

# Chapter 4

## Detecting Fake News on Social Media: The Case of Turkey

Esra Bozkanat

Kırklareli Üniversitesi, Turkey

### ABSTRACT

*As Web 2.0 technologies have turned the Internet into an interactive medium, users dominate the field. With the spread of social media, the Internet has become much more user-oriented. In contrast to traditional media, social media's lack of control mechanisms makes the accuracy of spreading news questionable. This brings us to the significance of fact-checking platforms. This study investigates the antecedents of spreading false news in Turkey. The purpose of the study is to determine the features of fake news. For this purpose, teyit.org, the biggest fact-checking platform in Turkey, has been chosen for analysis. The current study shows fake news to be detectable based on four features: Propagation, User Type, Social Media Type, and Formatting. According to the logistic regression analysis, the study's model obtained 86.7% accuracy. The study demonstrates that Facebook increases the likelihood of news being fake compared to Twitter or Instagram. Emoji usage is also statistically significant in terms of increasing the probability of fake news. Unexpectedly, the impact of photos or videos was found statistically insignificant.*

### INTRODUCTION

Because Web 2.0 technologies turned the Internet into an interactive medium, users have since dominated the field. With the spread of social media, the Internet has become much more user-oriented. In contrast to traditional media, the lack of control mechanisms in social media makes us question the accuracy of spreading news.

According to a report from We Are Social (2019), Hootsuite (2020), and Digital (2019), the world currently has 3.484 billion active social media users all over. Given that the number of people, saying that all users have the same education level or the same media literacy level is completely unrealistic. Therefore, users are distinctly affected by the separate content they are exposed to. At times they can

DOI: 10.4018/978-1-7998-4718-2.ch004

question the reality of what they see or read, and other times they for some reason are likely to accept the information on social media without question.

The time spent by Internet users on social networking sites in one day is gradually increasing. While a user spent 90 minutes a day on social networks in 2012, this period increased to 144 minutes in 2019 (Statista, 2019a). This is quite a long time. Given the time people spend on social media, encountering fake content seems likely. While an ordinary social media user can be exposed to fake news at any time, some users are more disadvantaged. According to multi-participation research, older individuals are less successful than young people in distinguishing facts and opinions (FullFact, 2019).

Statista's (2018) report states, "As of March of 2018, around 52 percent of Americans felt that online news websites regularly report fake news stories in the United States. Another 34 percent of respondents stated believing online news websites to occasionally report fake news stories." In addition, a study showed that news with the fake flag had no effect on judgments about truth; flagging headlines as false did not influence users' beliefs. Users maintain their belief in news that aligns with their political opinions (Moravec, Minas, & Dennis, 2018). In Europe, people stated online social networks, video hosting sites, and podcasts to be the most unreliable sources of news and information (Statista, 2018). In Turkey, 53% of people stated users to be able to distinguish between fact and fiction and to not support a social media ban. 66% of people rely on social media companies to ensure the authenticity of shared content in times of crisis (Statista, 2019b). This brings us to the significance of fact-checking mechanisms.

When considering these reasons, fact-checking services in the online environment become vital for millions of people. Their services are expanding and increasing day by day. The Reporters' Lab (2020) at Duke University holds a database of fact-checking services. According to that database, 316 fact-checking platforms exist all around the world. Of these, 217 are currently active and 89 are inactive. There are many well-known fact-checking services in the world. For instance, Africa check is a platform that verifies the news from Kenya, Nigeria, South Africa, and Senegal, as well as every other country. Chequeado is a Spanish fact-checking service. The site does not have an English version. It confirms news regarding economics, health, justice, education, and more. Full Fact is the UK's independent fact-checking service. Teyit.org is Turkey's biggest fact-checking platform. All four sites adjust their sites accordingly when a global issue occurs. For instance, in the days when this research was written, fake news about the COVID-19 epidemic (Coronavirus) had started to spread on social media, and these four platforms added a confirmation section about coronavirus to their website.

The reason the number of Fact-checking services is so high is that real and fake news are indistinguishable in the post-truth era. This research provides suggestions for eliminating this uncertainty by identifying the features of fake news. The study's purpose is to determine the features of fake news in Turkey. For this purpose, the website Teyit.org, a Turkish fact-checking platform, has been chosen for statistical analysis. Previous studies have focused on only one or two features of fake news, such as likes and users (Tacchini, Ballarin, Vedova, Moret, & Alfaro, 2017), inter-user engagement (Ruchansky, Seo, & Csi, 2017), stance classification (Thorne, Chen, Myrianthous, Pu, Wang, & Vlachos, 2017), linguistics (Shu, Sliva, Wang, Tang, & Liu, 2017), and visual features (Yang, Zheng, Zhang, Cui, Li & Yu, 2018). This study differs from previous studies as it combines all the features of fake news. Therefore, the current study differs from other studies in the literature in terms of revealing different antecedents of fake news and fills a gap by showing how fake news can be identified.

This study makes a fivefold contribution. Thus, the paper is organized as follows: The first section summarizes the brief history of fake news in mainstream media and on social media respectively. Then it presents some explanations on the rise of fact-checking services. The second part shows the landscape

17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/detecting-fake-news-on-social-media/264932](http://www.igi-global.com/chapter/detecting-fake-news-on-social-media/264932)

## Related Content

---

### Trust Management Models for Digital Identities

Prasann Pradhanand Vikas Kumar (2016). *International Journal of Virtual Communities and Social Networking* (pp. 1-24).

[www.irma-international.org/article/trust-management-models-for-digital-identities/168625](http://www.irma-international.org/article/trust-management-models-for-digital-identities/168625)

### A Feminist Autoethography of Academic Performance on Twitter: Community, Creativity, and Comedy

Sharon Lauricella (2023). *Research Anthology on Applying Social Networking Strategies to Classrooms and Libraries* (pp. 1259-1274).

[www.irma-international.org/chapter/a-feminist-autoethography-of-academic-performance-on-twitter/312979](http://www.irma-international.org/chapter/a-feminist-autoethography-of-academic-performance-on-twitter/312979)

### Social Tyranny and Democratic Governance in the Information Age

Andrew Ward (2014). *International Journal of E-Politics* (pp. 32-52).

[www.irma-international.org/article/social-tyranny-and-democratic-governance-in-the-information-age/112101](http://www.irma-international.org/article/social-tyranny-and-democratic-governance-in-the-information-age/112101)

### The Influence of Social Networks on Communication Satisfaction within the Organizations

Danijela Lalic, Ugljesa Marjanovicand Bojan Lalic (2012). *Handbook of Research on Business Social Networking: Organizational, Managerial, and Technological Dimensions* (pp. 545-566).

[www.irma-international.org/chapter/influence-social-networks-communication-satisfaction/60330](http://www.irma-international.org/chapter/influence-social-networks-communication-satisfaction/60330)

### Using Social Media to Target Customers for Green Technology Use

Ehi E. Aimiuwu (2018). *International Journal of Virtual Communities and Social Networking* (pp. 41-61).

[www.irma-international.org/article/using-social-media-to-target-customers-for-green-technology-use/230970](http://www.irma-international.org/article/using-social-media-to-target-customers-for-green-technology-use/230970)