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How to fight fake news.
The case of Facebook

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Index

I.   Introduction and motivations

We have been living with fake news for a long period of time, however, we were not aware. With the rise of social media and its different platforms, fake news have been growing at a fast pace. This is because a large part of the world's population has an account on different social platforms, thus, it is easier to reach a larger group of people. After the government of Spain declared national quarantine, we received a lot of news, some were true other were not. We were exposed to a constant flow of news, but since it was a new and disconcerting situation not knowing anything about the virus that was attacking us, the news were not entirely clear and each newspaper said different things. That is when fake news "took advantage" and we started to receive information that was false, without knowing that it was all made up. Even though we all have smartphones, laptops… and most importantly access to the internet, I found out shocking the fact that a lot of people did not try to double check the information they were receiving, and that they were sharing that information with their family, close friends… In my situation, I never paid attention to the information I received because of the uncertainty of the situation; however, I was amazed by all the persons that believed everything. After the quarantine was over, and that the situation was a little bit better, I noticed the power that news platforms and social media have in general and that it is important to always contrast the information we receive with other sources. That is why, I decided to do this work and research about fake news and how we can fight against them.

II.   Objectives and hypothesis

The aim of this work is to analyze what are fake news, explain the role of social media in the spread of them, and making a special analysis of the case of Facebook. In order to get to this final goal, there are defined four main objectives:

1. Defining the different conceptualizations of fake news and its formats.
2. Analyzing the process of creation and the receiver's attitude towards fake news.
3. Defining the role of social media in the propagation and filtering of fake news.
4. Explain which could be the mechanisms to fight against fake news.
5. Evaluate the impact of Facebook's actions related to fake news.

Moreover, I will try to validate three hypotheses throughout this work. The hypotheses are:

1. Social media are fundamental for the propagation of fake news.
2. Fake news have increased due to a greater use of social media.
3. The creation of Facebook has changed the way people consume news.

III.   Work methodology

This paper is a theoretical study in relation to fake news. The study method used has been deductive, where we have gone from the general to the particular, in other words, from the definition of fake news to the case of Facebook. In addition, they have been analyzed different factors through the literature review such as for example the theory of fake news, and a case study as mentioned above. Temporally, the analysis has been made from the irruption of social networks to the present day. Moreover, an attempt has been made to take into account both Spanish and Anglo-Saxon theorist, among whom stand out:

- Cherilyn Ireton, Julie Posetti, Claire Wardle, and Hossein Derakhshan for what has been the definition of the different types of fake news.
- Edson C. Tandoc Jr., Zheng Wei Lim and Richard Ling for the analysis of the different formats of fake news.
- Bertin Martens, Luis Aguiar, Estrella Gómez-Herrera and Frank Mueller-Langer to analyze how social networks have changed the way news is consumed.
- Ángel Vizoso and Jorge Vázquez-Herrero for the analysis of one of the mechanisms to fight fake news, fact-checking.
- Claire Wardle and Hossein Derakhsahn for the analysis of another one of the mechanisms to fight fake news, media literacy.

The literature that has been employed has been useful for the analysis of the different objectives, to finally get to understand what Facebook is doing in this global fight against fake news. In addition, two of the three hypotheses offered have been validated throughout the work. As a result of the analysis, it can be verified that social media are an essential factor for the spread of fake news since a large majority of the world's population has access to different social networks, and, thanks to these social media, the propagation of fake news has been on the rise since their birth as they have become their

main distribution channel. Finally, the birth of Facebook has led to a transformation in the digital world in general terms and although it is one of the most important social networks today, it is not clear that is has been the social media responsible for changing the way people consume news. On the contrary, it has been the ensemble of social networks that have changed this aspect.

IV.   Theoretical framework

Fake news is not a recent event. It has existed since news began to be a notion 500 years ago with the discovery of printing, much longer, in fact, than the verified "factual" news that sprang up a little over a century ago. From the beginning, fake news stories had the tendency to be both shocking and radical, with the intention of stirring up emotions and biases. Fake news appeared simultaneously with the creation of the printing machine by Johannes Gutenberg in 1439. At that time, it was difficult to corroborate if the information was real or not, since there were diverse sources of data, from the formal published literature of religious and political officials to the testimonies of fishermen and traders. However, there was no conception of ethics or objectivity since journalism was a profession that did not exist. That is why people had to pay close attention to what they were reading. During the 16th century, readers that were looking for real news considered that filtered confidential governmental records were trustworthy resources, such as the correspondence of the Venetian government, referred to as *relazioni*. Yet, shortly after, the original leaked files were followed by fake *relazioni* filtrations. Historians started to assume a new role in news verification in the 17th century by releasing their own sources as verified footnotes. Yet, as printing was growing and developing, so did fake news. Sensationalism attracted many readers, that is why it was something easy to sell to the public. At the beginning of the 19th century, newspapers emerged on the scene, promoting premieres and exhibitions, but also false stories in order to boost distribution. Throughout the Gilded Age in the Unites States, yellow press thrived, employing phony surveys, faux experts, and fake stories to incite both sympathy and anger as intended. One glimmer of hope in this long-standing and disturbing history of fake news is yellow press and its aftermath, all the way from civilian conflict to war, had caused a setback and led the public to seek more objective news story. Indeed, it was this booming market that led to the rise of journalism as a relative objective business (Soll, 2016).

However, not until the heyday of web-generated media was journalistic standards of our era severely defied, and fake news was once again a dominant factor. We could say

that digital news has placed yellow journalism back in the spotlight. The algorithms that generate news and collections do not take into account objectivity and reliability. Meanwhile, the tendency of digital media has diminished the strength, expressed in money and labor, within the conventional, unbiased, and independent news media (Soll, 2016). Moreover, while communications from one-to-many evolved during the 20th century, in particular with the appearance of both the television and the radio, satirical stories developed, being sometimes confused as the truth in the minds of news consumers. Also, the rise of the Internet at the end on the 20th century, which was followed by the birth of social media throughout the 21st century, drastically increased the dangers of disinformation, misinformation, propaganda, and deceptions (Posetti & Matthews, 2018).

Regardless of who started the business of fake news, the current shape of fake news is distinct from the traditional journalistic nonsense in the conventional media. The rate at which it is disseminated, and the extent of its impact puts contemporary fake news in a separate league from its historical counterparts. There are three parts that are unique to modern fake news that differentiate it from the old types of deliberately excessive or untrue stories: who, what and how (CITS, 2020). First, for the "who", those that initiate and put into circulation fake news are people with ideological interests or computer hackers seeking to earn money, so it no longer comes from the newspaper writer. Then, for the "what", many times implies the misinterpretation and the deceit of the origin of the news, and not just the information. Finally, for the "how", it is about the presence of social media nowadays, that makes people believe fake news. That is because of three reasons; the first one is that social media play the role of newswire enhancer that are source agnostic. In other words, they gather and deliver news items from a broad selection of media, without taking into account the quality, accuracy, and the ideological bias from the primary source. With no apparent credit to the original editor, it is easy for teasers and schemers to bring their fake stories closer to the attention of mainstream media. The second one is that most news articles are transmitted to people via social networks through their contacts, accompanied by an explicit or implicit approval of the story. These unspoken suggestions cause people more likely embrace the content they receive. Finally, the third one is that social media networks label stories automatically with popularity indications, the number of clicks or likes that they have obtained, made more difficult by bots that can consistently increase the indicators of popularity. Also making people more prone to agree with a story once scores are high (CITS, 2020).

So, it is important to understand the role of fake news as they have been circulating in the society for some year and are hidden among real news. Besides, individuals are not able to detect many of these news because they do not contrast the news in different social media, or because they have received it from someone in their closest circle, meaning that they blindly trust that the new is real (Waytz, 2017). It may also be due to the fact that the news coincides with their way of thinking or ideology. In any case, we live in a digital era where most of the things take place on social networks and because of this, we must be aware of the possible fakes and be critical of those things we read, see, or listen online.

V.   Analysis and discussion

    A. Presence of fake news nowadays

        1. Different conceptualizations of fake news

The terms "fake media" and "fake news" have been applied in many ways to explain the statements with which the complainant disagrees. Yet, as a matter of fact, it is inextricably susceptible to being subject of politicization and to being displayed as a tool against the press industry, as a mean to weaken the information that the people in charge do not approve of. Rather, the concepts like disinformation and misinformation are highly recommended. These two concepts cover caricature and farce, clickable captions, and the fraudulent use of headlines, images, or data, and the original material being shared without context, phony media content (when a journalist's name or newsroom logo is used by people with without connections to them) and manipulated and manufactured the content. Out of all this, it appears as if this crisis is far more complicated than what the expression "fake news" implies (Ireton & Posetti, 2018).

Within the debate of what is fake news, we can find three different concepts: misinformation, disinformation and mal-information. Yet, it is important to differentiate the different messages each of these notions has. First, misinformation is "information that is false, but not created with the intention of causing harm" (Wardle & Derakhshan, 2017). Second, disinformation is "information that is false and deliberately created to harm a person, social group, organization, or country" (Wardle & Derakhshan, 2017). And third, mal-information is "information that is based on reality, used to inflict harm on a person, organization, or country" (Wardle & Derakhshan, 2017).

Figure 1: Example of misinformation

> **Facebook posts**
> stated on July 7, 2020 in a Facebook post:
>
> "New Zealand let health experts" rather than politicians make decisions about how to deal with COVID-19, "and as of today they have zero COVID cases."

Source: Kertscher (2020)

Figure 2: Example of disinformation

> **Facebook posts**
> stated on March 21, 2021 in a Facebook post:
>
> "Less than 500 people a year killed by all rifles combined" and "4,000 a year killed by illegals."

Source: Kertscher (2020)

Figure 3: Example of mal-information

> **Facebook posts**
> stated on March 28, 2021 in a video on Facebook:
>
> Video says COVID-19 vaccines are "weapons of mass destruction" that "could wipe out the human race."

Source: Czopek (2021)

2.Various formats of fake news

Within the world of fake news, we must keep in mind that not every fake news is the same nor has the same format not the same objective. According to the paper of Edson C. Tandoc Jr., Zheng Wei Lim, and Richard Ling (2018), fake news can have six different ways to reach the public: satire, parody, fabrication, manipulation, propaganda, and advertising.

For the first one, news satire is the most popular form of fake news in the articles. News satire normally have the objective to satirize news programs, which normally employ comedy and hyperbole to present the news to the public. The profile of these programs is generally focused on modern subjects and often use the format of a television news transmission. Nonetheless, there is a big different between both of them, and the main different is that programs that resort to news satire, promote themselves as people that instead of delivering information, offer entertainment first and foremost. In these cases, the hosts are humorists or performers. The type of humor they use is not superficial, but rather, the humor is usually used in order to judge social, economic, or political matters. Moreover, one slot they hold in the media scenery is their competence to situate day-to-day news within a broader context. Finally, political news satires take the shape of newsreels for the benefit of humor, toying with hyperbole style, extravagant and false reports, laughter from the live crowd, etc. Nevertheless, the essence of the substance of political satire is grounded in real facts (Tandoc Jr., Lim & Ling, 2018).

For the second one, it is important to highlight that news parody shares many features with news satire as both of them depend on humor as a way of attracting the attention of the audience. Also, news parody uses a format that resembles the style of news media. However, parodies diverge from satires, the main difference is that news parody uses information that is not accurate to instill humor. Parody trifles with the absurdity of the themes and emphasizes them by inventing totally fabricated news. In the event of a successful parody of news, the perpetrators, with a "wink" to the hearing, conduct a refined balance between what can be feasible and what is nonsense. According to Berkowitz and Schwartz (2016), news parodies play a similar role to that of news satire, mainly because they are part of the "Fifth Estate", simultaneously with non-mainstream news sources such as reporters and bloggers. The "Fifth Estate" develops an exclusive borderline vis-à-vis mainstream media information by allowing critiques of both individuals in power and of the media. In addition, by acting as watchdogs for the media,

satirist and parody websites contribute to maintain professionalism in the journalistic process, thereby enhancing the trustworthiness of the media. Parodic news are unlike other types of fake news in which there is an underlying belief that both the writer and the reader of the news share the muzzle. In the context of news parody, as we have already mentioned above, the content is false (Tandoc Jr., Lim & Ling, 2018).

For the third one, news fabrication are stories that have no objective foundation but are released in the same ways as of news articles to build authenticity. Within fabricated news, there is no underlying interpretation between the writer and the reader that the article is untrue. In fact, the purpose is quite often the contrary. The manufacturer of the article has frequently the intention of misinforming. Fabricated news articles can be posted on blogs, websites, or social media networks. The challenge of identifying false fabricated news happens when supporter organizations publish such stories, giving an appearance of impartiality and balance in the information. A successfully produced news, at least from the perspective of the author is an element that is based on pre-existing memes or biases. It fabricates these into a story, which is often politically biased, that the user assumes to be genuine. The reader encounters more difficulties in verifying, as manufactured news is also released by non-news businesses or individuals under a banner of legitimacy by sticking to the styles and formats of the news. Articles can also be exchanged on social network media and thus gain more credibility as the individual receives them from people he or she can trust. It is necessary to point out that the effectiveness of the produced articles depends on an already existing social tension. If there is social tension, if there are severe political, cultural, racial, or sectarian discrimination, then, individuals will be far more exposed to manufactured news. A challenge that we can find with this type of fake news are online bots. These bots make the fabricated articles seem more real, not only the style and the content are the same as real news, but it creates the illusion that they are broadly spread. The outcome of this is that it gives the reader the feeling that other people are reading the article, if they try to the article in different websites, they will probably find it there, which will add credibility the article. In short, manufactures news play a role in some of the same aspects of the news parody, with no implicit understanding between the writer and the reader that the content is fake. On the contrary, the author is failing to act in good faith and is driven by financial or political motives (Tandoc Jr., Lim & Ling, 2018).

For the fourth one, photo manipulation refers to the handling of authentic pictures or video to produce a fake narrative. The modification of the images is becoming more and more popular with the arrival of digital photography, the use of a powerful software for image editing and the know-how. The media are no strangers to using these skills to capture the public's attention. This has been studied more recently in the framework of journalism, characterized by the excess of information and the challenges in the identification of data and graphics. This is aggravated by the sharing practices among consumers that often share documents without confirming their accuracy (Tandoc Jr., Lim & Ling, 2018).

For the fifth one, which has to do with advertising, in this case, advertising information is used to disguise news and press releases published as honest. In some cases, news can work as a way to satisfy both advertising and news aims via an advertising concept called "native advertising" (Tandoc Jr., Lim & Ling, 2018). Native advertising is the fact of including promoted content in a website, always respecting the format and the editorial style. It is driven by the emergence of social networks and the decline in effectiveness of more traditional online advertising. Users perceive this type of advertising (banners, pop-ups…) as an obstacle that does not add any value to their browsing experience (Fuente, 2020). Moreover, we can also find the employment of "clickbait" captions which are intended to motivate the consumer to "click", as well as moving the user to a commercial website, is also increasing (Tandoc Jr., Lim & Ling, 2018).

Finally, for the sixth one, which has to do with propaganda, we can notice a greater interest in the idea of propaganda due to its importance in the political events of the past few years. Propaganda concerns news generated by a political organization in order to shape the public opinion. The stated purpose is to profit a public persona, agency, or government. Like advertising, propaganda is sometimes based on evidence, but involves a bias that encourages a specific side or approach. Such is the case with the mixture of news and commentary, although not unprecedented in journalism, lies behind the claim to be objective news; however, the purpose is often convincing instead of informing (Tandoc Jr., Lim & Ling, 2018).

3. Objectives, motivations and the process of creation and diffusion of fake news

Fake news follows a process for their creation and propagation, as well as having different actors that share the fake news.

The first step of fake news is its creation, which is when the information is conceived, the second one is the production this one, so it is when the message becomes a media product, and the third one is the distribution, which is when the item is shared or released to the public. It is important, in particular, to contemplate the distinct stages of a fake news together with its components, because the agent that generates the information content is frequently distinct from the agent that creates it. Even, the reasons for a person for creating a fake news are significantly different from the reasons for other individuals to share that message. And as soon as a message has been delivered, it can be redistributed without end, by many diverse actors, all with varied motivations. For example, a post on social media can be delivered to more than one community, causing the message to be collected and reproduced by the mainstream network and subsequently distributed to other communities. So, we can see that this problem with fake news is a vicious circle that has no end, since we can all be agents that share fake content without being aware (Wardle & Derakhshan, 2017).

Moreover, according to Wardle and Derakhshan (2017), we can find three elements that compose fake news: the agent, the message and the interpreter. The agent is an individual that can create, develop, and distribute a fake news. The message is the kind of message, its form, and its components. The interpreter is the person that has received the false information and how he or she has understood the message.

The **agent** is the only factor that is present in the three steps of the creation, production, and distribution of a fake news, also, he or she is the one with the motivations for creating it. We can ask ourselves a few questions to understand the type of agent that is behind the false information:

a.   What kind of agent they are?

There are two types of agents: official and unofficial. For the official agents, it refers to for example: intellectual property services, political organizations, or news institutions.

For the unofficial agents, it involves for example an organization of citizens that have spread the word about a certain topic.

b. How are they structured?

Agents can work independently or in groups where there are common interests.

c. What are their motives?

We can find four possible factors that act as motives for the creation of a fake news: financial, the agent tries to profit from the fake news through advertising; political, the agent has as objective degrade a political applicant in an election or to affect the public opinion. Social, the agent wants to contact a particular online or offline group; psychological, the agent looks for recognition or endorsement.

d. Who are their targeted audiences?

Each actor may have their own target audience in mind. These targets can range from a private mailing archive or consumers of an organization to groups that are based on social and economic features, to a whole society.

e. Is the actor using computerized technology?

When talking about computerized technology, we are referring to online bots. According to Cambridge Dictionary, a bot is "a computer program that works automatically, especially one that searches for and finds information on the internet" (Cambridge Dictionary, 2020). These bots have the power to automatically generate and deliver messages online, and nowadays, this process is considerably simpler, and ultimately more cost-effective.

f. Do they have the intention to deceive?

It is important to determine if the agent has the objective of deceiving the audience targeted.

g. Do they intentionally want to harm?

Also, it is critical to verify if the agent has the intention of causing harm to the audience targeted.

The **message** can be transmitted by actors face to face (gossip or discourses), in text (articles, newsletters or brochures) or in audiovisual material (pictures, videos or

memes). Whereas much of the ongoing debate about fake news has been centered on fabricated articles, dis-information and misinformation frequently featured in images. This is relevant because the automatic text analysis technologies are essentially different from those of static and moving image analysis. Again, we can ask ourselves different questions about the message:

a. How lasting is the message?

We can find different types of messages that are of varying durations. Some of the messages are intended to stay both important and powerful over the long term, for example during a war. Other messages are meant for the short term, for example along an election, or only for a short time, such as an isolated message given during a breakthrough news event.

b. How precise is the message?

It is also important to examine the correctness of a message. In the case of mal-information the information used is accurate since it is employed to cause damage (whether by posting personal information in the public sphere or by using people's memberships, like their faith, against them). In the case of incorrect information, there is a range of accuracy from the wrong combination (a clickbait holder that does not match the content of your article) to 100% fabricated information.

c. How legal is the message?

The message could be unlawful as in instances of acknowledge hatred speech, intellectual trespassing, breaches of confidentiality or molestation.

d. Is the message fake content?

The message will either use an official brand name, such as a logo, in an unofficial way, or it will hijack an individual's persona, such as a renowned reporter in order to become more trustworthy.

e. Who is the intended target of the message?

The actor has an expected audience as a target, which is the target audience he or she is trying to affect, but who is distinct of the targeted message. The target may be an individual such as a political or corporate leader, an organization being a private

enterprise or a governmental body, a social community like a racial or ethnic group, or the society.

The **interpreter** is the audience that receives a fake new. An audience is composed of many people, each of whom understands the content of the information based on his or her unique sociocultural background, political roles, and life experiences. Comprehending the formal nature of communication is fundamental to explaining how and why people react to messages in diverse forms. The types of data that we consume, and the way we give them meaning, are meaningfully impacted by our own identity. Moreover, in a society where everything we discuss or share is available to our relatives, friends and coworkers, such social and representational factors are more influential than ever before. What the individual that interprets is able to do with the information received underlines the fact that the three components of fake news (agent, message, and interpreter) must be seen as part of a possible endless cycle. In a time of social mass media, where everybody is a prospective producer, the interpreter can turn out to be the next agent, choosing how to distribute and structure the message for its own benefits.

The communicative process that takes places with fake news is particularly remarkable due to the role of social media that acts as a vehicle that allows to communicative cycle to start restart each time, but with an additional worsening factor: the passive stance of the diffusers. During the 20th century, we have witnessed a multitude of attempts to explain the effects that mass communication produces on audiences. From classic theories that, in the years prior to the World War II, proclaimed the omnipotence of the media, through the theories of limited effects, to the post.1970s stage, from which the most current theories were formulated, such as the agenda setting, the spiral of silence or the framing theory, which adopting an intermediate position, recognize the importance of the effects of the media under certain contextual circumstances, we can identify different patterns of influence (Álvarez Gálvez, 2012).

4. Receivers' attitude to fake news

Fake news has evolved over the years into what it is today. A large part of their evolution is due to the fact that more and more people are sharing or creating content that is not real and by the attitude towards fake news by those people who receive the information. In relation to the attitude shown by the receiver there are different approaches that explain the predisposition of individual to believe or not an information

that is false. However, it is important to explain beforehand the problem of human fallibility.

Human memory is imperfect and prone to mistakes and misunderstandings. The human brain memorizes data independently of how true or false it is. In these times of fake news and misinformation, it is more challenging for people to assess what is right and wrong. In addition, human fallibility is also aggravated by high-tech scenery, with an increasing number of academic works that proposes that the Internet is transforming the way in which individuals think, and makes us even more vulnerable to ignorance, hearsay, and assumptions (Vasu, et al., 2018).

As mentioned above, there are different approaches that explain the distinct attitudes among receivers: illusory truth effect, primacy effect, naïve realism, and confirmation bias. The illusory truth effect is the phenomenon in which individuals, when they are exposed and later re-exposed to fake information might be tempted to assume that the content is more accurate since they cannot recall the original source of such information. In fact, it is important, when people are able to recognize that the original source of the erroneous information is not reliable, they may discard the information as false. The primacy effect is related to the period of formation in which people share the most definitive opinions resulting from the information that is gathered first. Early opinions are likely to build up information in their advantage, although they are challenged by strong and convincing arguments, that may not be approved. This pattern of enforcement is characterized as the continuum of belief, involving the intellectual representation and affirmative assessment of significant information (Vasu, et al., 2018). Naïve realism is the propensity to assume that our understanding of reality is the sole exact representation, and that those who do not agree with this representation are inevitably ignorant, unreasonable, or biased (Waytz, 2017). Thus, whenever we see or hear of something that is compatible with our convictions, we tend to believe it. Besides, most people are very critical about studies that are not in line with what they believe. People are also more inclined to accept an explanation from a persona sharing their point of view, rather than from someone not sharing they point of view (Heflick, 2017). Confirmation bias is the propensity to process data by searching for or understanding that information which is akin to one's underlying core beliefs. Prevailing beliefs may involve one's intentions in a particular context and forecast of a specific outcome. Individuals are particularly apt to use information to sustain their own beliefs when the question is very

substantial or relevant to them. An explanation as to why people are prone to confirmation bias is because it is an effective method of dealing with information. Humans are overwhelmed with data in the societal world and are unable to have the time to accurately evaluate every piece of information to develop an unbiased opinion. Yet, an additional factor that makes people susceptible to confirmation bias is to preserve their self-worth. Hence, people will pursue information that reinforces their pre-existing beliefs. Confirmation bias is relevant sin it can cause people to hold on tightly to untrue beliefs or to add more importance to the information that endorses their beliefs. People may be overly confident in their assumptions because they have gathered enough evidence to sustain them, when in fact, many of the pieces of evidence that disprove their assumptions have been either neglected or abandoned, evidence that, when considered, could result in a reduced confidence in one's faith (Casad, n.d.).

The concept of fake news is a broad and ambiguous term that brings together several definitions. That is why, professionals have created three main categories of fake news: misinformation, disinformation, and mal-information, in which we can place the different types of fakes news that we can find in social networks. The transformations in the production and distribution of information introduced by the new technologies, especially social media, have led to a great explosion of information sources and a constant flow of communication. This has resulted in the media ceasing to be the primary source of information and in the loss of part of the added value that journalist brings to their information: its verification and contextualization.

B. The role of social media in the propagation and filtering of fake news
1. The rise of social media

Social media is defined by Cambridge Dictionary (2021) as "websites and computer programs that allow people to communicate and share information on the internet using a computer or mobile phone". Social media has been in our lives for a long time; however, it was not until the early 2000s that social media became how we know it nowadays. It was with the creation of the first social media network in 2004, MySpace, that social media started to become a major actor in everyone's life (Ortiz-Ospina, 2019). Social media has been able to evolve and transform into what they are today as a result human drive to communicate and the progress in the field of digital technology.

Within the span of under a generation, social media has grown from being a simple online information hub, to a digital meeting place, to a virtual retail sales platform, to a major 21st century marketing engine. As mentioned above, social media has been in our lives for a long time, we can trace the roots back to the 1800s. Somehow, social media started in 1844, in the form of a set of electronic points and lines pressed by hand on a telegraph typewriter. Samuel Morse's first electronic note from Baltimore to Washington DC, showed that he comprehended the historical implications of his scientific accomplishment. Later, during the 1970s, was developed ARPANET, a US Defense network that was the precedent of the beginning of Internet. Commercial Internet service providers began to emerge in the very lake 1980s, and the growth of the Internet allowed the launch of online communication facilities, which brought users into the world of digital conversation, for example via email or an online chat. At the end in the 1990s appeared other forms of online communication such as blogs, and then in the early 2000s, MySpace was created and became the most visited social network by 2006, nevertheless, in 2008 MySpace was overshadowed by Facebook ("The Evolution of Social Media: How Did It Begin and Where Could It Go Next?", n.d.). Also, in 2006, Jack Dorsey created the social network known as Twitter. This social media ranks thirteenth in number of users worldwide (The Social Media Family, 2021).

What started as a traditional workstation or laptop situation, moved to cell phones as well as tablets. As cell phone service became more widespread; the abilities of mobile phones grew, transforming them into what we know today as smartphones, but also, Wi-Fi and high-speed Internet gained more and more accessibility in households, companies, and even public spaces. Moreover, with the arrival of social media applications, which could operate on smartphones, users were able to carry their social communities with them everywhere they went. In the beginning, social media was all about helping users reach out to friends, coworkers, relatives, and even people that had thing in common but that they have never encountered in person ("The Evolution of Social Media: How Did It Begin and Where Could It Go Next?", n.d.). However, nowadays, with the help of smartphones, everything we need is in our hands; phone calls, social media apps, access to the Internet, messaging apps, videos, music… We could say that the world of the Internet is right in our hands.

2. How social media has changed the consumption of news information

The conventional media business model before the digital era was largely built on vertical integration between the creation and the delivery of news. A newspaper had reporters who gathered the information and then wrote the articles, a printer who generated the newspapers, and a delivery system to distribute the newspaper to the end consumer. The newspaper usually consisted of and indivisible set of articles and advertisements, that were first edited and sorted by the editors depending on the newspaper's publishing line and market status, and then they were sold at a predetermined price to main contributors and daily consumers. The last mile of delivery could be subcontracted to freelance retailers. Radio and television (broadcast) news production and distribution was also vertically integrated and delivered in a package of news and advertisements (Martens, Aguiar, Gomez-Herrera & Mueller-Langer, 2018).

The emergence of fake news in the media is hardly a new occurrence: in 1835, several articles printed in the New York Sun, referred to as the *Great Lunar Hoax,* chronicled the finding of activity in the moon (History.com Editors, 2020). Today, the world is experiencing hoaxes that are vastly more complex; social media networks have fostered the propagation of fake news with a wider impact. Most news consumptions today have moved to online social media, where engaging, sharing and joining in further debate about the news with friends as well as other consumers is more accessible. Since online content production is becoming simpler, cheaper, and more rapid, the barriers to entry into the online media business have lowered, which makes it easier for people to create their own media, share their own news, and reach a larger number of readers. This has led to the diffusion of poor-quality news that refuses the traditional journalistic benchmarks and the absence of third-party fact-checking. Such drivers, along with the general decrease in confidence in conventional media, represents the primary factors responsible for the explosive rise of fake news in social networks (Pierri & Ceri, 2019).

A new development in the process of digital transformation of the distribution of news is the ever-increasing role played by social networks, such as Facebook and its sister companies, in the attempts of online news editors to widen their range of reach among consumers. According to Martens, Aguiar, Gomez-Herrera and Mueller-Langer (2018), there are two main reasons:

- First, people are increasingly choosing to spend more time on social media to engage with one another and with the world as a whole. As the focus of consumers move away from conventional linear media to social media progressively, news editors need to keep up with consumers and establish a strong social media appearance.
- Second, consumers prefer to use smartphones more and more than computers and laptops to surf the Internet. Social media applications are major channels for delivering news articles as they are more suitable tools than web navigators. A big perk of moving news stories to smartphones is that consumers are now able to read news in a simpler way and at low opportunity cost moment of time, while on the train or bus for example.

Social media goes further than web navigators and introduces an additional distribution tool: the links among social media users. What individuals read on social media is not just dependent on the feeds they have chosen, but also on what is posted and shared by their colleagues, friends, or network members. For example, in the Facebook Newsfeed, people can determine which page or content they would like to see displayed first on their screen. Content can be propagated via a strong or weak network of links between users. Such links can be employed strategically to direct and deliver content that can be either generated or shares by the user, as well as premium content. Algorithms on the social media hub orchestrate and filter this delivery system and exert an influence on these channels (Martens, Aguiar, Gomez-Herrera & Mueller-Langer, 2018)

The way people are informed in the modern world is increasingly driven by social media due to the commodity of being able to have the ever-changing news feed available to them in an instant. Nowadays, social media is emerging as the new mainstream for news consumptions since it provides instant speed and availability for news to travel rapidly. As a result, social media is reshaping the way in which consumers connect with the world, with one another, and with the latest news (Aronson, 2018). As we spend more and more of our daily lives engaging online via social media channels and increasing number of people are tending to look for and consume news from social networks instead of conventional news organizations. According to Shu, Silva, Wang, Tang and Liu (2017), the underlying logic for this shift in consumption habits are intrinsic to the embedded nature of these social media networks:

- Engaging in news consumption on social media is frequently more convenient and less costly compared to traditional media, such as television or press.
- Sharing, discussing, and debating news with friends or with other users on social media has become easier.

With the evolution and the success of social media, the panorama of news consumption has changed in a matter of years, nowadays it is more common to check the news on the smartphone than on traditional newspapers. Because if this, social media is not only a marketing instrument, but rather, it is a place that gathers the audience gives them what they want to read, listen, or see. Also, it gives them the opportunity of sharing the content they are interested in with just a click. Moreover, we have to take into account, that these social medias work with algorithms and cookies, meaning that based on what we have searched on the Internet, the algorithm then show us directly to web sites in which we are interested (Masi, 2018).

3. Social media as a news platform

During these days of global pandemic, riots, economic recession, and distress among the population worldwide, consumers continue to move away from traditional media outlets for their news and turn more to social networks and messaging services to find the information. We are past the days when people would get the majority of the news from a local TV broadcast channel, a local journal, or a local program (Vorhaus, 2020). Throughout the years, social media has become more and more rooted in day-to-day communication, its significance and impact on news organizations has increased. By aligning already established trusted relationships with widely used social media networks, media outlets can interact with their audiences in a wide variety of opportunities. In an environment where the shrinking of conventional media continues speedily, highlighted by the fall in public, viewership, and advertisement incomes, media involvement with the different social networks is not only a form of keeping up, but also a way to help guarantee their survival in a fast-changing media scene (Bowd, 2016).

As we have seen, nowadays, people access daily news through their smartphones, as it is easier, faster, and cheaper. Thanks to social media networks such as Facebook and Twitter, people are able to read the most relevant news to them in a matter of minutes without having to waste time. This is possible because consumers can configure the type of news they want to read. Nowadays, we hardly see people on street benches reading a

newspaper anymore or reading the news while having a cup of coffee. A large part of the population has "migrated" from traditional media (newspaper, radio, or television) to social media and the Internet, using technological devices to access the press, TV, or radio online. In addition, their entry point is often the profiles of these media on social networks since they are followers. This may also be due to the change in the lifestyle of people, who have a more intense lifestyle, meaning that they tend to do things fast, which makes it more effective and easier for them to read the news on their tablet, smartphone, or laptop, for the reasons we have already mentioned before. Among the social media networks that are used as a news platform, Facebook and Twitter are the ones leading (Bowd, 2016). A survey undertaken by the Pew Research Center in partnership with the John S. and James L. Knight Foundation in 2015, concludes that a distinct majority of Twitter (63%) and Facebook (63%) said that either platform provides a source of news regarding events and matters that go beyond the scope of relatives and friends (Shearer, Barthel, Gottfried & Mitchell, 2015).

Social media for news entertainment is a double-edged sword. On the one hand, its cheapness, easy availability, and fast distribution of information makes people pursue and consume news from social media. On the other hand, it allows a broad dissemination of fake news, poor quality news with deliberately untrue information. Hence, fake news reporting in social media has emerged as an important field of research that is drawing considerable attention. Fake news detection in social networks exhibits unique features and challenges that render traditional media's current detection engines invalid or unenforceable. As the popularity of social media has grown, people are increasingly consuming news from social media rather than from traditional media outlets. Nevertheless, social media is also being misused to propagate fake news, resulting in a severe disruptive impact on both individual consumers and the society. Therefore, is it necessary to implement different types of mechanisms to avoid it.

C. Different mechanisms to fight fake news

Fake news websites are targeting the filter bubbles of the parties that most closely identified with those news stories, using the power of social media networks. At the beginning, fake news in the social media age was somewhat easy to detect. The wording, sources and hyperlinks were often used to ascertain accuracy. Throughout the years, and sooner and later, fake news became more malicious, more numerous, more nuanced, and corrupt with the aim of manipulating information and public opinion. Nowadays, fake

news have plenty of new social media platforms where they can emerge and diffuse rapidly through human and non-human actors (Burkhardt, 2017). That is why, it is important to establish a system that is able to spot the different types of fake news, to educate individuals, and to build a system of laws.

1. Fact-checking

In recent years, we have witnessed the reinforcement of an activity known as verification. An activity deeply rooted in the origins of journalism. In accordance with the principles of this profession, there has always been, or should have been, a broad preoccupation for the concern for the comparison of the data and content reported. In addition, a new player has appeared on the communication scene. The Internet and social media are, unquestionably, a breeding ground for data and stories to be shared but, at the same time, they represent a place with blurred limits in which any user can access large audiences with content that is not necessarily verified. This reality is not new, since throughout the years, there have always been cases of false information to benefit specific purposes. However, it has acquired a new turn at the present time. As a response to this situation, journalism has raised the banner of fact-checking, which is considered as the most effective instrument for fighting the power of fake news (Vizoso & Vázquez-Herrero, 2019).

According to Jane Elisabeth (2014), "fact-checkers and fact-checking organizations aim to increase knowledge by re-reporting and researching the purported facts in published/recorder statements made by politicians and anyone whose words impact others' lives and livelihoods. Fact-checkers investigate verifiable facts, and their work is free of partisanship, advocacy, and rhetoric. The goals of fact-checking should be to provide clear and rigorously vetted information to consumers so that they may use the facts to make fully cognizant choices in voting and other essential decisions". Although the verification of information is an indispensable task in any journalistic production process, in recent years, this activity has taken on a new turn in response to proliferation of falsehoods. Thus, many media and civic initiatives have set up departments, working groups or spaces designed to verify information published by other media and disseminated through social media. The growth of organizations or initiatives focused on fact-checking is due to a worldwide phenomenon in journalism that combines those who perform it in many diverse environments and cultures with the academic, political, and civil fields (Vizoso & Vázquez-Herrero, 2019). According to Cherubini and Graves

(2016), the emergence of this type of independent media specialized in verification, or the creation of sections dedicated to this verification, or the launching of sections specialized in this task in social networks with a longer trajectory, is the result of the constant acceleration of the news production cycle as a consequence of the dissemination of information through the Internet. The importance of fact-checking is justified nowadays due to the wide circulation of fake information mainly via social media. Moreover, when talking about this type of fake content, it must be considered that, due to its appearance or to the already mentioned human preference for content that agrees with one's own opinion, often the correction of errors or even the fact of denying them by providing the correct data does not have the expected effect on the audience, a factor from which the producers of false information rely. Hence, taking advantage of the anonymity, the ease of publication and the credibility provided by the network. All this makes the presence of a constantly growing profile in the newsrooms of the media more and more necessary: the fact-checker (Vizoso & Vázquez-Herrero, 2019). The media in different countries around the world implement methods that differ according to the organization of the media, but with the same objective: to fight against fake news and promote journalistic transparency (Martínez Fagella, 2020). Some of the most outstanding fact-checking proposals in the world include:

- **Full Fact** is a British organization that is developing automated verification tools for use in newsrooms around the world. The project is divided into two parts: Trends and Live. On the one hand, the first one registers each repetition of an incorrect piece of information, to detect it and find put who is behind the misleading claim. Live, on the other hand, tracks statements that appear in TV subtitles and that have already been checked before. It automatically displays the most recent articles about that information, but also, it identifies claims that have not been checked for verification (Full Fact, n.d.).

- **The News Provenance Project** is being developed by The New York Times. This proposal is based on blockchain, a chain of blocks that allows citizens to reach the origin of the content, in this case, of images. It is a vast database containing the history of transactions executed on the network and distributed among several participants who store an exact copy of the chain (News Provenance Project, n.d.).

- **FANDANGO** (FAke News discovery and propagation from big Data Analysis and artificial intelliGence Operations) is a project financed by the European

Union. The goal is to aggregate and verify data from news, media sources, and social networks to detect fake news and provide more efficient communication to citizens. The big data is stored and then analyzed with Artificial Intelligence tools to reveal false or misleading news (FANDANGO, n.d.).

2. Media literacy

For years, misinformation and fake news have become a major problem for democracies around the world. Individuals are exposed to fake news all the time, which is why it is important to educate them so that they know how to differentiate fake news from real news. On the one hand, a media literate individual comprehends the role and functions of the media among a society and is capable of critically assess the content and engage with the media, particularly online, in a conscientious way (Turčilo & Obrenović, 2021). According to Turčilo and Obrenović (2021), a media literate person has different needs:

- The need for media education, implying that media literacy is a skill that is taught, that is, not an intuitive ability gained only by using the media.
- The need for training to understand the media, which involves the social function of the media and the importance of comprehending how the media are incorporated within the society.
- The need to consistently question the material shared on the media, which implies a critical point of view on the part of the consumers.
- A need for self-expression, which requires the involvement of citizens in the media community, and not only their idle role in the reception of media content.

On the other hand, media literacy is "the ability to identify different types of media and understand the messages they are sending" (What is media literacy, and why is it important?, n.d.). Moreover, media literacy has a further aspect that is connected to the use of media for cross-cultural exchange and social interaction. UNESCO's tools and approaches for the development of media literacy accurately addresses this dimension of media literacy as a vehicle for contributing not only to the well-being of the individual, but also to the society and the community. If we consider fact, information, education, and intelligence to be the core components of the global information neighborhood, it could be said that the purpose of media literacy is to allow individuals to gather data and process information, although it should not stop at this point. Possibly, an even more

crucial aspect is the development of a system of knowledge within the society, built on the data gathered and the information available. Moreover, the objective of media literacy is the attainment of community intelligence, that would result in a "democratic community" or "responsible society", in the optimal meaning of the concept. Media literacy is therefore considered a necessary precondition for participation in public life, as it embraces more than just the interpretation and production of media material. Its broadened definition incorporates critical skills, international citizenship, communication, cooperation, and entrepreneurship. This media literacy turns into a goal-competency, going further than the relationship between the population and the media, meaning that media content is becoming a know-how for social engagement and global citizenship. Clearly, it must, as such, be integrated into the educational system, via academic approaches and procedures. Moreover, it must be carried out by implementing the concept of continuous learning, that is, throughout the five cycles of education: kindergarten, elementary, high school, university, and adult education, using both formal and informal education programs (Turčilo & Obrenović, 2021). According to Ireton and Posetti (2018), media literacy then allows individuals to:

- Differentiate between reality and a made-up story, along with the appropriateness of the various frameworks and stories within the field of genuine journalism.
- Understand how narratives are chosen, who develops the content, which methods are employed to build the impression of an accurate portrayal of reality, how language is handled, what is emphasized, what is excluded, who says what, how relevant and/or trustworthy that persona is, the effect that the new has had, is having or will have, and how others consume the same new.

3. Laws

Governments and businesses around the world are becoming increasingly alarmed by the propagation of fake information on the Internet and its impact on everything ranging from stock market prices to elections to public unease (Reuters Staff, 2021). To halt the growing impact of fake news, several countries have criminalized the production and sharing of intentionally fake information (Schetzer, 2019). Among the countries that are fighting fake news, we can find the following: Australia, China, and Spain.

In the case of Australia, the actions undertaken by the country's government in view of the 2018 elections and the country's future are the creation of a government task

force and a media literacy campaign. These actions focus on foreign disinformation campaigns and media literacy (Ziebell, 2018). In June 2018, four government departments established a task force with the objective of targeting possible cyberattacks and foreign influence propaganda campaigns. The task force to secure electoral integrity was directed by the Home Affairs Department and was established in the midst of continued warnings by the intelligence community regarding foreign meddling in Australia (Funke & Flamini, 2018). Moreover, in February 2019, an investigation launched by the Australian Broadcasting Corporation disclosed that the Australian Electoral Commission issued warnings to Twitter and Facebook requiring them to abide by notifications of illicit advertisements on their social media. The Australian Electoral Commission issued threats to the social media giants with legal actions if they did not cooperate (McGrath, 2019).

For the case of China, the Asian country has implemented laws and has created an online reporting portal. The focus of these actions is on fighting misinformation (Funke & Flamini, 2018). Throughout the years, China has been the victim of many rumors, such as for example: worms found in tangerines exported from China, because of this rumor, sales in the entire nation were affected. In 2013, not long after Chinese leader Xi Jinping came to power, Beijing started a broad campaign to fight online rumors by closing numerous accounts on China's main social media, Sina Weibo, requiring them to fix their mistakes. But also, they arrested those alleged of fabrication fake information, and they imposed several fines on protesters and opinion leaders. Later, in 2015, an additional round of crackdowns of fake news saw the shutdown of approximately 165 profiles for propagating rumors in relation to stock market instability, the 70th celebration of the conflict with Japan, and Tianjin's explosions, along with other issues. Moreover, in 2016, Beijing criminalized the making and spreading of fake news that weaken the economic and social welfare with a new Cybersecurity Law. Additionally, in 2017, a new campaign addressed online fake ads, copyright violation, and falsification. A law named Provisions for the Administration of Internet News Information Services required Internet news suppliers to republish information posted by government-recognized news organizations without altering and counterfeiting news information. In other words, social media networks were forbidden from independently publishing their own posts or spreading information without proper credit or attribution (Repnikova, 2018). Moreover, China released a new platform in 2018 that allows the public to denounce online fake

information and it even employs artificial intelligence to pinpoint allegations that are untrue. The platform arrives at a time when Beijing is intensifying its efforts to monitor the Internet, particularly social media used by individuals to engage in discussions on politics and other delicate topics, notwithstanding strict censorship. In addition to the website, the Piyao (meaning "refuting rumors") platform has also a mobile app and profiles on social both social media giants; WeChat and Weibo. Through these channels, Piyao disseminates real news, obtaining reports from local party-controlled press, several government bodies, and state media (Reuters Staff, 2017).

In Spain, the actions taken in for fighting misinformation and election misinformation are a committee recommendation, a joint cybersecurity group, and a government fact-checking (Funke & Flamini, 2018). In 2018, the National Security Committee of the Congress of Deputies approved a non-legislative proposal urging the Government to reinforce the material and human resources dedicated to combating online misinformation. The socialist initiative urges the Government to actively participate in the process of building the European Strategy to stop the spread of fake news on the Internet. However, left-wing party Unidas Podemos, rejected the action because it attacked freedom of expression with the excuse of fighting hoaxes (Alberola, 2018). On the same year, in November 2018, Russia and Spain allegedly reached an agreement to create a common cybersecurity group to ensure that diplomatic relations are not jeopardized. This agreement arises from because Spanish ministers claimed that Russian-based groups had misused social media to strongly promote the Catalan independence referendum with the objective of destabilizing Spain (Times, 2018). Furthermore, in 2020, the Government approved a procedure for action against the so-called fake news by which it will monitor information and may request the collaboration of the media to pursue deliberate, large-scale and systematic dissemination of fake information, which seeks to influence society for interested and misleading purposes (Europa Press, 2020).

We have seen that there are several mechanisms to fight fake news. Even so there are still problems with the rapid spread of misinformation, and in the case of the system of laws, we can find a challenge that is that human rights defenders are concerned that these laws which have the objective of stopping the so-called fake news, could be a violating the freedom of speech (Schetzer, 2019). Despite this, governments, international organizations, and social media platforms, such as Facebook, are doing everything possible to filter the information and thus gradually eliminate fake information. In the

case of social media, it is interesting to analyze what Facebook, the giant of social media, is doing to fight the spread of fake news in its social media.

VI. The case of Facebook

A. The relevance of Facebook

There is something truly drastic taking place in the media scene and the news industry without people even realizing it, and almost certainly lacking the degree of public examination and discussion that it requires. The information landscape has shifted more radically over the past ten years than probably at any time in the last half-century. The world is witnessing enormous leaps regarding technological ability: virtual reality, streaming video, messaging apps, and artificially intelligent news bots. Moreover, populations around the world are experiencing monumental shifts in control and finance, placing the fate of the publishing industry in the hands of a select few organizations, now controlling the future of many (Bell, 2016). Within these select few, we can find Facebook.

Mark Zuckerberg's social network celebrated its sixteenth birthday in 2020 and continues to be the world's social media most used with almost 3 billion users (The Social Media Family, 2021). Facebook, a top 5 global company, has grown into a powerful platform that brings content to various communities (Priego, 2020). The social media allows its users to do many things, from keeping in touch with family, friends and even strangers, to sharing photos, articles, opinions… among many other things. With more than 2 billion users, Facebook has become a worldwide, economic, cultural, and social phenomenon. It is difficult to overemphasize the relevance of the social media for journalists, entrepreneurs, communication, and social relations as users around the world spend endless hours on the platform. Facebook has turned into an important site to get information about not only family and friends, but also about worldwide happenings (Mercer, n.d.). Facebook has marked a before and after in terms of digital communication, as it has been not the first but the one that has been the strongest in terms of volume of social networks and has managed to fulfill the mission they had planned, which was to make people share content and make the world a more open and connected place (Merodio, 2014).

B. What is Facebook doing to fight fake news?

Technology is an important component of our lives, and companies such as Facebook carry tremendous responsibilities (Zuckerberg, 2019). As we have mentioned before, Facebook is among the top 5 global companies, where users can create content and share it with the community. However, it has been implicated in several scandals of various kinds, among them, the excess of fake news and the problem that this entails. The company has had to propose several measures to foster greater control of fake accounts and the removal of fake news on the platform (Priego, 2020). Fake news is damaging Facebook's community, causing users to be poorly informed and undermining trust. That is why Facebook need to take responsibility and deal with misinformation in its platform. According to Facebook (2021), the social media is actively working to counter the propagation of fake news in three main areas:

- Altering economic rewards since the majority of fake news are economically driven.
- Create new products to stem the flow of fake news.
- Assist people in making better-informed choices when they are confronted with fake news.

For the first one, in the fight against fake news, eliminating economic drivers for misinformation traffickers is one of the most successful methods of combating fake news. Facebook discovered that many fake news stories are economically motivated. Such spammers earn money by disguising themselves as genuine news publishers and they share hoaxes that make individuals visit their websites, which are usually mostly advertisements. Among the different steps they take, we can find:

- Identifying fake news via its community and independent fact-checking initiatives in order to restrict its circulation, making it, in turn, unprofitable.
- Make it as hard as feasible for people who share fake news to purchase ads on the network's platform by strictly enforcing its policies.
- Implementing machine learning to help their response teams identify scam and enforce their policies towards non-genuine spam profiles.
- Upgrading Facebook's fake account detection, making it much more difficult to send spam at scale.

Then, for the second one, Facebook is developing, trying out, and going over new products to target and contain the diffusion of fake news. However, they alone cannot serve as mediator of truth. That is why the social network is working on improved approaches to listen to its community and collaborate with third parties, to both identifying fake news and preventing them from being disseminated on the platform. The work involves some of the following:

- Ranking improvements: Facebook is constantly aiming to enhance the News Feed by hearing what they community has to say. They have found insights such as the fact that if when reading a story causes people to be slightly less inclined to share, that could be a cue that a news story has deceived people somehow. The social network continues to test this method in the News Feed sorting to decrease the likelihood of fake news content.

- Easy reporting: Facebook has always trusted its community to judge what is newsworthy and what is not. They are trialing approaches to make it simpler to denounce a fake news story if a user sees it on the platform.

- Working with partners: Facebook believes that giving more background can help people to judge for themselves which articles to believe in and which ones to share. They have launched a program to work alongside independent fact-checking organizations. The social media will use the community's feedback, combined with other aspects, to submit stories to these organization. If the fact-checking organization reports the story as untrue, it will be marked, and a link will be provided to a corresponding post that explain why it is not true.

Finally, for the third one, while Facebook is committed to doing its best to curb the circulation of fake news to a level as close to zero as practicable, it also needs to ensure that measures are taken to tackle the issue when users do come across hoaxes. For that purpose, the social media is looking at ways to provide people with more background on stories, so they make well-informed choices on what to read, believe, and share, as well as ways to offer individuals more insights into the topics they are reading about. Among some of the projects that Facebook has worked on are:

- Facebook Journalism Project: the social media is engaged in partnering with news organizations to collaboratively build products, to grant tools and facilities for journalists, and assisting people to get high-quality information so they can make wise judgements about what they read (Facebook, n.d.).

- News Integrity Initiative: Facebook has teamed up with a group of more 25 contributors and stakeholders, among them we can find educational organizations, charitable and third-party organizations, and tech industry leaders to introduce this project, a global initiative aimed at supporting users to make informed choices regarding the articles they read and share on the platform.

Facebook is investing heavily to prevent fake news from spreading and to foster high-quality journalism and media literacy. Their strategy to stop misinformation has three components:

- The first one is **deleting** profiles and content that breaches the Community Standards or ad policies.
- The second one is **reducing** the spread of fake information and dishonest content, such as clickbait.
- And the third one is **informing** consumers by providing them with more background on the publications they see. This strategy eliminates the "bad agents" who often propagate fake news. It drastically reduces the scope of those stories, and it helps keeping people updated (Facebook, 2018).

For the first one, although Facebook has a lot of ways to avoid posting content that infringes its Community Standards, some content can still slip through. Whenever this occurs, the objective is to catch it and delete it as soon as possible yet doing so is presented as a challenge. This issue most frequently remains a problem in closed group of Facebook. The social media has mechanisms in place that detect about 95% of these violations, the company has learned that its team must do more to hold groups responsible for complying with its Community Standards (Hearn, 2019). The Community Standards describe both what is and what is not permitted on Facebook. Its guidelines are influenced by community input and advice from industry experts in areas like human rights, technology, and public security. The purpose of the Community Standards has at all times been to provide a forum for speech and to give the users a voice (Facebook, n.d.). For the second one, this category deals with content that is troublesome or disruptive, such as for example spam, clickbait, and fake news, without actually breaching Facebook's Community Standards. This "gray" zone within what is merely deceptive and what is truly hurtful is the reason why the social media has struggle so much to restrict the propagation of misinformation across its platform. For the third one, to have a real positive impact, it is important not just to reduce the flow of misinformation, but to educate the users so that

they can have their own point of view. The challenge with social media and the Internet at large, is that when people see a headline, they tend to accept it. Since Facebook users can publish almost everything they like, it is hard to sort out what is believable from what is not. So, instead of just taking reactive action by deleting and restricting the display of fake information on Facebook, it is critical for people to be aware of the degree of credibility of these sources prior to deciding to believe them (Hearn, 2019). In 2018, the social media added new features to aid users in determining the trustworthiness of a news source for themselves. Moreover, in 2019, they unveiled additions to these tools providing further transparency. Currently, Facebook is introducing Trust Indicators to the Context Button. This was developed by the Trust Project, which is formed by an alliance of news organizations committed to impartiality, precision, and transparency in reporting. Form that moment, Facebook's posts will be rated according to the Trust Indicators eight core standards for assessing credibility (Facebook, n.d.).

C. Which are the results of its strategy to fight fake news?

On paper, Facebook has implemented several measures in order to fight fake news. However, it has received several criticisms saying that the social media is not doing its job properly.

In retaliation for Facebook's consistent inability to confront the massive spread of hate across its platform, six organizations launched a new initiative in June 2020, #StopHateforProfit, calling on Facebook's major advertisers to demonstrate that they will not endorse a company that prioritizes profit over safety. The National Association for the Advancement of Colored People, the Anti-Defamation League, Free Press, Color of Change, Common Sense, and Sleeping Giants have formed a coalition of the nation's most prominent civil rights organizations asking some of the world's biggest companies to cease advertising on Facebook through July 2020. The initiative is a reaction to Facebook's long record of permitting violent, racist, and demonstrably fake content to run unchecked within its platform (ADL, 2020). In response to this, Facebook said that none of the posts were against its policies, and despite the setback, the social media argued that its policies were fine, they just needed to strengthen them. This was not the first time the company committed to improving. As a result, they launched its first civil rights audit. Facebook gave critics some brief sparks of hope, it announced adjustments to the way it labels posts by politicians that breach its hate speech policies. However, one news story

ended any hopes that Facebook had made significant progress on its purported objective of cleaning up the platform (Sonnemaker, 2020).

In August 2020, The Wall Street Journal reported that the social media giant refused to act against a politician who infringed its hate speech policies for fear of backlash. Facebook chose not to enforce its hate speech policies against T. Raja Singh, a politician from India's governing party, regardless of his demands to fire on Muslim immigrants and his threats to tear down mosques. Facebook employees had come to the conclusion that, besides breaching Facebook's policies, Singh's rhetoric in the real world was threatening enough to deserve his expulsion from the platform. However, the company's top public policy executive of the country overturned the employees, claiming that the political implications could damage Facebook's business stakes in the country (Purnell & Horwitz, 2020). In addition, conspiracy theory groups continue to flourish on Facebook. NBC News was able to preview an internal Facebook investigation that shows that thousands of groups and pages associated with the QAnon conspiracy theory have expanded all over the platform and drew millions of believers (Sen & Zadrozny, 2020). The QAnon theory advocated that Trump is in a secret war against an alleged elite that sexually exploits children (Maldita.es, 2021). NBC News reported that Facebook played a key role in QAnon's rise due to its stress on groups, which its algorithm recommends to users depending on their prior interests (Sen & Zadrozny, 2020). Facebook executives were even aware that the algorithm was driving people to take more extreme positions, however, they stopped any intentions to fix it (Horwitz & Seetharaman, 2020). But this does not stop here, on an issue that directly affect everyone, Facebook has a fact-checking loophole that allows climate change skeptics to pass off falsehoods as opinions. Critics have long blamed the social media's third-party fact-checking system for not having enough power or resources to successfully combat misinformation. One notable example has been its policy of excluding opinion articles from fact-checking, which came under criticisms when Facebook revoked one of its fact-checkers. The fact-checker in question had identified a post raising concerns about climate change as having selective data and marked the article as being false, though, following complaints of bias from some Republicans, Facebook withdrew the label, stating that it was in fact an opinion text (Sonnemaker, 2020).

Moreover, in the context of Covid-19, health misinformation on Facebook has been visited more than 3.8 billion times over 2020. According to a report by the civil

organization Avaaz, the social network's own algorithm, as well as the lax measured of media verification, would be protecting the denialist movements of the pandemic. The group, known for its activist stimulus in the United States, where it has led actions against climate change and in favor of human rights and peace, claims that the social network led by Mark Zuckerberg could represent a great threat to public health by allowing misinformation within its platform. Despite Facebook's efforts to counter the impact of fake news, the Avaaz report suggests that only 16% of the health misinformation it identified on the social media carried a warning label (AVAAZ, 2020). This refers to the latest measure passed in the team of fact-checkers, which is as we have mentioned before, to publicly warn on every post that the content shown might be unreliable. In the end it is of little use, as the denialist groups continue to visit and spread the information, as they assume that the traditional media are part of a conspiracy to spread a false disease. Thus, the top 10 websites identified by Avaaz as disseminators of health fake information had almost 4 times as many views on Facebook as official sites, such as the World Health Organization (Casal, 2020).

Since the birth of the social media in 2004, Facebook has evolved to become one of the most important and widely used social networks in the world. Along with its growth, Facebook has been experiencing controversies, including many related to the issue of fake news. Since the social media was facing a problem that was beyond its reach, they decided to implement a series of measures to curb the circulation of fake news as much as possible. Despite their efforts, Facebook has continued to have problems with this issue and has been harshly criticized along with its measures. The social media giant still has a long way to go in its fight against fake news.

However, Facebook's challenges do not stop there, in 2020, Netflix released a documentary on social media called "The Social Dilemma". This documentary addresses the issue of polarization and disinformation (Miranda, 2020), and it also puts the spotlight on manipulation and how they keep their users in a constant loop of consumption (Ramos González, 2020), putting Facebook on the public eye of criticism. Following the accusations made against Facebook, the social network has responded to these allegations. Facebook denounced the documentary as falling into sensationalism. Mark Zuckerberg's company did not approve the way the movie reveals the practices of manipulation and control of its users' personal information (Miranda, 2020). The company published a report called "What 'The Social Dilemma' Gets Wrong", in which

it discusses seven points it considers erroneous in the film. The seven points are the following ones: addiction, the user is not the product, algorithms, data, polarization, elections, and misinformation (Facebook, n.d.). Another problem that Facebook faces is related to freedom of speech, while Twitter and other social networks censored Donald Trump, Mark Zuckerberg said Facebook could not be the "arbiter of truth" and allowed the president to post inflammatory content on its platform (Miranda, 2020).

VII. Conclusions and contributions
A. Next steps to avoid fake news

Throughout this work, it has been possible to analyze the five objectives set out at the beginning. In other words, we have analyzed the different definitions of fake news, as well as its diverse formats. In addition, the process of production and distribution of fake news has been explained, along with people's attitude towards it. Then, the role of social media as the main distribution channel was defines. Subsequently, three methods to fight against fake news were explained: fact-checking, media literacy, and laws. Finally, the impact of Facebook's actions in the fight against fake news was evaluated. Moreover, in relation to the hypotheses, two of the three have been validated. The first one is that social media are a fundamental tool for the propagation of fake news. As we have mentioned, since the birth of social networks, the dissemination of fake news has become easier and faster, besides, the person who shares the news has the possibility of targeting a bigger audience. The second one is that fake news has been on the rise as a result of the increased use of social media. Nowadays, almost everyone has a profile on some of the social networks. This means that fake news can reach more and more people, plus, the people who receive the news have the opportunity to share it, creating a never-ending circle. Finally, the third hypothesis proposed regarding Facebook having changed the way people consume news could not be validated. While it is true that Facebook has been a turning point in the digital landscape, we can conclude that it is the entire set of social networks that have changed this aspect, and not only Facebook.

The era of social media has changed the digital landscape with the advent of fake news and its propagation. Fake news can have different definitions such as: misinformation, disinformation and mal-information. We could say that each of these definitions of fake news has different objectives. Moreover, a fake news can have a different format than another, on the one hand, we can find a fake news that takes the format of a parody, while on the other hand, another fake news can be a propaganda.

Internet users receive a constant flow of information on a daily basis, so it can often be difficult to differentiate between what is true and what is not. In addition, with the evolution of social networks, the process of production and distribution of fake information has been transformed. Nowadays, sharing fake news is faster, cheaper, and more accessible than it was a years ago. It also helps that people in different countries are interconnected. Besides transforming the production and distribution process, new technologies have contributed to the rise of information sources; nowadays, any person, website, or social network can act and be used as a source of information. At the same time, they have also changed the scenario of traditional media and the role of the journalist. Social networks have both advantages and disadvantages. On the one hand, some of the advantages we can find are the following, it allows people, families, and friends to be connected all the time without being necessarily having to be in the same place. Furthermore, it is a system as we have mentioned above, cheap, easy to use, and quick to access. On the other hand, some of the disadvantages in relation to what it is mentioned before is that these features make it easier for those who create fake content to spread that information and reach as many people as possible. Therefore, social networks are considered a double-edged sword, and why users must be very careful when "assessing" the credibility of the information received. With the objective of minimizing as much as possible the impact of fake news, it is important the collaboration of different actors, from governments, to citizens, and all the way to social media. In the world of fake news not everything is black and white, but rather, we can find a "gray area" where most of the problems related to this issue are found, and that can be approached in different ways. As we have seen throughout this work, there are governments all around the world that for some years have been implementing laws to curb the spread of fake news. Also, the birth of independent fact-checking organizations has helped in the process of fake news detection on the Internet. In addition to this, we have seen that media literacy is an important factor in this fight, as it allows people to have a critical thinking towards the information received. However, even though there are mechanisms, they are not perfect, since a large of fake news are not filtered and reach big audiences.

As we have seen, Facebook, a social media giant is making efforts to fight fake news in its platform. During the past years, the social network has been implementing a series of tools with the objective of filtering fake information. These tools are based on three main pillars: deleting, reducing, and informing, among many other measures.

Nevertheless, Facebook has been harshly criticized since individuals state that the measures are not working and that in some cases, they are biased. Moreover, Netflix's documentary "The Social Dilemma", puts Facebook on the public eye of criticism regarding topics that are related to polarization, misinformation, and manipulation. Although Facebook is taking measures to make its platform more secure in relation to fake news, it still has a long way to go to achieve its goal.

VIII. Bibliography

1. ADL. (2020). ADL, NAACP, Sleeping Giants, Common Sense, Free Press and Color of Change Call for Global Corporations to Pause Advertising on Facebook to Stop Hate Online. Retrieved 29 April 2021, from https://www.adl.org/news/press-releases/adl-naacp-sleeping-giants-common-sense-free-press-and-color-of-change-call-for

2. Alberola, M. (2018). El Congreso insta al Gobierno a reforzar los medios para frenar las 'fake news'. Retrieved 29 April 2021, from https://elpais.com/politica/2018/03/07/actualidad/1520450353_962234.html#?ref=rss&format=simple&link=guid

3. Álvarez Gálvez, J. (2012). Modelos teóricos sobre los efectos de los medios de comunicación de masas.

4. Aronson, J. (2018). How Social Media Is Reshaping News Consumption. Retrieved 29 April 2021, from https://medium.com/@aronsonjenna/how-social-media-is-reshaping-news-consumption-102d72a9a335

5. AVAAZ. (2020). Facebook's Algorithm: A Major Threat to Public Health. Retrieved 29 April 2021, from https://avaazimages.avaaz.org/facebook_threat_health.pdf

6. Bell, E. (2016). Facebook is eating the world. Retrieved 29 April 2021, from https://www.cjr.org/analysis/facebook_and_media.php

7. Berkowitz, D., & Schwartz, D. A. (2016). Miley, CNN and The Onion: When fake news becomes realer than real. *Journalism practice*, *10*(1), 1-17.

8. Bowd, K. (2016). Social media and news media: Building new publics or fragmenting audiences?. *Making publics, making places*, 129-144.

9. Burkhardt, J. M. (2017). *Combating fake news in the digital age* (Vol. 53, No. 8, pp. 5-9). American Library Association.

10. Cambridge Dictionary. (n.d.). Bot. Retrieved 15 December 2020, from https://dictionary.cambridge.org/es-LA/dictionary/english/bot

11. Cambridge Dictionary. (n.d.). Social media. Retrieved 29 April 2021, from https://dictionary.cambridge.org/es/diccionario/ingles/social-media

12. Casad, B. (n.d.). Confirmation bias. Retrieved 29 April 2021, from https://www.britannica.com/science/confirmation-bias

13. Casal, L. (2020). Facebook es una "gran amenaza" para la salud pública: un estudio concluye que las 'fake news' del coronavirus han recibido más de 3.800 millones de visitas. Retrieved 29 April 2021, from https://www.businessinsider.es/facebook-gran-amenaza-salud-publica-fake-news-700643

14. CITS. (n.d.). A brief history of fake news. Retrieved 03 December 2020, from https://www.cits.ucsb.edu/fake-news/brief-history

15. Czopek, M. (2021). Example of mal-information. https://www.politifact.com/factchecks/2021/mar/31/facebook-posts/no-covid-19-vaccines-are-not-weapons-mass-destruct/

16. Elizabeth, J. (2014). Who are you calling a fact checker?. Retrieved 29 April 2021, from https://www.americanpressinstitute.org/fact-checking-project/fact-checker-definition/

17. Europa Press. (2020). El Gobierno aprueba un plan contra las 'fake news': monitorizará la información y podrá pedir colaboración a los medios. Retrieved 29 April 2021, from https://www.europapress.es/nacional/noticia-gobierno-aprueba-plan-contra-fake-news-monitorizara-informacion-podra-pedir-colaboracion-medios-20201105112017.html

18. Facebook. (n.d.). Community Standards. Retrieved 29 April 2021, from https://www.facebook.com/communitystandards/

19. Facebook. (2018). Hard Questions: What's Facebook's Strategy for Stopping False News?. Retrieved 29 April 2021, from https://about.fb.com/news/2018/05/hard-questions-false-news/

20. Facebook. (n.d.). Launching New Trust Indicators From the Trust Project for News on Facebook. Retrieved 29 April 2021, from https://www.facebook.com/formedia/blog/launching-new-trust-indicators-from-the-trust-project-for-news-on-facebook

21. Facebook. (n.d.). What 'The Social Dilemma' Gets Wrong. Retrieved 29 April 2021, from https://about.fb.com/wp-content/uploads/2020/10/What-The-Social-Dilemma-Gets-Wrong.pdf

22. Facebook. (n.d.). Welcome to the Facebook Journalism Project. Retrieved 29 April 2021, from https://www.facebook.com/journalismproject

23. Facebook. (2021). Working to Stop Misinformation and False News. Retrieved 29 April 2021, from https://www.facebook.com/formedia/blog/working-to-stop-misinformation-and-false-news

24. FANDANGO. (n.d.) What is Fandango?. Retrieved 29 April 2021, from https://fandango-project.eu/the-project/what-is-fandango/

25. Fuente, O. (2020). Native advertising: La tendencia en publicidad digital. Retrieved 29 April 2021, from https://www.iebschool.com/blog/que-es-native-advertising-nativa-publicidad-online/

26. Full Fact. (n.d.). Who we are. Retrieved 29 April 2021, from https://fullfact.org/about/

27. Funke, D., & Flamini, D. (2018). A guide to anti-misinformation actions around the world. Retrieved 29 April 2021, from https://www.poynter.org/ifcn/anti-misinformation-actions/

28. Graves, L., & Cherubini, F. (2016). The rise of fact-checking sites in Europe.

29. Hearn, I. (2019). Facebook Outlines New Steps to Fight Misinformation in News Feeds. Retrieved 29 April 2021, from https://www.impactplus.com/blog/facebook-outlines-steps-to-fight-misinformation-in-news-feeds

30. Heflick, N. (2017). Why We (Often) Believe Fake News. Retrieved 29 April 2021, from https://www.psychologytoday.com/us/blog/the-big-questions/201703/why-we-often-believe-fake-news

31. History.com Editors. (2020). "The Great Moon Hoax" is published in the "New York Sun." Retrieved 29 April 2021, from https://www.history.com/this-day-in-history/the-great-moon-hoax

32. Horwitz, J., & Seetharaman, D. (2020). Facebook Executives Shut Down Efforts to Make the Site Less Divisive. Retrieved 29 April 2021, from https://www.wsj.com/articles/facebook-knows-it-encourages-division-top-executives-nixed-solutions-11590507499

33. Ireton, C., & Posetti, J. (2018). *Journalism, fake news & disinformation: handbook for journalism education and training*. Unesco Publishing.

34. Kertscher, T. (2021). Example of disinformation. https://www.politifact.com/factchecks/2021/mar/30/facebook-posts/fact-checking-number-people-killed-rifles-and-peop/

35. Kertscher, T. (2020). Example of disinformation. Example of misinformation. https://www.politifact.com/factchecks/2020/jul/10/facebook-posts/yes-science-led-new-zealand-currently-has-no-local/

36. Maldita.es. (2021). QAnon y la gran teoría de la conspiración. Retrieved 29 April 2021, from https://maldita.es/malditobulo/20210120/qanon-teoria-conspiracion-trump-democratas-pedofilia-ninos/

37. Martens, B., Aguiar, L., Gomez-Herrera, E., & Mueller-Langer, F. (2018). The digital transformation of news media and the rise of disinformation and fake news.

38. Martínez Fagella, J. (2020). Fact-checking para combatir la desinformación. Retrieved 29 April 2021, from http://www.aikaeducacion.com/recursos/fact-checking-para-combatir-la-desinformacion/

39. Masi, T. (2018). Opinion: How social media has changed the way we consume news. Retrieved 29 April 2021, from https://fentoninprint.com/16958/opinion/how-social-media-has-changed-the-way-we-consume-news/

40. McGrath, P. (2019). Facebook probed by Australian Electoral Commission over mysterious political ads. Retrieved 29 April 2021, from https://www.abc.net.au/news/2019-02-26/facebook-electoral-commission-emails-reveal-political-ad-concern/10834736

41. Mercer, E. (n.d.). The importance of Facebook. Retrieved 29 April 2021, from https://smallbusiness.chron.com/importance-facebook-56887.html

42. Merodio, J. (2014). ¿Qué ha aportado Facebook al mundo?. Retrieved 29 April 2021, from https://www.abc.es/tecnologia/redes/20140204/abci-facebook-analisis-expertos-privacidad-201401301343.html

43. Miranda, L. (2020). Facebook carga contra 'El dilema de las redes sociales', el documental de Netflix que expone sus malas prácticas. Retrieved 29 April 2021, from https://hipertextual.com/2020/10/facebook-carga-contra-dilema-redes-sociales-netflix

44. Miranda, L. (2020). Mark Zuckerberg defiende ante sus empleados la decisión de no censurar a Donald Trump. Retrieved 29 April 2021, from https://hipertextual.com/2020/06/facebook-mark-zuckerberg-censura-donald-trump

45. News Provenance Project. (n.d.). About NPP. Retrieved 29 April 2021, from https://www.newsprovenanceproject.com/about-npp

46. Ortiz-Ospina, E. (2019). The rise of social media. Retrieved 29 April 2021, from https://ourworldindata.org/rise-of-social-media

47. Pierri, F., & Ceri, S. (2019). False news on social media: a data-driven survey. *ACM Sigmod Record*, *48*(2), 18-27.

48. Posetti, J., & Matthews, A. (2018). A short guide to the history of 'fake news' and disinformation. *International Center for Journalists*, *7*, 2018-07.

49. Priego, L. (2020). Así es como Facebook España está luchando contra las fake news en el panorama de desinformación actual. Retrieved 29 April 2021, from https://www.businessinsider.es/como-facebook-luchando-fake-news-espana-580347

50. Purnell, N., & Horwitz, J. (2020). Facebook's Hate-Speech Rules Collide With Indian Politics. Retrieved 29 April 2021, from https://www.wsj.com/articles/facebook-hate-speech-india-politics-muslim-hindu-modi-zuckerberg-11597423346?st=nczbr8ko9dcz4mj&reflink=article_copyURL_share

51. Ramos González, J. (2020). Facebook dice que 'El Dilema de las redes sociales' es sensacionalista. Retrieved 29 April 2021, from https://www.enter.co/cultura-digital/entretenimiento/facebook-dice-que-el-dilema-de-las-redes-sociales-es-sensacionalista/#:~:text=Facebook%20dice%20que%20'El%20Dilema%20de%20las%20redes%20sociales'%20es%20sensacionalista,-octubre%205%2C%202020&text=%E2%80%9CEn%20lugar%20de%20ofrecer%20una,problemas%20sociales%20dif%C3%ADciles%20y%20complejos

52. Repnikova, M. (2018). China's Lessons for Fighting Fake News. Retrieved 29 April 2021, from https://foreignpolicy.com/2018/09/06/chinas-lessons-for-fighting-fake-news/

53. Reuters Staff. (2017). China launches platform to stamp out 'online rumors'. Retrieved 29 April 2021, from https://www.reuters.com/article/us-china-internet/china-launches-platform-to-stamp-out-online-rumors-idUSKCN1LF0HL?utm_source=Pew+Research+Center&utm_campaign=97c404e86d-EMAIL_CAMPAIGN_2018_08_30_01_19&utm_medium=email&utm_term=0_3e953b9b70-97c404e86d-399354537

54. Reuters Staff. (2021). Factbox: 'Fake News' laws around the world. Retrieved 29 April 2021, from https://www.reuters.com/article/us-singapore-politics-fakenews-factbox-idUSKCN1RE0XN

55. Schetzer, A. (2019). Governments are making fake news a crime – but it could stifle free speech. Retrieved 29 April 2021, from https://theconversation.com/governments-are-making-fake-news-a-crime-but-it-could-stifle-free-speech-117654

56. Sen, A., & Zadrozny, B. (2020). QAnon groups have millions of members on Facebook, documents show. Retrieved 29 April 2021, from https://www.nbcnews.com/tech/tech-news/qanon-groups-have-millions-members-facebook-documents-show-n1236317

57. Shearer, E., Barthel, M., Gottfried, J., & Mitchell, A. (2015). The Evolving Role of News on Twitter and Facebook. Retrieved 29 April 2021, from https://www.journalism.org/2015/07/14/the-evolving-role-of-news-on-twitter-and-facebook/

58. Shu, K., Sliva, A., Wang, S., Tang, J., & Liu, H. (2017). Fake news detection on social media: A data mining perspective. *ACM SIGKDD explorations newsletter*, *19*(1), 22-36.

59. Soll, J. (2016). The Long and Brutal History of Fake News. Retrieved 29 April 2021, from https://www.politico.com/magazine/story/2016/12/fake-news-history-long-violent-214535

60. Sonnemaker, T. (2020). Facebook had a very unsuccessful week in its fight against misinformation and hate speech. Retrieved 29 April 2021, from https://www.businessinsider.com/facebooks-unsuccessful-week-fighting-misinformation-and-hate-speech-2020-8

61. Tandoc Jr, E. C., Lim, Z. W., & Ling, R. (2018). Defining "fake news" A typology of scholarly definitions. *Digital journalism*, *6*(2), 137-153.

62. Times, T. (2018). Russia and Spain Agree to Cooperate on Cyber Security, Fight Fake News. Retrieved 29 April 2021, from https://www.themoscowtimes.com/2018/11/07/russia-and-spain-agree-to-cooperate-on-cyber-security-fight-fake-news-a63417

63. The Evolution of Social Media: How Did It Begin and Where Could It Go Next?. Retrieved 29 April 2021, from https://online.maryville.edu/blog/evolution-social-media/

64. The Social Media Family. (2021). VII ESTUDIO SOBRE LOS USUARIOS DE FACEBOOK, TWITTER, INSTAGRAM, LINKEDIN EN ESPAÑA.

65. Turčilo, L., & Obrenović, M. (2021). Retrieved 29 April 2021, from https://www.boell.de/sites/default/files/2020-08/200825_E-Paper3_ENG.pdf?dimension1=division_df

66. Vasu, N., Ang, B., Teo, T., Jayakumar, S., Faizal, M., & Ahuja, J. (2018). *FAKE NEWS: NATIONAL SECURITY IN THE POST-TRUTH ERA* (pp. 14-18, Rep.). S. Rajaratnam School of International Studies. Retrieved 29 April 2021, from http://www.jstor.org/stable/resrep17648.7

67. Vizoso, Á., & Vázquez-Herrero, J. (2019). Plataformas de fact-checking en español. Características, organización y método. *Communication & society*, *32*(1), 127-144.

68. Vorhaus, M. (2020). People Increasingly Turn To Social Media For News. Retrieved 29 April 2021, from https://www.forbes.com/sites/mikevorhaus/2020/06/24/people-increasingly-turn-to-social-media-for-news/?sh=13ed2b323bcc

69. Wardle, C., & Derakhshan, H. (2017). Information disorder: Toward an interdisciplinary framework for research and policy making. *Council of Europe report*, *27*, 20-28.

70. Waytz, A. (2017). The Psychology Behind Fake News. Retrieved 29 April 2021, from https://insight.kellogg.northwestern.edu/article/the-psychology-behind-fake-news

71. What is media literacy, and why is it important?. (n.d.). Retrieved 29 April 2021, from https://www.commonsensemedia.org/news-and-media-literacy/what-is-media-literacy-and-why-is-it-important

72. Ziebell, W. (2018). Australia forms task force to guard elections from cyber attacks. Retrieved 29 April 2021, from https://www.reuters.com/article/us-australia-security-elections/australia-forms-task-force-to-guard-elections-from-cyber-attacks-idUSKCN1J506D

73. Zuckerberg, M. (2019). Opinion: Mark Zuckerberg: The Internet needs new rules. Let's start in these four areas. Retrieved 29 April 2021, from https://www.washingtonpost.com/opinions/mark-zuckerberg-the-internet-needs-new-rules-lets-start-in-these-four-areas/2019/03/29/9e6f0504-521a-11e9-a3f7-78b7525a8d5f_story.html