# WHAT CAN WE DO TO MITIGATE THE SPREAD OF FAKE NEWS ON INSTAGRAM?

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Tutorial Number: T15 (Group 5)

Members:

#### ABSTRACT/PROPOSAL:

Since the advent of digital technology, the spread of 'fake news' has become a major concern. It is paramount to tackle it as fake news can inflict serious harm on individuals and those around them. Such harms include causing distress to the public, the rise of polarizing communities, distortion of understanding on certain issues as well as the loss of trust of online users. Additionally, the spread of fake news has now been accelerated due to advancements in technology, such as the creation of social media platforms like Instagram, making it crucial for us to understand the origins and impact of fake news, as well as methods to combat fake news. In our poster, we evaluated the existing solutions that aim to mitigate the spread of fake news on Instagram. Improvements to these solutions as well as novel solutions have also been included. With these proposed solutions, we would be more equipped to navigate the vast sea of information online and to discern fact from fiction.

## I.PROBLEM STATEMENTS & AIMS

Rumors, misinformation, and disinformation are the most frequent challenges faced by all forms of media, especially for digital media like social media platforms. When fake news spreads, it influences people's decisions, which could cause serious harm to themselves and others around them. For example, during the pandemic season, almost 6,000 people were hospitalized in the first three months of 2020 due to a false rumor about a coronavirus cure.

**Problem statement:** What can we do to mitigate the spread of digital misinformation and fake news on Instagram?

**Aim:** To analyze the root cause of why fake news is being spread around, evaluate current solutions and generate creative solution that addresses these root causes.

## II.INTRODUCTION

In today's era of digital technology, the spread of 'fake news' has become a major concern. People are unaware whether the information they are spreading is false and this may influence the mindset and thus decisions that themselves and others make. The extent of impact these untrue news have may differ for each individual and should the impact be great, it may pose serious harm to individuals and others around them. For example, during the Covid-19 pandemic, there was false information about the harmful effects of vaccination being circulated online. This manipulated people and made them unwilling to get vaccinated and thus rate of infections remained high which is harmful towards the community.

Once an information spreads online, it is difficult to retract the information. Even if retraction is successful, it is difficult to change the mindset of people who have already digested the false information. This can lead to confusion and misinterpretation of information and can undermine public understanding towards the concept brought up in the fake news. With the rise in fake news, public trust towards online content has dwindled.

### III.DESIGN APPROACH

Based on the information that we have gathered from our Google forms, 90% of the participants have encountered fake news online.



In addition, according to a survey conducted by NTU Centre, only 48-53% of people can tell if the content on social media is accurate or misleading.

#### Surveys on Internet use during the pandemic

	Dec 2020	July 2021	Dec 2021
Fake news			
Can tell if information on social media is true or false	49%	52%	50%
Unknowingly shared fake news*	71%	75%	69%
Knowingly shared fake news*	57%	60%	51%
Was called out for sharing fake news*	55%	60%	50%

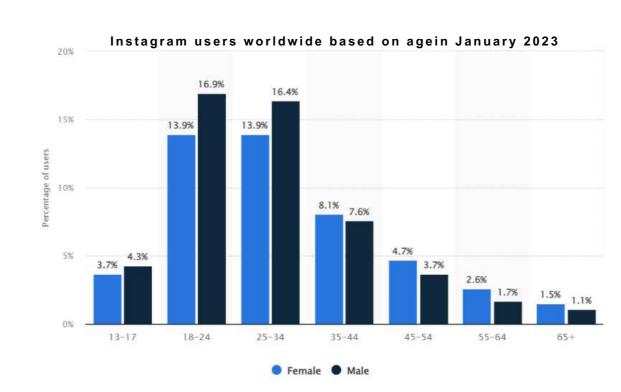
#### Computational Thinking Approach

**Decomposition**: By breaking down the issue of the spread of fake news, we decided to tackle the root cause of the problem, which is people reposting the fake news to share with others online without knowing the authenticity of the information.

Pattern recognition: A pattern that we found is that people are unable to discern between real and fake news. Without knowing whether the news is real or not, they still continue to share it online in hopes that people would correct them if the information shared is untrue. However, this often results in a vicious cycle of the continuous spread of fake and untrue news without any fact-checking.



**Abstraction:** Fake news is present in many different forms of digital media, but our group decided to focus on Instagram which is the most used social media platform by the younger generation as shown in the bar chart below.



Algorithm: For users/companies that is verified, there will be a verified symbol on the post and story they upload. Conversely, if a user is not verified and one tries to repost the content that the user uploaded, a pop-up alert will appear - "! This post may not be credible".

#### **Existing Solutions:**

**Fact-Checking Function:** For every informative post/ story uploaded, it would be fact-checked by the system.

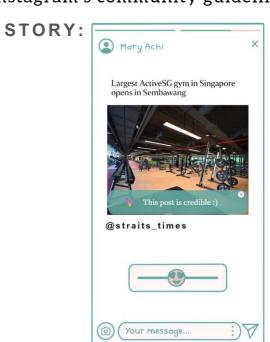
Filtering function: If the fact-checking system deem the information as false, it will be filtered from the Explore page, Hashtag page, Feeds and Stories segment, making it harder to be found to decrease interactions between consumers and the content. However, this solution does not notify users that the information is false and it is still possible for them to come across those information.

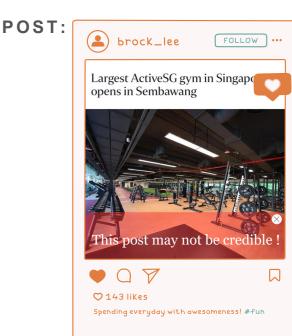
#### Our solutions:

Verification Symbol: Every informative post or story posted by a verified account would have the verified symbol. For informative posts that are not verified, a pop-up alert stating "This post may not be credible!" would appear when they try to share it on Instagram, which deters them from spreading potential fake news. For consumers of the news, this pop-up will also appear to notify them of the authenticity of the information.

#### Process of getting verified:

- Users will have to provide accurate information about their real identification.
- Short informative section curated to enhance their knowledge about fake news and the harms associated with spreading fake news.
- Users must have a good reputation, and must not have violated any of Instagram's community guidelines before.





**Educational Videos:** Short educational videos on serious consequences of spreading fake news will frequently appear in users' feed and stories.

## IV.OUTCOME & FUTURE POSSIBLITIES

Our desired outcome is to reduce the spread of fake news by allowing users to know which posts are credible and which are not. With the help of the current fact-checking function, its algorithm will enable the prioritization of credible sources and subsequently diminish the influence of fake news. By incorporating verified labels, users will be provided with vital context and information concerning the accuracy of the content. This approach will help endorse content from authoritative sources, while concurrently reducing the spread of misinformation and disinformation. Furthermore, we can extend this project in the future by incorporating our solution into other social media platforms such as Twitter and Facebook to reach a greater audience. In the long run, when there is greater awareness of the danger of spreading fake news online, the reposting and sharing feature will be restricted to content that is factual. With such a restrictive feature, users will only be permitted to share verified content and this would help to curb the spread of fake news.

## V.CONCLUSION

Although the use of human-machine tools to counter fake news is a step in the right direction, it is still crucial for us, as users, to remain vigilant. Addressing fake news is a collective effort that requires the involvement of both individuals and organizations. With the increasing popularity of digital media, the probability of encountering fake news on various platforms is expected to rise. Therefore, it is important to educate each other about the dos and don'ts when encountering fake news. With our proposed solutions, it will help mitigate the spread of fake news and prevent the spread of fake news from gaining traction on social media platforms.

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