

FAKE NEWS: IS THERE A PATHWAY FOR MINIMIZING THEIR EFFECTS?

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Abstract. *The digital age and rapid expansion of social media have provided a fertile ground for dissemination of fake news or misleading information. Fake news has become an urgent matter and discussion topic among both academics and practitioners, as it has sparked a concern about the effects it can have on both business and society. On the basis of recent researches and reports, this paper discusses effects of fake news and possible pathways for their minimizing. Thus, it aims to draw the attention of public and organizations to the need of being better equipped to identify fake news.*

Keywords: *fake news, misinformation, social media*

1. INTRODUCTION

Fake news refers to inaccurate information, which is presented as news media content in form, but not in organizational process or intent [1] and it is created to be spread on social media. Fake news attracted a lot of attention during the presidential election in USA in 2016, when it was related to the phenomenon of post-truth, that Oxford English Dictionary announced as the word of that year [2]. As it is often used in political context, Cambridge dictionary explains fake news as 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 [3]. Fake news is a matter of concern in business as well. The latest European Communication Monitor reported that 22.5% of European organizations and their reputation have been affected by fake news within the last months, mostly on social media [4].

A phenomenon of fake news is not new. However with the use of the internet and social media, the scope of information is much larger and information sharing is substantially facilitated, and consequently fake news has become an important issue, and a topic of interest of recent researches [1, 5, 6, 7, 8, 9]. It is more difficult today to identify if news is fake or real due to the extensive amount of information that can be found online. The goal of the paper is to present and explain fake news, the reasons for their spreading, the effects it can have, together with possible pathways for minimizing the effects. The paper is based on analysis of the most recent researches and reports in order to get better understanding of the phenomenon.

The paper is organized as follows. Section 2 analyzes the spread of fake news, whilst Section 3 discusses possible effects it can have on both business and society. Forth section identifies possible pathways that can lead to decreasing the effects misinformation can have. The final section provides

concluding remarks, together with directions for future research.

2. THE REASONS FOR SPREADING OF FAKE NEWS

Having in mind the reach and effects of social media and networks regarding the potential of spreading news, false information can make an impact on both society and business, easily and quickly [10]. Thus, social media contributes to the dissemination of fake news at large extent.

By researching academic articles that used the term “fake news” and were released between 2003 and 2017, Tandoc et al. categorized fake news, according to their content as follows [11]: satire and parody news, which purpose is not to mislead but to be satirical and funny; fabricated news, that is completely fictitious with purpose to mislead the reader into believing something that is not true; manipulated news that is based on true information but the conclusions are fake with the purpose to direct the reader into perceiving the information in a certain way; propaganda news that presents news as credible, but the source of it or the motivation behind it are lacking, and advertising news, that presents misleading or even false information in order to attract consumers to buy a product/service.

Fake news stories are commonly used in politics, and their evident increase can be noticed during the US presidential election, when a number of fake stories supporting elected candidate’s campaign circulated all over Facebook and were read by millions of people [12]. According to Silverman et al. [13] even Facebook engagement, through likes, comments and shares, was greater for the top 20 fake than 20 real news stories in last three months of the campaign. Even though the exact effect of fake stories still cannot be clearly determined, many argue that they had an influence on the election result.

Apart from politics, the spread of fake news is apparent when there is a high interest for information about certain issue, such as crisis situation, or health concerns [9].

Both academics and practitioners explored the reasons why people tend to believe false news. Allcott and Gentzkow have analyzed the reasons why someone would spread false information and try to deceive the public and they reported two main, financial and ideological. Financial reason means that websites post news articles that go viral in order to raise ad revenue with each time their article is clicked by online users. On the other side, ideological reason means that people post false stories not after money but they want to support a cause, a person or an organization [8].

Similarly, after interviewing scientists, psychologists and experts in the field of digital journalism, Marshal identified

that mainly the reasons are related to algorithms, human psychology and money [14]. Algorithms are identified to be used by social media in order to filter stories one is likely to agree with, from like-minded groups, and thus inaccurate information can be spread more easily and quickly [9, 24].

A research conducted in MIT about the spread of false news in Twitter revealed that false news was 70% more likely to be retweeted than real news [15]. The research showed that generally people, and not bots (automated accounts that impersonate real users), are the reason why false news spreads faster. Accordingly, the characteristics of our psychology make a fertile ground for dissemination of misinformation. For instance, we tend to believe a piece of information we read is true if it is aligned with our personal beliefs and opinions, and this is the case when fake news publishers rely on the fact that people trust in online opinions if these opinions match their own. Thus, spam opinions or spam reviews about people or organizations can be made and disseminated [16].

Additionally, fake news can be shared as rumors, an important form of human communication, which might quickly spread through various channels [17]. The authors reported that people can have different roles in the process of rumor spreading, depending on their attitudes towards rumors, but even they hesitate to spread rumors, people have a positive effect on their spreading. The very recent example of rumors and its effects appeared during the lunar eclipse on July 27 2018, when amongst other news, it was said that we should turn off our mobile phones during a certain time because of the cosmic rays passing very close to Earth. This news went viral and was believed by many even though there were websites reporting this news as fake [18].

Studies have also shown that the reason why people tend to believe fake news comes from their laziness to think and not because they think in a motivated way [7]. This means that when we hear some information we are more likely to accept it the way it is rather than relying on our intuition and question it.

Jang & Kim have also found a strong tendency to third person perception. This means that people believe in their ability to successfully identify fake news and believe that other people are more vulnerable to fake news than they are [9].

To make fake news even more believable their creators make websites with similar names to real news websites. This way the reader will think that they are reading the news from a credible website. For instance, in July 2015 Twitter stock jumped nearly 8 percent because of news of a \$31 billion bid for the company. The news was posted by <http://bloomberg.market>, that was made to look like <http://bloomberg.com> which is a credible news portal [19]. Thus, we can trace a path for recognizing the way for combating fake news and minimizing their effects.

3. THE EFFECTS OF FAKE NEWS

Misinformation has already become an issue that affects both business and society [10].

For businesses and organizations fake news can severely damage their reputation, and cause significant financial loss, as the consumer can stop buying the products/services if they

believe fake news about either company or its products [16]. For instance, BuzzFeed posted an untrue story about a jewelry shop using fake diamonds which caused their stock to drop 3.7% and cause reputation damage [20].

Furthermore, as Online opinions sharing have an impact on consumer purchase decisions, increase of fake (or spam) reviews can damage the reputation of brands and influence users' perceptions about products and companies [16].

One of the main concerns of fake news is how they affect the society. Fake news can influence public opinion, especially in political context. The 2016 presidential election in the US, as well as the Brexit vote in the United Kingdom, demonstrated how news had been affected, changed and used in the digital age [21].

Misleading information is found to be a risk for public health as well, as it might have an impact on health literacy and the spread of conspiracy theories, for instance regarding vaccines, or cardiovascular diseases [22]. The authors found that lack of education in healthcare context can result in behavioral changes, and thus it is a severe threat to the public health. Their research in Poland showed that 40% of the most frequently shared links contained text they classified as fake news.

As the spread of fake news cannot be controlled and can have a powerful impact on beliefs and attitudes of individuals, and consequently the intentions and behaviors of these individuals [23], it is crucial to identify possible pathways for minimizing these effects.

4. MINIMIZING THE EFFECTS OF FAKE NEWS

Jang et al. [24] identified several pathways for combating fake news, from media literacy education, over enhancing fact-checking procedures available to users, which give warnings that particular stories can be fake news, to detection of fake news sources and filtering out the information from those sources. Each of identified pathways has particular issues and flaws. Figuiera & Oliviera categorized the approach into human intervention and using algorithms [10].

Media literacy in terms of ability to critically understand, evaluate and interpret media content [25] is important, but it still depends on one's cognitive ability. De keersmaecker & Roets argued that individuals with lower levels of cognitive abilities changed their attitudes less than people with higher levels of cognitive abilities, and concluded that the effect of inaccurate information cannot simply be undone by explaining that the information was incorrect, in particular among individuals with lower cognitive ability [6]. Here, it is important to point out that there is a difference between facts and opinions. A fact is a truth that accurately reports something that has happened whilst an opinion is an interpretation of something that has happened usually from one person's perspective [26]. Nevertheless, educational efforts about information and digital media can help in minimizing the effects of fake news [27].

As there is apparent need that the public should be better informed and educated to distinguish fake news from real [5], the International Federation of Library Associations and Institutions (IFLA) suggested a procedure with 8 steps to educate the readers on how to identify fake news [28]. We used it as a framework and elaborated it as follows.

As a first step, the suggestion is to consider the source. When we read something online we should always check where this information came from. There are a number of websites dedicated to disseminating fake news only. As mentioned before publishers of fake news also create websites with a very similar URL to real news websites in order to deceive the reader. A study of Jang et al. explored 307,738 tweets about 30 fake and 30 real news stories during the 2016 presidential election in USA, and the findings revealed that the fake stories were originated by accounts from ordinary users (users with no experience in journalism) and they often included a link to a non credible source [24]. Therefore, considering the source can help us identify if the information we are receiving is true or not.

The second step refers to reading beyond headlines. Headlines are designed to attract the attention of the reader therefore very often the information from the headline is very different from the content of the article. Usually interesting headlines attract the users to click in the article which gives ad revenue to the website owner. So the reader is advised not just to believe the headline but to read the article behind to find out if the headline is misleading or not.

The third step is checking the author. Similar to checking the source of the information the readers should also check the author and make sure they are real and credible. Not everyone has real knowledge of what they post so before accepting the information as real people ought to make sure the author is credible and has actual knowledge of what they wrote.

The fourth suggestion in decreasing the effect of fake news is to check supporting sources. Good and credible news articles provide the readers with supporting sources that back the information published in the article. So to make sure the news we are receiving is not fake we should check the supporting sources and see if they agree with the information we are receiving.

Furthermore, it is important to check the date. For information to be true and not misleading it should also be up to date and related to current events.

Additionally, we should check if the information is a joke. As mentioned before there are several types of fake news that comprise satires and parodies. They are meant to be funny and not mislead the reader into believing false information. So we need to check the author or website to see whether the content of the article has a satirical content or it is actual fake news with the intent to mislead the readers.

On the other side, everyone should check their own biases, as well. Before believing any sort of information we first need to make sure we are being objective and that we are not judging based on our personal beliefs. As it is mentioned earlier, people often tend to believe what they agree with regardless if that information is true or not.

The final suggestion is to ask the experts and check whether the information is true or false. If we lack solid knowledge about the content we are reading and we are not sure whether to believe it or not, we should consult with someone who has expert knowledge on the matter.

Social media context is specific in the sense that, unlike traditional media, the identity of authors is often unknown, the citation of sources is not a norm, and the content is usually changed through the process of spreading. To

overcome the effects of fake news, Jang et al. [24] explored not only the origins, in terms of root content and producers of original source, but also evolution patterns of false information. The authors found that tweets about real and fake news had different evolution patterns.

For minimizing the effects of misinformation it is relevant to identify and analyze how the fake news is initiated and evolved in digital environment. The use of algorithms has a limited impact as this method is still not able to fully identify which content is true or false [10]. Nevertheless, by identifying sources and related bots and cyborgs, algorithms can be created in order to reduce the visibility of such information [24].

5. CONCLUSION

Having in mind the reach and effects of social media and networks regarding potential of spreading the news, false information can affect both society and business. As social media contribute dissemination of fake news at large extent, fake news phenomenon has attracted the attention of both academics and practitioners.

Fake news stories are commonly used in politics, but it is apparent also in situations when there is an interest for information about certain issue, such as health issue, or crisis situation. From business perspective, fake news can affect companies and their reputation, but still, according to European Communication Monitor 2018 report, there is a large number of organizations that do not have established routines to identify fake news.

As the spread of fake news cannot be controlled and can have a powerful impact on beliefs and attitudes of individuals, and consequently the intentions and behaviors of these individuals, it is crucial to identify possible pathways for minimizing effects.

On the basis of existing literature and reports, we summarized several directions for identifying and monitoring fake news. One of the directions is enhancing digital literacy, but not only in terms of technology using, but also the ability to critically understand and interpret content on social media, and distinguish fake news from real, as well as to detect fake news sources and filter out the information from those sources. In addition to better education, algorithms can be created in order to reduce the visibility of misinformation, as well.

In business context, fake news has to be treated as a permanent potential risk and a situation that need to be monitored constantly. Companies should invest in procedures that can help in identifying and minimizing the effects of misinformation.

As this paper summarizes recently published researches and reports on the topic, further direction of our research will include collecting empirical data on types of fake news affecting the companies, and strategies that companies apply for minimizing its effects.

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