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**Exploratory research examines how the COVID-19
pandemic led to increases in consumers 'social media
marketing behaviors in Greece.**

IOANNA TZISTOUDI

SID: 3305210020

SCHOOL OF SCIENCE & TECHNOLOGY

A thesis submitted for the degree of

Master of Science (MSc) in eBusiness and Digital Marketing

OCTOBER 2022

THESSALONIKI – GREECE

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Ioanna Tzistoudi

SID: 3305210020

Supervisor: Prof. Assimakopoulos Konstantinos

Supervising Committee Members: Assoc. Prof. Stalidis Georgios

Assist. Prof. Baltatzis Dimitrios

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Abstract

The Covid-19 pandemic has evolved into an unprecedented global health phenomenon and accelerated existing trends in the adoption of e-commerce by a significant portion of them consumers. The governments of all states in their effort to limiting the spread of the virus, imposed quarantine and other restrictive measures in the movements of citizens. So, the impact of these restrictions has been to steer consumers toward e-commerce and the choices afforded by social media.

This thesis examines this turn of the consumers and especially toward online social media marketing. It introduces us to details consumer interactions with social media platforms and the feedback that they offer companies to understand their consumer's profiles better. Work is structured in five chapters. The first chapter refers generally to e-commerce and social media marketing in its development trend, both globally and at the domestic level. At the same time, the definitions, similarities, the differences between the behavior of consumer on online marketing and social media marketing

The second chapter mentions the effect of the pandemic Covid-19 on e-commerce and in the new trends created by the pandemic on social media marketing globally and nationally. Also, we refer to the possible long-term changes that the pandemic in social media marketing in general.

In the third chapter a methodological approach to the work is presented, through a survey conducted through questionnaires as well as the statistical processing that followed the survey.

The fourth chapter focuses on the results of the research, with a thorough reference to the research questions and developments as well as to conclusions from the comparison of the answers regarding the consumption habits of Greeks regarding e-commerce before March 2020 in relation to the period March – June 2020. Also, consumer choices regarding online and mobile shopping are recorded.

Finally, in the fifth chapter, we come to some useful conclusions drawn from the research we conducted and some issues for possible future investigation are also raised.
Keywords: COVID-19, pandemic, e-commerce, digital marketing, social media, online shopping Greece, consumer behavior, purchasing experience.

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CHAPTER 1-Social media marketing

1.1 Introduction

Without a doubt, 2020 has been a year that is revolutionizing the way we live, communicate and mainly how we buy, having a fundamental impact on marketing that has turned 360 degrees to quickly meet the needs of a population forced to confinement. The situation caused by the spread of COVID-19 around the world has jeopardized the economy of the most countries, forcing businesses to close their doors and rethink the way they interact with their customers and it is that COVID-19 triggered a tsunami of innovation, it froze entire industries and rendered archaic those strategies carefully planned by specialists, being forced to implement campaigns according to the crisis, becoming an extraordinary challenge.

The influence of social media on society has increased on enormous scales, making companies generate new activities of marketing in social networks (hereinafter AMRS), following the line of Bilgin (2018), as the main communication tool with its clients (Godey et al., 2016). A marketing strategy has a strong influence on brand value and the consumer behavior (Godey et al., 2016), and social networks are an essential contribution to strengthen loyalty, communication, brand value and perception.

Social media, according to various research, fulfill the purpose of communicate and be the filter between brands and consumers (Viteri, 2018), legitimizing cultural consumption and educating consumers and thus feel "satisfied and happy". With the outbreak of the pandemic called COVID-19, all over the world, the marketing and production processes were forced to adapt their offline activities to an online one (Sánchez González, Gil-Saura and Ruíz-Molina, 2020), accelerating the processes of commercial digitalization, hastening the adaptability of the consumers (Ortega, 2020) and adapting the prices of products and services to the new reality, analyzing the different segments.

The new information and communication technologies have revolutionized information systems. Global interconnectivity, breaking barriers of time and space, being able to keep millions of people connected. In this system of interconnectivity are the social networks that are a group of

applications or platforms that are based on the internet, which allow to create, exchange and discuss on the content that users produce (Can and Kaya, 2016).

Over time, social networks have become an effective tool that facilitates national and international trade, and it is for this reason most of the companies are taking advantage of the advantages that this medium offers them to remain current in the market, and to provide more value to customers.

1.2. Aim of the study

The main purpose of the research is to clarify the relationship between users with social media. Through specific research are discovered how satisfying they are some social networking applications by users but and what impact the coronavirus pandemic has had on their lives. In substance through research will be discovered how satisfied are the users from social media and the opposite, for what reason do they use it, from which medium are they informed, etc. In addition, research is going to cover some additional goals as well from the main:

- To make a record of the theoretical framework regarding the social media but also its correlation consumer behavior during the pandemic of COVID-19 with them through the international scientific literature.
- To investigate the behavior of users with the social media during COVID-19, to discover how they work within them but also what is the reason that they use.

1.3. Research questions

The research questions of the study are the following:

1. Which factors affect the consumers' social media marketing behaviors in Greece?
2. How COVID-19 increased consumers' social media marketing behaviors in Greece?

1.4 New digital economy environment

The most comprehensive contemporary trend of the time that covers not only the information industry but all sectors of economic activities is the digitization of all financial processes.

In the contemporary era, the globalization of all processes increases the uncertainty of political and social development and, by extension, the digital economy. A human being, by nature, creates obstacles and insecurity in introducing a new mode of operation of the economy. A solution to the problem comes from the digital economy, as it is a global network of economic activities, commercial transactions, and professional interactions supported by information and communication technologies. Even though some people use technology only for daily computer tasks, the digital economy is more advanced. It does not just use a computer to perform tasks traditionally performed manually or on analog devices. The digital economy highlights the possibility and necessity for organizations and individuals to use technology to perform everyday tasks more efficiently, faster, and more accurately than before. (OkhunovM et al.2022)

Within this new digital environment, innovative ways were developed in Business e-commerce. Historically, opening a business involves obstacles, including the need for significant initial capital, bureaucracy, and operation. In the new digital environment, the barriers to entry and operation are not so insurmountable and, as a result, can be more relaxed. Several young people are Entrepreneurs entering the business arena. (Porter, 2001)

Businesses always try to leverage new technologies in order to remain competitive in the marketplace. In this case, traditional business models are characterized by stasis and uncertainty. However, business entities have used the Internet more than other entities in e-commerce and e-business. A digital business model helps internet-connected businesses, their customers, and their business partners maintain continuous development by providing all the information and technologies necessary to support e-commerce, collaboration and communication among enterprises, and web-based business processes within and outside the organization. (Asif A et.al 2021)

1.5 *E-commerce*

An electronic commerce (e-commerce) transaction is one in which goods and services are traded electronically using telecommunications and telecommunication tools such as the Internet. Although E-commerce is often used to mean essentially the same thing as "e-business," it is a sub-component of e-business. In e-business, activities are carried out using the Internet and online technologies, such as buying and selling products with digital cash through Electronic Data Interchange (EDI). (Maureen K. 2016 et al 2016)

More formally, *E-commerce* can be defined as commercial transactions that are digitally enabled between individuals and organizations. Each element of the above definition is essential. First, digitally enabled transactions to include all transactions carried out using digital technology. More specifically, this means transactions via the Internet, the web, and mobile devices. Commercial transactions include the exchange of value (e. g. money) across organizational or individual boundaries return of products and services. Value exchange is vital to understand the limits of e-commerce. Without an exchange of value, there is no trade. Professional literature most often refers to e-commerce as digital commerce. For this purpose, we consider e-commerce and digital marketing synonymous. Finally, it is essential to distinguish between e-commerce and e-business. We use the term e-business as the digital enablement of transactions and processes within a business involving information systems under the control of the company. It also does not include commercial transactions involving an exchange of value across organizational boundaries. Online stock control mechanisms, for example, are a component of e-business, but from an external perspective, they are not processes that directly generate revenue for the company. However, many times within a company, the e-business infrastructure provides support for electronic e-commerce exchanges.

For the most part, we distinguish different types of e-commerce based on the buying relationship, i. e. who sells to whom. Mobile, social, and local e-commerce can be seen as subsets of these types of e-commerce. We have six categories of e-commerce:

1. *Business-to-consumer (B2C)* e-commerce, where online businesses attempt to reach individual consumers.
2. *Business-to-business (B2B)* e-commerce, in which businesses focus on selling to other businesses.
3. *Consumer-to-consumer (C2C)* e-commerce provides a way for consumers to sell to each other with the help of an online market maker (also called a platform provider) such as eBay or Etsy
4. *Mobile e-commerce (m-commerce)* refers to the use of mobile devices to enable online transactions
5. *Social e-commerce* is e-commerce enabled by social networks and online social relationships.
6. *In local e-commerce*, the consumer is targeted based on his or her geographic location (Kenneth C. 2017)

1.6 Digital Marketing

As digital marketing has grown since the 1990s, it has changed how brands and businesses use technology. It has become more efficient and sophisticated as people use digital devices more than physical visits to stores because they save time. According to (Ljupka N., 2014), digital marketing is the execution and management of marketing using digital channels and technologies, such as the web, digital television, and wireless media, for a timely, interactive, and cost-effective approach to markets. It can also be defined as using digital media to achieve the brand or company's goal by effectively fulfilling the customer consumer's needs (Sawicki, 2016).

There are different types of digital marketing that companies can use:

i. Search engine marketing is marketing a brand or product through search engines. For example, advertising on Google, the most popular and most used search engine website, and some companies that provide SEM services.

ii. Social Media Marketing: This form uses websites and social networking applications as marketing tools (Baines, Fill, 2014). Businesses must use social networks more frequently to stay in touch with their customers. Trademarks, for example, have acquired accounts on all social media

platforms, including Instagram, Twitter, Facebook, Tik Tok, and even have a website so that customers can learn more about their products and share reviews that will increase their customer base.

iii. Display Marketing: These ads appear on web pages and consist of interactive content to attract more attention to users. For example, advertisements on YouTube, the second most popular search engine after Google (Janda, 2011). Furthermore, sponsored ads on social media apps like Instagram and Twitter. For example, due to many Instagram users, companies have had the opportunity to advertise on it, gain traffic to their websites and gain more customers.

iv. Influencers Marketing: with the changes in digital marketing methods, social media marketing evolved as well as brands began to use advertisements through influencers, i.e., people with influence in the internet world. Through influencer marketing, a brand can reach a wider audience when they work with a social content developer (Ki, 2019). These have a large following on social media platforms, such as YouTube, Instagram, Twitter, and TIK TOK.

1.7 Main tools of digital marketing:

Over 156 million emails are sent from businesses to customers each minute, according to research done by the World Economic Forum. Consumers now spend more than \$751,000 on online purchases in a minute and download over 342,000 apps. As traditional media are losing ground in marketing processes, digital techniques and tools are gaining ground in the digital economy. This fact offers modern Marketing Managers new opportunities to interact with their customers on their path to completing a purchase (Srinivasan et al., 2016)

The main methods, techniques, and tools of Digital Marketing are also analyzed.:

1)online marketing

One of the most well-known techniques of online marketing is Online Marketing. With this method, the digital entity uses online marketing to send messages to websites and attract new users to the name. As with traditional media, online advertising aims to increase sales and enhance brand recognition. Procedure advertising uses the internet to display messages to users on their computer screens.

Digital ads are like television ads. They use the element of interruption. Unlike television advertising, digital advertising does not force the recipient immediately to pay attention to the product. He is trying to persuade consumers with a creative way to show interest if they want him for a species. Consumers and internet users still have the power to ignore advertising with one click or not. As there are many ways to view digital advertising, it is often called promotion advertising. It is necessary to note that technology progresses new methods for promoting digital ads. Specifically, in addition to the pictures and simple logos, interactive banners, pop-up windows, and videos with creative material attractive to the user are used more. (Duguay A. L., 2012).

2)email marketing

According to Gay(Gay et al.2007), we defined *email marketing* as "a way for organizations and businesses to send information to their potential and existing customers using email." It is common for organizations to send promotional emails to encourage readers to buy products from their website or promote their father-in-law for recurrences or retirements.

There are several goals when using email marketing.

*Viral Marketing or Electronic Word-of-Mouth Advertising: Examining Consumer Responses and Motivations to Pass Along Email*The goal is to approach (future) customers by sending advertising emails and allowing them to care about the area of a company. When approaching (future) customers, the second target of email marketing is *to share and exchange information with customers*. The information pertains to promoting products and services, creating a good reputation, guiding customers through the website, and tracking orders (Merisavo&Raulas, 2004). Through the research of Merisavo&Raulas (2004) users viewed emails with certain development information, information about new products, competitions, and general news differently than emails with other content. *Sales* are the third goal and key. Shipment of email advertising must lead to the sales of a business. Further, given the additional work caused by personalization, there needs to be a good performance of the electronic investment. All of the above objectives are successful through the personalization of electronic messages. (Merisavo and Raulas 2004)

Unlike other marketing tools, email marketing offers significant advantages for marketing professionals. An email is a cheap tool, and traders can promote and present their contents with

targeted messages selectively, only to consumers who are of interest to the disadvantage is that many companies use e-mail marketing with the effect of electronic consumer mailboxes filled with unsecured emails by all companies. Consumers tend to delete the adverse mail to be released from a website due to overcrowding (Phelps et al., 2004). Email marketing can create close relationships between the organization and customers. This increases the client's interaction with the organization and customers' beliefs (Huang, J.H. & Shyu, S.H.P., 2009). This dedication increases satisfaction and, therefore, the target of an organization's aims. (Vlachopoulou & Dimitriadis 2014), distinguish the following forms of Marketing through Email:

- The sending of periodic e-newsletters, commonly known as e-newsletters, to inform recipients about the activities, products, and services of an organization.
- After an order has been placed, an e-mail is sent, which works as an order confirmation, reminding, confirming, thanking, and informing its recipients about its progress.
- Electronically sending promotional or reminder messages regarding new products, services, events, competitions, etc., to prompt recipients to respond directly.

3) search engine marketing

More specifically, search engines refer to online applications that record and classify websites on the Internet according to their relevance with an algorithm-based search. In our time, the most well-known and Used Search Engines are Google, Microsoft, and Bing. Yahoo in 30 Several countries around the world, Baidu in China, and Daum in Korea (Jerath et al., 2014). It is worth mentioning that according to a study by the statistical agency Statista, the largest share of searches on a global scale today belongs to google, which in January 2019 reached only 90.28%. (Chart 1)

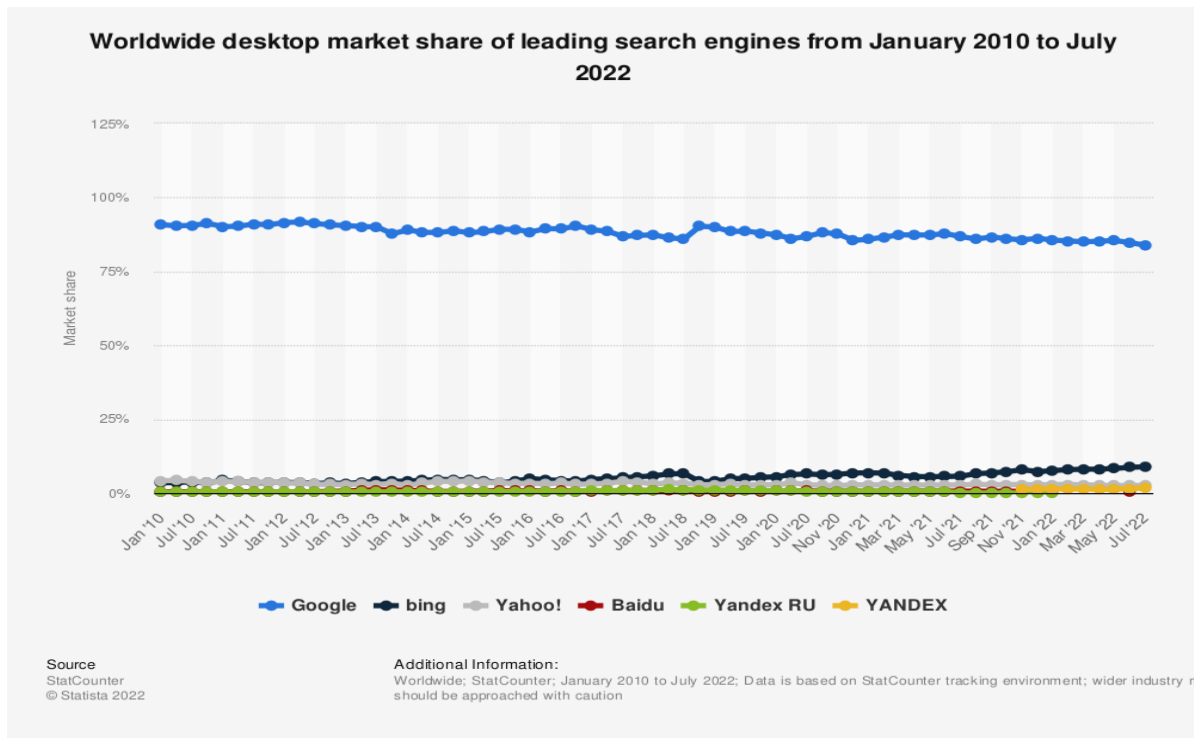


Chart 1: Worldwide desktop market share of leading engines from January 2010 to July 2022

Source: (Statista 2022)

To perform a search in the above search engines, one must type a specific word or phrase in the search bar. The search bar suggests keywords or key phrases from previous related searches. In addition, it returns a list of online addresses ranked according to the degree of relevance in terms of search.

These searches are termed 'organic' because businesses cannot pay to appear higher in the rankings (Ghose et al., 2014). However, the results are influenced mainly by the user's previous searches, so two users with the exact search term will have slightly different results in the search engines.

Search engines are now the most popular way to search for information, attracting more customers to a business's website. (Newman & Levy, 2014; Safran, 2013). Thus, tools that make businesses visible after users type a keyword or phrase into the search box have been developed. A search engine marketing tool is search engine optimization (Egri&Bayrak, 2014; Kritzinger& Weideman, 2013).

4) Search and Paid - per Click - Ads

Paid - per Click - Ads appear above organic search results or in the vertical column to their right (Horbal et al., 2017; Kritzinger & Weideman, 2013). This practice encourages users to visit a company's website when they type a similar word or phrase with related content in the search bar. These ads usually have a simple form of small text with a title, and a link and, for this reason, are considered more standardized than attractive. According to Chen & He (2011), in this practice, interested companies buy specific keywords, or phrases, by bidding on various search engines. A set of ads appears each time a user types the particular words, phrases, and keywords above or below the 'organic results' (Jansen & Schuster, 2011). To format a web page; entering the terms the user wants to search for, and the terms they are willing to purchase is necessary. Most search engines rank content based on its popularity rather than its relevance, based on the price paid by the advertiser for the search words and phrases (Laudon & Traver, 2017). Whatever the case, advertisers should realize that they do not pay every time their ads are displayed to users, as with conventional media; they only pay when their ads are clicked.

This amount is called cost per click and is mainly related to the word, phrase, and key used during the search, the quality and the degree of importance, and the so-called page rank, of the official website of the advertiser (Mordkovich & Mordkovich 2007).

Businesses set an amount for their advertising and usually choose a way of billing the charge per click, determining the price available for each click. At the same time, they indicate the words, phrases, and keywords that correspond to the content of their website. So, every time a user types a specific word or phrase, Google runs an auction and displays the results with the most significant ad item first. Suppose the business declares relevant words, phrases, and keywords regarding what the user entered in their search and pays a higher price for each click on its listing. In that case, the business is more likely to appear on Google's search results page and in a higher position proportionately. Specifically, the auction is repeated for each search command with different results based on the competition at the given time (Vlachopoulou & Dimitriadis, 2014).

5) Display Advertising refers to the first type of advertising that appeared on the Internet, using static, graphic images, i.e., banners (Vlachopoulou & Dimitriadis, 2014). It involves the

placement of paid advertisements on websites, social networks, and mobile apps associated with the advertised business (Laudon & Traver, 2017) through simple, graphic icons accompanied by a short promotional message (Kaur et al., 2015) to attract visitors to her website.). Essentially, every time a user clicks on these advertisements, it is transferred to the website of the advertised business with which they have linked (Laudon & Traver, 2017; Chaffey & Ellis – Chadwick, 2016). In our time, Banners include more exciting content such as images, sound, video, and location maps. Moreover, all Banners can be displayed in all sizes and places on the website (Kaur et al., 2015). The main goal of display advertising is to increase awareness and not to increase sales (Chaffey & Ellis–Chadwick, 2016).

So, the first step is always the selection of the type of Banner. After the passage of the Banner is the placement and finding of the appropriate website for this display advertisement. Some standard criteria help in choosing the proper website for the advertising content.

- The similarity between the target audience profile of the advertised business and website visitors.
- The relevance of the advertised product or service to the general content of a website.
- The "traffic," i.e., the website's traffic and coverage.
- The cost of advertising on said website.
- The loading speed of the website.
- The ability to adapt the website to all digital media

The two most dominant channels have always been Google ads and Facebook, as shown in the diagram below.

Google and Facebook Set to Dominate Display Ads

Estimated U.S. display advertising revenue (in billion U.S. dollars)

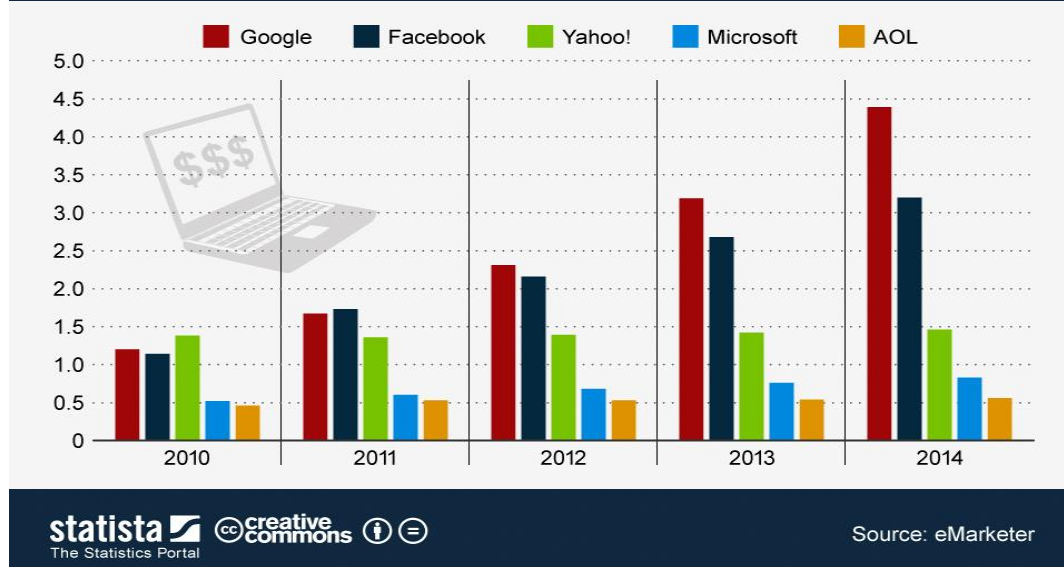


Chart 2: Estimation of U.S display advertising revenue in billion U.S dollars

Source: (Statista 2022)

Concerning the ways of charging the specific form of advertising, the following are distinguished following (Vlachopoulou&Dimitriadis, 2014):

- Cost per click: Advertiser pays a pre-agreed amount only for each click on its banner and not for its general appearance in the medium it has chosen
- In a cost per thousand impressions, a company pays for every time its banner appears in a particular medium, regardless of how many clicks it receives.
- A cost per action is when an advertiser pays a set amount only when the user takes a desired action, such as purchasing a product.

6)Viral Marketing

Viral marketing refers to a modern version of word-of-mouth marketing using electronic media. This method transmits information by users in multiple social networks or communities or by email. (Akyol, 2013; Dahan, 2012). According to The Chaffey Ellis - Chadwick (2016), this practice's primary purpose is to recognize a company's identity through targeted actions to increase sales (Borade, 2013).

The most popular tools of Iogenic Marketing are listed below (Vlahopoulou&Dimitriadis, 2014; Georgiadou et al., 2011):

- An email-to-a-friend feature allows a user to let a friend know about a website or some of its content.
- Promotion of free products: One of the most popular viral communication techniques is providing free software and gifts to website visitors of businesses. By offering this incentive, she encourages people to return to her website, subscribes to her newsletter, and advise friends to use their products and services.
- Free email account provision: Another popular tool is providing free email accounts by websites to their visitors, aiming to attract new customers.
- It is possible to send electronic cards, in which the recipient must log on to the website that provides this service to view them, thus increasing traffic on the website.
- Articles and reports: One of the most effective tools of viral communication is sharing articles and reports on a company's website relevant to its subject, encouraging its visitors to forward them to others.
- In E-books, visitors enter their email addresses and receive free articles and other information about a specific subject.
- The sending of newsletters is a powerful technique for promoting new products and tactics of a business.
- Tool for public discussions and communication: Media and online chats are particularly popular for electronic communication, message exchanges, and user communication.
- Introducing a prompt for recommendation: By introducing the phrase "recommend it," the company encourages the visitor to recommend the website to a friend and thus increase the traffic and visibility of the page.

7)Marketing through Mobile Devices

The ever-increasing use of mobile devices has led businesses to take advantage of the opportunities they offer the various portable devices (Varnali&Toker, 2010) to create new dimensions for marketing their products or services (Coy, 2013). According to an advertising analysis by Google (2013), nine out of ten user searches through mobile devices result in some

desired action. Consequently, a business not optimized for mobile devices risks losing a significant share of its existing and potential customers (Turner – McGreevy et al., 2017).

Marketing through Mobile Devices refers to interactive communication through a group of processes and organizational functions, which aim to promote and create added value to a company's products and services and better manage its customer relationships through existing mobile devices. Below are listed the most popular Marketing techniques through Mobile Devices (Vlachopoulou&Dimitriadis, 2014; Georgiadou et al.):

- The display advertising category includes banner ads on mobile phone portals, the mobile portals of service providers, or on other content providers' mobile phones.
- Text Messages or Picture Messages: These campaigns are implemented through text messages or pictures, such as MMS.
- Electronic vouchers are tickets sent to mobile phones for redemption against a purchase offer or discount. They are usually shared via SMS, MMS, or Bluetooth.
- Search: This is the process of finding online content that is accessible and adapted to mobile devices.
- A location-based service provides users the information they desire based on their location and position in the GSM network.

According to the global mobile report in Europe for 2020 we have more than 532 million users

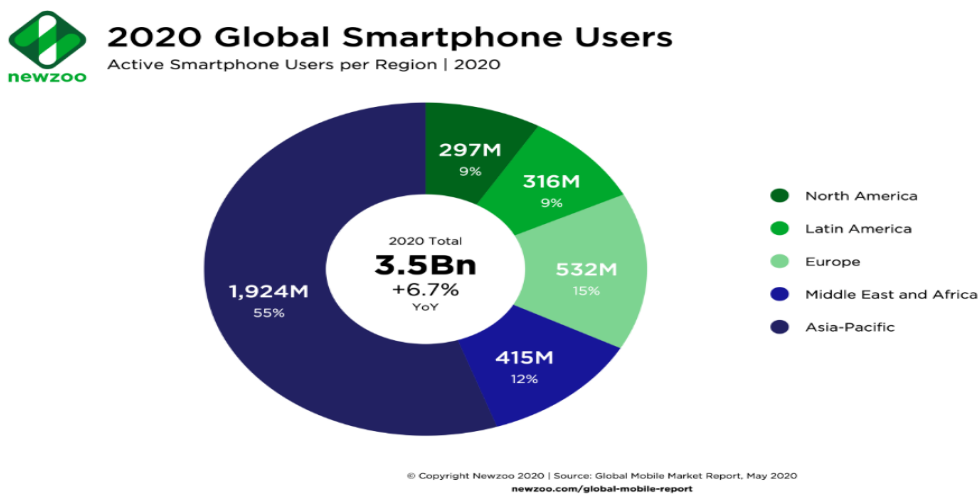


Chart 3: Global smartphone Users of 2020

Source: (Smartsights 2020)

Indeed, from 2021 onwards, according to Statistics, users use their mobile devices more than their laptops or desktops:

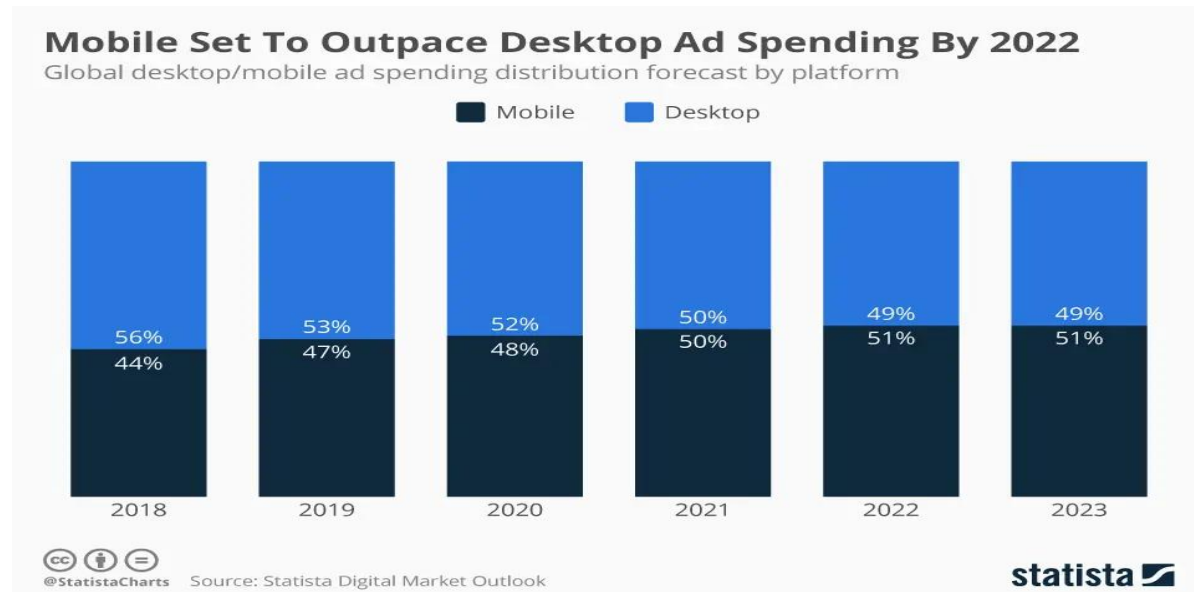


Chart 4: Mobile vs Desktop Ad spending by 2022

Source: (Statista 2022)

8)Marketing through social media

One of the latest revolutions in Information and Communication Technologies are the means of social networking with effects both on interpersonal relationships between people, as well as in becoming an entrepreneur (Siddiqui & Singh, 2016; Owusu – Acheaw& Larson, 2015; Abuhashesh, 2014).

In their study, Kaplan &Haenlein (2010) examine the impact of online applications, WEB 2.0 is based on ideologies and technological foundations that enable users to share and create content. This term is often confused with that of social networking. Their difference guarantees that social media include the tools to share information with users. In contrast, social networking is the development and utilization of communities, aiming to connect people with common interests (Cohen, 2009). Regardless, social media networks must continuously evolve to adapt to contemporary trends and technological advancements. (Asur & Huberman, 2010).

The essential features of social networking media are:

- They include complex creative content such as text, images, audio, and video.
- They may use these forms either individually or in combination.
- Accept interactions that go through one or more platforms.
- User engagement levels vary from medium to medium
- They optimize the speed and range of information dissemination.
- They offer multiple types of communication, i.e., one-to-one, one-to-many, or many-to-many.
- They allow communication both in real-time and asynchronously.
- All digital devices support them.

9) *Social Networking Sites*: In this social media category, all the communication systems and the formation of human practice are found as social identities. More specifically, they constitute the list of contacts through which the individual shapes his social identity, participate in various applications, and creates a list of contacts (Owusu – Acheaw& Larson, 2015). Today, there is a multitude of social networking sites that are divided into categories based on their content and the way of communication and user participation. (Statista 2022) Facebook has been the most popular in recent years, with over 2 billion active users. The most popular social networking sites include alongside Pinterest, Instagram, Twitter, LinkedIn, WhatsApp, and Google Plus (Edosomwan et al., 2011)

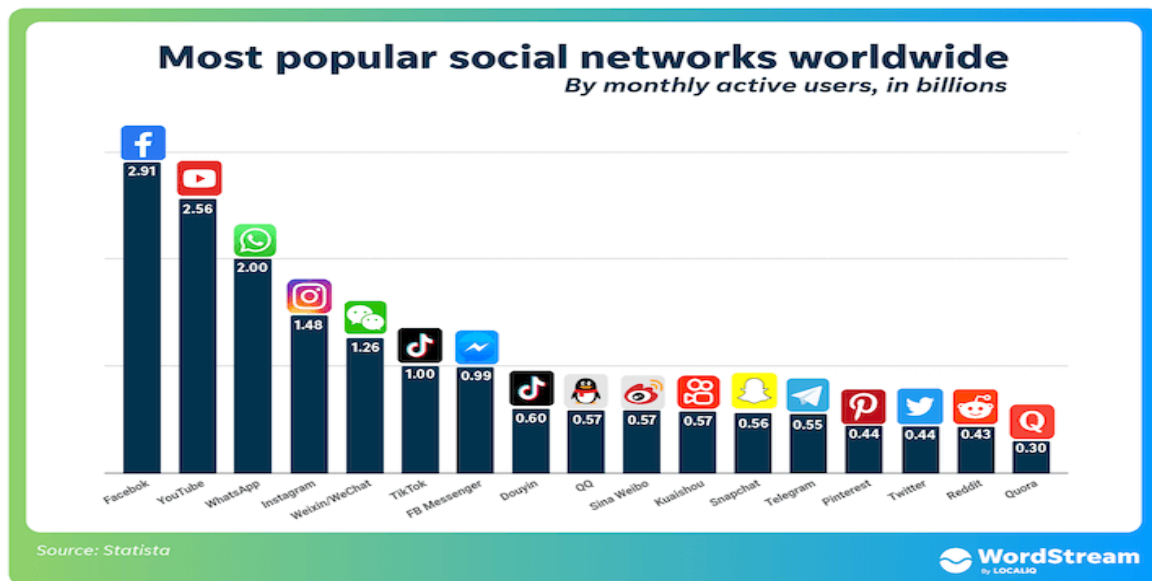


Chart 5: Most popular social networks worldwide for 2022

Source: (Wordstream 2022)

10)Microblogs: enable users to interact asynchronously through short messages. It is used by groups of people who frequently update the content of their messages, including short phrases, photos, and video links. Twitter applications dominate this category. It became widely known instantly after it was created in 2006 (Vlachopoulou&Dimitriadis, 2014). Globally, it has a user base of over 762 million users, mostly young (Statista, 2022).

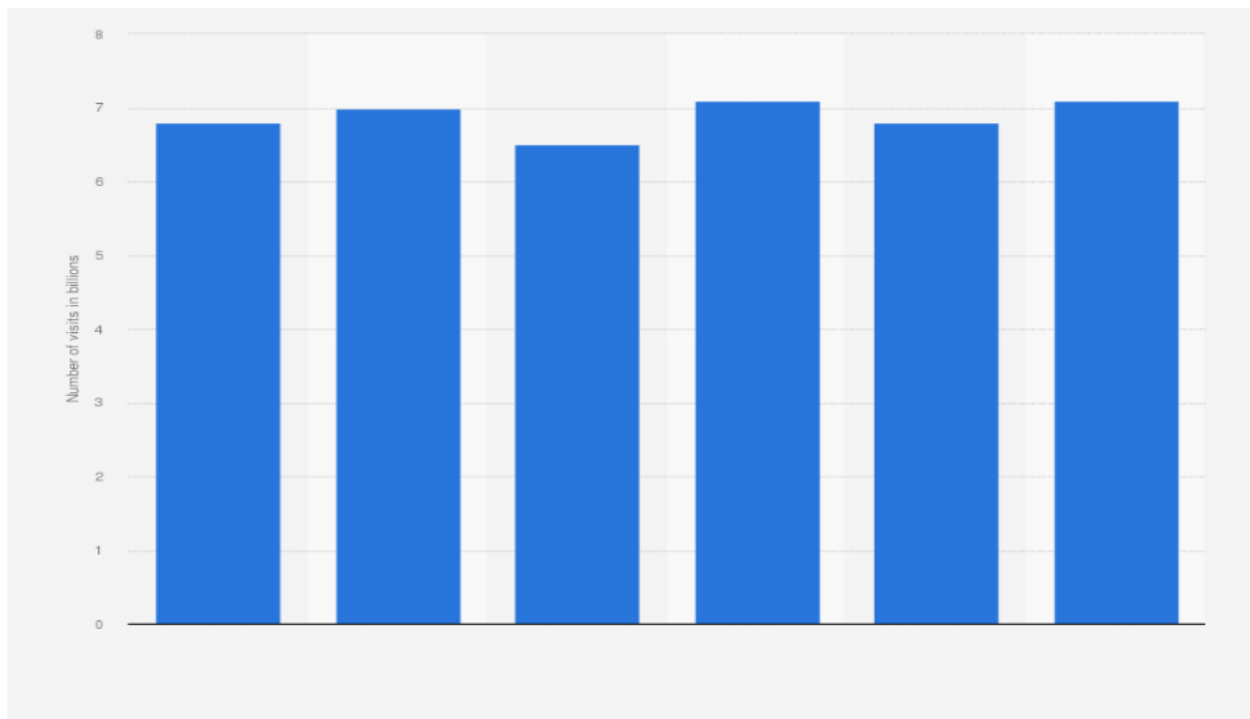


Chart 6: Twitter visitors for 2022

Source : Statista 2022

11)AffiliateContent Websites: content providers are online applications that enable their users to add, modify and delete their content easily and quickly without necessarily having registered with them (Wikidot, 2017) or possessing knowledge of languages programming and code (Miletsky, 2009). In other words, they refer to a web server software that allows users to contribute to creating its content. The first time a corresponding website appeared was in 1994 and was installed on the web on the 25th of March 43, 1995 (Wikipedia, 2017). Today, the most classic example of a cooperative website is the online encyclopedia Wikipedia, which is about a collective author's work of free access and use, with more than 30,000,000 articles in 287 languages (Net Advice, 2017).

12) Audio-sharing websites consist of audio files stored and posted on the internet from which users can download and listen to them anytime they want. An example would be a selection of music, a song, or an excerpt from a movie. In 2004, Apple introduced the iPod, a portable digital audio player. There are countless audio-sharing websites from various providers (Vlachopoulou&Dimitriadis, 2014).

13) Video sharing sites: Video sharing sites consist of digital video files stored and posted on the internet so users can download and watch them whenever they want. Such are funny videos, video clips, and movies. Now, the most popular application is YouTube, which was created in 2005 while measuring millions of active users worldwide (Vlachopoulou&Dimitriadis, 2014)

14)Information-sharing websites are related to online applications where visitors interact with and share their views and reflections with other users. More specifically, they are online communities where users meet to discuss various topics that interest them. It is one of the most modern services since the first websites of information sharing emerged in the late 1990s, in which the members communicate with each other through messages without being required to be present (Vlachopoulou&Dimitriadis, 2014).

15)Content Sharing Streams: Content Sharing Streams refer to the application of exchange of informational digital content based on the known 'XML' markup language. It is an alternative communication method that automatically informs each user about events. Subscribing to the service website allows someone to access these streams from any website (Miletsky, 2009). There are countless websites on the Internet today packed with so much information that no one can keep up with what is happening in the world or the objects of their interests. Through these applications, users can receive the information they are interested in without having to visit the websites (In News, 2018). These streams have been around since 1999. However, their spread on the World Wide Web was around 2005 due to the spread around the same period of blogs with regular content renewal (Vlachopoulou&Dimitriadis, 2014).

16)Image Sharing Sites: This social media category includes the websites that facilitate digital image transformation and appearance, allowing internet users to share public or private information. In a few words, it allows users to see the content of the images without taking the photo. The best-known photo-sharing website is Flickr (Vlachopoulou&Dimitriadis, 2014),

which appeared in February 2004 and currently counts more than 90 million monthly users (Smith, 2017).

17) Social news websites: These websites are online applications created to be used by mobile devices. Specifically, they allow users to share their location, comment positively or negatively, locate their friends, and discover new points of interest and ways of having fun. Nowadays, the most widespread social news site recommends Foursquare, with more than 50 million users and 6 billion location shares (Konsoulas, 2014).

1.8 Social media marketing

Social media marketing uses social media platforms to connect with the audience to build a brand, increase sales and increase website traffic. This includes posting great content on social media profiles, listening and engagement of the followers, the analysis of the results, and serving social media ads. The leading social media platforms (currently) are Facebook, Instagram, Twitter, LinkedIn, Pinterest, YouTube, and Snapchat. Several social media management tools also help businesses make the most of the social media platforms mentioned above. For example, Buffer is a tool platform for social media management that can help succeed success with social media marketing. (Tan et al. 2016)

Social media marketing first started with publishing. Businesses were sharing their content on social media to generate website traffic and, hopefully, sales. However, social media has matured beyond just being a place to broadcast content. Today, businesses use social media in many ways. For example, a company that worries about what they say to people for the brand would monitor the conversations in social media networking and respond to relevant reports (listening and social media engagement). A business that wants to understand its social media performance will analyze the social media reach, engagement, and sales networking with an analysis tool (social media analytics). A business that wants to reach a specific set of audiences at scale would perform targeted social media ads (social media advertising). Collectively, these are also known as social media management.

Social Media Marketing uses the latest technological means that provide the internet and online socializing for the company to offer the necessary information and attract new consumers or even help strengthen the already existing relationships in the context of interactivity and provided

services. In general terms, social media marketing is related to every kind of projection implemented by any social network, like through ads on social media like Twitter and Facebook, even on the google platform. (Wyman 2020)

Social Media Marketing combines many different trends. Characteristics examples of these trends are:

- Direct communication between companies and customers, without intermediates.
- Direct, customer-to-customer communication.
- Strengthening the customer's voice through social media.
- Need for an authentic story that satisfies human needs.

To choose a social media marketing strategy must have been previously defined objectives. The main aim of the business is to increase revenue, reduce costs and improve consumer satisfaction. At the same time, other goals can be set, such as the increase in traffic to the company's website, the rise in sales, and the prospect of establishing itself in its industry. On the other hand, there needs to be more information about social media marketing. This concept developed exponentially in recent years, and global literature islagging material. For this reason, marketing managers resort to the classic promotion mix, adapting to the needs and social media data.

Companies aim to distract their attention from consumers and commit to them regarding the quality of their products. The four main ways to focus the consumers on a product or a business are communication, collaboration, education, and entertainment. When consumers commit to a product, it's a serious possibility that they will promote it through sharing on social media. In addition, users-consumers can participate in online contests, games, and polls that can set up a business to attract users' interest. This motivates customers to switch to a product and to seek more information about it. (Lee 2017)

1.9 Advantages of social media marketing

1. Recognizability

Social media arouses the interest of the users that constitute potential consumers. They could make comments and share audiovisual material that interests them while interacting with other users

and companies. Through social platforms, users find it easier to search for information about the service or the company they want.

2. Increase in visits to the company's website

The company is also benefiting from increased traffic to its website. More specifically, creating offers and offering information to social media, quality traffic, and search is growing with the result of promoting it in the rankings of the following years.

3. Support and improvement of the user experience (Customer Support)

The consumer is convinced that he can search for information regarding the company's services on social media. This will be the first point he will look for, expecting an immediate answer. The businesses that will manage to satisfy these needs will also be the ones that stand out in consumer preferences. (Μπουρχας 2017)

4. Relationships of trust

To differentiate and differentiate, a company on social media must form a spirit of mutual trust with consumers. This will be implemented from the first stages of their relations, from the market of the respective goods up to and including the stage of their use and continues with the after-sales experience. Social media multiplies and amplifies its image of the companies, not just virtual. Social Media has come to multiply a good image of the company in the real world.

5. Target the right audience and geographic area

Using social networks, they aim to stimulate the interest of consumers who wish, depending on the area that they aim for. Regarding the traditional ways of marketing with or without connection to the internet, it becomes possible to create a financial campaign to promote the company's goods. (Tan et al. 2016)

1.10 Disadvantages of social media marketing

It can be the majority that social media marketing brings significant financial benefits to businesses; however, there will always be adverse effects. Due to the lack of specialist knowledge or the incorrect strategy chosen by marketers, companies can miss promoting a product. If the tactic

is inappropriate for the product, the buying public will reject it. Also, a bad reputation will spread among users and damage the product.

The lack of it is equally "dangerous" business-wise as wrong marketing planning. When one organization ignores the social media marketing part, it is too much likely to lose a large share of the market. Businesses need to refresh the frequent electronic communication channels they use. Business based important to the dynamics of the specific marketing strategy; they know that there must be a specific group or part of its personnel o deal responsibly with the organization and operation of social networking pages. In opposite cases, the picture of the business is damaged, and consumers collect, indifferent on the part of the business. Another negative impact is the risk of exposure. When for example, the business is represented by a Facebook page, it exists the risk of being referred to it, a negative review, or a negative comment. In these cases, there is usually a dialogue between the user and the person who manages the page and often contributes to product improvement. (Mehta S. et.al 2020)

1.11 Impact of social media

Social media has become a powerful platform for marketing due to high brand exposure and a great return on investment. When more than 3 billion people browse the content of social media, it opens an unlimited opportunity for brands and businesses to promote products and services using social media. Social media marketing has positive effects on the industry. It allows the public to find a business on social media. The most significant benefit of social media marketing is that the company can reach its target audience, stay engaged, and answer their questions quickly. Social media is a great way to evaluate the competition by monitoring their social media pages.

The lack of it is equally "dangerous" business-wise as wrong marketing planning. When an organization ignores the social media marketing part, it is too likely to lose a large share of the market. Businesses need to refresh the frequent electronic communication channels they use. Businesses are essential to the dynamics of the specific marketing strategy; they know that there must be a specific group or part of the personnel to deal responsibly with the organization and operation of social networking pages. In opposite cases, picture the business is damaged, and consumers collect indifferent on the part of the business. Another negative impact is the risk of exposure. When for example, the business is represented by a Facebook page, it exists the risk of being referred to it, a negative review, or a negative comment. In these cases, there is usually a

dialogue between the user and the person who manages the page, often contributing to product improvement. (Koyuncu, C. & Lien, D.,2003).

1.12 Consumer behavior in time of crisis

Consumer behavior in times of crisis can be known from different theoretical approaches (Valaskova et al., 2015, Hamilton et al., 2019). According to Hamilton et al. (2019), millions of people experience chronic financial constraints or episodic. Elements such as scarcity should be considered of resources, the restriction of options, and the comparison of social and environmental uncertainty for decision-making consumption decisions. For example, emphasizing consumer resilience, highlighting that consumers often successfully face and design adaptive strategies to deal with financial constraints. According to Sheth (2020), consumption habits are seen as altered by context changes. For example, events in the life of the consumer, such as getting married, having children, and moving (social context), internet use, the emergence of smartphones and online shopping (context technology), and measures to combat the pandemic (rules and regulations related to public spaces and shared). Lastly, less predictable events like earthquakes, hurricanes, and global pandemics, such as the case of COVID-19 (natural disasters and regional conflicts). Amalia et al. (2012) explain that people are different as well as their perception of a situation, with adverse effects due to an economic crisis or any other kind of crisis. The perception of risk reflects the interpretation of the consumer in relation to its content and that he dislikes himself so much. This perception reflects the consumer interpretation and the possibility of being exposed to the content of that risk.

CHAPTER 2 - Covid 19 era and social media marketing

Having left behind COVID-19 by the end of 2022 and the dawn of the new year, we have moved into an era of high technology that has flourished during the pandemic. Countless social activities between countries, urbanization, and overpopulation led to the dramatic spread of Covid 19, making it a pandemic (Keane M and Neal T, 2021).

In the past, the world has faced severe pandemics such as cholera, syphilis, and plague. Historically, the world has successfully faced serious epidemics, but despite this, the world managed to cope and move forward. However, all of these have a significant impact on human culture. People have become more suspicious, but they are also confronted with dangerous stimuli in their daily lives. As a result, they have become more vulnerable to contracting strange diseases, which has paved the way for spreading the latest and life-threatening COVID-19 pandemic. Fortunately, as time progresses, this COVID-19 pandemic has become part of the history books (Naeem, 2021). The battle with COVID-19 was remarkable in Public Health Systems whose strategy and efforts have played a very influential role worldwide in reducing the number of deaths.

As of today, and later announced by the WHO, the disease COVID-19 has caused more chaos than natural disasters such as volcanic eruptions, hurricanes, and earthquakes. Confirmed people infected with the coronavirus and about 4125 deaths worldwide (Di crosta et al., 2013).

2.1 The effects of the pandemic on social media marketing

As the Coronavirus epidemic spread to America and throughout Europe in 2020, it created new conditions and information poignant the actual and profitable lives of billions of individuals on Earth. Wyman (2010) reports that obligatory inner stays and social distancing have created social media as one of the foremost well-liked selling designs throughout this era.

As seen within the graph below, there was an adding trend in the use of social media throughout Europe. A lot specifically, before the epidemic in massive European countries like Norge, Malta, and Germany, however conjointly in lower bones like Greece and Cyprus, we tend to determine a lower likelihood of social media use in 2020 than when the tip of the epidemic in 2021. so, a lot of specifically in Greece, in keeping with Eurostat during a check dole out in 2021, the

prospect of social media use increased by three percent from 2019 and late. This was followed by twenty percent in 2014, and later, social media sales rose.

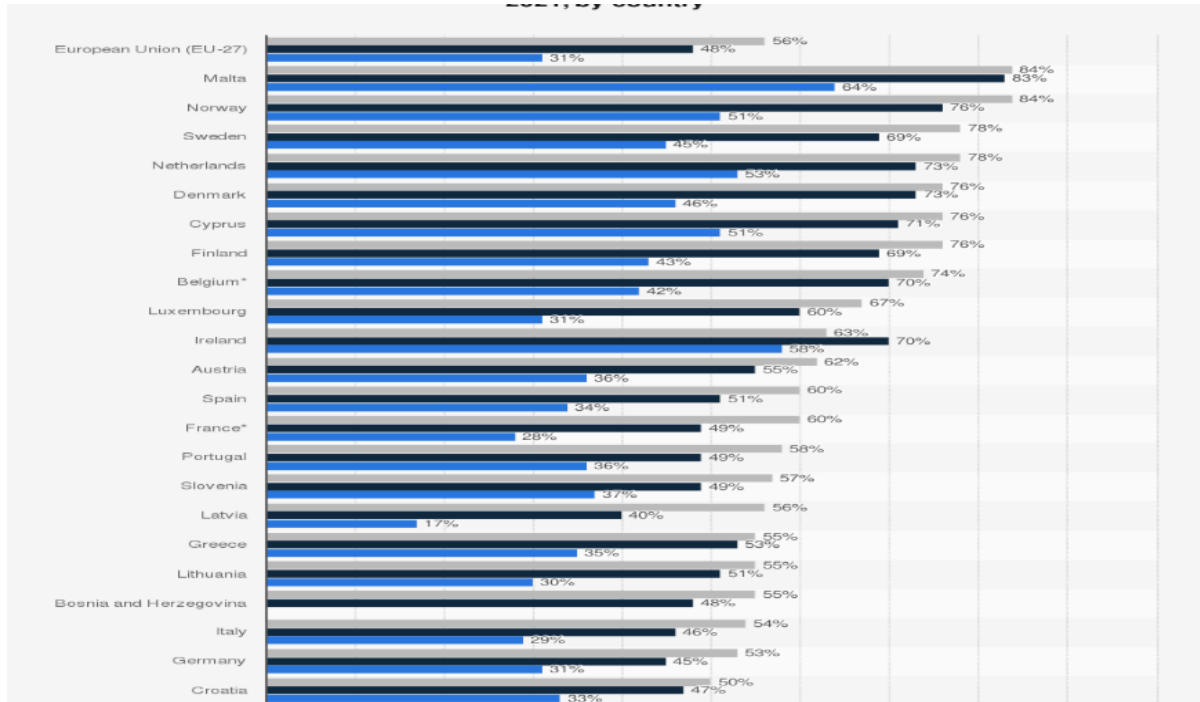


Chart 7: Social media use in 2019 vs 2022

Source: (Eurostat 2022)

In addition to the increase in social media use, the number of mobile app downloads worldwide has also increased continuously since 2016, surpassing 200 billion in 2019. In the most recent year measured, consumers downloaded 230 billion mobile apps on their connected devices. up more than 63 percent from 140.7 billion app downloads in 2016.

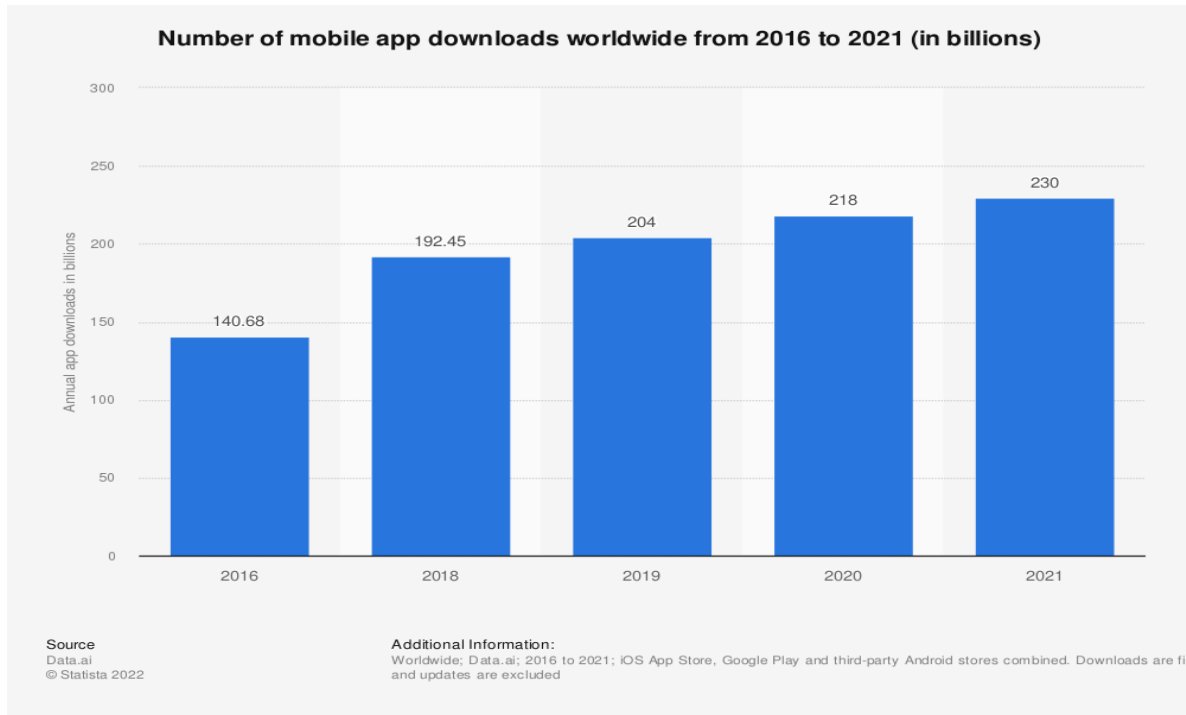


Chart 8: Number of mobile app downloads worldwide from 2016 to 2021 (in billions)

Source: (Statista 2022)

The coronavirus pandemic is one of the factors that has light-emitting diode to redoubled interest in social networking, with billions of individuals in internment, operating and learning from home and in would like of socialization. For this reason, there has been a sharp increase in the use of social media applications. It's clear from the graph below that everyone platform has seen an oversized rate with TikTok showing an impressive increase in monthly active users worldwide from 2019 to 2021, at 38%. The short-form video-sharing app was utilized by 689 million individuals monthly by 2021, compared to five hundred million in 2019. alternative high social networks that grew by over 30 % were Pinterest and Reddit.

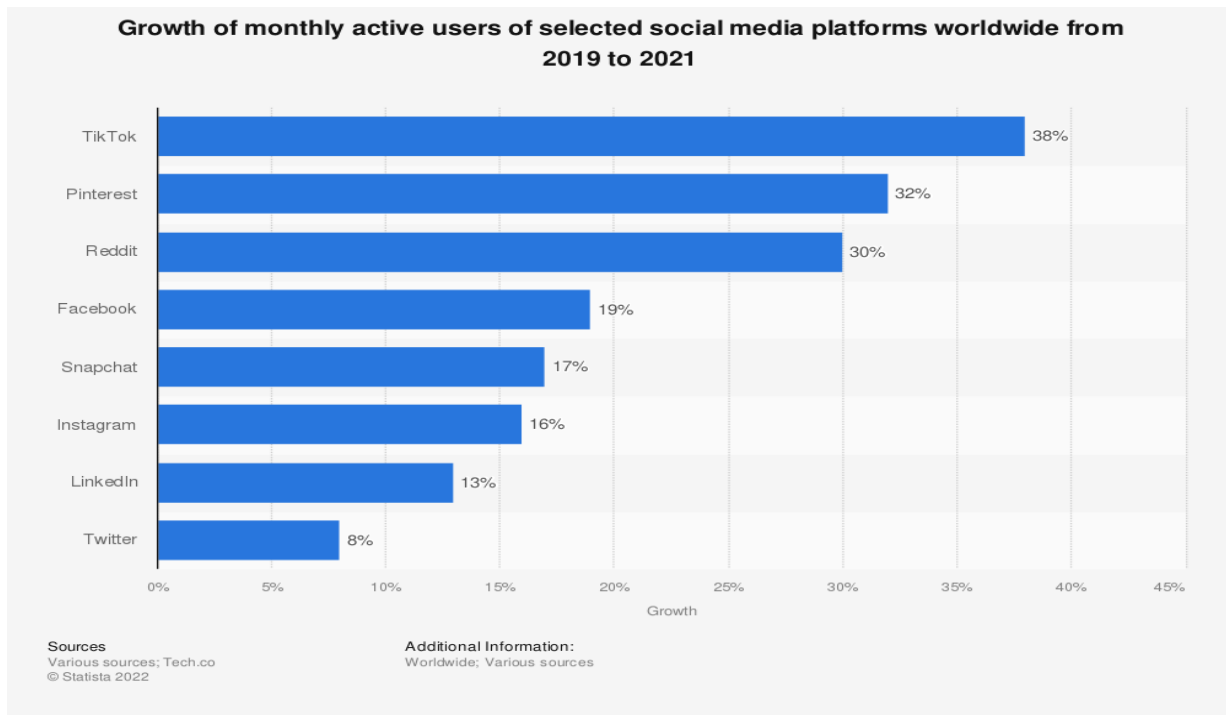


Chart 9: Growth of monthly active users of selected social media platforms worldwide from 2019 to 2021

Source: (Statista 2022)

2.2 The covid-19 pandemic differentiates the types of use of social media

This graph illustrates that 47% of people used social media to keep in touch with family and friends during the pandemic. Around 30% later use social media to fill their free time and read new stories. With its visual content-heavy nature, unlimited scrolling capabilities, and ease of consumption, social media provides enormous entertainment value. Therefore, analysts consider it an aggregator of news and entertainment.

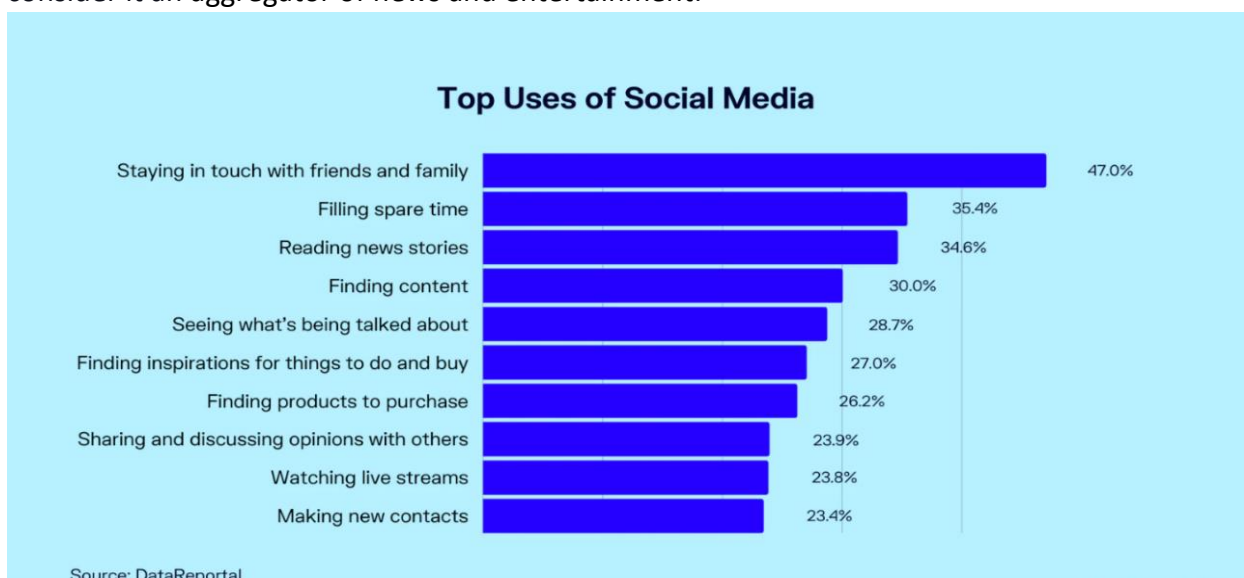


Chart 10: Reasons for using social media platforms

Source: (Datareportal 2022)

For many users on social networks, one of the goals of publishing content is to reach a large audience. The likelihood of receiving reactions to a message differs for each user and depends on various factors, such as location, daily and weekly behavior patterns, and visibility of the message. In the pandemic era, when the world had more free time, the problem of recommending personalized posting times was reinforced. The goal of most users is to find the best times to post on social networks to maximize the likelihood of audience response. To understand the complexity of the problem, we look at user behavior from a post-to-reaction perspective time and compare the weekly reaction behavior between networks (Nemanja).

2.3 Quarantine determined the best time to post

The American Marketing Association's research on social media programming reveals that content posted early in the morning resulted in an 8.8% increase in the click-to-view ratio. For posts made in the evening, there was an 11.1% increase in commitments compared to the afternoon posts.

More specifically, according to the research carried out during the quiz, the time spent on social media increased mainly in the morning and midday hours on Tuesday if we look at the example of Facebook and Instagram, two of the largest internet platforms. Compared to the old days when

the time was more limited due to a heavier workload of users.

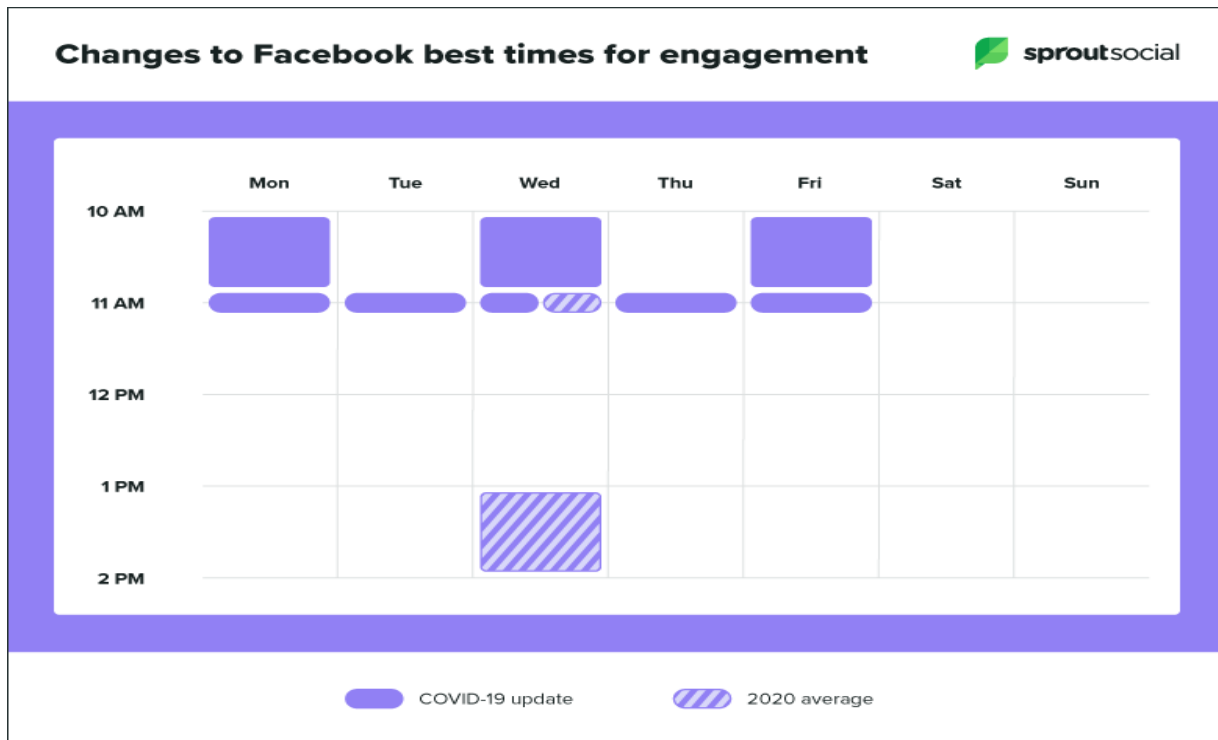


Chart 11: Best time for engagement for the case of Facebook 2022

Source: (AMA 2022)

The best times to post on Facebook are Tuesday, Wednesday, and Friday between 9 am. and 1 pm. According to the AMA, there are better days to post than Saturday, as it is the day of the week with the lowest engagement. Facebook remains undefeated as the world's leading social media platform, a fact that reflects the timing of the publication. Facebook enjoys 24/7 engagement. However, weekdays, evenings, and early mornings show brands the most consistent engagement and opportunities to watch their content.

On the other hand, Instagram is no longer just a medium for publishing photos and videos but also a marketplace where thousands of brands are advertised and promoted. According to the AMA, you should post on Instagram between 11 a. m. to 2 p. m. on Tuesday and 11 a. m. on Monday to Friday.

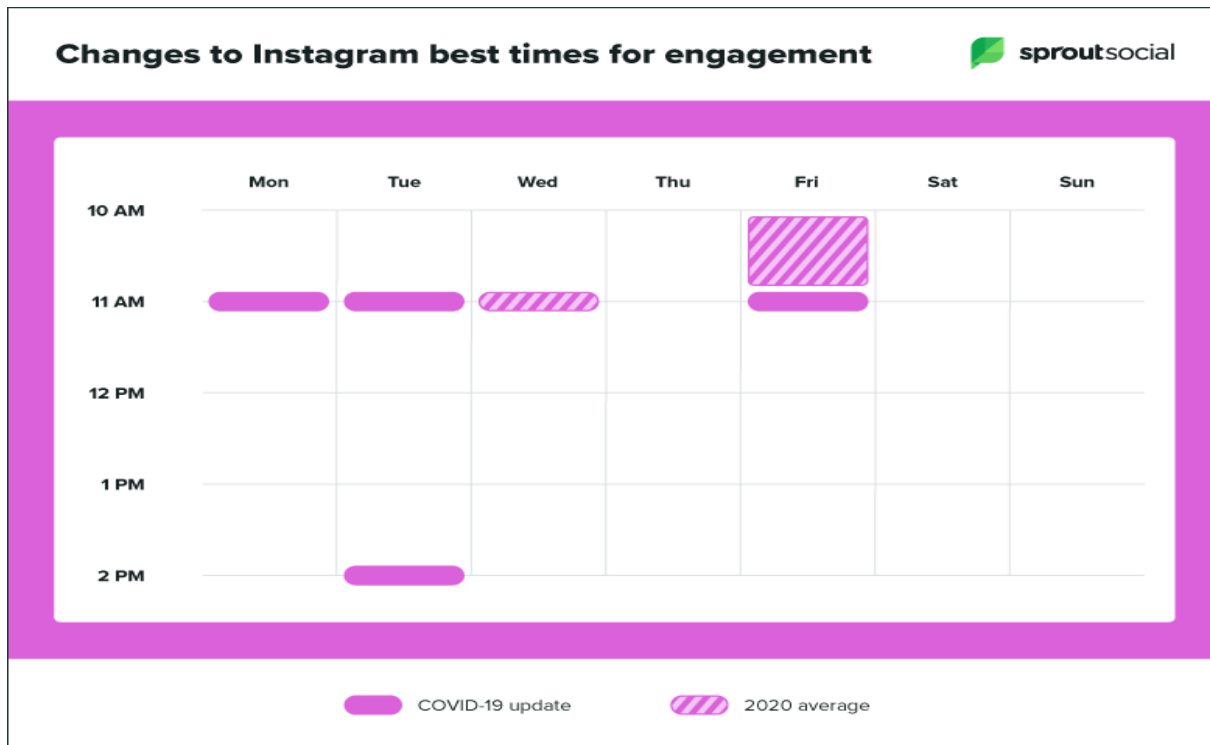


Chart 12: Best time for engagement for the case of Instagram 2022

Source (AMA 2022)

2.4 Impact on influencing Marketing popularity

An unintended consequence of the pandemic is the exponential growth of influencer marketing. Brand communication through opinion leaders and influencers has become one of the most popular marketing strategies in recent years. A market report in 2019 showed that 86% of surveyed businesses had set aside some money for influencer marketing. Later during the pandemic, the overall industry grew to approximately \$7.9 billion in 2021-2022. Influencers' characteristics are the adoption of the belief that they are "regular customers" who use the product. Status makes them perceived as more authentic and their brand content more persuasive. (Akpınar E.)

Also, most influencers are considered unreliable sources of information, especially during the ongoing pandemic. According to the Edelman Group Brand Trust Report (2020), consumer trust in influencers has dropped to 32% for a small influencer, 28% for a well-known influencer, and even less, 26% for celebrities, compared to 45% for a brand CEO. Most of the time, the level of trust in an influencer depends mainly on the content and career of the influencer on social media and other influencers outside of the brand's social media. As is logical, the level of confidence

may vary across the same categories of influencers depending on the types of content and careers of influencers outside of the social media space. There is no doubt that consumers are looking at brands to deal with the crisis mainly rather than the factors that affect them. (Johns, R)

Consumers' characteristic responses and expectations towards brands and influencers highlight the ambiguous status of influencers between internet celebrities and personal brands. In addition, many affected people have opened new accounts over the past two years, documenting their lives during the lockdowns.

Finally, in these times of crisis, brands are particularly tight on marketing budgets. Within this limitation, influence marketing is intensified. Some of the main risks influencers must face in recent weeks are related to influence marketing activities. Based on a recent survey, the two main challenges influencers have faced in recent weeks are the attrition of brand partnerships (27.3%) and the risk of appearing insensitive to their audience (26.5%). The dominant factor that significantly affects this situation is the contrast between the extreme consequences of the pandemic and the ideal and authentic world repeatedly projected by the influencers. (Ilicic, J.)

2.5 The pandemic increased the need to create an interactive community, raising many new applications and platforms.

The covid pandemic has made a remarkable impression in the catastrophic situation it caused worldwide. The outbreak has led to the development of many new platforms and applications that allow people to stay connected, gather information, and even educate themselves online; since March 12, 2020, people have been working and attending school online, continuing until January 20, 2021, when COVID-19 emergencies began. (Almunawar, M.N.; Anshari)

However, the applications that people use have increased to meet their needs in everyday life. The mobile phone applications that have been developed are exceptionally famous because almost every person has a smartphone without requiring additional hardware purchases. For a traditional medium of learning, people can take the opportunity to use remote social media platforms that allow easy conversations, such as using smartphones and even tablets. Teenagers or adults could continue studying in higher education institutions remotely through synchronous and asynchronous education. For example, they can use web tools to communicate through social media platforms such as WhatsApp, Telegram, Zoom, Microsoft Team, and Edmodo and

to connect with friends and teachers. Students can share information about social media for the provision of work, especially using platforms such as Google Drive. Students can create video assignments using Macromedia Flash, Filmora, or Movie Maker applications. The teacher can use the above platform online to conduct dialogue and chat with students in the presence of a wireless circuit through applications such as Zoom or Skype from their homes. Employers and employees can better interact using technology transfer, documents, and information sharing across the business. People can benefit from using an open-source platform to continue their conversations easily and quickly by reducing travel outside the home and spending time more efficiently (Almunawar, M.N.; Anshari, M.; Susanto).

Families, mothers, and fathers at home can learn about cooking, gardening, financial management, health care, diet, and exercise methods using social media such as YouTube.

Grandparents and their children, grandchildren, siblings, brothers, and sisters can communicate digitally through social media such as Skype or Zoom and through transport technology.

(Cleveland) Another area made difficult by covid 19 was purchasing food and raw materials and their repurchase. Therefore, with the use of online applications, e-commerce can be used to buy food online without having to go to the market and take the shopping home. They undertake the entire delivery process from the supermarket basket to the consumer's home. People can also use popular update platforms, Instagram, and Facebook, provided by the National Disaster Management Service and the Ministry of Health, where there is valid information and the latest data on the COVID-19 situation. (Cummings, E.; Mather, C.)

However, this situation led many people to unemployment and paralyzed the tourism sector, which is one of the primary sources of income for many countries, especially Greece. However, not only the tourism sector but also the private sector has experienced paralysis with the effects of the COVID-19 pandemic. Amidst all these negative impacts, the pandemic has offered us the opportunity for more integrated communication and marketing patterns. Today, digital and social media are practical and efficient options for communicating with the community. However, for optimal performance and usability of communication media, all users and businesses must understand how changes in patterns and media use affect them (Dhir, A).

Maintaining an excellent online presence is one of the critical aspects determining start-up companies' success, which can better advertise and promote their products easily and quickly

without high start-up and operating costs. On the other hand, the increased use of social media has brought news information security challenges. Therefore, the user must secure servers and technologies from external and internal threats using encrypted passwords that enable individuals to connect encrypted and uniquely.

2.6 Effects of the COVID-19 pandemic on the consumer behavior

The arrival of Covid-19 has radically changed all aspects of human life. On a personal level, it completely changed the rules of human "contact" from how we communicate with others to how we shop in a supermarket. On a professional level, businesses have had to comply with new hygiene rules to keep their customers and employees safe. This unprecedented situation also forced businesses to think of and implement new marketing strategies in a brief period. Despite being a long-standing trend, the shift from "traditional" to "digital" was intensified after the pandemic. Digitization has become a solution and a way to fulfill our needs, such as food, entertainment, learning, and communication. In addition, consumers' communication with businesses, their expectations, and their consumption of products have changed significantly. Therefore, for a company to survive in the new data, it must first reflect on the current situation of itself and its environment and then adapt appropriately to it (Garfin et al., 2020).

Although each reality represented a particular way of assuming and dealing with the emergency, the pandemic has disrupted people's daily lives worldwide. Many habits, from the most straightforward, such as greetings, have had to be discarded to avoid contagion. Moreover, the adoption of sanitary measures implies, at the same time, changes in people's lifestyles (Li et al., 2018).

Lifestyle is the open set of effective practices freely chosen by a person, through which they express and make perceptible who they are or whom they want to be, based on their attitudes, values, tastes, and beliefs. Lifestyle concepts emphasize choice, repetition, and routinization in everyday affairs - from what to eat for breakfast to how to spend free time. Hence, as various studies in recent years suggest, there is a high relationship between lifestyle and health status. It should be noted that there is no single categorization of lifestyles; the focus of each investigation sets the standard for studying and categorizing them; therefore, the indicators used for this purpose are usually different too. However, if there is an indicator of lifestyles common to the different approaches, it is consumption.

Consumption habits are defined as a series of actions carried out with some constancy and are identified based on what is usually acquired or consumed. It can have an internal or external origin. The internal source refers to the past consumption that conditions the current one; the external origin is determined by the consumption decisions of other individuals based on the materialization of their standard of living. In this way, media consumption, which concerns us, constitutes an indicator of different lifestyles (Li et al., 2018).

In the months of the pandemic with a high rate of infections, there were essential changes in consumer behavior. If before the pandemic, changes were observed in these, since the consumer was more informed, with the pandemic, in addition to staying informed, he acquired new behaviors of which many will stay. Hence, businesses need to know to adapt to them. Knowing consumer behavior by entrepreneurs is crucial to identifying current needs that last over time. In addition, consumers have been a crucial factor in the development of strategies by companies, which has led them to conduct studies to understand their behavior and create products or services that meet their requirements. The consumer's behavior is more than how consumers acquire a product at a given time since some marketing strategies and tactics aim to intervene in behavior (Miseng, 2020).

In the framework of the pandemic, multidisciplinary research has prioritized problems such as the effect of repetitive consumption of information regarding COVID-19, whether through traditional media or social networks, on mental health. This, considering that, in the case of the former, the treatment of information can lead to alarmist news that ends up raising public anxiety and, in the case of the latter, the misinformation easily spread through their channels tends to amplify the perception of risk (Miseng, 2020).

Thus, for example, during the news coverage of the Ebola virus outbreak in the period 2014-2015, the high frequency of exposure to messages that raised the risk could have contributed to increasing public concern -which was greater than that reality justified - about the disease caused by this virus in the United States of America. In addition, television was the medium through which this type of message was disseminated the most, compared to the print media (Quispe-Juli et al., 2020).

Likewise, the content and frequency of exposure to the media affect the psychological and physical responses to a traumatic event suffered by a community, which generates acute stress and anguish

among its members. In this sense, researchers agree with the need for adequate information processing and media coverage at the juncture of the pandemic (Brooks et al., 2020).

Media consumption has varied significantly in the context of quarantines around the world. One of the causes has undoubtedly been the population's growing need for information on the evolution of the pandemic. The magnitude of the world situation has justified, from the beginning, permanent coverage by the media. Undoubtedly, the abundance and thematic homogeneity of the information offered would eventually lead to oversaturation. If, of course, the traditional media are already an abundant source of information on the pandemic, social networks exceed this abundance, but with messages of a diverse nature, origin, and tone: from the increasingly frequent fake news to the latest conspiracy theories. This behavior was equally predictable since some platforms, such as Facebook and Twitter, have become easy to disseminate and rapidly propagate this content in recent years. In this way, during the confinement phases, millions of people around the world suddenly found themselves locked in their homes, and with a kind of avalanche of information - and misinformation- without comparison, a kind of infodemic (Miseng, 2020).

Nevertheless, users of social networks are more complex consumers of content. Gone is the passivity of the public; new audiences need to interact and feel part of the media flow. In recent times, the Internet and, in particular, social media have promoted the figure of the prosumer, a concept proposed by McLuhan and Nevitt (1972), who introduced the idea that the consumer could simultaneously assume the roles of content producer and consumer thanks to digital technology. During the pandemic, marked by global alarm and the confinement of millions of people at home, social networks, and their interaction increased significantly.

The complexity of consumer behavior has led several authors to develop theories to guide companies in using personal consumption variables. (Rivera Road et al., 2009: 45-50). Among these theories, we can mention:

- Alfred Marshall's Rational-Economic Theory. The consumer knows his needs and the means to satisfy them and seeks maximum satisfaction. It focuses a lot on the cost-benefit ratio in the decisions he makes.

- Learning Theory of Iván PetrovichPávlov. Learning occurs through responding to stimuli that modify or condition consumer behavior. For example, the consumer learns to buy a particular brand product out of habit or custom.
- Sigmund Freud's Psychoanalytic Theory. The purchase decision is influenced by economic criteria and symbolic aspects of the behavior guided by internal or unconscious forces.
- Thorstein Bunde Veblen's Sociopsychological Theory. The influence of a social group, such as family, friends, etc., determines consumer behavior. In addition, consumers are influenced by the behavior of reference groups, which leads them to adopt said behavior to feel that they belong to it. These theories guide companies to understand consumer behavior and the factors influencing their purchase decision. They help to know the activities the consumer performs when looking for information about the product or service and deciding to buy, use and evaluate a product.

Consumer behavior is a multidisciplinary study involving several disciplines, such as psychology. The sociology of needs, personality traits, perceptions, learned experiences, and consumer attitudes, for example, focuses on more prominent social groups, such as family and peers. Economists and statisticians use mathematical models to predict consumer behavior and communication methods, while anthropology considers values about cultures and subcultures.

The effects were identified based on what was proposed by Sheth (2020). In the beginning, there was the storage of goods, either out of fear or hoarding. The need to learn more about COVID-19 led to an increase in cyberchondria. The isolation measures and the circulation restriction limited the availability and accessibility of products and services. This led to making better use of available resources. It was given a prioritization to products that should be consumed and to spend taking care of finances and health. Digital technology allowed us to be connected despite the quarantine. New options arose not to become islands and connect with the outside world but to facilitate work from home.

At the beginning of the pandemic, the need to be informed about COVID-19 and its symptoms resulted in consumers being overloaded with information through online searches on various sites with different reliability levels (Sheth, 2020). The overload of information leads to not paying the necessary attention to what happens in the environment and results in less self-control, which leads to making decisions without the care required at the time of purchase (Samson and Kostysyn,

2015). By placing trust in search engines and not in journalistic content, there was evidence of a decline in confidence in informative news, a phenomenon that has been taking place in recent decades (Lewandosky et al., 2017).

For Husnaiyan et al. (2020), the increase in the use of Internet and social networks as a result of the practices of social isolation and teleworking, brought with it the increase of search for information on the COVID-19 pandemic. Seeking information about the new coronavirus, especially at the beginning of the pandemic, caused the spread of the cyberchondria. According to Starcevic and Berle (2013), this is defined as a situation of suffering, anxiety, and a compulsive need to search for medical information in line with a specific topic. Due to high exposure to sites about the pandemic caused an overload of information that resulted in an increase in cyberchondria and in the intention of making unusual purchases (Laato et al., 2020).

Businesses worldwide have had to adapt quickly and change how they communicate, serve and satisfy their customers. It is precisely at this point that Digital Marketing along with existing technology has provided "lifesaving" solutions to most businesses worldwide. After all, successful Marketing continues after the sale. The key to success lies in customer satisfaction before, after, and during the purchase because a happy customer will not only return but will speak positively about the products and the business to those around them.

The virus outbreak made customer retention and serviced the most crucial goal of all companies worldwide. Fortunately, today's technology has helped businesses establish and maintain customer relationships even during the pandemic. Specialized CRM platforms, chatbots for customer service, and emails to maintain relationships are some of the Marketing tools that exist; their use has recently increased. But the challenge for businesses is to choose these tools that suit their needs and effectively integrate them into their operations to take advantage of their benefits.

Today businesses are divided into two categories. On the one hand, are the sectors loaded with orders such as food, hygiene, and medicine; on the other, those that have suffered, such as hotels, automotive, and luxury goods. But regardless of which category each business belongs to, the data in buying and selling products and services has changed dramatically, let alone after the arrival of Covid-19. Consumers now use multiple digital media and platforms throughout a good's decision and purchase process. This decision directly affects the discovery and evaluation of products and

services by search engines, social media, and influencers. On the market side, there are various ways of making transactions, such as e-wallets through smartphone applications.

From the start of the health crisis, customer services and internal helpdesks were overstretched, while at the same time, they had to deal with an unprecedented reorganization. Beyond the technical questions, it is mainly in the service organization that 3 main elements have appeared. The first challenge was related to the prioritization of incoming contacts, using chatbots to answer basic and frequent questions. This allowed the agents to focus on more complex situations requiring human contact. The second big question is related to remote management. It may seem more accessible for the supervisor to twirl on the contact center set than to be present and available for employees across the city. And even if the fundamental principles remain the same as face-to-face (setting and monitoring objectives, maintaining motivation, being present without being pushy, etc.), several local managers still must work on the particularities of distance leadership. Finally, this crisis has shown that developments studied for several years within certain societies can be put in place in a few weeks when the feeling of urgency is felt. The crisis has finally shown us that "Sprint" type methods are probably the most suitable to accelerate the necessary changes in remote customer relations.

2.7 New trends in social networks

The industries that knew how to take advantage of e-Commerce were the main ones to find a way to continue their work and adjust to consumer behavior. Its focus should have been on raising awareness and preserving values like health and family. Consumption varies depending on the purchasing power of everyone. There are those who, due to this situation, became unemployed and had to cut their budgets.

Main changes in consumer behavior during and after the COVID-19 pandemic:

Organic food: the sale of natural and local products rose. Surveys in Spain (one of the countries most affected by the pandemic) indicate that 51% of the population cooks more at home, and food waste has been reduced.

Hygiene and health: Due to health organizations' recommendations, many people stock up on cleaning products and everything that could strengthen their defense against the Coronavirus.

Pharmacies and laboratories have been at peak sales of masks, and other suggested implements to stop contagion.

Technology: Given that many companies and businesses had to limit the number of people in their offices, teleworking became a reliable source of work. Web traffic increased by 50%, the use of social networks in education, as well as the consumption of consoles and even household items. To all of the above, it can also be added that many businesses had to implement the delivery system because people were afraid to go directly to their establishments to obtain their products.

E-Commerce and teleworking took the reins to make life easier for the majority after a period in which the world came to a standstill to slow down the growth curve of people affected by Covid-19. Those who already had their website and social networks active used them to inform their customers of future activities, promotions, and offers. Moreover, those that do not have to adapt to this modality to avoid the bankruptcy of their businesses.

There is no doubt about the importance of the evolution of technology and its impact on consumer behavior. Companies can better understand marketing by understanding customers' behavior and adapting to their needs. In fact, with the passing of the pandemic, it is clear that the needs have changed almost entirely, with health and well-being being one of the aspects to take into account when offering a service. In addition, thanks to the ease of digital communication tools, corporate communication has become more accessible, allowing meetings and decision-making to be fluid.

Here are some relevant data on the impact of COVID-19 on the habits of use of social networks:

- The main use of social networks changed, they began to be used to share information and as a method of distracting from the topic of the pandemic, to give it a bit of humor through memes.
- The most active industries: health, finance, telecom, gambling
- People during the pandemic spend an average of 12% more time on Facebook, and it is Instagram that shows the highest growth in use with 14%, reporting around 30 min per day per user.
- Decrease of around 5% of the total paid publications and 50% of the investment in Ads.
- Facebook reversed a downward trend in users and usage, reporting an increase in messages of 50% and WhatsApp of 40%.

- The highest levels of engagement were obtained on Instagram in the Finance and Health categories, exceeding a 100% increase in interactions in March 2020 vs. March 2019.
- Influencer posts decreased 22.6% for Facebook, 41.2% for Twitter and increased 8.93% for Instagram.
- Online mental health support services were born to cope with, among other things, feelings of anxiety and depression caused by isolation.
- Another trend with significant growth is fake news. Using networks to spread false news generated attacks on health personnel, racism and discrimination against different ethnic groups, attacks on 5G antennas, a shortage of toilet paper, etc.
- On Facebook, the publications with the highest levels of interaction were detailed notes, interviews, and conferences on the status of infections.
- On Instagram, “breaking news” photos and videos of celebrities who tested positive for the virus performed best, Twitter became the go-to for news with statistics and charts of local infections and prevention tips.

2.8 The role of social networks during covid-19, challenges, and opportunities

The constant concern of people to learn about the virus has resulted in the sharing of any information that is received and is considered of general interest before verifying if it is real, since that messages and news on social networks potentiate or reinforce people's feelings or points of view. But in another sense, their function has changed and has been strengthened, making them today more than before, a catalyst for commercial activity, large, medium, and small businesses, the informal economy, and restaurants; everyone today makes use of social networks to offer and promote their products and services, this being a very positive and proactive aspect to boost the economy and reinvent entrepreneurs with new digital marketing. In this regard, it has been observed that people who publish their needs for products and services in a few seconds have one or many suppliers. Thus, given the current situation, people have more time to dedicate to social networks. Therefore, disseminating messages is more significant in an age segment that has been technologically educated. In this way, a threat is being transformed into multiple marketing opportunities and what is certain is that this has changed the course of thinking and doing things in everything and for everything. Not only brands but also associations or social movements that have emerged from this new panorama add value to the people who need it the most, generating

new, immediate social marketing that arrives on time to achieve the objectives that are to be completed. The relevant role of social networks in social marketing should focus on specific market niches and audiences. A critical issue that will be impacted is the commercial; technological support shows that it has become a powerful ally and that after all this happens, the way of thinking of the marketing people and the commercials is going to change. From my point of view, it is going to be strengthened. New channels are created, and more excellent proximity to the consumer is generated; likewise, how creative industries should be reinvented.

Meanwhile, the conflict frame emphasizes problems and disputes between individuals, groups, and institutions to generate interest in the audience. Human interest framing brings a human face or an emotional angle to the presentation of events to personalize, dramatize, and emotionalize the news. Finally, the economic consequences framework reports events regarding the financial impact they will have on individuals, groups, institutions, regions, or countries. Instead, moral framing contextualizes the information within a series of moral and even religious prescriptions (Semetko & Valkenburg, 2000). Although this framing is a product of the strategic ritual of objectivity typical of journalistic work, it works more at the audience level than the press. Changes in the new convergent ecosystems on productive routines have generated detailed Moral evaluations and increasingly colored news content.

Some studies on the composition of the new menu in the context of the pandemic already yield results that make it possible to map the behavior of citizens concerning the media and networks. For example, an investigation into news consumption in the United States determined that COVID-19 increased the demand for information, even among the youngest, placing TV and cable in the first place (96%) and, in second place, social networks (87%). The work exhibits the complementarity of both consumptions since while the network users themselves recognize that a large amount of circulating information threatens its quality, they locate the traditional media as computers of information overload (Casero-Ripollés, 2020).

An investigation in Spain analyzed the spread of false news at the start of the pandemic. We began our analysis by examining the warning issued by the World Health Organization (WHO) about an information crisis characterized by an "overabundance of information - some accurate, others inaccurate - that makes it difficult for people to find credible sources and reliable sources." (Salaverra et al., 2020, p.2). Within this framework, the researchers found that Facebook exhibited

lower percentages of false news dissemination (4.6%) compared to other platforms such as WhatsApp (24.7%) or Twitter (14.1%). The rates of fake news transmission on Facebook are like those of online media (4%), which supports the hypothesis that the phenomenon of disinformation is not the sole responsibility of social platforms. However, there is evidence that the perception of risk in network-hungry consumers increases.

Another study on the consumption of news about COVID-19 in Mexico shows that digital media and Facebook were the two main channels of information on the subject (Muñiz&Corduneanu, 2020). Although the work does not describe the kind of news that Facebook users consult the most, it leaves a central question about whether consumption from social platforms implies exposure to alternative content to traditional media. Alternatively, virtual social networks concentrate and visualize news content from significant information powerhouses. These information powerhouses are the focus of this article and have direct implications for the media ecosystem's power structure.

In Argentina, media consumption grew by 31% during the first months of the pandemic. As in other countries, television was the primary source of information (62.3%), while social networks (57.8%) and digital media (47.5%) appear in second and third place. However, the confidence of Argentines in the media is at low levels (33%) (Newman et al., 2020).

Thus, the Argentine case is a fruitful laboratory for analyzing information consumption during a pandemic. It is a country with an ecosystem where the trend towards a growing economic concentration of info-communication companies is verified (Zuazo, 2018). This affects the plurality and diversity of the information that circulates. Likewise, the country experienced a process of political polarization in recent years that, according to some studies, had an impact on the perception of the pandemic, especially in the relationship between health risks and economic problems (Aruguete& Calvo, 2020). Compared to other South American countries like Brazil, where polarization is high (Calvo & Ventura, 2021), Argentine COVID-19 began during a relative political consensus regarding the government's health strategy, which allowed us to examine the effects of polarization and depolarization on information consumption.

2.9 Previous research

López (2019) aimed to determine the influence of social media and consumer engagement in Guayaquil in 2018, being 385 people forming part of the sample. As a result, 73.5% indicated that

the social network was at a high level, 25.7% were at a medium level, and 0.80% were at a low level. In addition, 79.2% of people think that the level of participation is high, 18.7% think that the level is medium, and 2.1% think that the level is low. Therefore, the correlation between the variables is high, but the trend is shallow since $r = 0.125$ and the significance level = 0.014. Based on $r = 0.125$ and a significance level of 0.014, there is an apparent correlation between the variables, but there is only a shallow trend between them.

During his research, Jadue (2019) studied the impact of social networks on consumer behavior, conducting an analysis as well as a market study, with surveys used to determine the segmentation of the population to determine what influence specialized marketing had on that segmentation. The population consisted of 420 people. Results indicated that 98% of those who connected to a social network used a mobile phone, 61% used a computer, and Instagram, with 86% of connections, was the most popular, followed by Facebook, with 85%. Furthermore, the average time spent online on a social network is between two and four hours (36%) and between one and two hours (24%). Meanwhile, 92% of respondents said they used social networks for entertainment and leisure, and 76% for information. Concluding that the use of social networks occurs mainly through mobile phones since these offer convenience and easy access. Furthermore, it was found that the most used social network is Facebook. However, Instagram is still the favorite of users.

Linares's (2013) objective was focused on analyzing social media's influence on consumer behavior when making purchases online in 2012—totaling 384 consumers who made up the study sample. Approximately 60% of consumers do not make purchase decisions based on products and services they see on social media, while 32% usually use them occasionally to buy and acquire services. On the other hand, 29% of respondents use social networks when purchasing products. In comparison, 42% of respondents claim to make decisions about purchasing services based on comments made by friends and acquaintances, compared to 39% for purchasing products. Also, 70% indicated social networks as the medium for consumers to compare when purchasing a product and Internet service.

On the other hand, 70% revealed that it saves time for the moment of the purchase decision. Finally, 60% stated that social media provide comfort at the time of purchase decision, while less than 25% considered that they hardly ever feel comfortable. The Kolmogorov-Smirnov test

indicates, therefore, that the use of social media did influence the behavior of Valencian consumers, as determined by the Kolmogorov-Smirnov test.

Cabrera (2018), in his research, aimed to determine the level of impact that social networks have as a marketing strategy in the sales of MILATEX S.A. The sample population consisted of 294 clients and four workers of said company. According to their results, 32% of respondents use the internet to access social networks and 28% to check their emails. The study also found that 32% spend between 10 and 15 hours online, while 25% spend between 5 and 10 hours online. In addition, 35% of devices connected to the network are cell phones, followed by 29% by computer desktops. Finally, 36% of online advertising is done via email and 31% by social media. Based on our analysis, more and more companies are embracing the digital age, with Facebook being the most widely used platform, leveraging the advantages offered by these platforms in terms of information, controllability, and price compared to other advertising channels. Furthermore, they also ensure that the information is received by the people interested in it, increasing the possibility of success in the company.

Chumbe (2020) aimed to analyze the factors influencing fast-food consumer behavior after the pandemic. The sample population was made up of 167 people. Social factors included Facebook, WhatsApp, and YouTube. The results indicated that 90% of consumers used Facebook and WhatsApp; psychological factors influenced consumer behavior the most: 83% of people bought because they were close to where they were bought, 54% because they were cheap, and 93% said the product had a good flavor, 56% said it had a reasonable price, and 33% said it had much quantity; whereas 74% of purchases were made in the same establishment, and 23% were made through delivery. Finally, the purchase frequency is usually 78% on weekends and 14% at the end of the month. As a result, it is concluded that psychological factors significantly influence consumer behavior after a pandemic. It is due to their motivations, such as sharing a moment with family or friends, proximity to points of sale, quality of products, and low prices.

In his research, La Chira's (2019) objective was to determine those factors of consumer behavior that influence the decision to buy consumer purchase of two shopping centers such as Mall Aventura and Royal Plaza. A total of 384 people were considered in the sample, who attend Both Mall Aventura Plaza and Real Plaza. Based on the results obtained, the personal factor accounted for 77.6%, the social aspect 77.1%, the cultural factor 76.8%, and the psychological factor 76.6%.

Concluding that, in consumer behavior, the element that influences the most is the personal one since consider that it is their attitudes that define the moment to make a purchase.

Hualtibamba (2019) focused on identifying the behavioral factors that are more influential in consumer purchasing decisions than Trujillo Food Markets in 2018. A total of 384. As a result, it is determined that the participating factors are: 74.5% of social factors, 74% cultural factors, 73.7% personal factors, and 72.4% psychological factors of consumers. The food market in cities is where social attitudes pay more attention to your preferences. The conclusion is that, from the results, it was determined that the behavioral factors that had the most significant impact on purchasing decisions are social and cultural.

Enrique and Pineda (2018), the purpose of this study was to know the impact generated by the use of digital strategies and content marketing, as well as know those social networks that turn out to be the most relevant for developing and applying these strategies. 381 consumers formed the study sample. The study's results identified that the preferred social network is Facebook, 82.94%, and YouTube, 6.56%. This information is relevant to determine which digital platforms turn out to be more effective; on the other hand, the time dedicated to social media networks is 84.54% all day and 15.46% only one hour a day. The study concluded that digital marketing in social networks influenced customer loyalty, having Facebook as the preferred digital medium. It was also emphasized that we must consider developing high-quality content attractive to customers.

The purpose of Granados (2018) was to identify the relationship between Facebook use and students' behavior in a Chilca school. His sample consisted of 154 students. Obtaining as a result that the most important social network is Facebook, 53.90% agree, and 29.9% agree. In addition, it is adequate to share and communicate 47.4% agree, and 21.4% agree. Another result was that Facebook is used as an advertising medium to promote a product and service, with 39.6% agreeing and 29.2% not agreeing to agree or disagree, finally the publications made by this medium allow them to be informed, 42.9% agree and 32.5 neither agree nor disagreement. Therefore, based on Spearman's Rho interpretation table, it was concluded that the use of Facebook has a significant inverse relationship with behavior.

In his research, Moreno (2020) aimed to diagnose the variables influencing consumer buying behavior at the company Tai Loy Chiclayo. The sample comprised 384 people from five districts,

such as Chiclayo, Pomalca, Pimentel, José Leonardo Ortiz, and La Victory. The results showed that 62% of the respondents were frequent shoppers, while 19% were new customers; 42% of the respondents visited the store once a month and 22% once a year; and 56% of consumers found out about the store via referral, compared to 23% who found out through television advertising. Lastly, 43% of the respondents said they were originals, and 33% said they should receive good attention when purchasing a product. Moreover, 28% of people who visit the store say it is for the attention they get. In comparison, 25% say it is for the prices they pay—concluding that the internal variables have a greater degree of influence on consumer behavior since these depend on the personal impulse to have a satisfactory experience and thus get consumers to be loyal to the company.

Herrera (2019), in his research, aimed to determine consumer behavior and those factors that influence the purchase decision in the Supermarket El Super. A total of 77 consumers made up the study sample. As results are obtained, consumer behavior has the price as an influential factor reaching 61%. Also, within the purchase decision, it seeks to improve attention by 44%, which is decisive for the company to maintain over time. Finally, the quality of the product is 100% what customers say, which is final when making purchases. Concluding that they are the factors related to the cultural, personal, and social aspects that positively influence the consumer's behavior of deciding on a purchase, either by conducting a product search, evaluating options, and post-purchase service provided by companies.

In their thesis, Bustamante and Risco (2017) aimed to analyze the main differences in consumer buying behavior from the Tottus, Plaza Veja, and Metro supermarkets in Chiclayo. The sample was made up of 1587 customers from the three supermarkets. As a result, it found that according to the valued attribute of a supermarket, 26.63% indicate that, due to the infrastructure and order, also depending on the frequency of purchase, 23.24% say that it is weekly, valued for two reasons: with 32.58% for infrastructure and order and with 24.72% the variety of products, on the other hand, concerning the preference to buy products, it is said that 28.03% have in mind their favorite brand counts and 27.39% do so to satisfy needs. As a result, consumers' buying behavior depends on several factors, such as the segments to which they are targeted, the variety of food products offered by Metro and their store locations, Tottus's discount cards and low prices, and Plaza's proximity to a shopping center and site.

According to Sicilia et al. (2021), social media mentioned that with time, they are more present in our daily activities and, therefore, in our life. Approximately 72% of users do or do have a profile in any of the existing social networks and usually dedicate between two to three hours to said platforms. On the other hand, social networks have become a fundamental priority for different companies. Most of its customers interact with it in this new digital world.

For his part, Prato (2010) expressed that social networks aim to the main thing that people interact with each other, coming to share information for subsequent manipulation. Therefore, social media allows communication with often known or unknown users.

This COVID-19 pandemic has generated remarkable growth in social media, becoming one of the primary sources of information and leisure used during times pandemic. For the same reason, said growth causes much pressure and leads companies to incorporate their businesses into the most excellent social media (Sicilia et al., 2021).

Talking about Facebook is undoubtedly one of the oldest social media and currently has the most significant number of users worldwide, in addition to being a more generalized network that allows reaching different audiences and different age ranges. Furthermore, this social network's vast amount of information has allowed several advertising campaigns to identify specific markets (Sicilia et al., 2021).

While Instagram is also a network that belongs to Facebook, it has been showing growth in recent years. This network is said to be used more by the female and very young population. A clear example is that its users stay within 30 years. For generation Z, Instagram and YouTube are the networks most used in this segment; most have private profiles and a higher frequency of access (Sicilia et al., 2021).

According to Flores et al. (2012) mentions, in Castillo (2017), social media strives to ensure that most of its users are assets, offering tools to satisfy and retain them because many of these networks provide instant messages. Also, they are continuously updated to improve the user experience, connect to the web, and share photos and videos in real time.

Castillo (2017) considered that the dimensions that are part of the social media variable are the following.

1. Connection, these platforms allow us to have contact with everything around us.
2. Communication allows contact with the environment and, at the same time, disseminates messages quickly to the desired public.
3. Update the websites to bring up-to-date news and things of interest in just a matter of seconds; and
4. It connects people and gives them a free platform to promote any product or service.

New technologies are changing the purchasing process because they allow the search for information about the purchase until determining the payment method. As we advance, we become more hyperconnected, where the consumer manages to be better informed and dedicates more time to making comparisons and, thus, being able to choose the best option. Here, the relevance of social media arises since the search made previously this reference was carried out physically in the establishments. However, in the middle of the 21st century, the consumer is more likely to interact with it online by leaving a comment, a like, or a complaint.

CHAPTER 3 – Research Methodology

3.1 The research tool

The methodological approach of the thesis will initially focus on a thorough (Greek and English) literature review of the factors that influence consumer behavior, regarding social media. In particular, the effect of the Covid-19 pandemic on the consumer behavior of customers towards the use of social media and online shopping will be examined. Then, in the purely research part of the work, the data that will come from the answers to the structured questionnaires will be processed, so that our study's most accurate and reliable result can be obtained.

The questionnaire includes a total of 34 questions and is structured in four parts. The first part includes inquiries related to consumer preferences toward social media. The questions in this section are on a Likert scale to better understand consumer opinions and habits.

The second part includes questions to ascertain the situation regarding the online shopping habits and online preferences of consumers in relation to social media (frequency of purchases, amount spent and what products the consumer bought) before March 2020.

The third part includes questions about online shopping habits and online preferences of consumers in relation to social media (frequency of purchases, amount spent and what products the consumer bought) in March - June 2020 (1st quarantine)? We compare the same questions in these two different periods

In the fourth part, demographic data such as the gender and the annual income of the consumers are included, so that they will help us later to make the necessary contrasts and to find if the different variables are related between them.

The structured questionnaire is structured to focus on two essential topics. First, what factors affected users' consumer behavior, and the pandemic affected and increased the use of social media in Greece.

The given questionnaire will be addressed to various groups of the public of all ages and socio-economic strata so that the survey data is as reliable as possible. Simple random sampling is used for sampling.

3.2 Research methodology

The registration of the answers, as well as the processing of the data, valuable, will be done through special statistical software IBM SPSS so that valid conclusions can be drawn from the research. A total of 120 questionnaires were received.

In the first part, we will present all the frequencies resulting from the questionnaire data and then the frequency diagrams. In the second phase, we will compare the same questions in different periods in order to determine if there are statistically significant changes between the preferences and trends of consumers and users on the internet and in a third basis, using the method of crosstabulation and the corresponding tests of significance we will identify if there are significant correlations between the variables to find the factors that influence the behaviors of social media users-consumers.

3.3 Reliability of the questionnaire

For the correctness of drawing safe conclusions from the empirical research, it is essential to check the reliability of the given questionnaire. Thus, the reliability of the questionnaire was checked using Cronbach's Alpha coefficient. The value of the Cronbach Alpha coefficient ranges from 0 to 1. An acceptable value of the coefficient is from 0.7 and higher. For the specific questionnaire we compiled, the Cronbach Alpha coefficient is 0.795. This indicates that the structured questionnaire used is reliable and useful.

Reliability Statistics	
Cronbach's Alpha	N of Items
,795	29

Table 1: coefficient Cronbach's Alpha

We must note that for the calculation of the Cronbach Alpha coefficient, 29 questions were considered and not 34. Five questions concerning the respondents' demographic, educational, and economic characteristics were excluded.

CHAPTER 4. Data Analysis

4.1 Descriptive Statistics

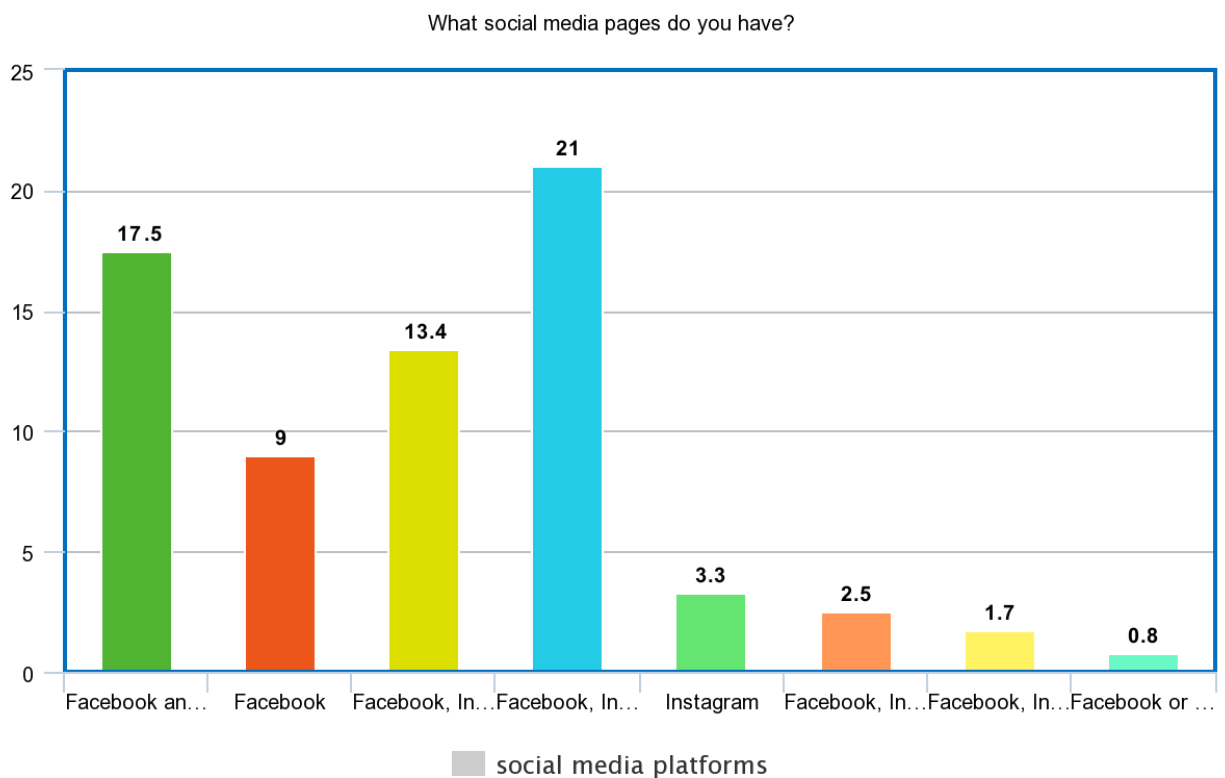
In the following part, we analyze the descriptive statistics, for each question of our questionnaire, using frequency tables.

Table 2: What social media pages do you have?

	Frequency	Percent (%)
Facebook,Instagram	21	17,5
Facebook	9	7,5
Facebook,Instagram,Twitter	8	6,7
Facebook,Instagram,YoutubeChannel	8	6,7
Facebook,Instagram,Pinterest	5	4,2
Facebook,Instagram,Pinterest,YoutubeChannel	5	4,2
Facebook,Instagram,Twitter,Tumblr,Pinterest	5	4,2
Facebook,Instagram,Twitter,YoutubeChannel	5	4,2
Instagram,Twitter	5	4,2
Facebook,Instagram,TikTok	4	3,3
Facebook,Instagram,Twitter,Pinterest	4	3,3
Facebook,Instagram,Twitter,TikTok,Pinterest	4	3,3
Facebook,Instagram,Twitter,TikTok,Pinterest,YoutubeChannel	4	3,3
Instagram	4	3,3
Facebook,Instagram,TikTok,Pinterest,YoutubeChannel	3	2,5
Facebook,Instagram,TikTok,YoutubeChannel	2	1,7
Facebook,Instagram,Twitter,Pinterest,YoutubeChannel	2	1,7
Facebook,Instagram,Twitter,TikTok,Tumblr,Pinterest,YoutubeChannel	2	1,7
Facebook,Pinterest	2	1,7
Facebook,Pinterest,YoutubeChannel	2	1,7
Facebook,Twitter,Pinterest,YoutubeChannel	2	1,7
YoutubeChannel	2	1,7
Facebook,Instagram,Twitter,TikTok	1	,8
Facebook,Instagram,Twitter,TikTok,Tumblr	1	,8
Facebook,Instagram,Twitter,TikTok,YoutubeChannel	1	,8
Facebook,Instagram,Twitter,Tumblr,Pinterest,YoutubeChannel	1	,8
Facebook,TikTok	1	,8
Facebook,Twitter	1	,8
Facebook,YoutubeChannel	1	,8
Instagram,Tumblr	1	,8
Instagram,Tumblr,Pinterest	1	,8

Instagram, YoutubeChannel	1	,8
Twitter, Tumblr	1	,8
Twitter, YoutubeChannel	1	,8
Total	120	100,0

Table 1 presents the frequency table concerning which social media pages each participant has. The majority of participants, seem to have pages on Facebook and Instagram (17.5%), while 9% of the participants reported that have only Facebook page. Participants who have Facebook, Instagram and YouTube channel or Twitter, are 13.4% of the sample, while 21% of participants reported that have pages on Facebook, Instagram, Pinterest, and YouTube Channel or Tumblr or Twitter. A small percentage of participants (3.3%) said that have only Instagram, which is significantly lower than the percentage of participants who have only Facebook page (7.5%). 2.5% of participants reported that have pages on Facebook, Instagram, TikTok, Pinterest and Youtube Channel. Only 1.7% of participants said that have pages on all social media accounts Facebook, Instagram, Twitter, TikTok, Tumblr, Pinterest and Youtube Channel. Lastly, participants who have pages only on Facebook or TikTok, Facebook or Twitter, Facebook or Youtube Channel, Instagram or Tumblr, Instagram or Tumblr or Pinterest, Instagram or YouTube Channel, Twitter or Tumblr and Twitter or Youtube Channel are less than 1% of the total sample (0.8%).



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Diagram 1: What social media pages do you have?

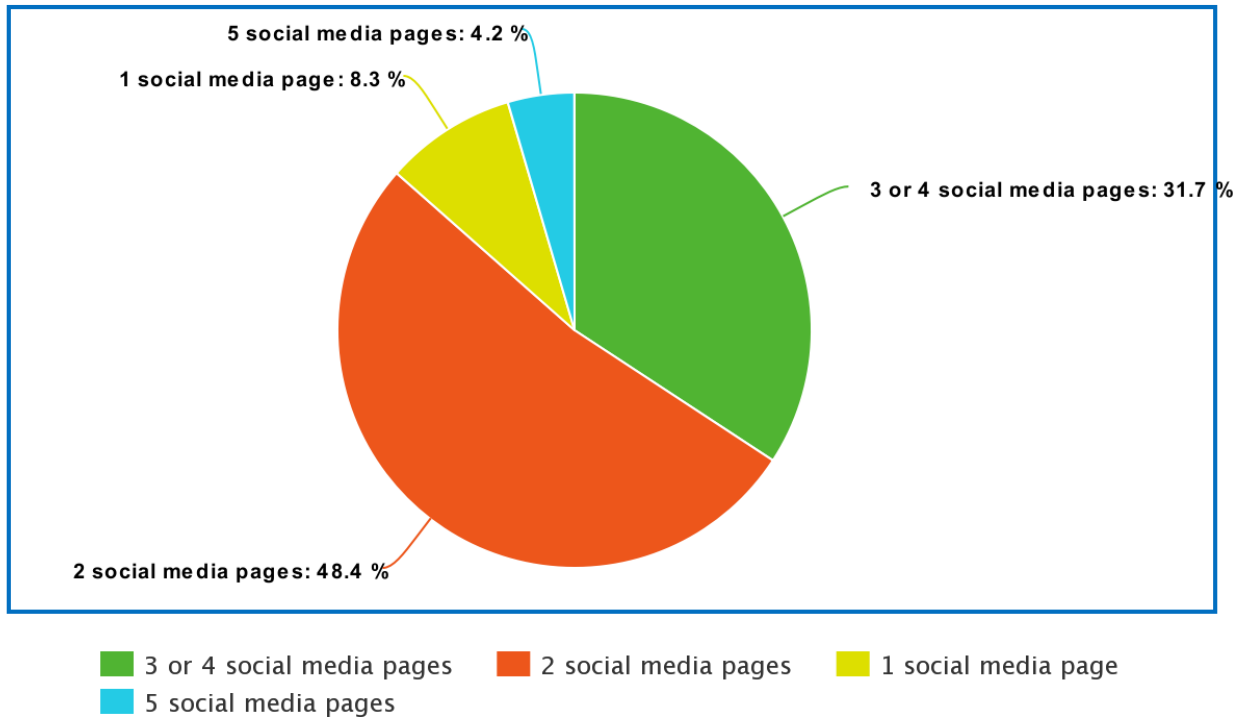
As can be easily seen in the diagram above, most users prefer to have more than three social media and for sure the three of them should be Facebook, Instagram, Pinterest and maybe a page on the rest of the social networks. The result is completely understandable if we think about how much the Facebook and Instagram platforms are popular among the general public, but also how much interesting content is provided by the Pinterest page. All three networks use the same philosophy of publishing photos and sharing content with the only difference being that Facebook is the most popular because of the many possibilities which provides users with communication, advertising and even buying and selling

Table 3: Amount of social media pages that participants maintain

Social media pages	Frequency	Percent (%)
1,00	10	8,3
2,00	29	24,2
3,00	38	31,7
4,00	29	24,2
5,00	9	7,5
6,00	5	4,2
Total	120	100,0

In table 2 the number of social pages that participants have, is presented. It is obvious that the majority of the sample (31.7%), have 3 or 4 social media pages, while 2 social media pages has 48.4% of the sample. 8.3% of the participants has 1 social media page and above 5 social media pages has 4.2% of the sample.

Amount of social media pages that participants maintain



meta-chart.com

Diagram 2: Amount of social media pages that participants maintain?

As shown in diagram 2 and 3, most people prefer to have two accounts and above, as there are many city options and the many benefits they offer.

Table 4: How often do you upload content on social media?

	Frequency	Percent
Everyday	11	9,2
5 - 7 times a week	2	1,7
2 - 4 times a week	19	15,8
once a week	17	14,2
2 - 3 times a month	21	17,5
Once a month	9	7,5
1 year and less	41	34,2
Total	120	100,0

In table 3 the frequency by which participants upload content on social media is presented. Participants who upload content on social media every day are 9.2% of the sample. Participants who upload content on social media 5 – 7 times a week are 1.7% of the sample, 2 – 4 times a week

15.8%, 1 time a week 14.2%, 2 – 3 times a month are 17.5% of the sample, once a month 7.5% of the sample and one year and less is 34.2% of the sample.

How often do you upload content on social media?

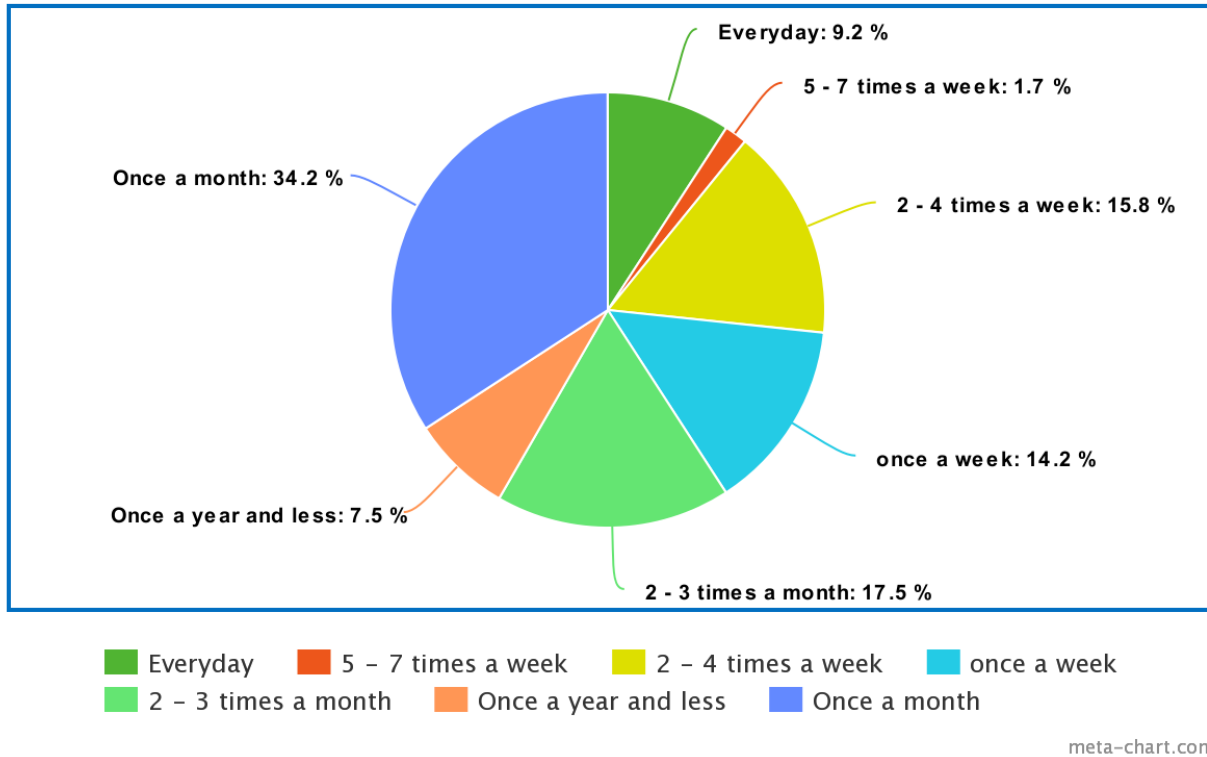


Diagram 3:How often do you upload content on social media?

Most of them publish content once a month and a large portion of users publish content at least 2 to 3 times a month, a fact that shows us that most people are especially active on the Internet due to the electronic reality we are experiencing in the year 2023. Certainly, in the above diagram, we understand that there is room for improvement of the platforms so that users publish content more often

Table 5: In which social media page do you find the most interesting content?

	Frequency	Percent
Facebook	30	25,0
Twitter	10	8,3
Facebook, Twitter	9	7,5
Instagram	8	6,7
TikTok	8	6,7
Facebook, TikTok	6	5,0
Instagram, Facebook	6	5,0
Facebook, Youtube	5	4,2
Instagram, Facebook, TikTok	5	4,2

Facebook,TikTok,Twitter	4	3,3
Instagram,Facebook,Twitter	4	3,3
Facebook,Youtube,Twitter	3	2,5
Youtube,Twitter	3	2,5
None	2	1,7
Instagram,Facebook,TikTok,Twitter	2	1,7
Instagram,Twitter	2	1,7
TikTok,Twitter	2	1,7
Facebook,Pinterest	1	,8
Facebook,Pinterest,Twitter	1	,8
Facebook,TikTok,Youtube,Twitter	1	,8
Facebook,Tumblr,Twitter	1	,8
Instagram,Tumblr	1	,8
Instagram,Tumblr,Twitter	1	,8
TikTok,Youtube	1	,8
Tumblr	1	,8
Tumblr,Twitter	1	,8
Tumblr,Youtube,Twitter	1	,8
Youtube	1	,8
Total	120	100,0

The majority of the sample (25%) finds interesting content on Facebook, 8.3% on Twitter, 7.5% on Facebook or Twitter, 6.7% on Instagram and 6.7% on TikTok. 10% of the sample finds interesting content on Facebook or TikTok and Instagram or Facebook. Below 1% of the sample (0.8%) find interesting content only on Tumblr, or YouTube. Participants who find interesting content on Tumblr and one at least other social media page are also a small percent of the total sample (0.8%).

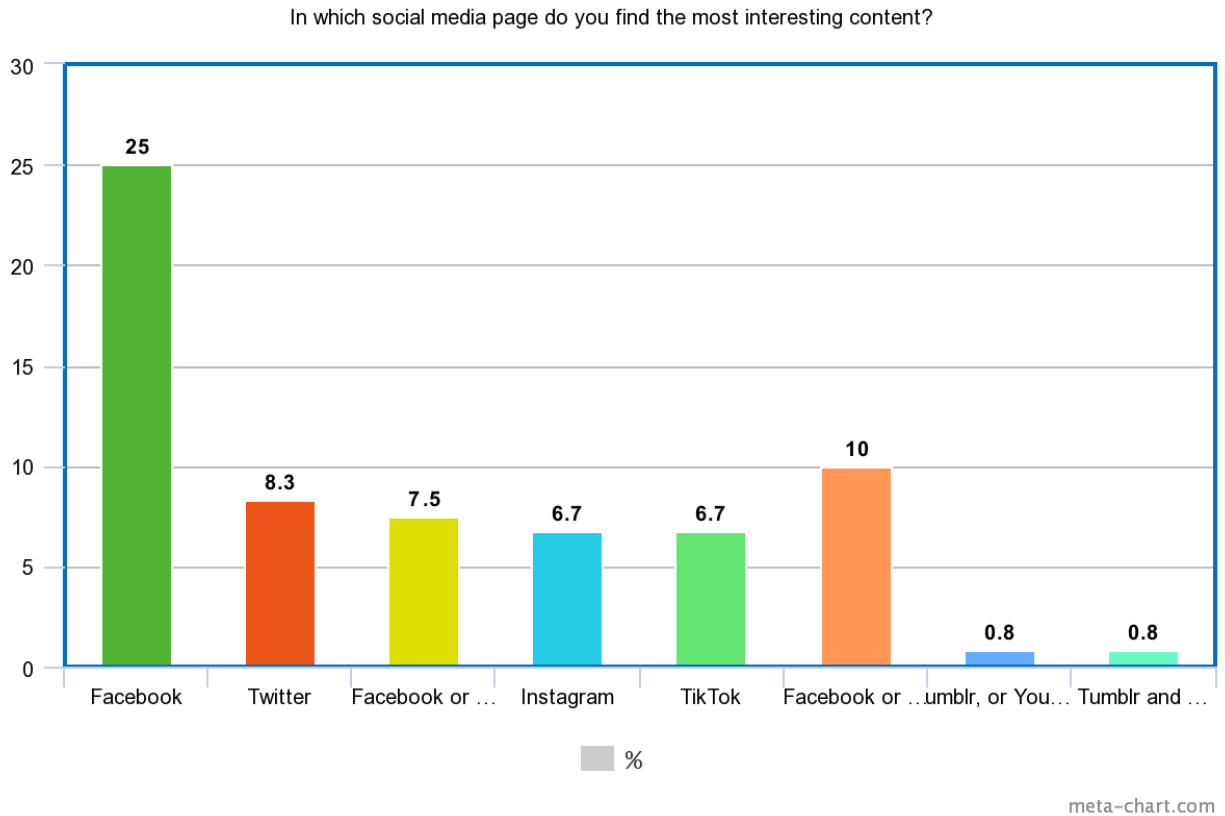


Diagram 4: In which social media page do you find the most interesting content???

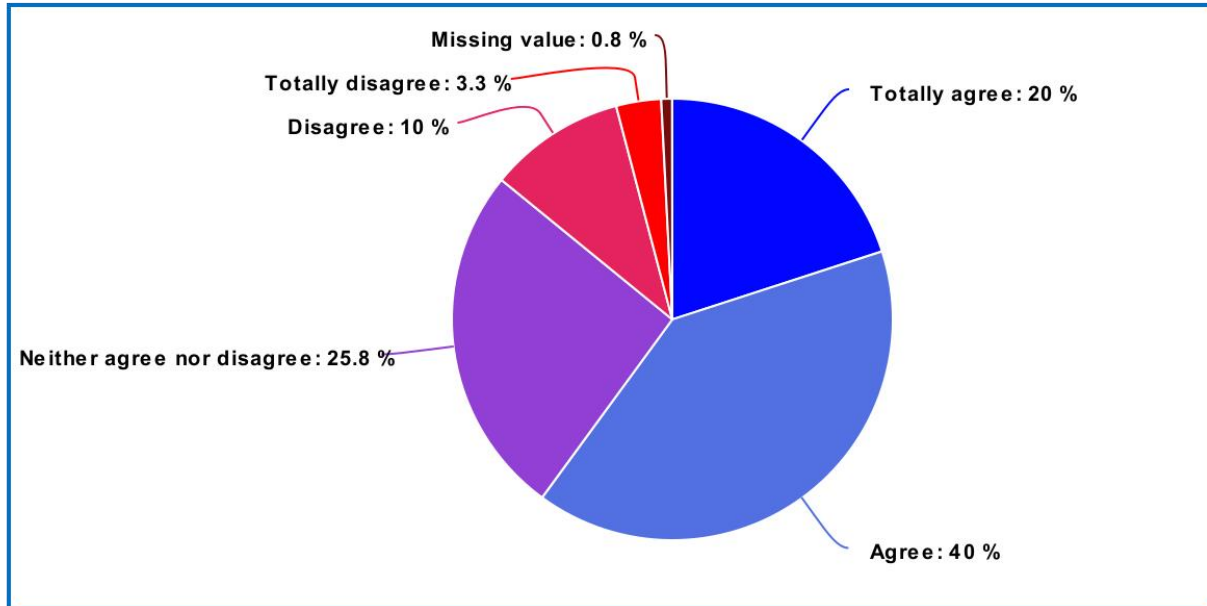
As the diagram above shows, most people find interesting content on Facebook. Due to the popularity that Tik-tok has acquired in recent years, users are reluctant to spend time on this platform in particular⁹ to watch interesting interactive content that combines sound, image and social media, such as, for example, short-minute videos on TikTik.

Table 6: Tell us your opinion about social media [5.Social media are better to collect information than traditional channels like Tv or Newspapers?]

	Frequency	Percent
Totallyagree	24	20,0
Agree	48	40,0
Neitheragree nor disagree	31	25,8
Disagree	12	10,0
Totallydisagree	4	3,3
Total	119	99,2
Missing	1	,8
Total	120	100,0

In table 5, participants' opinion about social media, as better means to collect information compared to traditional channel like TV or Newspapers, is presented. The majority of the sample agrees or totally agrees (60%), 25.8% neither agrees nor disagrees, while 13.3% disagrees or totally disagrees. A small amount of participants (0.8%) did not respond.

Social media are better to collect information than traditional channels like Tv or Newspapers?



■ Totally agree
 ■ Agree
 ■ Neither agree nor disagree
 ■ Disagree
■ Totally disagree
 ■ Missing value

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Diagram 5: Social media are better to collect information than traditional channels like TV or Newspapers?

The majority of the respondents agree with the opinion that social media is the most suitable means of gathering information than the traditional social media as we know them provide us with information from all over the world removing borders and limitations in time and in the way of obtaining information.

Table 7: Tell us your opinion about social media [Social media is better for online shopping than physical stores?]

	Frequency	Percent
Totally agree	8	6,7
Agree	24	20,0
Neither agree nor disagree	48	40,0
Disagree	35	29,2
Totally disagree	5	4,2
Total	120	100,0

In table 6, participants' opinion about social media, as better means for online shopping than physical stores, is presented. The 26.7% of the sample agrees or totally agrees, 40% neither agrees nor disagrees, while 33.2% disagrees or totally disagrees.

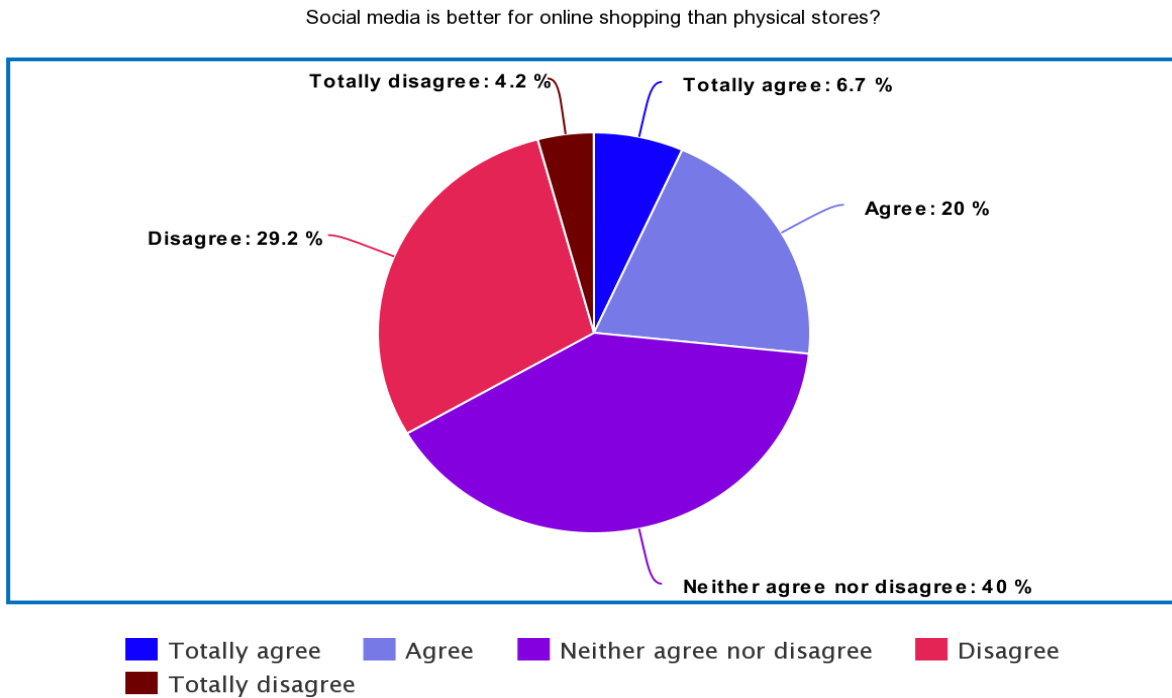


Diagram 6: social media is better for online shopping than physical stores?

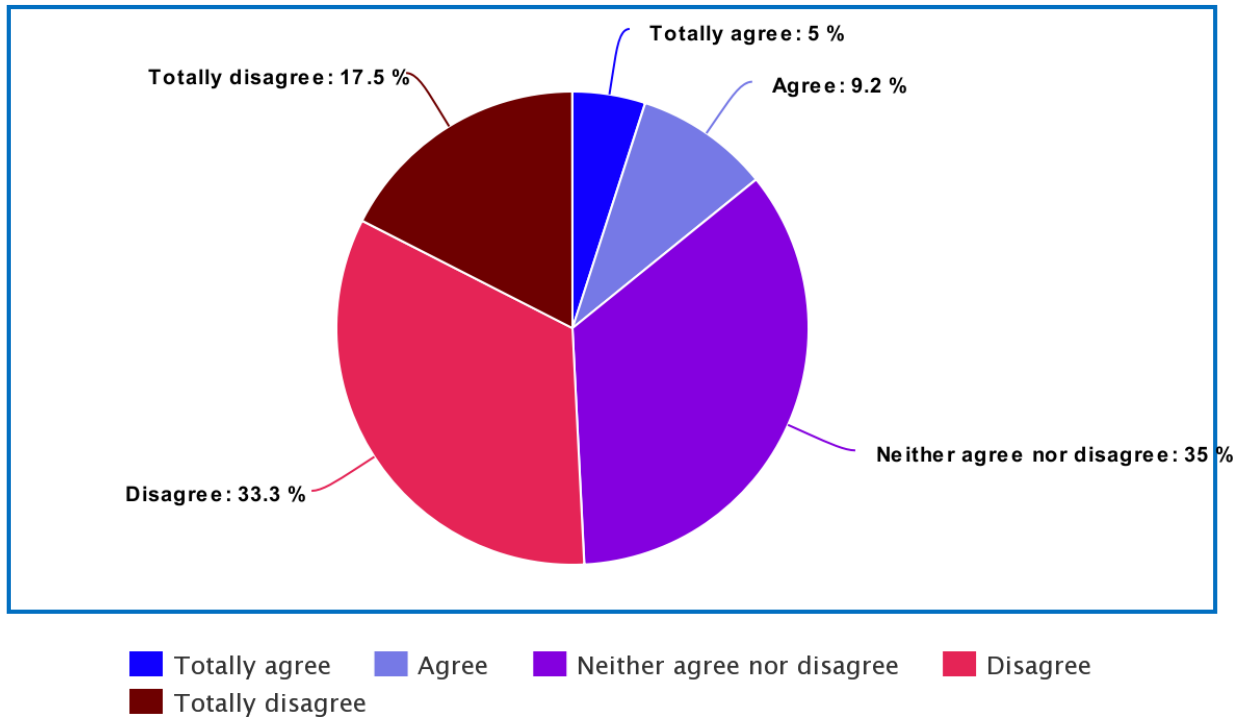
several of the respondents are the ones who agree that online shopping is better in relation to the traditional way of buying products, while the majority neither agree nor disagree with the opinion, showing us that there are definitely significant margins of improvement in online stores so that people to prefer them more. Few still value physical stores and are not attracted more by the convenience of online ones

Table 8: Tell us your opinion about social media [7.I trust social media content much more than any other online way]

	Frequency	Percent
Totallyagree	6	5,0
Agree	11	9,2
Neitheragreeanddisagree	42	35,0
Disagree	40	33,3
Totallydisagree	21	17,5
Total	120	100,0

In table 7, participants' opinion, about social media content being much more trustful compared to other online way, is presented. The 14.2 % of the sample agrees or totally agrees, 35% neither agrees nor disagrees, while 50.8% disagrees or totally disagrees.

I trust social media content much more than any other online way



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Diagram 7: I trust social media content much more than any other online way

The diagram above shows that users do not trust social media either, which is completely logical if we consider that each of us has the freedom to publish what we want and present what we want on social media at the time and in the way we want. the same with the result that most people do not believe what they see and do not know what is real and what is not.

Table 9: Tell us your opinion about social media [I found mthe content of social media more interesting than other channels?]

	Frequency	Percent
Totallyagree	14	11,7
Agree	50	41,7
Neitheragree nor disagree	39	32,5
Disagree	16	13,3
Total	119	99,2
Missing	1	,8
Total	120	100,0

In table 8, participants' opinion about social media, about social media content being much more trustful compared to other online way, is presented. The 14.2 % of the sample agrees or totally agrees, 35% neither agrees nor disagrees, while 50.8% disagrees or totally disagrees.

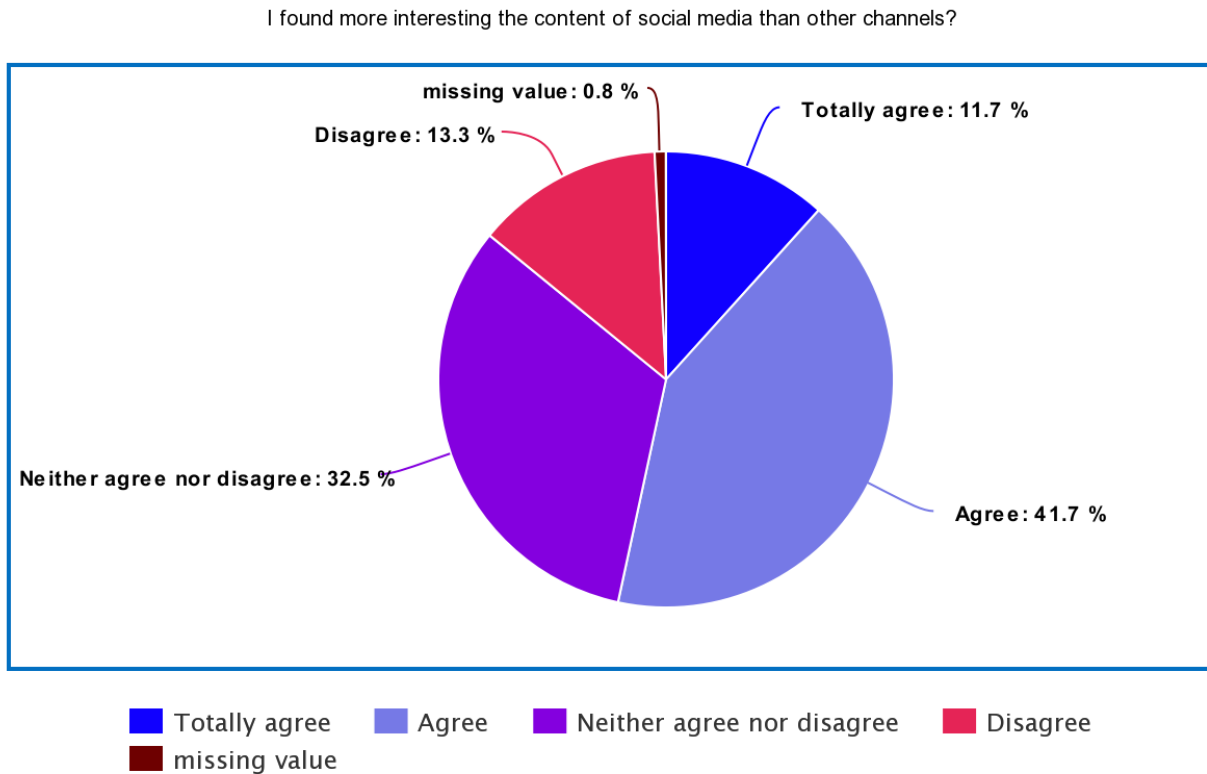


Diagram 8: I found more interesting the content of social media than other channels?

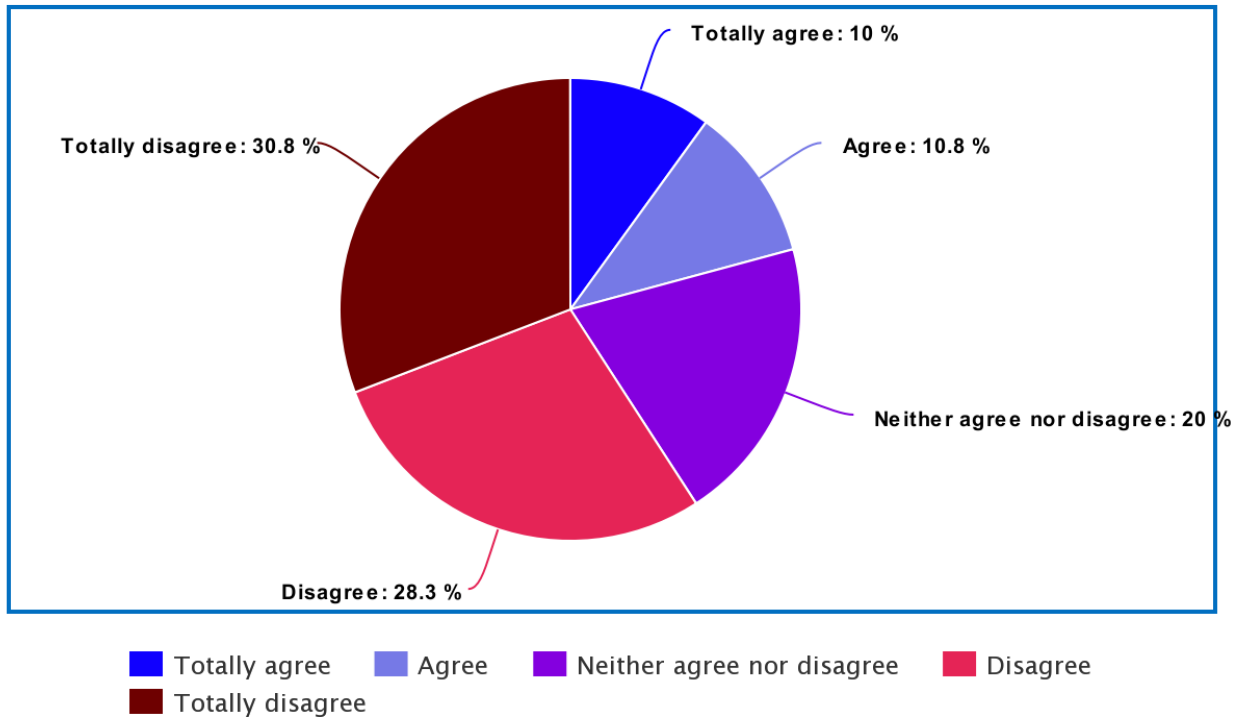
as we understand from the previous diagrams, but also from this, users find the content of social media interesting as it offers interactive options and content from all over the world, giving users the opportunity to discover any information they want and when they want it

Table 10: Tell us your opinion about social media [I prefer online communication than in person communication?]

	Frequency	Percent
Totallyagree	12	10,0
Agree	13	10,8
Neitheragreeenor disagree	24	20,0
Disagree	34	28,3
Totallydisagree	37	30,8
Total	120	100,0

In table 8, participants' opinion about social media, about social media content being much more trustful compared to other online way, is presented. The 14.2 % of the sample agrees or totally agrees, 35% neither agrees nor disagrees, while 50.8% disagrees or totally disagrees.

I prefer online communication than in person communication?



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Diagram 9: I prefer online communication than in person communication?

The majority of the respondents prefer personal communication and not group communication, which is particularly promising in our time when face-to-face communication and the socialization of people in general becomes difficult, as the fast pace of everyday life does not give people the opportunity to have free time and to socialize.

Table 11: What do you find more difficult on social media?

	Frequency	Percent
Trustful information	81	67,5
Post content	11	9,2
Sharing	9	7,5
Onlineshopping	13	10,8
Onlinecommunication	6	5,0
Total	120	100,0

In table 10, the difficulties that participants face on social media are presented. The majority of participants need help in collecting trustful information, 10.8% in online shopping, 9.2% in content posting, 7.5% in information sharing while 5% in communicating online.

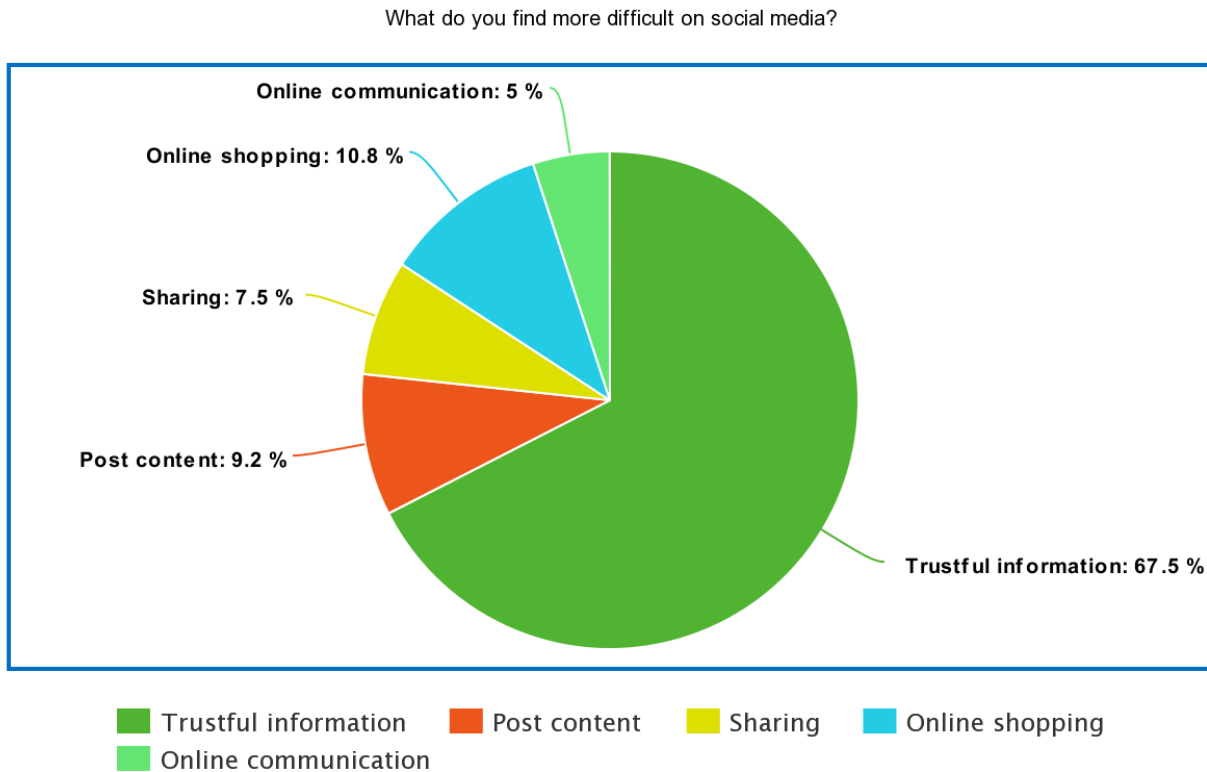


Diagram 10: What do you find more difficult o social media?

As can be seen above, most people need help finding reliable information. However, people need to verify information on social networking sites. that is why they are a major source of fake news. Journalists verify most mainstream media articles, so they are highly reliable on social media where there is no quick and easy way to authenticate content.

Table 12: Would you participate in a social media platform training seminar?

	Frequency	Percent
Yes	76	63,3
No	44	36,7
Total	120	100,0

In table 11, the opinion of participants as to if they would take part in a training seminar for social media platforms. The majority of the sample (63.3%) agrees on this, while 36.7% disagrees with this statement.

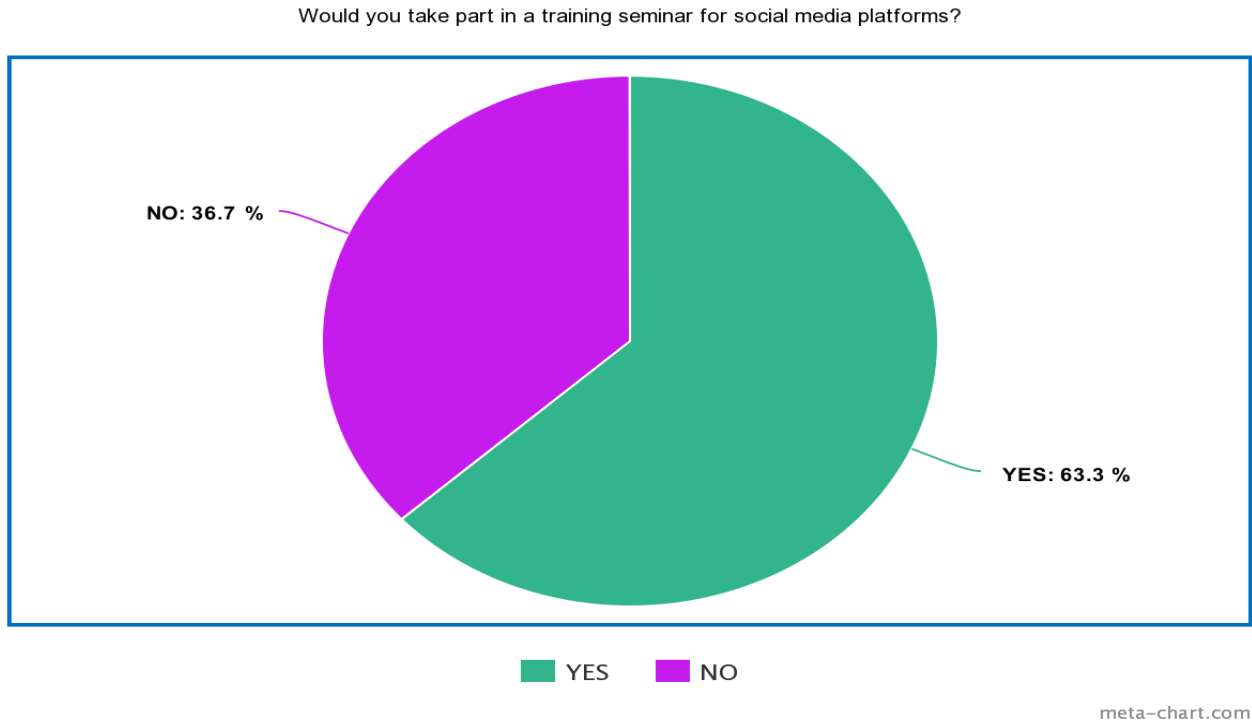


Diagram 11: Would you take part in a training seminar for social media platforms?

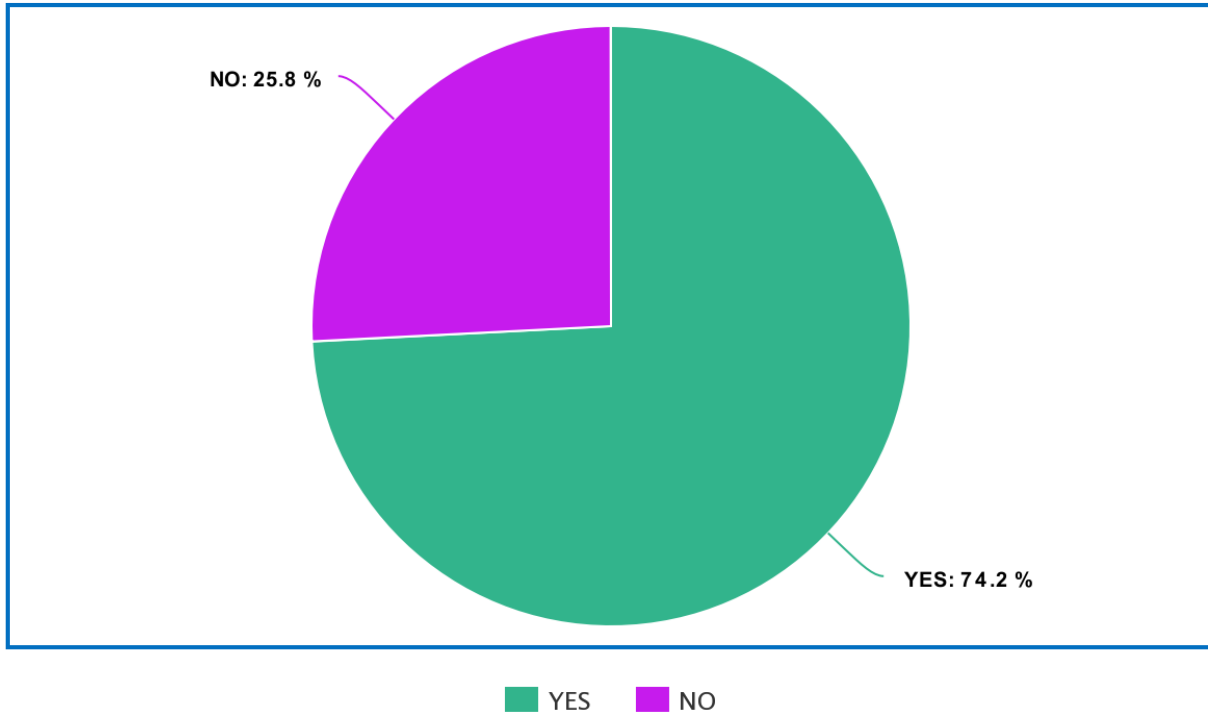
The majority responded that they would take part in a social media seminar that would help especially the illiterate people of social media Participation in social media would allow us to create an audience of people who are interested in what we have to say and who are willing to show their support. They will also facilitate communication methods and make it easier to share content that, as it was seen in the above diagrams, receives low feedback rates

Table 13: Do you find better discounts on social media than on a physical store?

	Frequency	Percent
Yes	89	74,2
No	31	25,8
Total	120	100,0

In table 12, the opinion of participants as to if they find better discounts on social media than on a physical stores. The majority of participants (74.2%) agrees while the rest 25.8% disagrees.

Do you find better discounts on social media than on a physical store?



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Diagram 12: Do you find better discounts on social media than on a physical store?

it is particularly important that people find more discounts online as the main reason discounts attract customers is the loss aversion principle. In addition, discounts release oxytocin, generate excitement, and make the customer feel smarter because they saved money.

Table 14: How much time did you spend per day on social media before March 2020 (before 1st quarantine)?

	Frequency	Percent
1 hour	38	31,7
1 - 2 hours	39	32,5
2 - 3 hours	31	25,8
> 3 hours	12	10,0
Total	120	100,0

In table 13, the time at which participants spend per day on social media, before March 2020 (1st quarantine) is presented. The majority of the sample reports that they spend less than 2 hours on social media per day (64.2%), 25.8% spend 2 – 3 hours per day, while 10% more than 3 hours per day.

Table 15: How much time did you spend per day on social media on 1st quarantine and after (March 2020-22)?

	Frequency	Percent
1 hour	17	14,2
1 - 2 hours	44	36,7
2 - 3 hours	31	25,8
> 3 hours	28	23,3
Total	120	100,0

In table 19, the frequency by which participants spent time per day on social media on 1st quarantine and after (March 2020-20), is presented. The majority of the sample (36.7%) stated that they spent on social media on 1st quarantine and after (March 2020-20), 1 – 2 hours per day, 25.8% of the participants spent 2 – 3 hours per day, 23.3% of the sample spent more than 3 hours per day, while 14.2% of the sample spend 1 hour per day.

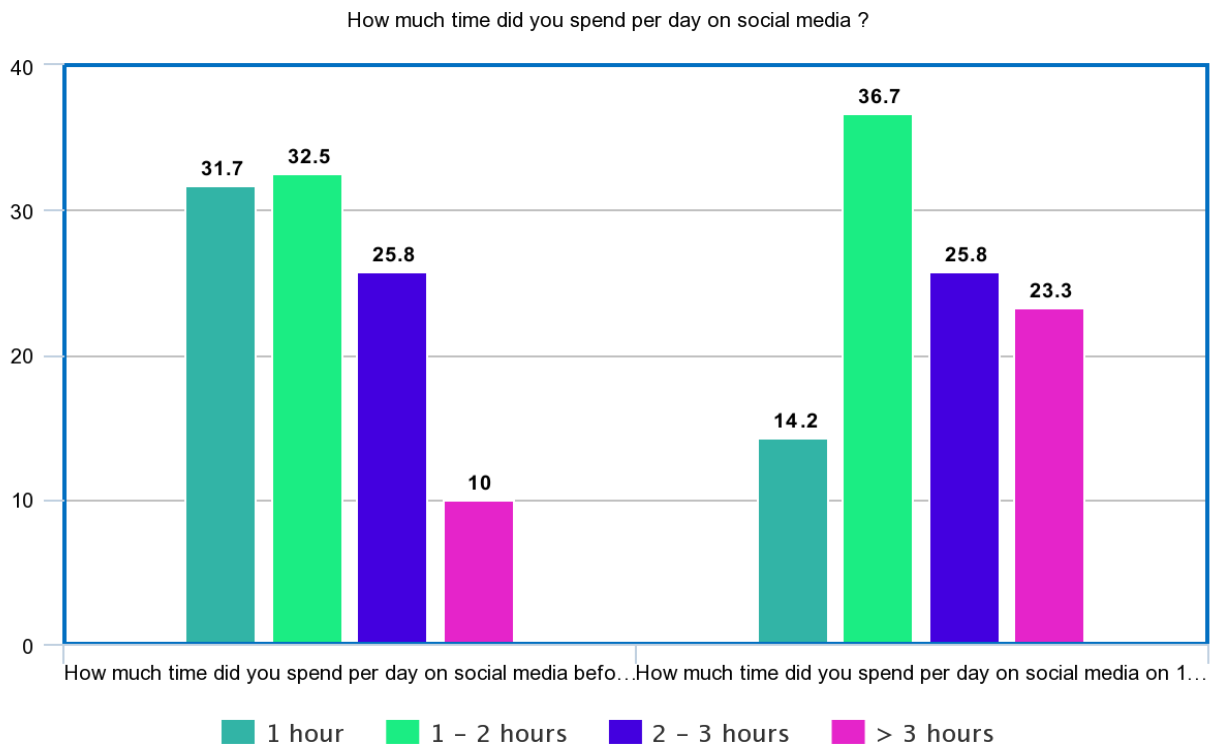


Diagram 13: How much time did you spend per day on social media before covid-19 and on 1st quarantine?

As we can see in the chart above, comparing the two time periods, the period before the outbreak of the pandemic and the period after the outbreak until now, most respondents have increased the number of hours they spend on social media, which is completely acceptable considering the amount of free time they have gained because of quarantine. In particular, those who spent more than three hours on social media increased by 13.3%, and those who spent less than an hour decreased by 17.5%.

*Table 16:*How often did you shop online from social media pages before March 2020 (before 1st quarantine)?

	Frequency	Percent
Once a week	24	20,0
2 - 3 times a week	7	5,8
Once a month	68	56,7
2 - 3 times a month	5	4,2
1 year and less	16	13,3
Total	120	100,0

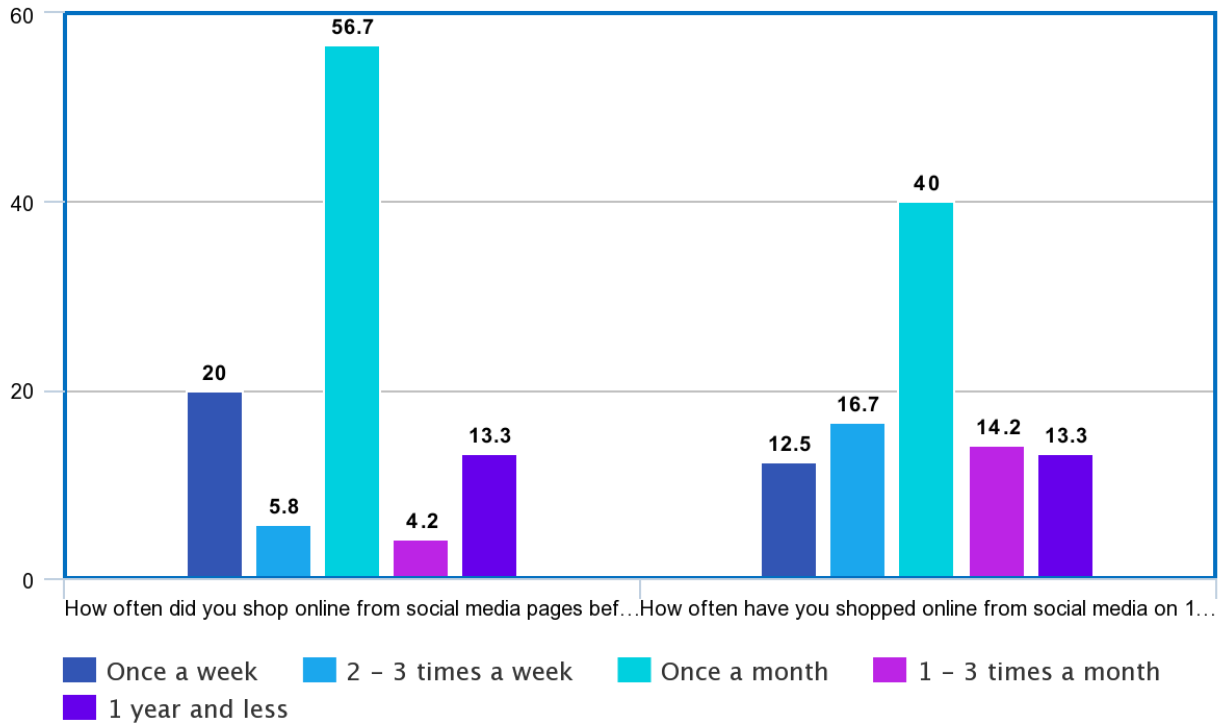
In table 14, the frequency by which participants shopped online from social media pages before March 2020 (before 1st quarantine), is presented. The majority of participants (56.7%) stated that they shopped online from social media pages before March 2020 (before 1st quarantine) once a month, while 20% stated that they shopped online once a week, 5.8% stated that that they shopped online from social media pages before March 2020 (before 1st quarantine) 2 – 3 times a week, 4.2% 2 – 3 times a month and 13.3% 1 year and less

*Table 17:*How often have you shopped online from social media on 1st quarantine and after?

	Frequency	Percent
Once a week	15	12,5
2 - 3 times a week	20	16,7
Once a month	48	40,0
2 - 3 times a month	17	14,2
1 year and less	16	13,3
Total	120	100,0

In table 20, the frequency by which participants shopped online from social media 1st quarantine and after, is presented. Most participants (40%) stated that they shopped online from social media pages once a month, while 12.5% stated that they shopped online once a week, 16.7% stated that that they shopped online from social media pages 2 – 3 times a week, 14.2% 2 – 3 times a month and 13.3% one year and less.

How often did you shop online from social media pages?



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Diagram 14: How often did you shop online from social media pages before Covid-19 and on 1st quarantine? According to the diagram, internet users shop online more than before the quarantine period, and those who buy products two to three times a week increased their percentage by 10.9% compared to before the quarantine. Our admission is acceptable since they can shop online from any brand around the world whenever they want. Rather than crowding the shops and waiting in lines, they can now order directly online and compare prices and reviews.

Table 18: How many social media accounts did you maintain before March 2020 (before 1st quarantine)?

	Frequency	Percent
1 socialmediaaccount	46	38,3
2 - 3 socialmediaaccounts	63	52,5
> 3 socialmedia accounts	9	7,5
Total	118	98,3
Missing	2	1,7
Total	120	100,0

In table 15, the amount of social media accounts that participants maintained before March 2020 (before 1st quarantine), is presented. The majority of the sample (52.5%) maintained 2 – 3 social

media accounts, 38.3% of the sample maintained 1 social media account and only 7.5% of the sample more than 3 social media accounts. Of the total sample, 1.7% did not respond.

Table 19: How many social media accounts have you had on 1st quarantine and after?

	Frequency	Percent
1 socialmediaaccount	31	25,8
2 - 3 socialmediaaccount	67	55,8
> 3 socialmediaaccounts	22	18,3
Total	120	100,0

In table 21, the amount of social media accounts that participants-maintained 1st quarantine and after, is presented. The majority of the sample (55.8%) maintained 2 – 3 social media accounts, 25.8% of the sample maintained 1 social media account and 18.3% of the sample more than 3 social media accounts.

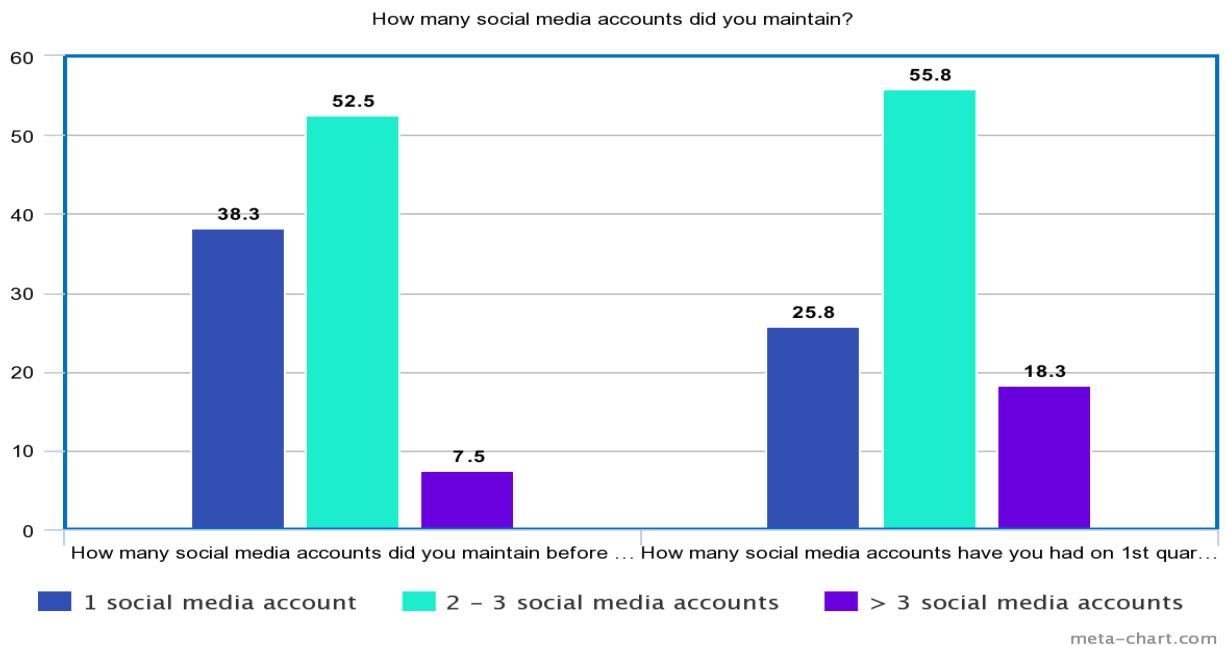


Diagram 15: How many social media accounts did you maintain before Covid-19 and after 1st quarantine?

According to the statistic, the number of people with three or more social media accounts increased by 10.8%, which makes sense as social media has changed significantly over the past two years. A harsh truth of the pandemic was that we had to be apart someday to be safe together. People have flocked to new platforms (TikTok) and old ones (Facebook) in order to stay in touch with their friends and family. Our new normal has caused us to change the way we behave on these platforms, with the messy realities of pandemic life crowding out some of the attitudes and perfection of social media.

Table 20: How much money did you spend on before March 2020 (before 1st quarantine)?

	Frequency	Percent
Less than 100€	62	51,7
100 - 200€	31	25,8
200 - 300€	15	12,5
300 - 400€	7	5,8
> 400€	5	4,2
Total	120	100,0

In table 16, the amount of money that participants spent on 4 of March 2020 (before 1st quarantine), is presented. The majority of the sample (51.5%) spent less than 100€, 25.8% of the sample spent from 100 to 200€, 12.5% spent 200 - 300€, 5.8% spent 300 - 400€, while more than 400€ spent 4.2% of the sample.

Table 21: How much money have you spend on online on 1st quarantine and after?

	Frequency	Percent
Lessthan 100€	30	25,0
100 - 200€	31	25,8
200 - 300€	37	30,8
300 - 400€	10	8,3
> 400€	12	10,0
Total	120	100,0

In table 24, the amount of money that participants spent on 1st quarantine and after, is presented. The majority of the sample (30.8%) spent 200 – 300 €, 25.8% of the sample spent from 100 to 200€, 25% spent less than 100€, 8.3% spent 300 - 400€, while more than 400€ spent 10% of the sample.

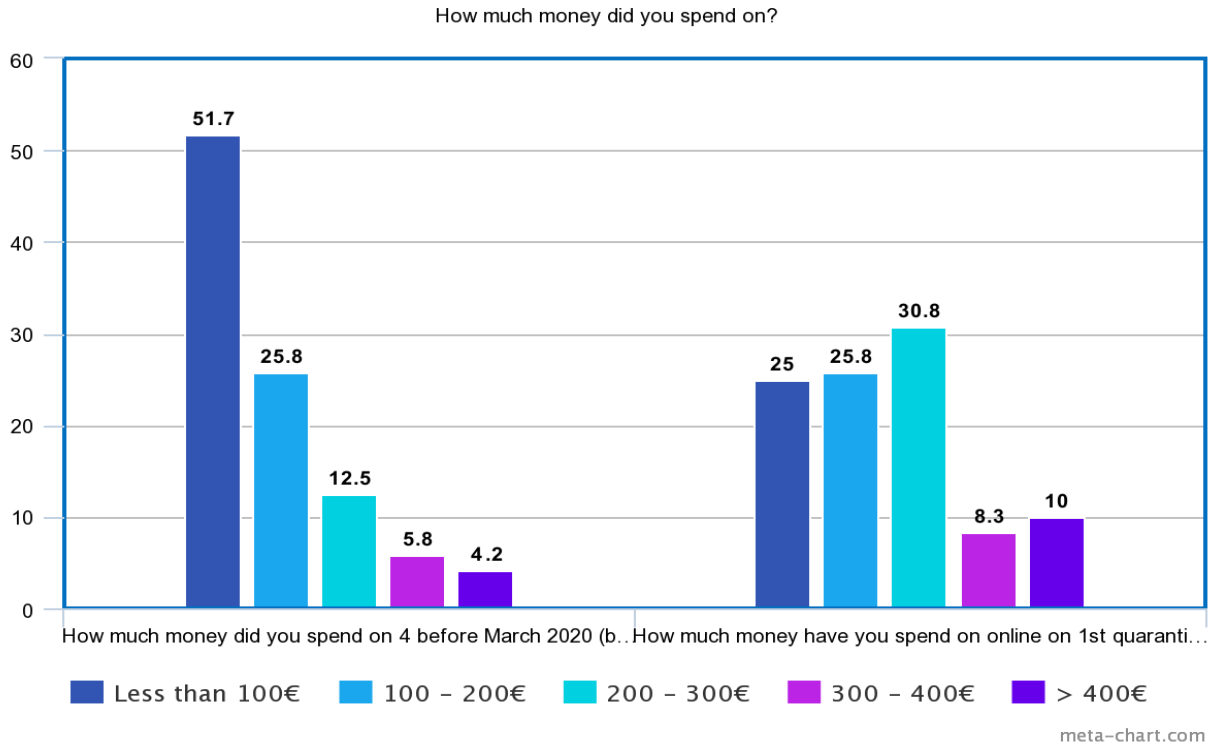


Diagram 16: How much money did you spend on before March 2020 and on 1st quarantine

As can be seen in the diagram above, the money spent by people before and after the pandemic increased a lot. Before the pandemic, most people spent less than 100 euros; after the pandemic, the amount reached over 400 euros. It is reasonable to accept the above result, since most people are afraid of their physical integrity and want to avoid crowded shops. The convenience of shopping at the supermarket from home has now become a reality for everyone. Online shopping is a necessity of the conditions rather than simply an option.

Table 22: Did you make any comment- review, send any feedback on social media page before March 2020 (before 1st quarantine)?

	Frequency	Percent
Everyday	8	6,7
Per week	12	10,0
Per Month	28	23,3
Once a year	72	60,0
Total	120	100,0

In table 18, frequencies by which participants made comments reviews or sent any feedback on social media page before March 2020 (before 1st quarantine), are presented. The majority of participants (60%) stated that they made comment- review, send any feedback on social media

page before March 2020, once a year, 23.3% once a month, 10% per week while only 6.7% stated that they made comments reviews or sent any feedback on social media page before March 2020 (before 1st quarantine) every day.

Table 23: Did you make any comment- review, send any feedback on social media page after March 2020 (After 1st quarantine)?

	Frequency	Percent
Everyday	16	13,3
Per week	23	19,2
Per Month	20	16,7
Once a year	60	50,0
Total	119	99,2
Missing	1	,8
Total	120	100,0

In table 23, frequencies by which participants made comments reviews or sent any feedback on social media page after March 2020 (After 1st quarantine), are presented. The majority of participants (50%) stated that they made comment- review, send any feedback on social media page after March 2020 (After 1st quarantine), once a year, 16.7% once a month, 19.2 % per week while 13.3 % stated that they made comments reviews or sent any feedback on social media page after March 2020 (After 1st quarantine) every day.

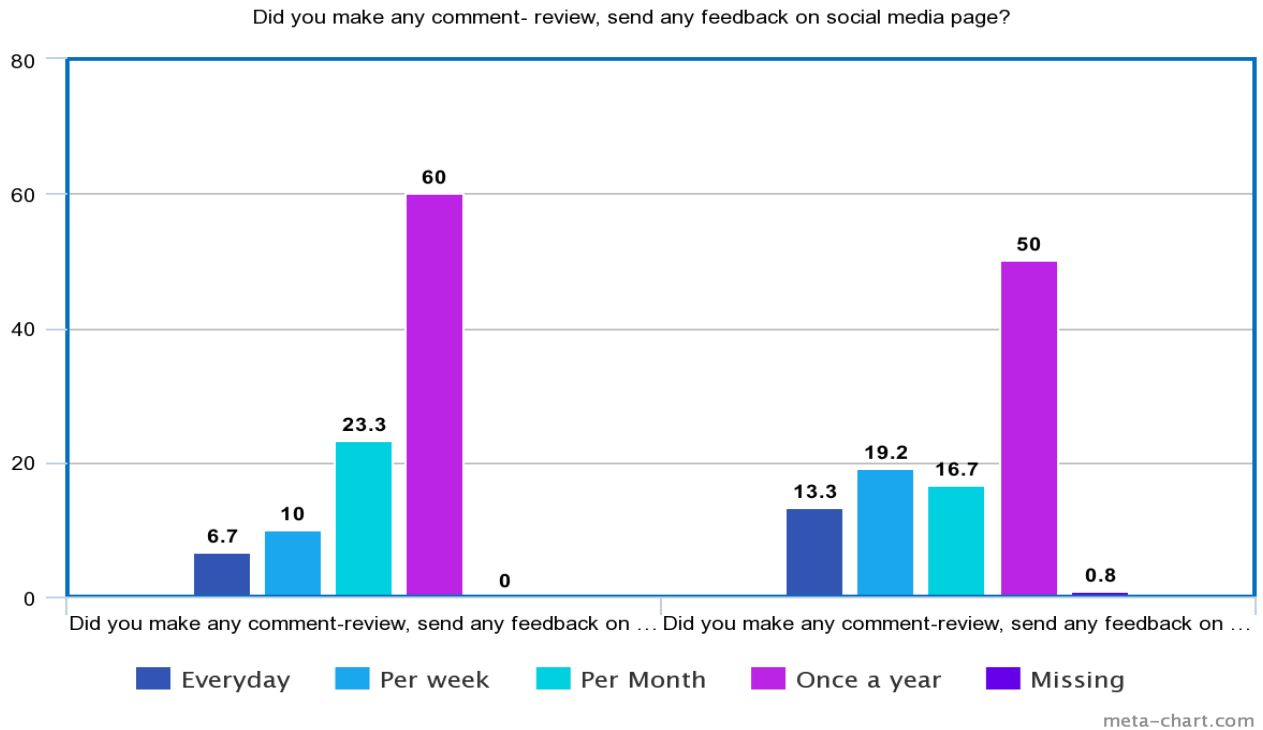


Diagram 17: Did you make any comment-review, send any feedback on social media page before March 2020 and on 1st quarantine?

The diagram shows that feedback on social media has grown a lot, and the percentage of people who criticize or comment on social media content daily has also increased. The diagram shows that feedback on social media has grown a lot, and the percentage of people who criticize or comment on social media content daily has also increased. The diagram shows that feedback on social media has grown a lot, and the percentage of people who criticize or comment on social media content daily has also increased. It is of the utmost importance for both consumers and companies to receive some feedback for their action diagram shows that feedback on social media has grown a lot. The percentage of people criticizing or commenting on social media content daily has also increased. Whether this is some publication or some purchase, constantly improve the content of the web pages and the quality of the products provided on the Internet. The increase is acceptable if we think about how many newsletters and emails we receive every day that call us to do some activity on the internet and for companies to know if what they offer is liked by consumers.

Table 23: Did you buy something that you didn't need because of social media influencer before quarantine?

	Frequency	Percent
Sometimes	12	10,0
Never	54	45,0
Alot of times	54	45,0
Total	120	100,0

Table 17 presents frequencies by which participants stated that they bought something they did not need because of social media influencer, are presented. 45% of participants stated that they never bought something they did not need because of social influencerse and with the same proportion, participants responded a lot of times. Only 10% of the sample stated that they sometime bought something they did not need because of social media influencer.

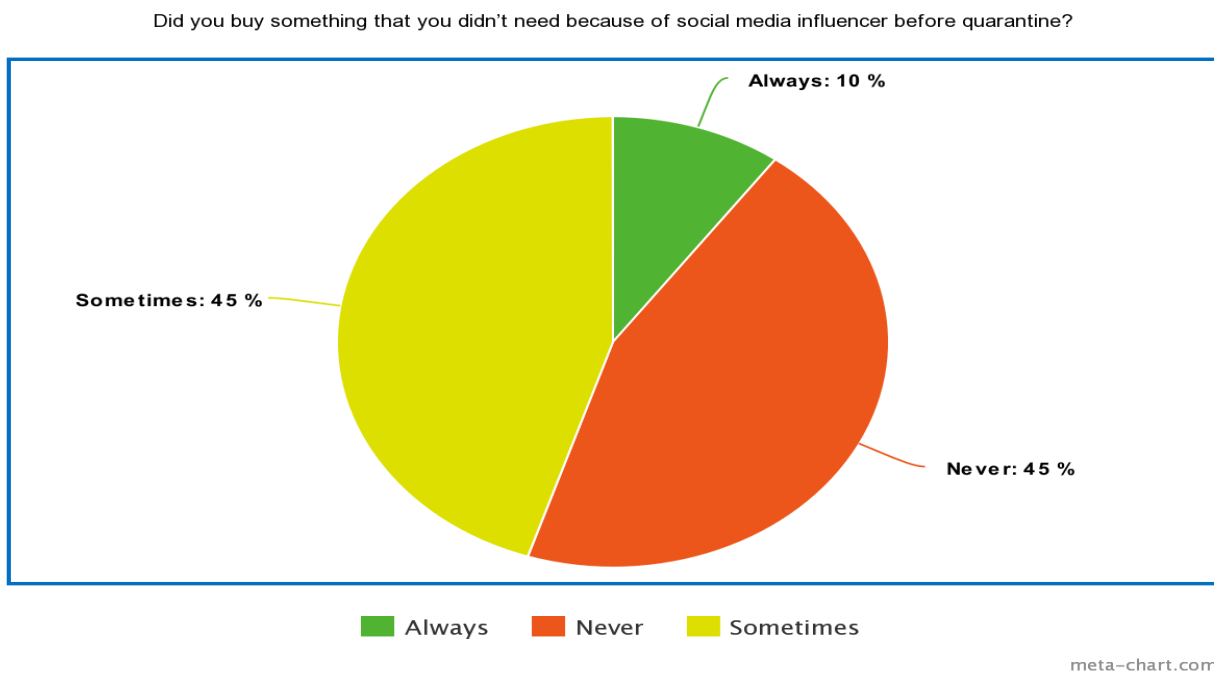


Diagram 18: Dis you buy something you didn't need because of social media influencer before quarantine?

According to the questionnaire, sometimes respondents have a product because of an influencer. Brands can advertise directly to their target audience using influencer marketing. Building trust is crucial for brands and marketing tactics as consumers become increasingly suspicious. The power of influencer advertising lies in the fact that brands can promote their products through someone a

niche community follows, interacts with, and trusts daily. So, instead of being skeptical of a commercial or social media ad, consumers trust the influencer if they love the product

Table 24: Have you created any new social media account on 1st quarantine and after?

	Frequency	Percent
Yes	60	50,0
No	59	49,2
Total	119	99,2
Missing	1	,8
Total	120	100,0

In table 22, almost half of the participants (50%) responded that they created a new social media account, during 1st quarantine and after and 49.2% that they still need to create a new social media account, during 1st quarantine and after. A 0.8% of the sample did not respond at all.

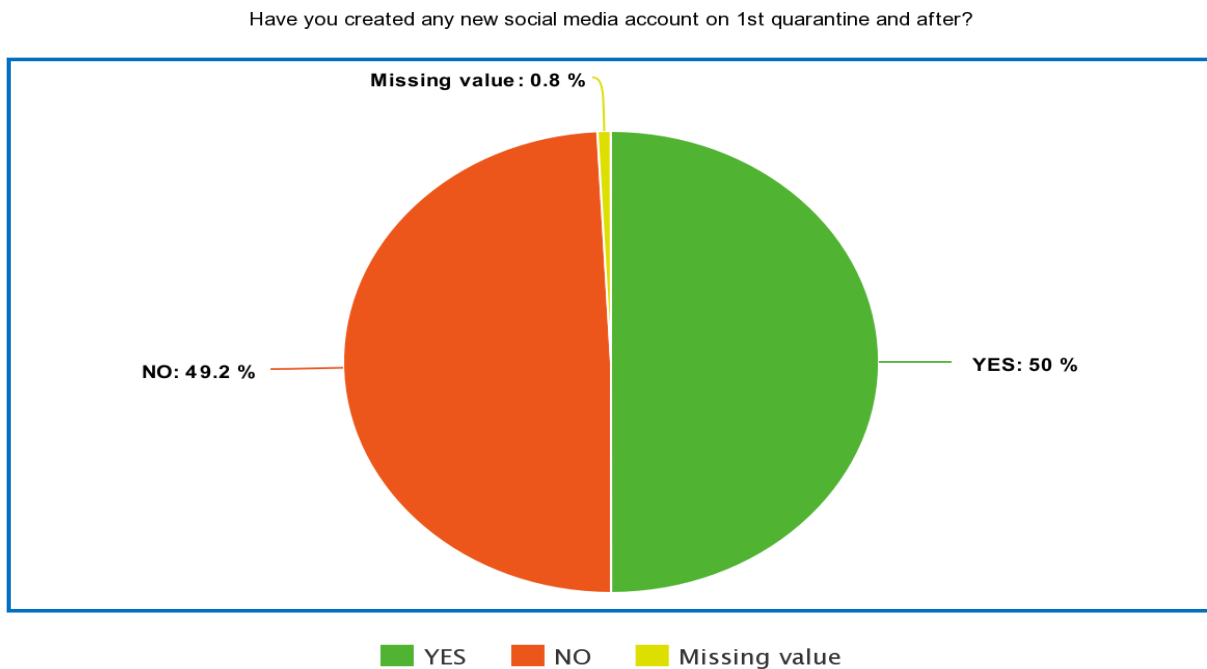


Diagram 19: Have you created any new social media account on 1st quarantine and after?

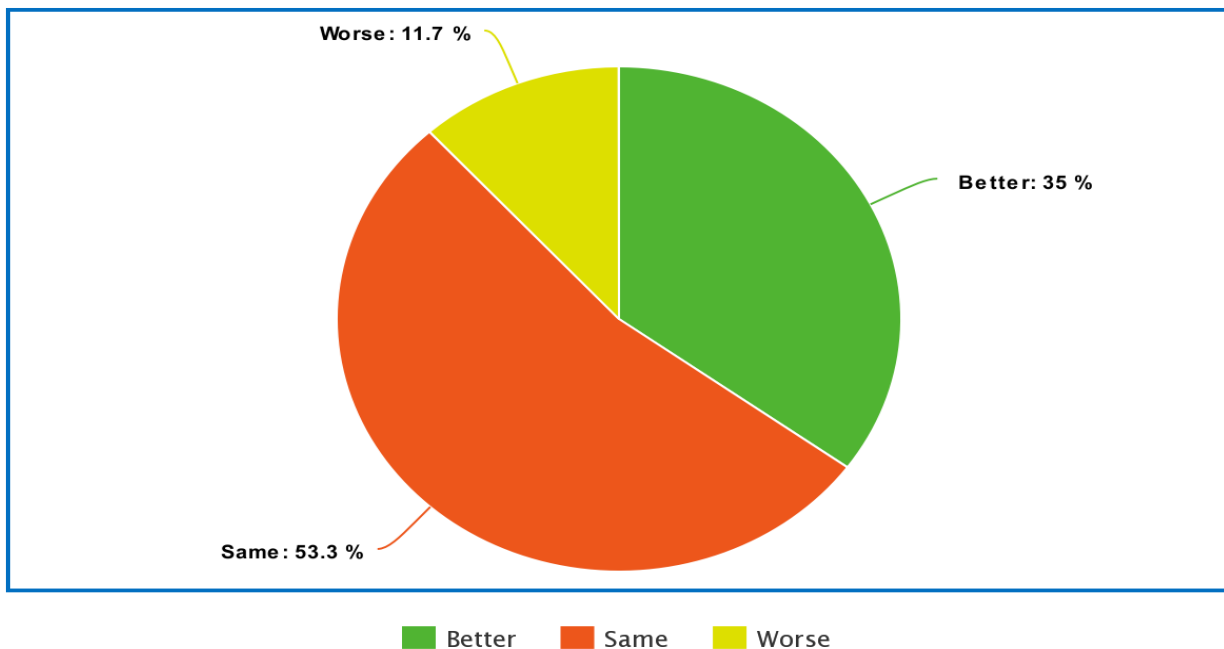
The above diagram shows that the percentage of people who improved their relationship with social media after the pandemic is roughly equal to the percentage relationship of social media that was interfered with; therefore, if we are to have a positive relationship with social media, platforms and online shopping need to be improved.

Table 25: After all these months of quarantine, your relationship with social media is:

	Frequency	Percent
Better	42	35,0
Same	64	53,3
Worse	14	11,7
Total	120	100,0

In table 25, the amount participants' relationship with social media, after months in quarantine, is presented. The majority of the sample (53.3%) stated that it remained the same, 35% that it was improved, while 11.7% that it deteriorated.

After all these months of quarantine, your relationship with social media is:



meta-chart.com

Diagram 20: After all these months of quarantine, your relationship with social media

As can be seen in the diagram, the relationship of the callers with social media is better after the pandemic as a significant improvement was observed in all media and platforms; however, we notice that the largest percentage is occupied by the relationship that interfered with before the pandemic. Therefore, all areas of improvement must be covered so that most users are happy with their online experience.

Table 26: Participants' Gender

	Frequency	Percent
Male	44	36,7
Female	76	63,3
Total	120	100,0

In table 26, participants' gender is presented. The majority of the participants (63.3%), are females while 36.7% are men.

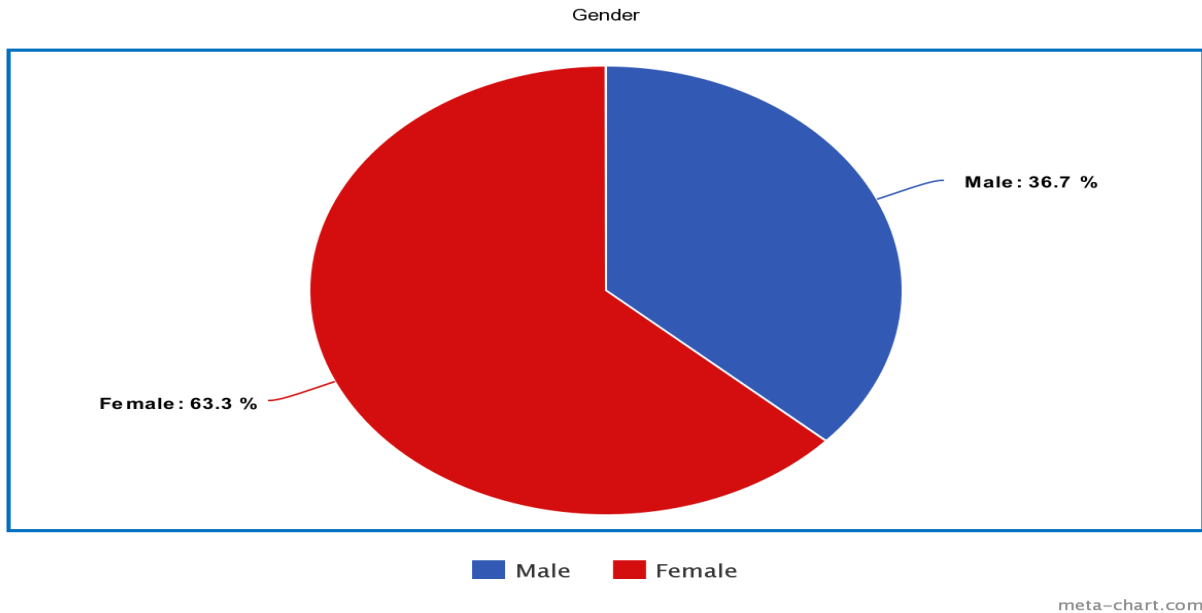


Diagram 21: Gender

Table 27: Participants' Age

	Frequency	Percent
18 - 25 years	23	19,2
25 - 30 years	52	43,3
31 - 40 years	27	22,5
> 41 years	18	15,0
Total	120	100,0

In table 27 participants' age is presented. The majority (43.3%) are between 25 – 30 years old, 22.5% are 31 – 40 years old, 19.2% are 18 – 25 years old, while 15% are older than 41 years.

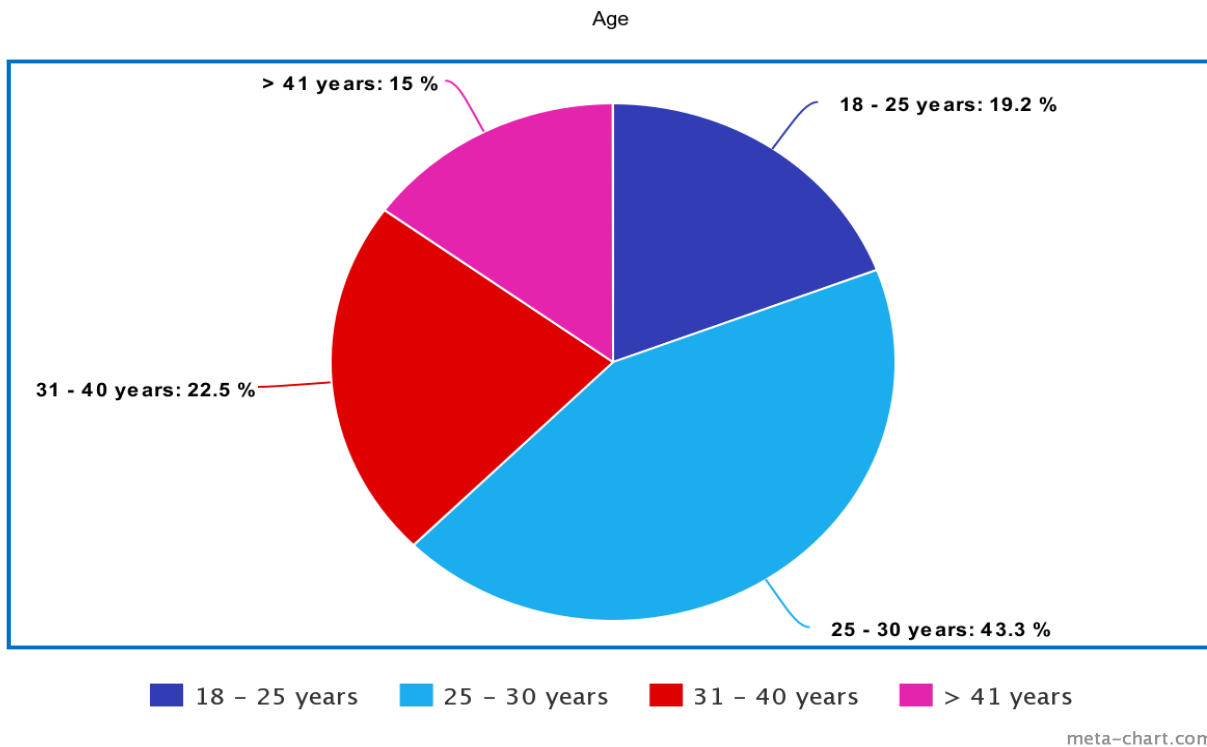


Diagram 22: Age

Table 28: Participants' Education

	Frequency	Percent
Compulsory	2	1,7
IEK	8	6,7
TEI	16	13,3
AEI	67	55,8
Postgraduate PhD	26	21,7
Total	119	99,2
Missing	1	,8
Total	120	100,0

In table 27 participants' education is presented. The majority (55.8%) hold a university degree, 21.7% are postgraduate PhD candidates, 13.3% hold a TEI diploma, 6.7% hold an IEK diploma and 1.7% have received compulsory education. The 0.8% of the sample did not respond.

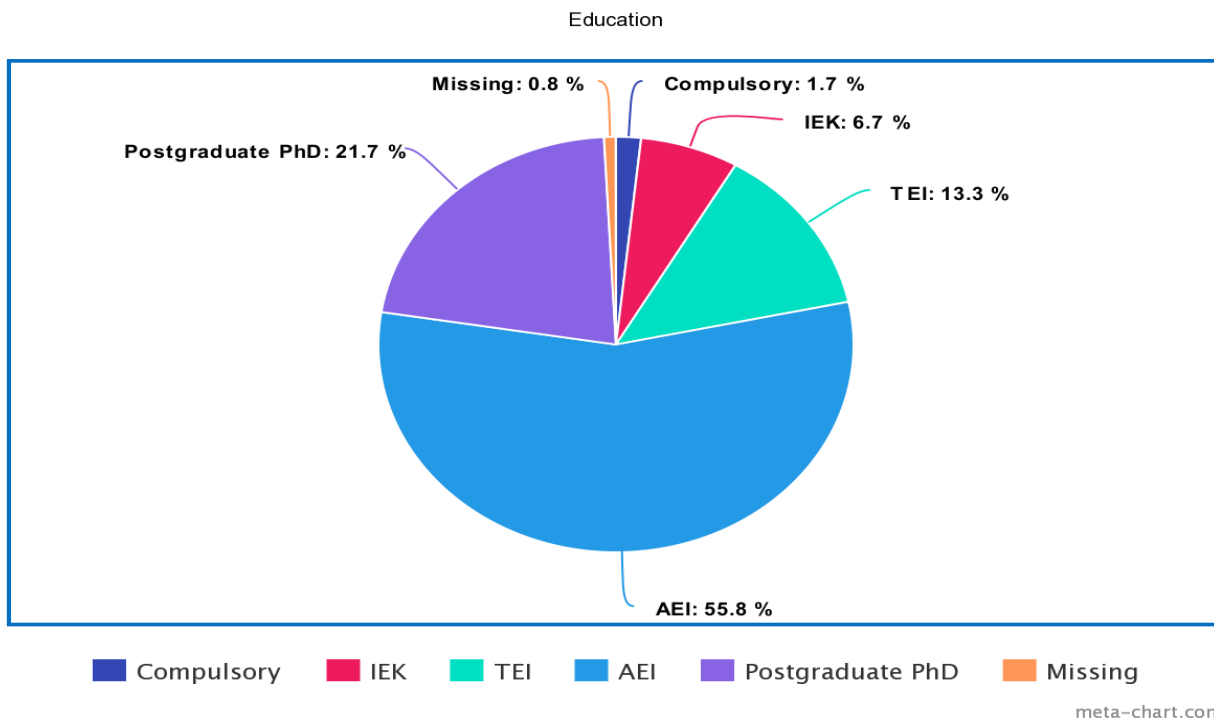


Diagram 23: Education

Table 29: Participant's Financial situation (annual family income)?

	Frequency	Percent
0 - 10.000€	31	25,8
10.001 - 20.000€	59	49,2
20.001 - 30.000€	17	14,2
> 31.000€	13	10,8
Total	120	100,0

In table 28 participants' financial status is presented. The majority (49.2%) receive 10.001 - 20.000€, 25.8% receive 0 - 10.000€, 14.2% receive 20.001 - 30.000€ and 10.8% receive more than 31.000€.

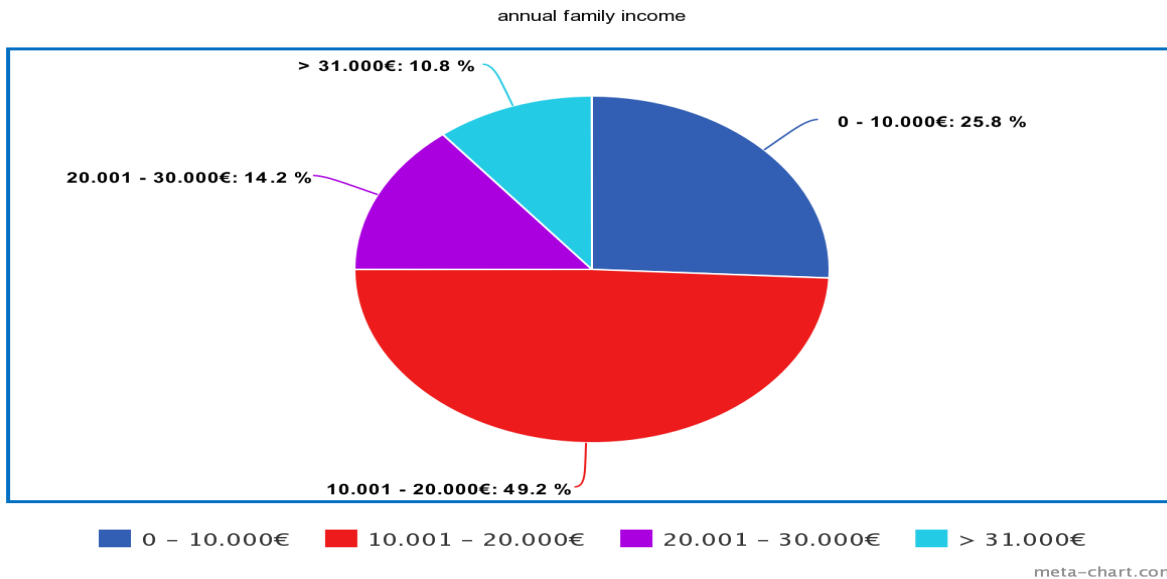


Diagram 24: Annua family income

Table 30: Participants' Marital statuses

	Frequency	Percent
Unmarried	21	17,5
Married	89	74,2
Other	10	8,3
Total	120	100,0

In table 29 participants' marital status is presented. The majority (74.2%) are married, 17.5% of the sample are unmarried and 8.3% of the sample are in another relationship that does not fall on either of the two previous.

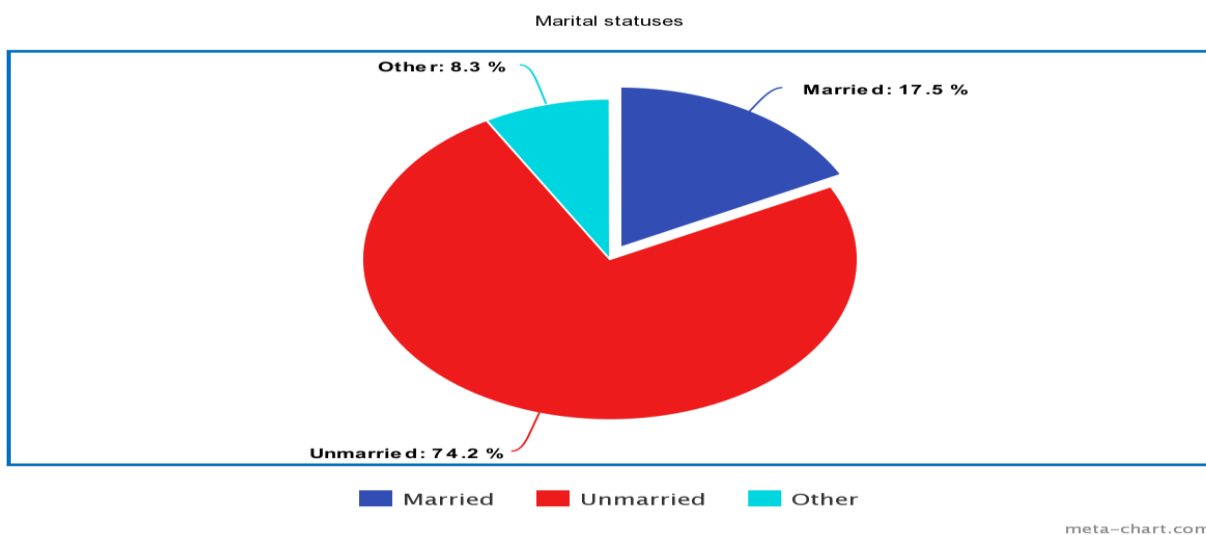


Diagram 25: Marital Statuses

Table 31: Participants' Location for internet connection

	Frequency	Percent
Mywork	13	10,8
Home	54	45,0
MobilePhone	53	44,2
Total	120	100,0

In table 30 participants' location for internet connection is presented. 45% of the sample connect from home, 44.2% through a mobile phone and 10.8% from work.

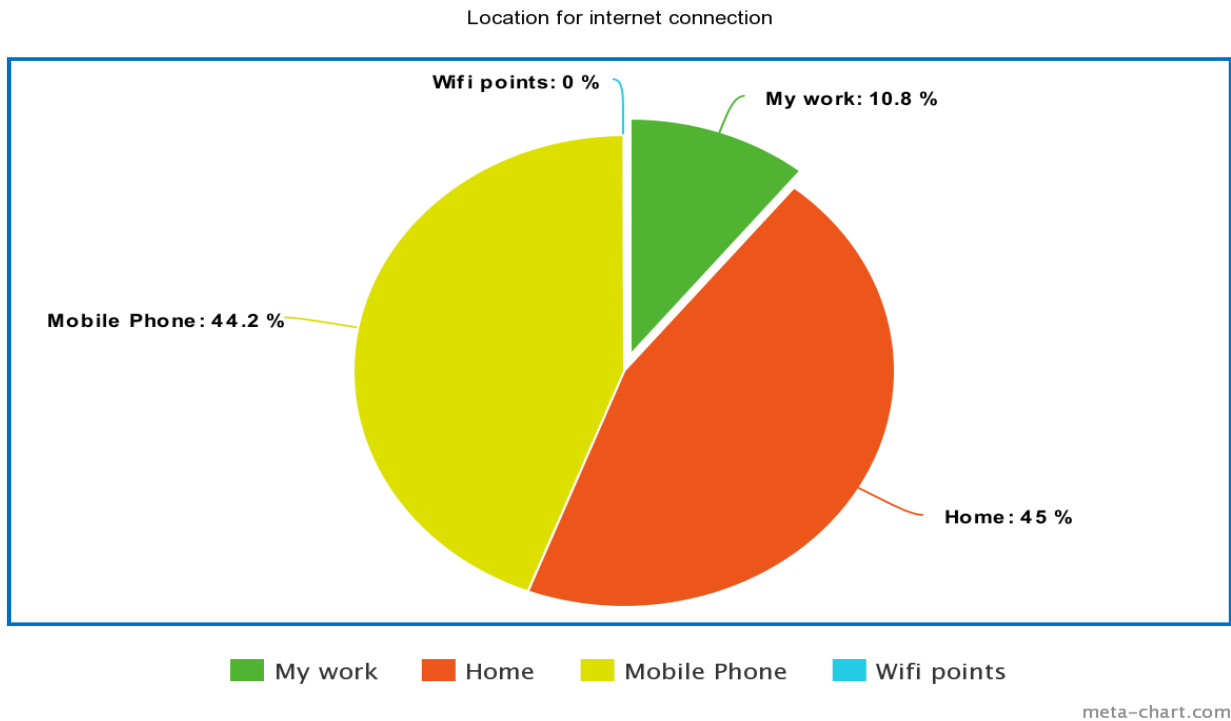


Diagram 26: Location for internet connection

Table 32: How do you connect to the internet?

	Frequency	Percent
Tablet	93	77,5
Laptop	1	,8
Smart phone	18	15,0
PC desktop	8	6,7
Total	120	100,0

In table 3, the way that participants are connected to the internet is presented. The majority of the sample (77.5%) connect through Smart phone, 0.8% through laptop, 15% through smart phone and 6.7% of the sample through PC desktop.

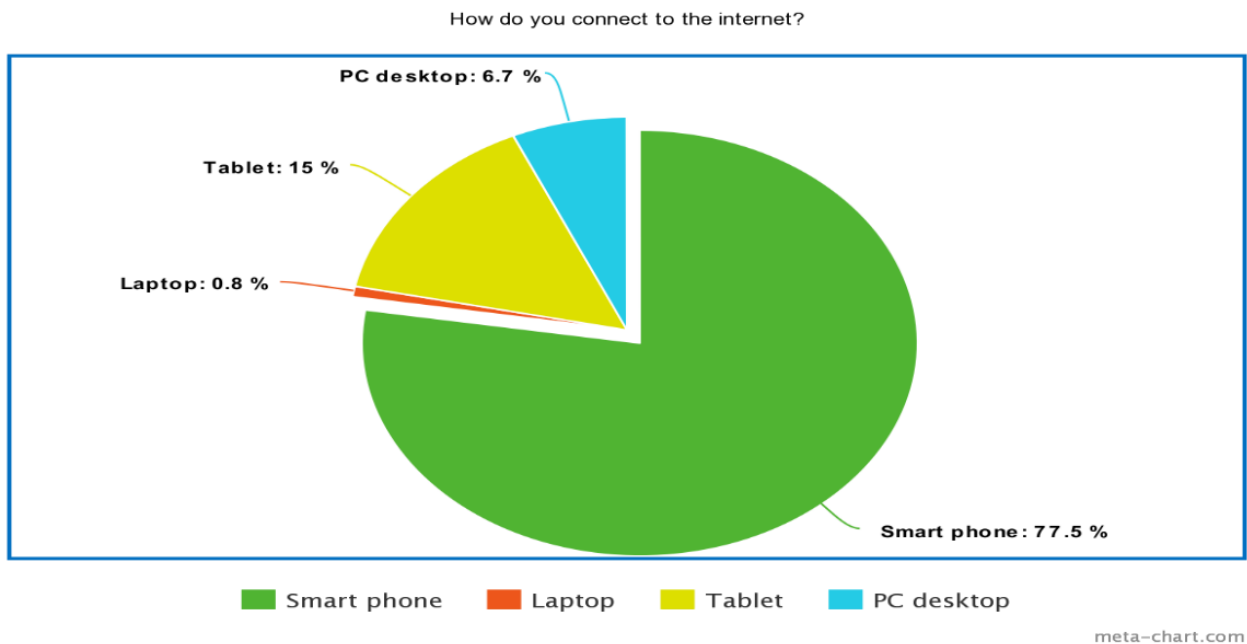


Diagram 27: How do you connect on the internet?

The most significant percentage of users connect to the Internet with their mobile phones. It is easy to access the internet by mobile phones. Since people can access the internet on their smartphones, they don't have to go to cyber cafes to use the internet or even sit at a computer to do so.

4.2 Inferential

In the part below, the inferential statistics are presented, which are in accordance with study's research hypotheses.

In table 33, the descriptive statistics of participants' opinion on social media is presented by how participants connect through the internet. The Opinion on social media, is a complex variable which was created by averaging the following questions horizontally: "Tell us your opinion about social media "Social media are better to collect information than traditional channels like Tv or Newspapers?", Tell us your opinion about social media "Social media is better for online shopping than physical stores" I trust social media content much more than any other online way" and " Tell us your opinion about social media" and "I found more interesting the content of social media than other channels?".

Table 33: Descriptive statistics of participants' opinion on social media, by ways they connect to the internet.

	N	Mean	Std. Deviation
Smartphone	93	2,8181	,70207
Laptop	1	1,2500	.
Tablet	18	3,0417	,64881
PC Desktop	8	2,9375	,51322
Total	120	2,8465	,69646

The majority of the sample that connect through smartphone, on average agree that social media Social media are better to collect information than traditional channels like Tv or Newspapers, are better for online shopping than physical stores, that they provide more trustful content than any other online way and that the content is more interesting of social media than other channels (M = 2.82, SD = 0.70), the participants that connect through laptop totally agree on the previous (M = 1.25, SD = 0), participants who connect through mobile phone neither agree or disagree (M = 3.05, SD = 0.65) and the same holds for participants who connect through internet via PC desktop (M = 2.93, SD = 0.70). Opinion on social media is statistically significantly different across the various ways that participants connect to the internet 10% level of significance ($F(3, 116) = 2.402, p = 0.071$)).

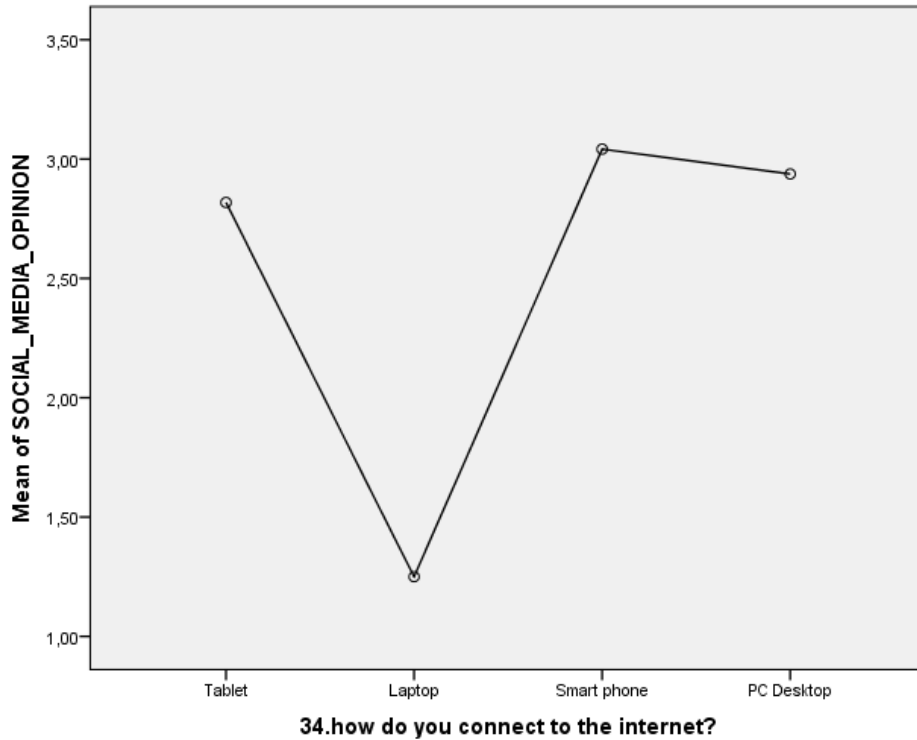


Diagram 28: Means plot of participants' opinion on social media by ways that connect to the internet.

Table 34: Descriptive statistics of frequency by which participants shopped online before and after March 2020

	Mean	N	Std. Deviation
14.How often did you shop online from social media pages before March 2020 (before 1st quarantine)?	2,8500	120	1,19277
21.How often have you shopped online from social media on 1st quarantine and after?	3,1000	120	1,30545

In table 34 the means and standard deviations of the frequency by which participants shopped online, in two different time points, namely before and after March 20, are presented. Participants on average responded that before March 20, they shopped online approximately once a month ($M = 2.85$, $SD = 1.19$), while after March 20, they shopped 1 – 3 times a month ($M = 3.10$, $SD = 1.31$). Between two time points there is a statistically significant difference at 10% level of significance ($t(119) = -1.903$, $p = 0.059$).

Table 35: Descriptive statistics of questions “ How much time did you spend per day on social media before March 2020 (before 1st quarantine)?” and “How many social media accounts did you maintain before March 2020 (before 1st quarantine)?” by participants’ age.

		N	Mean	Std. Deviation
13. How much time did you spend per day on social media before March 2020 (before 1st quarantine)?	18 - 25 years	23	2,5652	1,07982
	25 - 30 years	52	2,2500	,86035
	31 - 40 years	27	2,0370	1,01835
	> 41 years	18	1,4444	,78382
	Total	120	2,1417	,98130
16.How many social media accounts did you maintain before March 2020 (before 1st quarantine)?	18 - 25 years	23	1,7826	,59974
	25 - 30 years	51	1,7647	,55094
	31 - 40 years	26	1,6538	,68948
	> 41 years	18	1,3889	,60768
	Total	118	1,6864	,60904

In table 35, means and standard deviations of questions “ How much time did you spend per day on social media before March 2020 (before 1st quarantine)?” and “How many social media accounts did you maintain before March 2020 (before 1st quarantine)?” by participants’ age, are presented. Concerning the time at which participants spent per day on social media before March 2020 (before 1st quarantine), respondents who are 18 – 25 years old stated that on average spent 2 – 3 hours per day ($M = 2.6$, $SD = 1.08$), while participants who are older than 41 years, spent less than 1 hour per day. Time which participants spent per day on social media before March 2020 (before 1st quarantine), differs statistically significantly among different age groups at 1% level of significance ($F(3, 116) = 5.286$, $p = 0.002$).

On the other hand, the amount of social media accounts that participants maintained before March 2020 (before 1st quarantine), is not statistically significant among different age groups ($F(3,114) = 1.977$, $p = 0.121$), as regardless of the age, participants on average reported that maintained from 1 social media accounts, to 2 – 3.

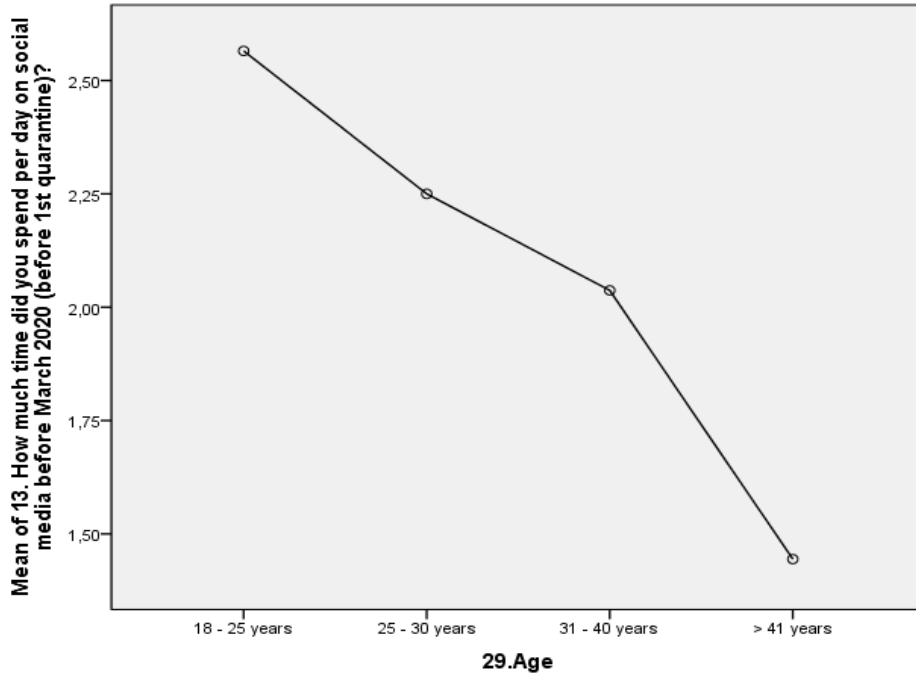


Diagram 29: Means plot of “How much time did you spend per day on social media before March 2020 (before 1st quarantine)?” by participants’ age.

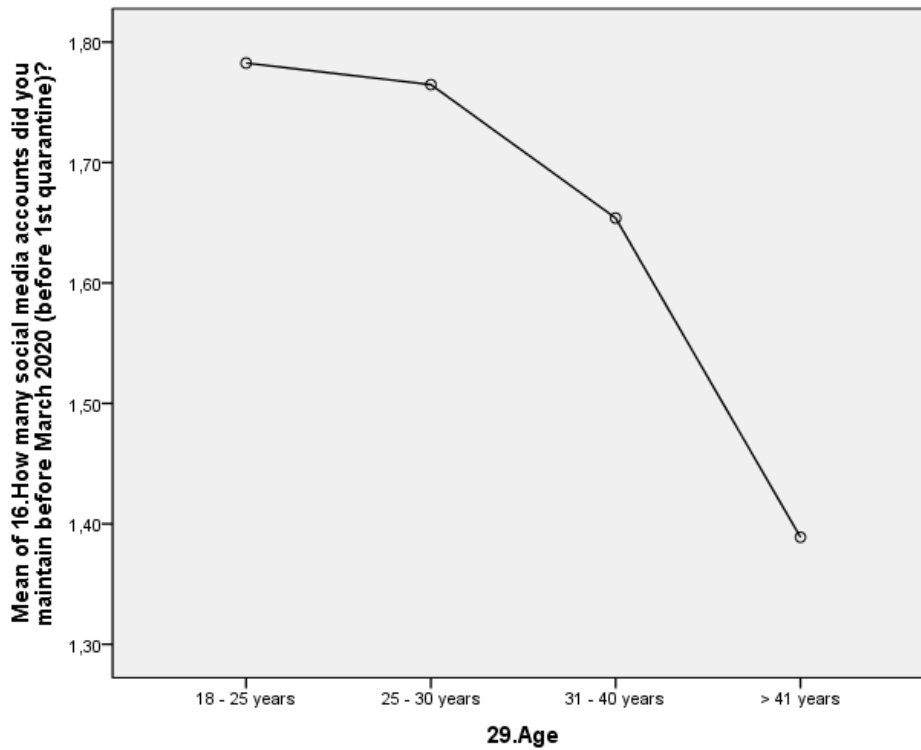


Diagram 30: Means plot of “How many social media accounts did you maintain before March 2020 (before 1st quarantine)?” by participants’ age.

Table 36: Proportion of products' bundle shopped online before and after the first quarantine.

Product	before quarantine	1st quarantine and after
Clothes	10.83%	10.83%
ClothesShoesFood	10.83%	16.67%
ClothesShoes	9.17%	6.67%
Shoes	6.67%	1.67%
Electronicdevices	5.83%	5.83%
Food	5.00%	2.50%
ClothesFood	3.33%	0.00%
ClothesShoesElectronicdevices	3.33%	3.33%
Clothes Shoes Electronic devices Books	3.33%	0.00%
Clothes Shoes Food Electronic devices Books	3.33%	3.33%
ShoesFoodBooks	3.33%	1.67%
ClothesFoodElectronicdevices	2.50%	0.83%
ElectronicdevicesBooks	2.50%	0.83%
Athleticequipment	1.67%	0.00%
Books	1.67%	3.33%
ClothesElectronicdevices	1.67%	2.50%
ClothesElectronicdevicesBooks	1.67%	0.83%
Clothes Shoes Food Electronic devices	1.67%	4.17%
FoodElectronicdevices	1.67%	1.67%
ShoesAthleticequipment	1.67%	0.83%
ShoesFood	1.67%	0.83%
ShoesFoodElectronicdevices	1.67%	0.00%
ClothesAthleticequipment	0.83%	2.50%
ClothesElectronicdevicesAthleticequipment	0.83%	0.00%
Clothes Food Electronic devices Books	0.83%	0.00%
ClothesShoesAthleticequipment	0.83%	0.00%
ClothesShoesBooks	0.83%	1.67%
Clothes Shoes Books Athletic equipment	0.83%	0.83%
ClothesShoesBooksToys	0.83%	0.00%
Clothes Shoes Electronic devices Athletic equipment	0.83%	1.67%
Clothes Shoes Electronic devices Toys	0.83%	0.00%
Clothes Shoes Food Electronic devices Books Athletic equipment	0.83%	6.67%
Clothes Shoes Food Electronic devices Toys	0.83%	0.00%
ClothesToys	0.83%	0.00%
ElectronicdevicesAthleticequipment	0.83%	0.00%
FoodAthleticequipment	0.83%	0.83%
ShoesBooks	0.83%	0.00%
ShoesBooksAthleticequipment	0.83%	0.83%
ShoesElectronicdevices	0.83%	1.67%
Toys	0.83%	0.00%
ClothesBooks	0.00%	0.83%
ClothesFoodBooksAthleticequipment	0.00%	0.83%
Clothes Food Electronic devices Athletic equipment	0.00%	0.83%

Clothes Food Electronic devices Books Athletic equipment	0.00%	1.67%
Clothes Shoes Electronic devices Books Athletic equipment	0.00%	0.83%
Clothes Shoes Food Athletic equipment	0.00%	1.67%
ClothesShoesFoodBooks	0.00%	2.50%
Clothes Shoes Food Electronic devices Athletic equipment	0.00%	0.83%
Electronic devices Books Athletic equipment	0.00%	0.83%
FoodBooks	0.00%	0.83%
ShoesFoodAthleticequipment	0.00%	0.83%
Shoes Food Electronic devices Books	0.00%	2.50%

In table 36 the proportions of products' bundle that participants shopped online are presented. The most frequent product that it was bought both before and after first quarantine, was clothes (10.83%), while clothes, food and shoes were most frequent during 1st quarantine and after (16.67%), compared to the time before 1st quarantine (10.83%). The frequency by which participants shopped online books doubled (3.33% vs 1.67%), while the frequency by which participants shopped electronic devices remained the same (5.83%). The frequency by which participants shopped toys online decreased from 0.83% to 0.00% and so did the frequency by which participants shopped food online (from 5.00% to 2.5%). Participants tended to shop online a bundle of all products, rather than some of them, as the frequency by which they shopped online Clothes, Shoes, Food, Electronic devices, Books and Athletic equipment in the first quarantine and after was approximately ten times larger than the corresponding before first quarantine (6.67% vs 0.83%). However these differences, proportions of products' bundle preference does not seem to differ statistically significantly between the two time points ($Z = 0.025$, $p = 0.995$).

Table 37: Cross tabulation of question "How much money did you spend on 4 before March 2020 (before 1st quarantine)?" with question "How much money have you spend on online on 1st quarantine and after?"

			26. How much money have you spend on online on 1st quarantine and after?					Total
			Les than 100€	100 - 200€	200 - 300€	300 - 400€	> 400€	
17. How much money did you spend on 4 before March 2020 (before 1st quarantine)?	Les than 100€	Count	27	20	12	1	2	62
		% of Total	22,5%	16,7%	10,0%	0,8%	1,7%	51,7%
	100 - 200€	Count	2	10	15	4	0	31
		% of Total	1,7%	8,3%	12,5%	3,3%	0,0%	25,8%
	200 - 300€	Count	1	0	9	3	2	15

	% of Total	0,8%	0,0%	7,5%	2,5%	1,7%	12,5%
	Count	0	0	1	2	4	7
300 - 400€	% of Total	0,0%	0,0%	0,8%	1,7%	3,3%	5,8%
	Count	0	1	0	0	4	5
> 400€	% of Total	0,0%	0,8%	0,0%	0,0%	3,3%	4,2%
	Count	30	31	37	10	12	120
Total	% of Total	25,0%	25,8%	30,8%	8,3%	10,0%	100,0%

In table 37, the cross tabulation of question “How much money did you spend on before March 2020 (before 1st quarantine)?” with question “How much money have you spend on online on 1st quarantine and after?”. It is evident that participants that spent online less than 100€ before March 2020 (before 1st quarantine), continued to spend the same amount of money on 1st quarantine and after (22.5%). For 16.67% of the participants, there was an increase, as they used to spend online less than 100€ before March 2020 (before 1st quarantine), while on 1st quarantine and after they increased their expenditure to 100 – 200€. From the table above, there is a statistically significant McNemar-Bowker correlation at 1% level of significance ($\chi^2(df = 10, N = 120) = 54.035, p = 0.000$).

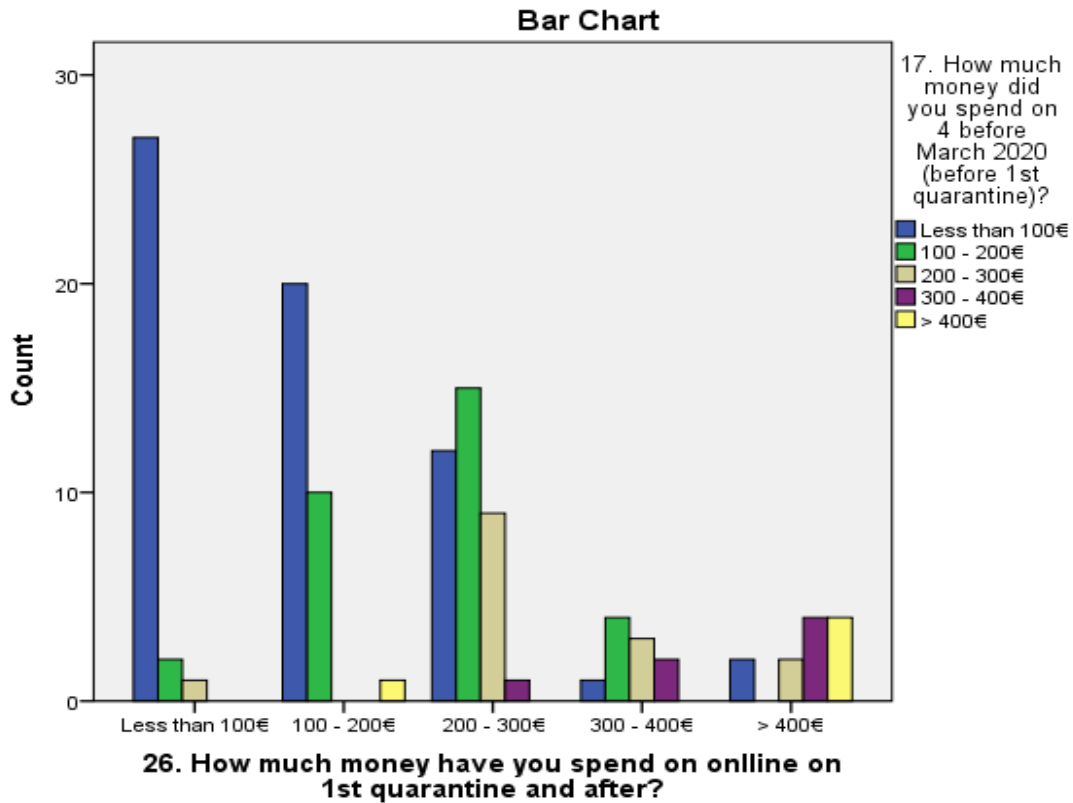


Diagram 31: Clustered bar chart of question “ How much money did you spend on 4 before March 2020 (before 1st quarantine)?” with question “How much money have you spend on online on 1st quarantine and after?”

Table 38: Cross-tabulation of question “Would you take part in a training seminar for social media platforms?”with question “Education”

			30.Education					Total
			Compulsory	IEK	TEI	AEI	PostgraduatePhD	
11.Would you participate in a social media platform training seminar?	Yes	Count	0	6	11	41	17	75
		% of Total	0,0%	5,0%	9,2%	34,5%	14,3%	63,0%
	No	Count	2	2	5	26	9	44
% of Total		1,7%	1,7%	4,2%	21,8%	7,6%	37,0%	
Total	Count	2	8	16	67	26	119	
	% of Total	1,7%	6,7%	13,4%	56,3%	21,8%	100,0%	

Table 38 presents the cross-tabulation between the questions “Would you take part in a training seminar for social media platforms?” and participants’ education. The more educated participants’

(university degree holders and Postgraduate PhD candidates) more are willing to take part in a training seminar for social media platforms, more than participants who are not so educated. Between “Would you take part in a training seminar for social media platforms?” and participants’ education, there is no statistically significant correlation ($\chi^2(df = 4, N = 120) = 4.285, p = 0.369$).

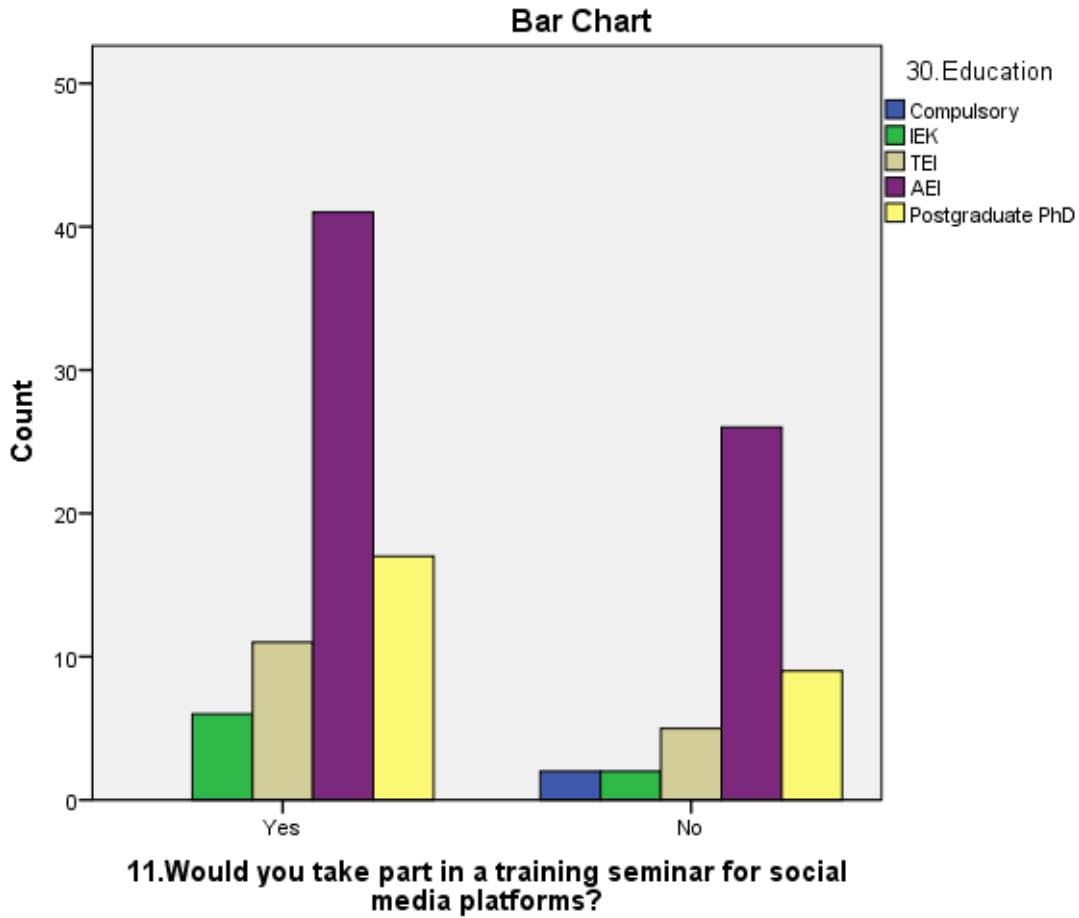


Diagram 32: Clustered bar chart of question “Would you take part in a training seminar for social media platforms?” with question “.Education”

Table 39: Cross tabulation of question “After all these months of quarantine, your relationship with social media is:” with question “Age”.

	29.Age				Total
	18 - 25 years	25 - 30 years	31 - 40 years	> 41 years	

27. After all these months of quarantine, your relationship with social media is:	Better	Count	8	21	5	8	42
		% of Total	6,7%	17,5%	4,2%	6,7%	35,0%
	Same	Count	13	24	20	7	64
		% of Total	10,8%	20,0%	16,7%	5,8%	53,3%
	Worse	Count	2	7	2	3	14
		% of Total	1,7%	5,8%	1,7%	2,5%	11,7%
Total	Count	23	52	27	18	120	
	% of Total	19,2%	43,3%	22,5%	15,0%	100,0%	

In table 39, the cross-tabulation between questions “After all these months of quarantine, your relationship with social media is:” with question “Age” is presented. The majority of participants who are 18 – 25 years old, reported that their relationship with social media remained the same (10.8%), and so did 20.5% of the participants who are 25 – 40 years old. Improved relationship with social media report 6.7% of participants who are older than 41 years, while deterioration 5.8% of participants who are 25 – 30 years old. However, there is no statistically significant correlation question “ After all these months of quarantine, your relationship with social media is:” with question “Age” ($\chi^2(df = 6, N = 120) = 7.537, p = 0.274$).

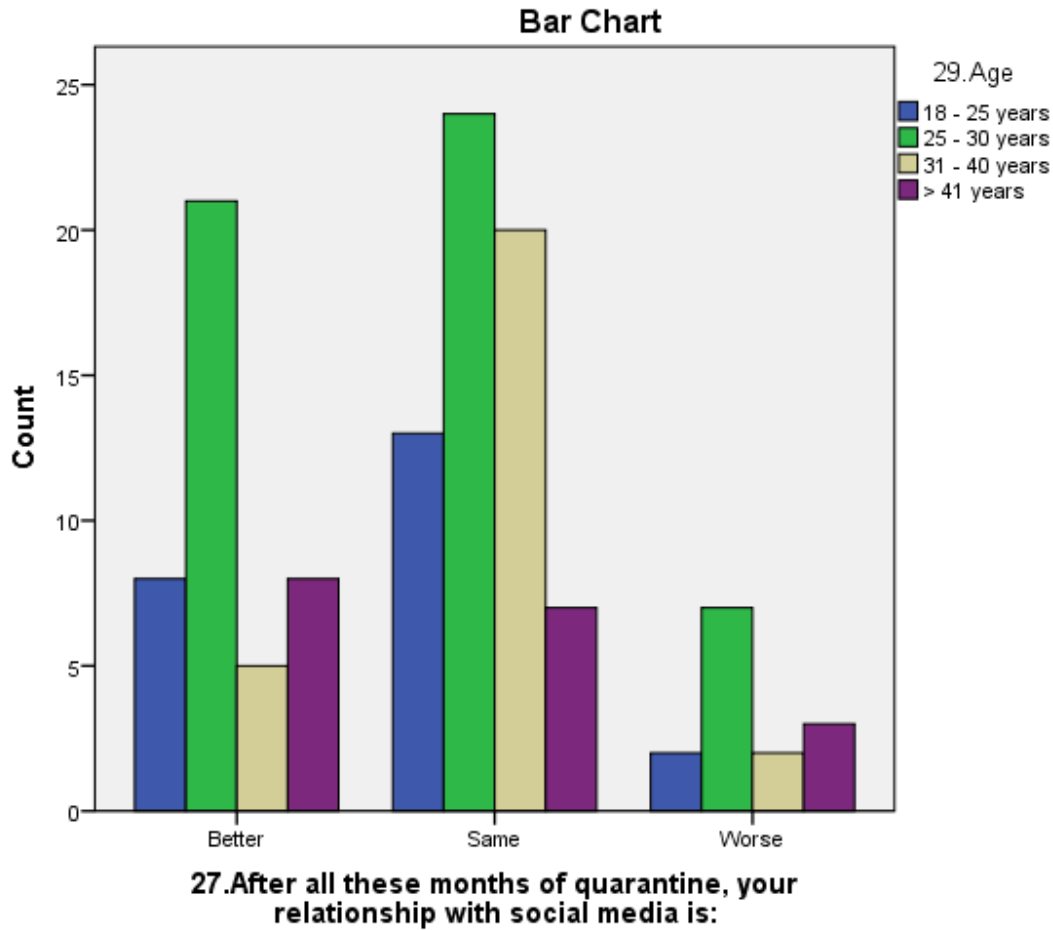


Diagram 33: Clustered bar chart of question “After all these months of quarantine, your relationship with social media is:” with question “Age”

Table 40: Cross-tabulation of the question “Gender” with the question “Have you created any new account on 1st quarantine and after?”

			24. Have you created any new social media account on 1st quarantine and after?		Total
			Yes	No	
28. Gender	Male	Count	22	22	44
		% of Total	18,5%	18,5%	37,0%
	Female	Count	38	37	75
		% of Total	31,9%	31,1%	63,0%
Total	Count	60	59	119	
	% of Total	50,4%	49,6%	100,0%	

Table 40 presents the cross tabulation between questions “Have you created any new social media account on 1st quarantine and after?” with question “Gender” is presented. The sample is equally divided among males and females, as to if they have created a new social media account, on

1st quarantine and after. Specifically, 18.5% of males reported that they have created a new social media account, on 1st quarantine and after, while the rest 18.5% reported the opposite. Concerning females, the percentages are equally divided among those who created a new social media account, on 1st quarantine and after (31.9%) and those who did not (31.1%). There is no statistically significant correlation between the questions “Have you created any new social media account on 1st quarantine and after?” and question “Gender” ($\chi^2(df = 1, N = 119) = 0.005, p = 0.944$).

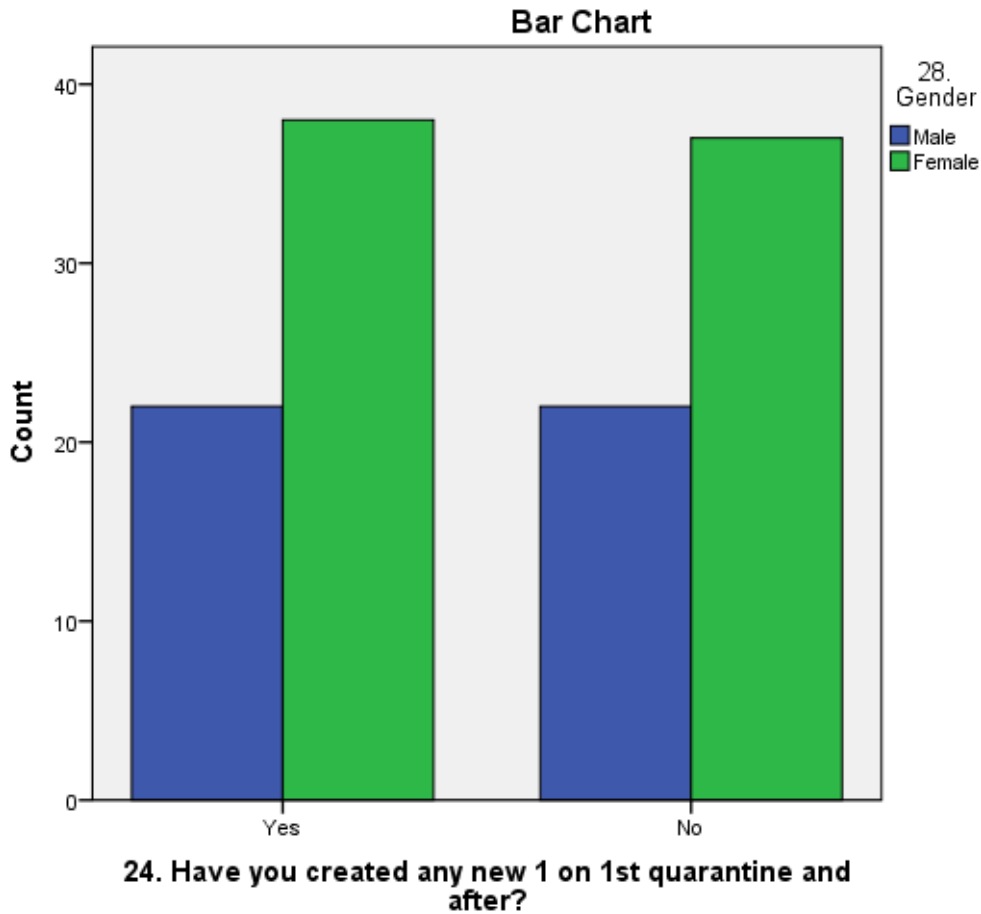


Diagram 34: Clustered bar chart of question “Gender” with question “Have you created any new 1 on 1st quarantine and after?”

4.3 Conclusions

Throughout the world, all aspects of human life are affected. It was temporary for many people to curtail their habits; however, it was a long-term change for others.

Following a bibliographic review of articles published in reputable scientific journals concerning the impact of the COVID-19 pandemic on consumer behavior, the following conclusions were reached: It is a common finding among scholars that the COVID-19 pandemic has led to a remarkable increase in online shopping by consumers around the world.

- Wyman (2010) states that internal stays and social distancing have made social media a popular selling method in this era.
- During the pandemic, social media use and mobile applications related to social media platforms increased, according to Eurostat (2022).
- everyone platform has seen an oversized rate with TikTok showing an impressive increase in monthly active users worldwide from 2019 to 2021, at 38%.(Statista 2022)
- According to Datareportal 2022 illustrates that 47% of people used social media to keep in touch with family and friends during the pandemic
- The American Marketing Association's research on social media programming reveals that content posted early in the morning resulted in an 8.8% increase in the click-to-viewratio
- The best times to post on Facebook are Tuesday, Wednesday, and Friday between 9 am. and 1 pm.
- you should post on Instagram between 11 a. m. to 2 p. m. on Tuesday and 11 a. m. on Monday to Friday (AMA 2022)
- In the times of crisis, brands are particularly tight on marketing budgets.

Withinthislimitation, influence Marketing isintensified. (Ilicic, J.)

- The outbreak has led to the development of many new platforms and applications that allow people to stay connected, gather information, and even educate themselves online; since March 12, 2020, people have been working and attending school online, continuing until January 20, 2021, when COVID-19 emergency was declared.

(Almunawar, M.N.; Anshari)

- Through an open-source platform, people can continue their conversations easily and quickly by reducing travel outside the home and spending time more efficiently (Almunawar, M.N.; Ansari, M.; Susanto).
- People can also use popular update platforms, Instagram, and Facebook, provided by the National Disaster Management Service and the Ministry of Health, where there is valid information and the latest data on the COVID-19 situation. (Cummings, E.; Mather, C.)
- Start-up companies must maintain an extensive online presence to succeed, as it allows them to advertise and promote their products more easily and quickly without incurring high start-up and operating costs.
- Digitization has become a solution and a way to fulfill our needs, such as food, entertainment, learning, and communication.
- for a company to survive in the new data, it must first reflect on the current situation of itself and its environment and then adapt appropriately to it (Garfin et al., 2020).
- For Husnaiyan et al. (2020), the increase in the use of Internet and social networks as a result of the practices of social isolation and teleworking, brought with it the increase of search for information on the COVID-19 pandemic
- Businesses worldwide have had to adapt quickly and change how they communicate, serve and satisfy their customers. It is precisely at this point that Digital Marketing along with existing technology has provided "lifesaving" solutions to most businesses worldwide
- The virus outbreak made customer retention and serviced the most crucial goal of all companies worldwide
- There is no doubt about the importance of the evolution of technology and its impact on consumer behavior. Companies can better understand marketing by understanding customers' behavior and adapting to their needs
- Main changes in consumer behavior during and after the COVID-19 pandemic like the turn of people on organic foods, tips for hygiene and health, pharmacies and laboratories have been at peak sales of masks, given that many companies and businesses had to limit the number of people in their offices, teleworking became a reliable source of work.

- E-Commerce and teleworking took the reins to make life easier for the majority after a period in which the world came to a standstill to slow down the growth curve of people affected by Covid-19
- Decrease of around 5% of the total paid publications and 50% of the investment in Ads.
- Facebook reversed a downward trend in users and usage, reporting an increase in messages of 50% and WhatsApp of 40%.
- Influencer posts decreased 22.6% for Facebook, 41.2% for Twitter and increased 8.93% for Instagram.
- Another trend with significant growth is fake news. Using networks to spread false news generated attacks on health personnel, racism and discrimination against different ethnic groups, attacks on 5G antennas, a shortage of toilet paper, etc.
- The constant concern of people to learn about the virus has resulted in the sharing of any information that is received and is considered of general interest before verifying if it is real, since that messages and news on social networks potentiate or reinforce people's feelings or points of view
- Some studies on the composition of the new menu in the context of the pandemic already yield results that make it possible to map the behavior of citizens concerning the media and networks.
- Another study on the consumption of news about COVID-19 in Mexico shows that digital media and Facebook were the two main channels of information on the subject
- A psychological consequence of COVID-19 in relation to people's consumption habits is that many consumers, trying to escape the psychological pressure imposed by the pandemic and the restrictive measures, bought unnecessary and necessary goods online to escape the psychological pressure. (DiCrostaetal., 2021).
- Social media dissemination of news and information, as well as the circulation of rumors and conspiracy scenarios during the COVID-19 pandemic, sometimes led to a climate of panic among the consumer population (Naeem, 2021).
- Consumers show an increasing trend of using online shopping via smart phones (mobile shopping) (Lee, 2017)

Based on the research and statistical analysis we conducted as well as the processing of the data we received, we reached the following conclusions:

The sample is considered satisfactory considering the smooth age distribution of the 122 completed questionnaires. The representative sample also has a high educational level, with more than 58.8% holding a university degree or a master's or doctoral degree. Since more than 74.2% of them are single, he has an average economic background.

Smart mobile phones are the dominant method and place of connecting to the internet, with percentages ranging from 44.2 to 77.5%.

Comparing the data and purchasing habits of consumers before March 2020 compared to the period March – June 2020 (period of enforcement of restrictive measures – 1st quarantine), we notice that:

- Participants' opinions on social justice media differ statistically significantly in terms of how they connect to the internet at the 10% level of significance. Most of those connected via smartphone agree that social media, which collects information from traditional channels like TV and newspapers, are better for online shopping than brick-and-mortar stores, provide more reliable content than any other online platform, and provide more interesting content for social shopping. So, the medium with which they connect to social media affects how happy users are with it
- There is a statistically significant difference between the frequency of shopping before and after quarantine at the 10% significance level between the pre- and post-quarantine periods. It is clear result that consumers have increased their purchases with the passing of the pandemic as the money they spend on them has also increased
- Respondents aged 18 – 25 said they spent an average of 2 – 3 hours per day ($M = 2.6$, $SD = 1.08$), while participants over 41 years old spent less than 1 hour per day. This means that the time they spend on social media depends on their age, the older the age, the less time they spend on the platforms. On the other hand, the number of social accounts that

users have does not depend on their age, as the significance level is not statistically significant among different age groups ($F(3,114) = 1.977, p = 0.121$)

- Between two time points (before and after first quarantine), proportions of products' bundle preference do not seem to differ statistically significantly. However, Compared with the period before the first quarantine, clothes, food, and shoes were the most frequent (10.83%) purchased products before and after the first quarantine (10.83%).
- The McNemar-Bowker correlation is statistically significant at 1% level of significance between the money someone spends before March 2020 (before the first quarantine) and the money they spend afterward. More specific for 16.67% of participants there was an increase, as they spent less than €100 online before March 2020 (before the 1st quarantine), while after the 1st quarantine they increased their spending to €100-200.
- although the more educated respondents are more willing to participate in a seminar on social media, the relationship between the level of education and the question of whether they would participate in a seminar is not statistically significant, so they do not influence each other .Improved relationship with social media report 6.7% of participants who are older than 41 years, while deterioration 5.8% of participants who are 25 – 30 years old. However, there is no statistically significant correlation between the age and relationship with social media.
- The sample is equally divided among males and females, as to if they have created a new social media account, on 1st quarantine and after., however There is no statistically significant correlation the new social media account and the gender.

Other conclusions derived from the statistics and research:

- there is significant room for improvement in the online mode of communication and in online shopping across platforms
- most consumers have more than 2-3 social media pages
- users have greatly increased the amount of time they spend on social media and the Internet
- Most people prefer to gather information from the Internet rather than traditional media.
- Trust levels are still particularly low for social media and need improvement
- The majority of the sample supported the opinion that online content is more interesting than other media

- Most respondents prefer face-to-face and online communication to protect themselves from alienation and social distancing.
- The majority has difficulty trusting the content they discover online.
- Online discounts are obviously bigger than those found in physical stores
- The influence of social media influencers is still small in relation to the rest of the means of promoting content and products
- The percentage of people who created a new account is about the same as the percentage who did not
- The relationship of individuals with social media intervened even after the quarantine for the majority of the respondents, a fact that signals the further investigation of the causes that led to the above result
- Mobile phones are the dominant form of connecting individuals to the Internet and social media, creating the attention of businesses and managers to optimize and perfect this form of use.

4.4 Further research

It is widely believed that the Covid-19 pandemic has shaped an unprecedented global environment, affecting the lives of billions of people. Within this framework, economic life and entrepreneurship took on new dimensions, with the help of modern technology and the internet. In the context of this work, we were able to focus on only some aspects of the multifaceted topic of the impact of the Covid-19 pandemic on the behavior of people towards social media and electronic markets

Many questions also arise that need further investigation and analysis, such as:

- How much has the Covid-19 pandemic affected e-commerce through mobile marketing
- How the business landscape of e-commerce is shaped in relation to logistics services.
- What are the aspects of social media that were not optimized during the pandemic in order to better engage users with social media and online shopping
- How can future consumers feel more secure about making purchases more frequently

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