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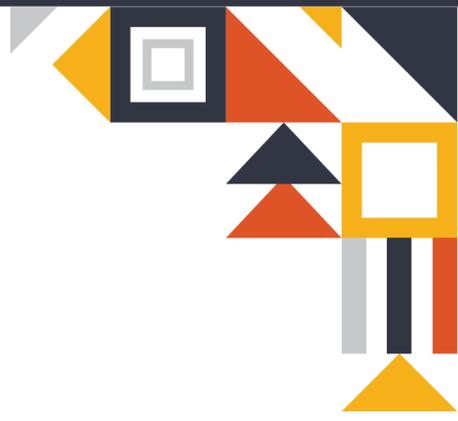


DISINFORMATION

INFODEMIC WARFARE: SAFEGUARDING
TRUTH AMIDST THE CHAOS

“FROM HERE WE RISE”





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FOREWORD

This booklet is a culmination of contributions from several individuals and organisations who are participating in the From Here We Rise project funded by the European Commission under the Citizens, Equality, Rights and Values (CERV) programme.

In mid-May 2020, most people found themselves in a country with closed borders, closed schools and businesses, and restricted freedom of movement. The Covid-19 pandemic was a social and an economic crisis just as much as it was a health one - its repercussions, severe and far reaching, are still being felt across the world. From school closures to devastated industries and millions of jobs lost, the social and economic costs of the pandemic are many and varied. The pandemic is threatening to widen inequalities everywhere, undermine progress on global poverty, clean energy and more. As for migration, respecting fundamental rights at borders was always a challenge in the EU. Migrants are dying at sea, facing violence and pushbacks at land borders, and overcrowding at reception centres. The pandemic fueled further discrimination, hate crime and hate speech towards minorities, particularly people with immigrant backgrounds and Roma.

On the other hand, the problem of disinformation proliferated to the detriment of democratic debate. The COVID-19 crisis unquestionably helped fuel the deluge of disinformation but if nothing else, it has also increased awareness of its potential harm. In this regard, we aim to use the current COVID-19 disinformation as an example to counter the general issue of disinformation and other forms of interference in the democratic debate. While enforcements of quarantines and lockdowns varied widely across jurisdictions, some governments deployed harsh measures, including security forces using repressive and violent tactics, to enforce strict rules¹

Our activities are geared towards empowering vulnerable groups like migrants, Roma and other minorities with media literacy tools to counter disinformation, whilst also researching, discussing and debating the social and economic repercussions brought on by the COVID-19 crisis to increase their knowledge on Fundamental Rights.

The project has the following objectives:

- Undertaking a gender-based research study, analysing the social and economic effects on vulnerable groups;
- Holding a series of debates and seminars, focusing on the curtailment of fundamental rights on vulnerable groups;
- Raising awareness and actively counter disinformation, through campaigns, a publication and workshops focusing on media literacy.

This booklet is thus a fulfilment of one of the objectives mentioned above.



Disinformation has for ages been a challenge to democracy. In an era of information overload, distinguishing between genuine news and misleading content has become a crucial skill. This booklet aims to equip you with the tools to identify and stop the spread of fake news. By understanding the characteristics and tactics commonly employed by purveyors of misinformation, we can collectively build a more informed and resilient society.

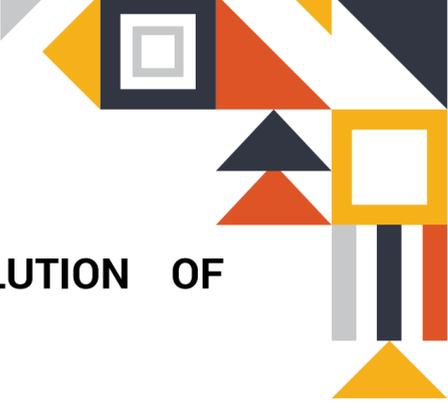
The digital age has facilitated a fresh urgency to counter the deluge of fake news that has proliferated online. Functional democracies aspire their citizens to have access to accurate information. Disinformation can be spread by state or non-state actors and can affect human rights. Many of the people who participated in this project's activities found themselves bombarded with information which they could not decipher whether it was true or false. Thus, this booklet will give some guidelines on how to spot disinformation and stop its spread.

The project is comprised of the following partner organisations from seven Member States:

- Cross Culture International Foundation (CCIF) lead partner – Malta
- Check-in – Portugal
- Babes Bolyai University (UBB) – Romania
- Human Rights Youth Organisation (HRYO) – Italy
- Akademija Razvojnih Potencialov (ARM) – Slovenia
- Institute for Roma and Minorities (IRM) – Germany
- Adel Slovakia – Slovakia

<https://reliefweb.int/report/world/refugees-are-paying-highest-price-covid-19-pandemic>

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HISTORICAL CONTEXT OF DISINFORMATION: TRACING THE EVOLUTION OF DISINFORMATION THROUGH HISTORY

The use of disinformation dates back to ancient civilizations, where it was primarily employed in warfare and politics. Sun Tzu, in "The Art of War", emphasized the importance of deception in military tactics, stating, "All warfare is based on deception" (Sun Tzu, The Art of War). This philosophy laid the groundwork for the strategic use of disinformation throughout history. In the Middle Ages, disinformation was used by the Church and monarchies to control populations and suppress dissent. The limited literacy among the masses made misinformation particularly effective during this era. The Renaissance, a period of cultural, artistic, and political rebirth in Europe, wasn't free from disinformation. Political figures like Machiavelli in his work "The Prince" implicitly endorsed the use of disinformation as a political tool (Machiavelli, 1532). This era illustrated how art and literature could be used to subtly disseminate political ideologies and disinformation.

The invention of the printing press by Johannes Gutenberg in the 15th century marked a significant turning point. As Elizabeth L. Eisenstein notes in "The Printing Revolution in Early Modern Europe", this technology facilitated the rapid spread of information and disinformation alike (Eisenstein, 1979). The Protestant Reformation and the Catholic Counter-Reformation saw extensive use of printed materials to disseminate both religious teachings and disinformation about opposing views.

The Age of Enlightenment brought a focus on reason and science, but it was not immune to disinformation. Governments used disinformation to manipulate public opinion, a practice that continued through the American Revolution and the French Revolution. The late 19th century saw the rise of yellow journalism in the United States, characterized by sensationalism and often unverified reporting. This era, highlighted in the works of authors like W. Joseph Campbell in "Yellow Journalism: Puncturing the Myths, Defining the Legacies", demonstrated the media's growing power in shaping public opinion through disinformation (Campbell, 2001).

The World Wars saw the rise of state-sponsored propaganda. Governments used disinformation to maintain morale at home and demoralize the enemy. David Welch, in "Propaganda: Power and Persuasion", discusses how nations used propaganda during these conflicts to shape public perception and enemy behavior (Welch, 2013). The Cold War marked a significant evolution in the use of disinformation, particularly through the concept of 'active measures' by intelligence agencies. Christopher Andrew and Vasili Mitrokhin, in "The Mitrokhin Archive", detail these methods, which included spreading false information to influence political situations in other countries (Andrew & Mitrokhin, 1999).



The advent of the internet and social media has transformed the landscape of disinformation. Information can now spread globally within seconds, often with little to no regulation or fact-checking. The 2016 U.S. Presidential election highlighted the impact of online disinformation campaigns, with foreign and domestic actors using social media to influence public opinion. Shoshana Zuboff, in "The Age of Surveillance Capitalism", discusses the role of digital platforms in the spread of disinformation (Zuboff, 2019).

The term "fake news" became prominent in recent years, becoming synonymous with political disinformation. It represents the modern manifestation of age-old tactics – the spread of false narratives for political gain. Claire Wardle and Hossein Derakhshan, in "Information Disorder", explore the complex nature of fake news and its impact on society (Wardle & Derakhshan, 2017).

Today, the challenge lies in combating disinformation in a world where information is abundant and access is unprecedented. Initiatives for media literacy, fact-checking organizations, and regulatory measures are being implemented globally to tackle this issue. However, the battle against disinformation requires a concerted effort from governments, tech companies, and individuals alike. Disinformation, a strategic dissemination of false information, has been a pivotal tool in shaping societies and politics throughout history. Its earliest recorded instances trace back to ancient civilizations, where it was employed in warfare and politics. Sun Tzu, in "The Art of War", emphasizes deception as a military strategy, laying the groundwork for future disinformation tactics (Sun Tzu, The Art of War). The advent of the printing press in the 15th century, as Elizabeth L. Eisenstein discusses in "The Printing Revolution in Early Modern Europe", revolutionized the spread of information and, consequently, disinformation. This era witnessed religious and political figures using printed media to manipulate public opinion (Eisenstein, 1979).

In the 20th century, disinformation became more sophisticated. During the World Wars, governments extensively used propaganda to influence public sentiment and enemy perception. David Welch's "Propaganda: Power and Persuasion" provides insight into these practices (Welch, 2013). The Cold War era marked a significant shift, with the use of 'active measures' by intelligence agencies, as documented by Christopher Andrew and Vasili Mitrokhin in "The Mitrokhin Archive" (Andrew & Mitrokhin, 1999). These methods included spreading false information to influence global and political dynamics.

Today, in the digital age, disinformation has found a fertile ground in the realm of social media, as explored by Claire Wardle and Hossein Derakhshan in "Information Disorder" (Wardle & Derakhshan, 2017). The speed and anonymity provided by the internet have amplified its impact, making it a critical issue in contemporary society.



As we move further into the 21st century, the challenge of combating disinformation remains daunting. The development of deepfakes content presents new avenues for disinformation, making the discernment between truth and falsehood even more challenging.

The historical evolution of disinformation reflects changes in media, communication technologies, and political power structures. From ancient military strategies to modern digital campaigns, its purpose has remained consistent: to influence opinion and action. Understanding its historical context is vital in developing effective strategies to combat disinformation and uphold the integrity of information in our societies.

The evolution of disinformation through history reflects the changing dynamics of media, technology, and political power. From ancient strategies to digital-era tactics, its purpose remains the same: to influence and manipulate. Understanding its history is crucial in developing effective countermeasures and promoting media literacy in an increasingly complex information landscape.



WHAT IS FAKE NEWS AND DISINFORMATION

We are without any doubt in the information age, the era in which information has become a commodity, quickly and widely disseminated and easily available especially through the use of computer technology. Along with this boom of information and digitalization born from the Industrial area, society experienced huge changes in the way the information is created and spread. New technologies improved worldwide communications although some other problems had arisen that are a concern for the society.

False news has always been spread throughout history, the term "fake news" was first used in the 1890s when sensational reports in newspapers were common. However, the term does not have a fixed definition and has been applied broadly to any type of false information. In this handbook we will present different definitions of fake news, which provide different shades of meaning for the same concept.

The Cambridge dictionary defines:

Fake news: "false stories that appear to be news, spread on the internet or using other media, usually created to influence political views or as a joke".

Misinformation: "wrong information, or the fact that people are misinformed" and "information intended to deceive"

Disinformation: "false information spread in order to deceive people"

These definitions seem to provide basic information on the terms, instead other organizations define fake news providing different points of view, adding more specific information to the concept.

The National Endowment for Democracy, is a quasi-autonomous non-governmental organization in the United States to advance democracy worldwide defined fake news as: "Misleading content found on the internet, especially on social media [...] Much of this content is produced by for-profit websites and Facebook pages gaming the platform for advertising revenue." And distinguished it from disinformation: "Fake news does not meet the definition of disinformation or propaganda. Its motives are usually financial, not political, and it is usually not tied to a larger agenda".

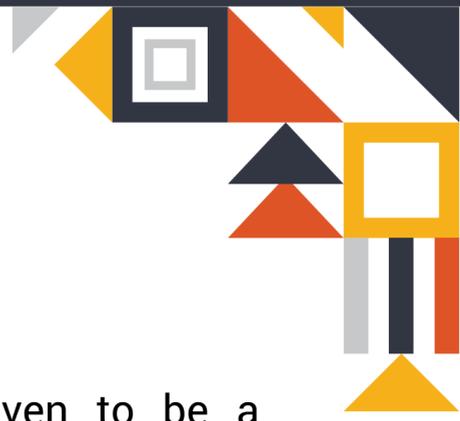
In this definition, the authors underline the channel in which fake news are easily spread and added the motivation for fake news



Other authors, such as the group composed by Edson C. Tandoc Jr., Zheng Wei Lim & Richard Ling in 2018) wrote Defining “Fake News”, a review of how previous studies have defined and operationalized the term “fake news”. In order to provide a wider vision of the definition of the terms. They did an examination of 34 academic articles that used that term between 2003 and 2017. The result was the identification of the six ways that previous studies have operationalized fake news: satire, parody, fabrication, manipulation, propaganda, and advertising. As for the Council of Europe definitions, ‘propaganda’, ‘misinformation’ and ‘fake news’ is considered as a range of ways in which sharing information causes harm, intentionally or unintentionally – usually in relation to the promotion of a particular moral or political cause or point of view. The COE definition agrees that the three terms are often overlapped and provides a separation and specification of the terms, mis-information, dis-information and mal-information:

- Mis-information - false information shared with no intention of causing harm
- Dis-information - false information shared intentionally to cause harm
- Mal-information - true information shared intentionally to cause harm.

Most recently, and due to the access to artificial intelligence we can consider it important to add in our definitions the deep fakes. Deep Fakes are defined as, a video of a person in which their face or body has been digitally altered so that they appear to be someone else, typically used maliciously or to spread false information”. Social media uses in a vast majority the use of videos and photographs to spread their news, deep fakes are very difficult to differentiate from the reality and causes big confusion among the users as they have been used to support the reach of fake news.



DISINFORMATION DURING COVID-19 PANDEMIC

In the murky waters of the information age, disinformation has proven to be a formidable adversary, particularly during the Covid-19 pandemic. Understanding the underlying theories that fuel its propagation is crucial for deciphering the tangled web of falsehoods that have permeated our digital landscape.

Previous global pandemics have impacted millions, yet the continuous media focus on COVID-19 has elevated this crisis to the forefront of our collective consciousness. It has evolved into a political battleground, where leaders contended not only over public policy but also interpretations of medical practices. Healthcare providers found themselves grappling with an overwhelming influx of medical literature, compounded by pressures from both the media and the community to navigate uncharted territory with precision. Simultaneously, the public was inundated with information from sources that were often unreliable. In this age of instant global communication, misinformation emerges as a potent and destructive force, capable of swiftly spreading false ideas to numerous susceptible ears.

The Theory of Disinformation

Disinformation, as a concept, operates on the principle of manipulating information to deceive, mislead, or sow discord. During the Covid-19 pandemic, this took on new dimensions as misinformation and disinformation spread rapidly, fuelled by fear, uncertainty, and a voracious appetite for information.

One theory behind the success of disinformation is the "information deficit model". This model suggests that misinformation spreads when there is a lack of accurate and accessible information. In the early days of the pandemic, as the world grappled with a novel virus, the information deficit model played a pivotal role. Individuals sought answers, and in the void left by uncertainty, misinformation thrived.

Examples of Disinformation

The pandemic became a breeding ground for false narratives, ranging from the bizarre to the dangerous. Examples abound, such as baseless claims linking 5G technology to the spread of the virus, unfounded assertions that certain foods or substances could cure or prevent Covid-19, and even the fabrication of conspiracy theories surrounding the origin of the virus.

One notable example is the spread of a viral video promoting the use of bleach as a cure for Covid-19. Despite the lack of scientific evidence and stern warnings from health authorities, the video gained traction, illustrating the potency of disinformation in exploiting public fears and vulnerabilities.

Today, we know that misinformation during the pandemic was not only spread in connection with health aspects. Lies were also spread about political or social issues.



How was individual affected?

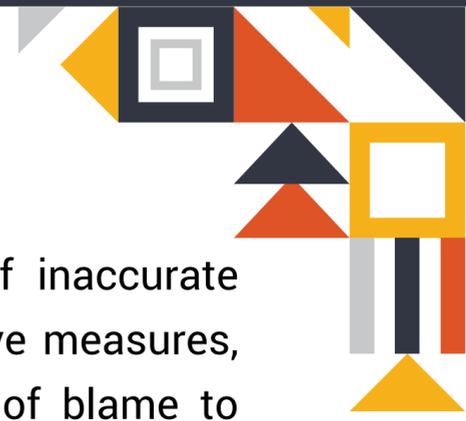
Amid the pandemic, mental health professionals noted troubling trends in coping mechanisms. Patients exhibited symptoms like worries about the future, depression, and grief, compounded by feelings of isolation. Misinformation intensified emotional complexities, impacting both the public and healthcare providers. Conflicting information has real-world consequences; an example being the rise in poison center calls after suggestions of internal disinfectant use. Beyond immediate health risks, misinformation contributes to the decline in preventive care, posing long-term consequences. Fear-driven actions, such as the use of unproven treatments like chloroquine, illustrate the harmful impact of inconsistent information. Tragically, the consequences extended to threats against researchers, revealing the severe repercussions of misinformation in a time of heightened anxiety.

How were medical professionals affected?

Medical professionals, all those who fought for a life of many people and were exposed the pandemic day and night. In the beginning of this crisis, we thank to medics, sang them and appreciated their work. It didn't take long to spread misinformation in the media, that affected medics work. They were often under the attack and hate speech of many people, who could not recognise disinformation. Physicians, grappling with ever-changing guidelines and constant data influx, may also experience stress and doubt about the validity of information from trusted journals. Uncertainty not only impacts care for COVID-19 patients but also strains the mental well-being and confidence of healthcare professionals in these unprecedented times. Maintaining rigorous academic standards, even in urgent situations, is crucial to safeguarding the reliability of medical literature.

How was democracy affected?

The weakening of democracy is due to the rapid spread of disinformation. Not only ordinary citizens but also politicians during the pandemic tended to believe false information. For many, politicians represent an idol, a person they can follow under any circumstances. It is even more dangerous if such important people also succumb to misinformation and publicly spread unsubstantiated information. In this context, faith in political personalities also weakened. Not only the spread of unsubstantiated information, but also constant changes in regulations, unstable conditions and rule-breaking by politicians have weakened democracy. The spread of misinformation poses a risk to both social unity and democratic principles and is therefore a matter of interest in various areas of politics.



In times of health crises, it is common to observe four categories of inaccurate information: distortion of the disease's nature or the necessary protective measures, dissemination of false treatments or medical interventions, attribution of blame to specific groups of people, and the propagation of conspiracy theories. These conspiracies often revolve around the existence or origin of the pathogen, instances of profiteering, or political motivations.

Drawing parallels with the Ebola crisis of 2014, it's evident that similar themes persist in the current outbreak.

To effectively counter mis- and disinformation, a four-pillar strategy is proposed:

Intervention Against False Content

Swift action against false and damaging content, as well as the sources spreading it, is essential to mitigate the impact of misinformation.

Promotion of Factual Information

Ensuring the widespread availability and dissemination of accurate information is paramount in cultivating an informed and resilient public.

Building Public Resilience

Empowering the public to discern reliable information from falsehoods enhances resilience against the seductive allure of misinformation.

Coordinated National Strategy

A cohesive national strategy, involving collaboration among social and news media, government entities, national security officials, public health authorities, scientists, and the public, is indispensable in the fight against misinformation.

In conclusion, the fight against disinformation during the Covid-19 pandemic required a multi-faceted approach. By understanding the theoretical underpinnings of disinformation, recognizing real-world examples, and acknowledging the dangerous ripple effect on public health and societal cohesion, we can better equip ourselves to navigate the complex and treacherous terrain of the infodemic.



HOW DISINFORMATION CAN UNDERMINE DEMOCRACY

Over the years, technological progress has been rapid. This technological advance is expressed in various areas, particularly in the rapid access to information on any subject. By this, we understand the velocity in which an event is turned into news by social communication, for example, and its spread online, being available for anyone to access it. This phenomenon has both positive and negative outcomes. Positive in terms of easy access to different topics and opinions about them, which democratizes knowledge, thus presenting an innovative way of making each individual an active citizen. However, and due to the need to constantly fuel the spread of information online, important steps are lost along the journey, which creates problems regarding the credibility and integrity of information presented online. Digital platforms, such as social networks (Instagram, Facebook, and Twitter), currently present fast and appealing content to citizens in such a way that they don't delve into important topics. The lifetime of information is nowadays shorter, which eliminates the time for reflection and the in-depth approach that some topics require. By reducing complex subjects to shorter articles or condense them in small videos that please the algorithm of social media platforms, we incur into the danger of spreading disinformation. Speaking of the algorithm that is behind these platforms, it does work in a way that is obscure to the average user, and strictly targeted to keep their attention and matching the user's interests. Besides the problems already identified, we face the danger of being kept inside a bubble - the algorithm will keep feeding you not only the same content (which translates into a lack of different topics necessary to be informed about), while just giving the same sort of examples and point of views, limiting one's perception of a subject and conditioning their opinions.

The phenomenon of disinformation is not just a question of access to limited or incorrect information but also encompasses the effect it has on the population. Misinformation harms citizens in various ways, particularly in their lives and democratic decisions. The speed with which fake news reaches a large number of people in the digital environment makes it difficult, and often impossible, to correct it before it becomes true for readers and influences them. In a way, this misinformation negatively influences its readers.

The spread of false information is not only a threat to our understanding but also to the formation of public opinion, particularly in a democracy. Decisions based on incorrect and distorted information undermine the democratic process. Disinformation regularly targets democratic institutions such as the government, political parties, the media, and non-governmental organizations. Therefore, it is often used as an effective tool to influence public opinion. In consequence, an influence is created on political, legislative, and regulatory decisions, resulting in inadequate public policies that are harmful to the population, which can lead to unconscious or partially informed political decisions.



The rapid and effective dissemination of false information creates populism in the various political parties and creates extreme and divisive narratives, thus contributing to a fragmented society. This effect is expressed in the difficult consensus and dialogue necessary for a healthy, truthful society and democracy.

The most significant example of the power of false information and news occurs during elections and election campaigns. During this period, huge defamatory campaigns and fake news are launched about the candidates, distorting the electoral process and the understanding of their objectives as political decision-makers. For citizens, these events hinder the process of making a clear and conscious choice, thus compromising a conscious and informed electoral vote.

To combat the negative effects of disinformation and fake news on the population and their democratic life, different measures need to be implemented for different age groups. In general, it is necessary to promote media literacy, invest in civic education, strengthen democratic institutions, regulate digital platforms, and encourage a culture of factual analysis and information transparency. Concerning young people who are regular users of online platforms, it is necessary to promote learning so that they know how to distinguish between real news and fake news; to make them aware of platforms and websites where they can find real information; to encourage them to participate regularly and assiduously in democracy, to build critical thinking in the face of the news that is easily accessible to them and presented on online platforms.

These measures are expected to preserve the integrity of the democratic process and build a more critical and resilient society in the face of the challenges inherent in the digital age.

ROLE OF SOCIAL MEDIA AND ALGORITHMS: ANALYSING HOW SOCIAL ALGORITHMS CAN CONTRIBUTE TO THE SPREAD OF DISINFORMATION

Social Media is at present an important source of dissemination of fake news (Aimeur, Amri, & Brassard, 2023), as most people have access to social media platforms and, unfortunately, many use social media to get the news. Algorithms represent for online companies important tools in terms of effectiveness, using procedures to filter information and provide recommendations to people (Shin et al., 2022). Distortion of information, biases, opacity regarding processes are some of the critics of algorithmic recommendations.

One way that social media algorithms function is through suggestions offered to users. This is one potent way in which disinformation can spread through social media algorithms. False content is shared online very fast and it is a dangerous threat to decision-making (Dance, 2023) in individuals and groups. Through algorithmic amplification, search behavior and prior exposure patterns a restrictive online environment can be created, in which various phenomena can reinforce people's attitudes (ex., conspiracy theories reinforced by deceptive content, provided by means of clickbait). Being forced to a restricted environment, people have access to contents that reinforce their fears, negative attitudes towards certain problems (Dan et al., 2021) (ex., the use of vaccination and traditional medication against an illness).

The use of fake, realistically looking accounts on social media platforms can be a dangerous way to spread disinformation. These accounts use regular posting and commenting on topics of interest for people, leading to fake beliefs about certain topics, and several emotional and behavioral consequences. Realistic photographs can be constructed and sophisticated means to avoid detection of false accounts are being designed. A lot of followers, real people, can be gathered using these fake accounts. These followers then contribute to the spread of disinformation, by providing comments to posts made by the fake accounts (Villasenor, 2020). The likes and comments are spreading disinformation very quickly and effectively and in some hours there can be damage to the image that people have upon a real fact.

The manner in which disinformation is spread through the use of social algorithms is very sophisticated, by the use of AI systems. For example, fake users can be built that can claim that a particular information is true, when in fact it has been proven fake. Thus, the spreading of the information through the likes, comments, shares on social media can be easily done in a short time. AI systems can be used also to detect fake information, by using intelligent systems that can be trained to detect inaccurate information. Machine learning can use large data sets to train and afterwards to be able to detect disinformation.



Online disinformation can have effects on several domains: financial, social movements, topics of interest for the population, or even political decisions and voting. Social media algorithms accelerate the spreading of disinformation, to the advantage of the social platforms and the disadvantage of the users (Pasquetto, 2022), who can have large difficulties detecting the fake information and separating it from the truth. Even after the fake information is uncovered, rumours can still persist, leading to changes in people's behavior. In situations where defences against disinformation need to be implemented fast, a small amount of data is available and machine learning cannot be accomplished effectively so that measures to be taken. At present, there is no simple solution for the problem of propaganda and disinformation on social media, and guidelines and policies are needed to tackle this problem.

In February 2024, the "Digital Services Act" will become active at the European Union level (Dance, 2023), meaning that several transparency standards will be enforced on social media platforms, regarding the functionalities of their algorithms. The act comes as a response to disinformation fuelled by social media algorithms, with negative effects on the level of trust in the population. There is an awareness gap at the level of the population regarding disinformation and the role of social media algorithms in the spread of the fake news. Those who are aware acknowledge the dangers of disinformation, regarding democracy, civil liberties, human rights, health decisions, but many people are not informed about the possibilities to be misinformed in this manner and so they are not safeguarding against it. At the policy level, more ethical algorithms, more transparent and fair, together with education on risks and tools to fight disinformation would be necessarily enforced in the following years. Shin et al. (2022) consider that algorithms are not the cause of disinformation, but rather a catalyst factor by the way they function to filter information.



DEEP FAKE AI

Deep fake AI became a powerful force in the ever-changing world of technology, permanently altering the dynamics of information sharing and escalating the problem of fake news. In light of the just finished COVID-19 outbreak, this seeks to analyze the subtleties of Deep fake AI, its extensive effects on the dissemination of false information, and its particular ramifications inside the European Union.

Deep fake AI operates at the nexus of artificial intelligence and machine learning. It used complex algorithms to produce material that merged fiction and reality. Its capabilities were improved by the use of Generative Adversarial Networks (GANs), which resulted in a complex interaction between authentication and content development. Notably, face-swapping technology elevated this to a whole new level by expertly superimposing facial traits onto other people, creating information that was incredibly challenging to differentiate from real-life sources.

While the difficulty of false news was not new, Deep fake AI provided a novel dimension by producing content that could fast permeate social media platforms. Deep fake content's innate realism undermined public confidence in traditional information sources and accelerated the spread of false information. Confirmation bias made matters worse by encouraging people to spread information that supported their preexisting opinions, which made it easier for lies to spread.

The European Union responded with legislative measures to tackle the threat posed by Deep fake AI after realizing how serious this problem was. Proposals like the European Democracy Action Plan and the Digital Services Act (DSA) demonstrated the dedication to thwarting misinformation and promoting ethical technology usage. In order to successfully address the issues related to fake news and misinformation, the EU promoted collaboration between governments, technological corporations, and civil society.

Deep fake AI identified a very useful niche in the context of the COVID-19 epidemic. Among the major areas of concern were the misrepresentations of public health information, the amplification of conspiracy theories, and the distribution of false videos about the virus and vaccinations.

During that crucial period, this not only made public health communication more difficult, but it also made the public less trusting of credible sources.

It was essential to use a diverse approach in order to lessen the influence of Deep fake AI. Technology-based solutions, such as the creation of reliable detection tools, made it easier to recognize and combat fake information. In order to create a perceptive and knowledgeable public, media literacy initiatives played a critical role in informing the public about the presence and the consequences of deep fake AI. Furthermore, because this problem was cross-border in nature, international cooperation was essential for its resolution, requiring the exchange of best practices and coordinated strategy creation.



The EU's proactive legislative measures, cooperative initiatives, and participation stand as laudable efforts to traverse the challenges of the information age, especially in light of the just finished COVID-19 outbreak and its confluence with Deep fake AI. During that difficult time, the EU worked to protect its citizens and maintain the integrity of information by promoting a united front against disinformation.

Identification of deep fakes

Hypothetical Situation with Advice on Recognizing Deep fakes:

Consider a scenario in which a malevolent actor produces a plausible Deep fake video that shows a well-known scientist or health expert debunking false information regarding COVID-19. The realistic voice and facial editing in the video gives it the appearance of authenticity, but it may also spread misleading information by downplaying the seriousness of the infection, discouraging vaccination, or endorsing experimental treatments.

Nevertheless, in the middle of possibly false information, people need to exercise caution and use methods to spot Deep fakes:

- **Examining Facial Features:** Deep fakes frequently have minute variations in their lip-synch, blinking patterns, and facial expressions. Keeping an eye on these particulars can assist in differentiating between real and fake videos.
- **Audio Inconsistencies:** Tone, pitch, and rhythm may all differ in deep fake audio. Red flags might be raised by paying close attention to any unusual fluctuations in the speaker's speech.
- **Unusual Lighting and Shadows:** If the altered face is overlaid on a different background, deep fake films may exhibit inconsistent lighting and shadows. Keep an eye out for any unusual changes in the illumination.
- **Blurred Edges and Artifacts:** Deep fake algorithms may have trouble reproducing tiny details precisely, which can lead to manipulated elements with visible artifacts or fuzzy edges. Examining the footage for these faults can reveal traces of manipulation.
- **Cross-Verification with Authentic Sources:** If something about a video seems off, make sure it's confirmed by reputable and established sources. Verified or refuted remarks from reputable scientists, governmental outlets, or health authorities might support or refute the claims presented in the film.
- **Make Use of Deep fake Detection Tools:** Apps and internet tools made expressly to identify Deep fakes are available. These technologies can offer another level of inspection, even though they might not be perfect.
- **When this fictitious Deep fake video becomes popular on social media, anybody equipped with these detection methods could recognize and report the altered material. Social medias can stop the spread of false information by using reporting tools and moderation algorithms.**

People may be key players in reducing the effects of Deep fakes and helping to preserve the accuracy of information in the digital era by being informed and using critical thinking when consuming it.



HOW TO SPOT FAKE NEWS AND STOP SPREADING IT

Fake news refers to false or misleading information which masquerades as legitimate news. Generally, fake news falls into two categories:

- Deliberately inaccurate stories that is, the people publishing them know them to be false but publish them anyway. This might be to manipulate public opinion or to drive traffic to a specific website.
- Stories that contain elements of truth but are broadly inaccurate. This might be because the writer hasn't checked all their facts or has exaggerated certain aspects to make a particular point.

Some stories have some grain of truth in them, but aren't 100% accurate, giving a false impression of their meaning. Every time you're online, you are bombarded by pictures, articles, links and videos trying to tell their story. Unfortunately, not all of these stories are credible. Sometimes they direct you to another story or advertisement at their own site, other times they want to upset people for political or religious reasons. Fake news spreads rapidly because it's typically designed to grab attention and appeal to emotions – which is why it often features quirky claims or stories which provoke anger or fear. On the contrary, there are also people who claim that factually accurate stories are fake news, just because they don't agree with the truth as they find it very uncomfortable. Fake news is nothing new or a recent phenomena, but, what is new is how easy it's become to share information, both true and false at an exponential rate. Social media platforms allow almost anyone to publish their thoughts or share stories to the world, the problem is, most people don't check the source of the material that they view online before they share it, which can lead to fake news spreading quickly or even "going viral." Sometimes, journalists don't have time to check all their facts before publishing, leading to genuine mistakes becoming fake news. However, trusted new sources will correct errors in their stories and be transparent with readers when they've got things wrong.

The pervasiveness of fake news sticks out as a sinister foe that beset our collective awareness when we think back on the turbulent times of the COVID-19 outbreak. Amidst the intricacies of this worldwide emergency, the infodemic emerged as a distinct obstacle, endangering public health, corroding confidence, and necessitating a reassessment of our association with data. This section examines the impact of fake news during the COVID-19 pandemic, its widespread nature, and the lessons that can be learned to counteract this sneaky menace.

The History of the Infodemic

Fake news and disinformation were a dangerous enemy during the pandemic. Sensationalized stories flourished on the internet thanks to misleading prescriptions and erroneous conspiracy theories. Due to the ambiguity surrounding COVID-19 in the first stages, unconfirmed information spread quickly, typically driven by fear, perplexity, and a need for clarification.



Public Health Effects

Fake news had serious consequences when the pandemic was at its worst. False information about the virus's causes, spread, and treatment crept into social media sites, leading to people acting erroneously and undermining public confidence. False information regarding the severity of the virus and hoaxes about miraculous treatments created an atmosphere of uncertainty that hampered the implementation of appropriate public health measures and exacerbated the worldwide health disaster.

Deterioration of Institutional Trust

Fake news has unintended consequences that went beyond public health and affected people's trust in institutions. Unchecked dissemination of false information led to an increase in mistrust of government directives and professional opinions. Coherent attempts to combat the virus were hampered by the decline in trust in governments, health organizations, and other authoritative sources, which created a climate in which following important instructions became divisive.

Media Knowledge as a Weapon

Promoting media literacy became clear as a critical tactic when it was realized that a proactive response was required. It became crucial to educate the public on how to identify reliable sources, verify information, and assess assertions critically. In addition to urging individual accountability, the push for media literacy recognized that a knowledgeable and perceptive populace forms the cornerstone of a society that can withstand information shocks.

The Responsibility of Social Media Platforms

It is impossible to overestimate the contribution of social media platforms to either enhancing or reducing the impact of false news. To stop the spread of false information, stricter content control guidelines, open algorithms, and cooperation with fact-checking groups became crucial. Social media companies started to realize how much they shaped the information environment and made a conscious effort to make the internet a more trustworthy and responsible place.

Ways to Spot Fake News

- Check the source

Look at the website where the story comes from. Does it look real? Is the text well written? Are there a variety of other stories or is it just one story? Fake news websites often use addresses that sound like real newspapers, but don't have many real stories about other topics. If you aren't sure, click on the 'About' page and look for a clear description of the organisation.

- Watch out for fake photos

Many fake news stories use images that are Photoshopped or taken from an unrelated site. Sometimes, if you just look closely at an image, you can see if it has been changed. Or use a tool like Google Reverse Image search. It will show you if the same image has been used in other contexts.

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- Check the story is in other places

Look to see if the story you are reading is on other news sites that you know and trust. If you do find it on many other sites, then it probably isn't fake (although there are some exceptions), as many big news organisations try to check their sources before they publish a story.

- Look for other signs

There are other techniques that fake news uses. These include using ALL CAPS and lots of ads that pop up when you click on a link. Also, think about how the story makes you feel. If the news story makes you angry, it's probably designed to make you angry. If you know these things about online news, and can apply them in your everyday life, then you have the control over what to read, what to believe and most importantly what to share. If you find a news story that you know is fake, the most important advice is: don't share it!

- Consider the Article's Quality

If you notice any typos or other blatant errors, you're probably reading a website with low credibility. Reputable news sources won't publish articles that are full of spelling or grammatical mistakes. The same goes for sensationalism, such as overuse of punctuation or dramatic language. You should also check the date on the story. There's a chance that a publisher could recycle an old story with a few altered details and pretend it's fresh.

- Check image authenticity

Modern editing software makes it easy to create fake images that look real. Look for shadows or jagged edges in the photo. Google Reverse Image Search is another way to check the image to see where it originated and if it's altered.

- Question Your Own Biases

We all have personal biases that can influence our perception of information. Be aware of your own biases and actively seek diverse perspectives. Critical thinking involves questioning information, even if it aligns with your preconceived notions.

- Report and Dispute

Take an active role in combating fake news by reporting it to social media platforms, fact-checking organizations, or relevant authorities. Dispute false information politely and provide evidence to support your claims. Engage in constructive conversations to promote a culture of accuracy.

- Educate others

Help create a more resilient community by sharing your knowledge of spotting and preventing the spread of fake news. Encourage friends and family to be critical consumers of information and share reliable sources. Education is key to building a society that values accuracy and truth. In the digital age, the fight against fake news is a collective responsibility. By staying vigilant, questioning information, and promoting media literacy, we can safeguard the truth and foster a more informed and resilient society. Together, let's build a future where misinformation has no place.

- Does it pass the CRAAP test?

It's a handy acronym for remembering how to ask yourself: is this source full of, uh, craap?

- **Currency:** When was it published?
- **Relevance:** Is it created for the right audience?
- **Authority:** Who wrote it?
- **Accuracy:** Is the evidence backed up with data?
- **Purpose:** Why was this created and is there an underlying bias?





RECOMMENDATIONS OF WEBSITES/PLATFORMS THAT REVEAL FAKE NEWS

<https://timesofmalta.com/articles/listing/fact-check>

<https://www.makeuseof.com/tag/faux-news-alert-best-websites-for-fake-news-satire/>

<https://www.makeuseof.com/tag/true-5-factchecking-websites/>

<https://fotoforensics.com/>

<https://www.makeuseof.com/tag/reverse-image-search-apps/>

<https://www.makeuseof.com/tag/news-apps-for-free/>

<https://www.makeuseof.com/tag/spot-online-fakes/>

- **PolitiFact.** This Pulitzer Prize-winning site researches claims from politicians to check accuracy.
- **Fact Check.** This site from the Annenberg Public Policy Center also checks the accuracy of political claims.
- **Snopes.** This is one of the oldest and most popular debunking sites on the internet that focuses on news stories, urban legends and memes. The independent fact-checkers cite all sources at the end of the debunking.
- **BBC Reality Check.** This site is part of the British Broadcasting Corporation (BBC) that checks facts for news stories.

<https://konspiratori.sk/zoznam-stranok>

This web page is creating a list of the web sites and youtube channels that are publishing not reliable information. It is a public database of websites with non-serious, deceptive, fraudulent, conspiratorial or propagandistic content.

<https://blbec.online/>

This is a platform that create a list of Facebook pages and profiles for which they have doubts about their credibility and the quality of their content. The list of sites is compiled and continuously updated by a collective of experts and activists who have been monitoring disinformation and dubious sources on Facebook and the Internet for a long time. The experts carry out this activity voluntarily based on their belief in its societal usefulness without any remuneration.

Facebook of Police Slovakia - <https://www.facebook.com/hoaxPZ>

Specialized official website of the Slovak Police Force to combat hoaxes and fraud.

<https://infosecurity.sk/>

A portal that is responsible for monitoring and policing public content in order to preserve information integrity and protect the public from harmful content.

<https://euvsdisinfo.eu/quizzes/euvsdisinfo/>

On this site it is possible to try learning to recognise misinformation in practice.



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Funded by
the European Union



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