases to determine future preferences in the demand and consumer behavior by age ranges; versus retail stores and online commerce. The research is framed under a quantitative approach; the statistical information was compared with that obtained from surveys carried out on a group of 314 consumers in sectors such as services and consumer products, in a period from 2020 to 2021, in ages ranging from 22 to 80 years.

For efficient database management, variables were assigned in the codebook. The following data set describes the characteristics of the variables.

• Buying behavior: These are nominal categorical variables. The values of a categorical variable are selected from a small group of categories.

• Age: They are continuous numerical variables (although the registered ages have been truncated to whole numbers, the concept of age is continuous). That is, when a variable contains any value within some range, it is called continuous.

• Tags: the name is a tag variable. In some data sets, each individual has a unique 'name' that can be used to identify them. We call this variable a label variable. Labels can help us identify unusual observations in the data set. Bbelow shows the variables and parameters used to conduct the surveys and measure the consumer behavior and trends of buying products.

Table 1
Variables and parameters in data collection

Variable	Label	Measurement Scale	Category
Consumer Behavior	Name	Nominal (A, B)	(A) E-commerce
			(B) Retail store
Age	Years	Continuous	Numerical

Source: Prepared by the author.

As shown in the previous table, the variables considered are age, consumer behavior in a period (t), parameters given by the nominal categories e-commerce and retail stores, and numerical category in the age groups of surveyed individuals.

3.1 Hypothesis

The hypothesis on which the study was based is the following:

H: Buying interest in online stores increases as age ranges decrease.

3.2 Data collection

The surveys were designed, and the cities where they would be conducted were determined; 114 surveys were the sample taken in the locality of Miami-Dade and Broward County in person, and 200 surveys online were the sample taken in other cities of the United States. Like New York, Dallas, and Houston. The questions were previously reviewed and validated by experts in the area. The survey was developed in a simple way to facilitate consumer responses and divided into the following three sections:

Section 1. The data asked in this section were first and last name, geographic location, age, and education (basic, secondary, university).

Section 2. Two simple selection options for shopping preferences were presented in this section, with a single option answer: a) online store, b) retail store.

Section 3. This section was presented to the costumers with a selection of incidence factors, common and related to the previously chosen preference option (online or retail), with a single option answer: 1) price; 2) discounts; 3) waiting time; 4) reliability; 5) accessibility; and 6) quality of service.
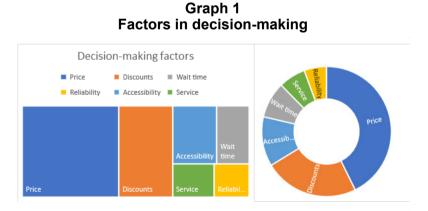
4. Results

The results are presented based on the analysis of information, the statistics collected from data sources such as BigCommerce (2021), CBRE Research (2021), Invespcro (2021), Statista (2020), and United States Census Bureau (2021); as well as the data obtained from consumers located in various cities in the United States, such as Miami-Dade, Broward County, New York, Dallas, and Houston; Power BI and codebook were used as the main analysis tool. through the surveys conducted during the period 2020 and 2021.

Table 2 below presents the values obtained in the 314 surveys and summarizes the incidence factors and preference categories. Graph 1 below shows the incidence factors for decision-making regarding online purchases vs. purchases in retail stores, obtained from the surveys conducted.

Table 2
Results from the surveys conducted

Age range	22-37	38-53	54-69	70≥
Online store	61	48	35	16
Retail Store	28	46	43	37
Price	38	18	21	13
Discounts	21	25	16	7
Wait time	8	9	7	4
Reliability	5	16	15	14
Accessibility	11	8	5	3
Service	6	18	14	12
Total respondents: 314				

Source: Own elaboration based on data from surveys conducted.

Graph 1
Factors in decision-making

Source: Own elaboration based on data from surveys conducted.

Next, table 3 and graph 2 show the preferences in purchasing behavior (online, offline) by age ranges, according to statistical data from the databases Statista (2020), United States Census Bureau (2021) compared to the surveys conducted. That allowed obtaining the average (%) percentage of all the

analyzed data and calculating the standard deviation according to age group and shopping preferences in online or retail stores.

Table 3 show the result of comparing and analyzing data between surveys and statistical information databases in the United States, such as Statista (2020),

United States Census Bureau (2021). Graph 2 show the results obtained from the discrete data matrix product of the analysis and comparison of information between the surveys conducted and statistical databases in the United States such as Statista (2020), United States Census Bureau (2021).

Table 3
Consumer Preferences

AGE RANGE	22-37	38-53	54-69	70≥
ONLINE STORE	67%	49%	46%	28%
RETAIL STORE	33%	51%	54%	72%
STANDARD DEVIATION	0.025026813	0.028735616	0.00797761	0.015476299

Source: Own elaboration based on Statista (2020), United States Census Bureau (2021) data, and surveys conducted.

Graph 2
Preferences according to population group.

Source: Own elaboration based on Statista (2020), United States Census Bureau (2021) data, and surveys conducted.

A discrete data matrix was generated to obtain table 3 and graph 2. The data were analyzed, taking into account age groups and consumer behavior. Average percentages of preference per group were generated, and the standard deviation was calculated for each group. Thus, comparing the data from the interviews conducted with the data obtained from United States Census Bureau databases and Statista, obtaining a standard deviation of less than 1 between 0.02 and 0.007 that measure the data similarity and confirm the hypothesis.

When observing the previous graphs and tables shown in the results section and analyzing the data sample, it was found that the proposed hypothesis is fulfilled. Consumers with the greatest preference to make purchases online because they are familiar with technology, social networks and are more willing to provide their personal data are those in the age range between 22 and 37. On the contrary, their preferences to purchases in retail stores are determined by specific needs in products and services such as food, gasoline, or others in convenience stores.

Consumers in an age range between 38-53, like consumers between 54-69, show that shopping preferences for online stores decrea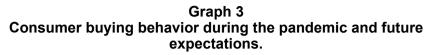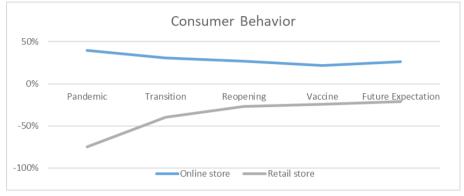se as age increases. The main reason for this is the familiarity and trust in digital platforms; for this age range, data protection, particularly regarding bank details such as accounts and credit cards, influences decision-making when choosing between online and retail purchases.

Finally, the age range belonging to those over 70 shows a significant drop in online shopping preferences due to their limitations in handling electronic devices and the use of online shopping platforms and networks. The preferences of this group are focused on retail stores; since they offer interaction with the store personnel, they perceive them as trustworthy and can instantly choose, test, and determine the quality of the products offered.

About the problem exposed and the impact COVID-19 has had on it, it can be seen that consumption patterns, psychology, and habits are constantly changing. COVID-19 accelerated these changes in the population's behavior at many levels: social, political, economic, health, educational, and consumer.

The following graph shows the consumer behavior curve regarding their online and offline purchases for the initial periods of the pandemic, during COVID-19, reopening and flexibility of measures, initial vaccination period, and expectations on these sectors in the future.

Graph 3
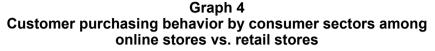**Consumer buying behavior during the pandemic and future expectations.**

Source: Own elaboration based on Statista (2020), United States Census Bureau (2021) data, and surveys conducted.

The blue curve shows how in the initial period and transition of the pandemic online shopping had a significant boom, then in the periods of vaccination, business reopening, and flexibility of measures, the curve shows a slight decrease. However, the future expectation is that many consumers who acquired and transferred their shopping habits to the online system will maintain it until confidence and control over the outbreak of the disease and its variants are restored.

The gray curve about purchases in retail stores shows an abrupt reduction in purchases in the initial period of the pandemic that decreased as businesses were allowed to reopen. The future expectation for this sector is for slow growth to reach levels similar to or higher than the pre-pandemic period, that is, corresponding to the years 2018 and 2019.

The following graph shows consumption by sector in online and retail stores, (Graph 4).

Graph 4
Customer purchasing behavior by consumer sectors among online stores vs. retail stores

Source: Own elaboration based on Statista (2020), United States Census Bureau (2021) data, and surveys conducted.

As shown in graph 4, the online purchase of products and services in the United States increased compared to retail stores due to COVID-19. The customer's purchasing behavior reflects two trends marked in the period 2020 to the beginning of 2021. Basic needs increased between 20% to 30%, such as food delivery, medicines, cleaning products, and household hygiene; However, and between 5% to 15% increased the entertainment sector such as books, magazines, videos, music, articles for hobbies, games, electronics, and newspapers.

Definitely, the relationship between the consumer and the traditional buying behavior depends on the wants, needs, and the perception of risk, profit, or loss of any good. During the COVID-19, the most precious asset is life, and around this criterion, people define new consumption patterns. The consumer relationship with an online or retail store offers benefits and satisfies some essential needs. For this reason, this article provides some recommendations to successfully maintain the level of sales for both retail stores and online stores.

It is important, creating some

recommendations to avoid losses, store closings, achieve greater market share, increase customers and entice shoppers to visit retail stores. Strategies such as giving an extra discount and designing a campaign to attract online shoppers, improve customer service with friendly policies, train employees, learn to build customer loyalty, add new products or product lines, improve purchasing management and negotiate with suppliers, consider logistics and inventory replenishment times, as well as product prices and quality. It is also relevant to reduce nonessential operating expenses and return a profit on the end financial statements.

There are e-commerce solutions that can create stores in minutes. However, running an efficient and long-lasting e-commerce business is different from running retail stores and shopping centers. Attracting traffic and generating income in the face of aggressive competition is difficult. Still, companies can improve sales and generate excellent profits by building an attractive website that captivates visitors' attention, is friendly, fast, easy to search for products, creates trust and simplicity in payment methods. Contact information, customer service, and return rules must be clear.

Use social media analytics to track the success of ads and strategize how can improve future promotions and get reviews from satisfied customers. Generate security and trust by displaying the associated companies on the home page, showing a great reputation to site visitors. Offer support at all stages of the shopping experience to encourage new buyers to make their first purchase and returning customers to continue shopping.

One strategy that allows being competitive is to offer free shipping, so buyers are motivated to keep shopping. Offer incentives, refunds, and money-back guarantee policies, and consider offering free shipping on returns as well. Providing customers with free returns is an additional cost for merchants, but offering this policy coupled with excellent after-sales service encourages brand loyalty.

6. Conclusion

The COVID-19 outbreak affected consumer habits and psychology, transformed patterns and preferences in purchases of goods and services. These social, health and economic changes also affected the relationship between the consumer, traditional local stores, and online businesses. Buying products and services is part of daily life; men and women of all ages satisfy their tastes and needs through this experience according to their lifestyle, perception, and psychology.

As mentioned throughout the article, there is a direct relationship between consumer interests and purchasing behavior. These interests can be represented by influencing factors such as price, discounts, waiting times, reliability, accessibility, and service. That allows a preference selection according to the perception of risk, profit, or loss of any asset.

Life as the most precious asset has become palpable for individuals and governments during the pandemic period. Around this criterion, people and governments have defined new patterns of consumption and distribution of aid to mitigate the effects caused.

In recent years, the growth of online commerce has had an exponential behavior, and the trend expresses a

positive action, which will continue to rise in future years. The United States is a leader in e-commerce purchases worldwide; in this sense, it is emphasized that for 2020 and 2021, global electronic commerce sales reached historical records due to the pandemic. The rise of e-commerce and online businesses has led many to wonder about the future of the retail store and consumer preferences.

The statistical analysis carried out throughout the article has shown sufficient evidence to support the hypothesis presented. Younger people tend to use e-commerce more than older people. However, both population groups have increased their consumption in online stores through this system's advantages. Additionally, due to the pandemic and mobility restrictions, distancing, and hygiene measures suggested by governments, online purchases continue to grow to the detriment of retail stores in the last year. Although, it is important to clarify that many consumers prefer to buy in physical retail stores because of waiting times, immediate gratification, and live an experience in the purchase.

It is important to take into account the impact of technology on each economic sector and the behavior of population groups by age, susceptible to making purchases offline and online for the coming years. In this way, recommendations and marketing strategies, cost reduction, technology implementation, and, above all, narrow them to the market niche of interest can be put into practice.

It is recommendable that both online and retail stores launch digital campaigns on social networks and use network analysis tools to monitor consumer trends and preferences, build trust and empathy through customer reviews or comments on digital platforms. Similarly, generate growth opportunities through constant innovation.

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