

Social Media Redesign

Manish Kumar, Aalto University, Finland

The existing structure of social media platforms focuses on generating revenue and increasing user engagement regardless of the potential adverse effects on one's mental health, a massive spread of misinformation, threats to personal data, excessive sharing of non-significant content and profile tuning. This paper proposes redesigning social media platforms that focus on fixing several fundamental issues that have arisen due to the current social media design. The proposed redesign includes better content moderation, more information about bots on the platform, a more personalized feed, and fake news detectors that could spot the spread of hate speech and false information. This will improve the social media experience while fixing the most significant challenges. The design is meant to achieve an equilibrium between generating revenue, maintaining political influence on social media, and keeping users engaged while maintaining data integrity, and a safe environment.

CCS CONCEPTS • **Human-Centered Computing** → **Collaborative and social computing**; Social network analysis
• **Human-Centered Computing** → **Collaborative and social computing theory, concepts, and paradigms**; Social media

Additional Keywords and Phrases: Content Moderation, Hate Speech, Social Media Bots, Artificial Intelligence, Profile Tuning, Algorithmic Influence

1 INTRODUCTION

Social media is the most powerful technology today because it has captivated the attention of people of all ages, both consciously and unconsciously. Hence, social media has acquired a significant portion of internet infrastructure and is now integrated into modern-day life. With the help of social media, not only can people talk to each other and connect with society, but it also helps businesses advertise and is a one-stop solution for the latest news and current affairs. Also, social media has a vast online community, and most companies use it to acquire customers, build their brands, and perform market research.

But despite all these pros, social media also has a number of cons. Since the beginning of social media, spreading hate speech, using bots, pretending to be famous people, buying paid followers, profile tuning, and spreading false information have always been at the epicentre of how social media operates. Social media addiction by being influenced by fake influencers and getting tempted to profile tuning has been a significant source of depression, anxiety, and negative mental health issues, especially among the young [1-2].

All of this is mainly caused by problems with the structure of social media and the lack of transparency between how social media is designed and how people use it. Today, there are more automated bots on social media than real people [3]. These bots use algorithms to spread hate speech, respond to questions automatically, and make a fake fanbase. Because of this, there is an imperative need for a solid and robust redesign of the structure of social media to fix all of the

fundamental problems. It is crucial to rethink the foundation of social media platforms, and an entire revolutionization is required to build a new design overall.

2 More about the need of social media redesign

Social media platforms need to be redesigned, which means that the core moral values need to be rewritten, the ethics need to be rethought, and a solid foundation needs to be built to eliminate all the negative challenges of using social media today. Also, using these platforms too much has been linked to many harmful effects on mental health, like anxiety and the fear of missing out [4]. The main goal of social media platforms today is to attract an increasing number of users every day, leaving morals behind and putting user's personal information at risk.

Secondly, false information and fake news significantly affect religious views and terrorism, and they hurt people's feelings. So, the redesign should focus on stopping the spread of false information and building a foundation that focuses on being the most accurate information found on the internet.

Finally, cyberbullying is a big problem on social media. With profile tuning and impersonating, it's easier for almost any user to show abusive behaviour and spread negative information that affects a large audience. Also, it's interesting to know that there are 4.8 billion active users on social media and that even small changes could significantly affect the whole world's population [5].

So, redesigning these platforms, which will change what moral values and ethics mean, will be a crucial part of how the entire industry works. If all platforms did this, there would be a massive rise in good deeds, and the world would be a better place.

2.1 Eliminating bots and revealing the number of automated social bots.

The first step in redesigning is to determine how the social media platform works and the business's objectives. The critical element of social media platforms is user engagement and the active users associated with the platform, which generates revenue for the company. This is brought by creating spam and spreading misinformation to the users. In other words, these bots try to create a lot of temporary chaos in the community, leading to many conflicts and making it a prominent and trending topic for the day. This gets more people involved, and eventually, the platform makes money by user engagement, but it also leads to a lot of disagreements and fights and can even cause mental health problems among people who are deeply involved. Also, regarding data integrity, many social bots get users to give them their data by offering a few services in exchange. [6]

For example, Twitter recently agreed to eliminate a million fake accounts and social bots every day. However, this happened after Elon Musk took over Twitter [7]. Therefore, to build and redesign the social media platform, moderating the bots is a great place to start. Here are some ways to deal with and redesign the problem:

1. Showing every user who signs up for social media the exact number of automated social bots in the platform.
2. Indicating the use case and specialty of each social bot used by the platform.
3. Making a clear distinction and maintaining transparency between essential platform bots and user-made bots so that the end user knows how each bot can be used.
4. Constantly Getting rid of and removing harmful bots that could put user data at risk.
5. Generating a weekly report to show the number of bots a user account interacts with.
6. Monitoring fake profiles and bots used to increase the number of followers, and removing accounts that manipulate likes and comments using purchased bots.

Overall, when the social media platform focuses on being transparent with the real users and showcasing the number of automated social bots and their use cases, it will build trust in the platform, which could be highly advantageous for acquiring more customers, thereby creating a unique market offering. In addition, prohibiting these harmful bots and paid bots used for fake followers could assist social media platforms in revealing the reality of an influencer, which could significantly impact the mental health of young fan-base individuals.

2.2 Content moderation and algorithmic influence

Content moderation and algorithmic influence govern the average time a user spends on a social networking platform and play a significant role in user engagement. Content moderation is a process automated mainly by social media platforms that work on reviewing, filtering and blocking profiles that violate community guidelines. Today, though, everything has a way out. Even with the most significant algorithms, harmful and insensitive content continues to be shared on social media platforms, sparking conflicts and spreading negativity within user communities.

Such content may appear improper to users, and more harmful content becomes publicly available on platforms each day, eventually evading content moderation algorithms. In contrast, algorithmic influence refers to how social media sites use complex algorithms to personalize each user's feed, increasing user engagement. User history, preferences, and interests often determine this. Yet, this can have unintended repercussions when the feed suggests inaccurate or harmful information [8].

Currently, social media companies have no intention of disclosing and maintaining openness in order to give users the full functionality of the feed. The suggestions below could be an excellent way to redesign the existing platform to moderate content better and implement better algorithmic influence.

1. Increasing the workforce to review the content rather than relying on automated bots to block harmful content.
2. Establishing clear policies and taking prompt action when guidelines are violated or ignored.
3. Encouraging users to report harmful content on the platform, so that platform engineers know it.
4. Ensuring transparency with users such that the guidelines are accessible with a single click and showing how content moderations operate.
5. Prioritizing quality over user engagement provides user feeds with quality content rather than pushing excessive non-significant content.
6. Offering extensive user control so that users may toggle their interests and personalize the feed to their satisfaction.
7. Combating misinformation would be a significant game-changer in redesigning social media. It was found that people rather than social bots distribute most of the disinformation [9]. Thus, providing an API that identifies fake news in every news article shortly after it is published will significantly reduce the prevalence of disinformation. In addition, the implemented technology could indicate and affirm at the bottom of the post whether the information is accurate.
8. Finally, the complexity of profile tampering, impersonation, and parody accounts has made social media unsafe. These accounts harm reputation, disseminate false information, and contribute to online abuse. Consequently, discouraging profile tuning and allowing users to report and deactivate fraudulent profiles and parody accounts are the most effective strategies to address this issue. There should be a transparent regulation that a public figure can only have one original account, and there should be no room for parody. In addition, most influencers tune their profiles by "pretending positive and pushing false," revealing only the positive aspects of their lives and concealing the unpleasant realities, which creates a massive bubble among young people and leads to mental health concerns [10]. This could be prevented by disabling these profiles and urging people to report them.

When these modifications are done, the redesign of the social media platform will be extremely effective. The majority of redesign techniques involve strengthening the workforce, improving company diversity, enhancing the algorithms, and continuously monitoring the online activity of social media platforms. If these improvements are implemented appropriately, social media has the potential to undergo a dramatic transformation, making all users feel more secure and protected when browsing these platforms. Of course, eliminating parody and fraudulent accounts will have a negative impact on user engagement, but this is a crucial step in guaranteeing a positive shift on the platforms.

2.3 Security and privacy must take precedence in social media

Privacy and security in online digital platforms and social media have become a significant concern and a daily security risk. Over the years, there have been multiple significant data breaches on some influential and well-known social media sites, compromising more than a billion user accounts on each platform. This is a substantial turndown in social media usage and also the internet. Yet, there has been no solution until today, and user data remains at risk. Moreover, it is apparent that social media sites typically eavesdrop via the phone microphone and generate advertisements depending on the conversation, which is scary [11-13]. The steps required to redesign social media security and privacy are listed.

1. Displaying maximum transparency even when eavesdropping in on conversations for market research so that the user knows the conversation is being taped.
2. Giving users strict control over their data and allowing them to select the data being shared.
3. Frequent security audits for each user account allow users to comprehend the application's permissions.
4. Taking proactive actions to ensure that the product's security features are effectively implemented. Examples include end-to-end encryption and enforcing two-factor authentication.

Therefore, the security and privacy of end users must be the focal point and most important aspect of the final redesign. In addition, this degree of openness by social media platforms will help ensure that users trust the platform. Half of the world's problems and political agendas would be solved if all the design changes on social media platforms were implemented.

REFERENCES

- [1] Keles, B., McCrae, N. and Grealish, A. (2019) "The influence of social media on depression, anxiety and psychological distress in adolescents," *International Journal of Adolescence and Youth*, 25(1), pp. 79–93. <https://doi.org/10.1080/02673843.2019.1590851>.
- [2] E.T. (2018) Editorial team, QS GEN. <https://qs-gen.com/ethical-design-is-the-answer-to-some-of-social-medias-problems/>.
- [3] Kai-Cheng Yang Doctoral Student in Informatics and Filippo Menczer Professor of Informatics and Computer Science (2023) How many bots are on Twitter? <https://theconversation.com/how-many-bots-are-on-twitter-the-question-is-difficult-to-answer-and-misses-the-point-183425>
- [4] Ali Professor, R., McAlaney Associate Professor in Psychology, J. and Alutaybi PhD Candidate in Computing and Informatics, A. (2022) Redesigning social media platforms to reduce 'Fomo', *The Conversation*: <https://theconversation.com/redesigning-social-media-platforms-to-reduce-fomo-124228>
- [5] Gaubys, J. How many people use social media in 2023? Oberlo. Oberlo. <https://www.oberlo.com/statistics/how-many-people-use-social-media>
- [6] Social media sites that have lost the most amount of your data (2022) Business Plus. <https://businessplus.ie/tech/social-media-lost-user-data/>
- [7] Twitter's bot: How bad is it for businesses? <https://spideraf.com/media/articles/twitter-bot-problem-how-bad-is-it-for-businesses>
- [8] Londoño, J. impact of the widespread adoption of algorithm-backed content moderation in social media, <https://www.americanactionforum.org/insight/assessing-the-impact-of-the-widespread-adoption-of-algorithm-backed-content-moderation>
- [9] Peter Dizikes | MIT News Office (no date) Study: On Twitter, false news travels faster than true stories, MIT News | Massachusetts Institute of Technology. <https://news.mit.edu/2018/study-twitter-false-news-travels-faster-true-stories-0308>.
- [10] Rachamalla, A. (2022) Faking happiness on social media, <https://www.endnowfoundation.org/faking-happiness-on-social-media-php/>
- [11] Kumar, Senthil & Kandasamy, Saravanakumar & K, Deepa. (2016). On Privacy and Security in Social Media. 78. 114-119. 10.1016/j.procs.2016.02.019.
- [12] Social media sites that have lost the most amount of your data (2022) Business Plus. <https://businessplus.ie/tech/social-media-lost-user-data/>
- [13] Selman, H. (2021) *Why we see Digital ads after talking*, www.mcnuttpartners.com/why-we-see-digital-ads-after-talking-about-something/