Economic and Social Council

Creating a framework for regulating the effect of social media and Internet search engine algorithms

Research Report

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"let us sing songs of freedom together"

Forum: Economic and Social Council

Issue: Creating a framework for regulating the effect of social media and Internet search engines

Position: Deputy President

Introduction

The appearance of social media and search engines with site-scoring algorithms in the late 1990s has altered the life and the point of view of the general public regarding countless issues. It is crucial to create a framework respecting the underlying damage an unregulated system would bring forward. Since the 2016 Twitter scandal, which almost put the USA's presidential election into possible jeopardy when personal data belonging to millions was collected by Facebook without consent and exploited to base political propaganda on the users' beliefs, the world has opened its eyes to the controversy that is social media. Therefore, many adjustments have been established to avoid invasion of privacy, identity theft, cyberbullying, or underage individuals seeing offensive images and messages on applications such as Instagram or Facebook or web browsers like Google Chrome or Safari. On the other hand, a search engine bias, which is more likely to exclude non-normative viewpoints in favour of the current "popular" opinion, can also result in less exposure towards controversial and divisive topics. Eli Pariser, who identified this arising issue, calls it the filter bubble, enabling users to isolate themselves from contrasting ideals and worldviews.

Definition of Key Terms

Freedom of information:

The right to see information kept by a public organisation, government, etc.:

Freedom of expression:

Freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of one 's own country borders.

Right to be informed:

The Right to Be Informed is a General Data Protection Regulation (GDPR) right of data subjects to know how their personal information is collected and used. Under the Right to Be Informed, businesses and websites must provide individuals with details of their personal data collection and processing. This is usually done in the form of a privacy policy.

Search engines' algorithms:

A search algorithm is a unique formula that a search engine uses to retrieve specific information stored within a data structure and determine the significance of a web page and its content. Search algorithms are unique to their search engine and vary widely in how they rank pages.

Social networks:
Websites and applications that allow users and organisations to connect, communicate, share information, and form relationships.

New media:
New media is a term that encompasses two trends that have occurred over the past few decades: the evolution of existing media delivery systems and the development of new digital communication technologies.

Filter bubble/Echo chambers:
Filter bubble is an algorithmic bias when users only encounter information that adheres to or are consistent with a particular political or social ideology. It conforms and reinforces their beliefs based on their previous online experience.

Search engine bias:
Search engine technology is not neutral, but instead has embedded features in its design that favour some values over others. Moreover, search algorithms do not use objective criteria in generating their lists of results for search queries.

General Overview
The evolution of both search engines and social media resulted in a global effect that wasn't taken into account in the beginning. In 1990, a university student named Alan Emtage invented the first search engine, Archie. Soon, followed by numerous sites aiming to outdo one another, Archie was no more than an afterthought. The rise of social media platforms and Internet search engines has transformed the way information is disseminated, opinions are formed, and societies function. While these technologies have brought numerous benefits, they have also raised concerns regarding the unbridled power of these platforms and the algorithms that underpin them. The need for a regulatory framework is apparent. It enables us to strike a balance between innovation and responsible technology use.

In recent years, several concerns have emerged, highlighting the need to establish a regulating framework:

The influence and power of Algorithms

Social media platforms and search engines rely heavily on complex algorithms to curate and prioritise content. These algorithms determine what we see in our news feeds, search results, and recommendations. Their influence is profound, as they can shape public opinion, amplify certain voices, and even have societal implications, such as impacting elections or contributing to the spread of misinformation.

Privacy issues

The collection and utilization of user data by tech giants for targeted advertising has raised concerns about user privacy and data security. Users may not fully understand how their personal information is collected, used, and shared.

Echo chambers and filter bubbles

Social media platforms often employ algorithms that curate users' news feeds based on their preferences and past behaviour This leads to filter bubbles, where users are exposed only to information that reinforces their beliefs and limits exposure to diverse viewpoints. In addition, due to erroneous assumptions in the machine's learning process, algorithms can perpetuate bias and discrimination. It results in unfair outcomes, such as privileging one arbitrary group over another. Moreover, algorithms are influenced by the "popular" sites and often end up favouring them, leading to the limitation of access to differing beliefs and results in a polarised perspective.

Addiction and mental health

Social media is designed to keep users engaged for longer periods of time. The excessive use of the aforementioned sites can lead to potential addiction and have an adverse effect on mental health, including anxiety, depression, and increased stress. This phenomenon is particularly common among younger users. People have changed their priorities regarding menial daily tasks, for instance, uploading and sharing a meal before eating it. A constant need to measure up is also induced in the users by the people, who have numerous options to voice negative and damaging opinions toward the publisher.

Misinformation and disinformation

Algorithms can inadvertently promote false or misleading information, contributing to the proliferation of fake news and undermining the credibility of information sources. This poses significant risks to public discourse and decision-making. All, who have a great understanding of how the internet works are able to promote fake news. The creation of multiple social media accounts by bots to spread disinformation, political groups, and organisations targeting users with ads that look like news. They often present strong, prejudiced opinions. Furthermore, algorithms are capable of directing them at an audience that is the most likely to reinforce them.

Due to many technological companies operating globally, enforcing regulations consistently across borders proves to be difficult. It's a delicate task striking a balance between regulating harmful content and protecting freedom of speech, a fundamental part of democracy.

Major Parties Involved

Internet Engineering Task Force (IETF)

IETF was founded in 1986 with the purpose of addressing various technical challenges and developing specifications for Internet technologies. They do not control the Internet, only propose a trajectory of the Internet in which it should develop. All its participants are volunteers, participating as individuals and making the Internet work better by producing high-quality, relevant technical documents that influence the way people design, use, and manage the Internet.

United States of America

The United States of America's regulatory system consists of the Federal Trade

Commission (FTC) founded in 1914. Its mission is to promote consumer protection and prevent anti-competitive business practices in the marketplace. In previous years, there have been discussions to implement data protection laws as well. Moreover, tech companies have faced antitrust scrutiny, resulting in investigations to determine whether they have abused their market dominance or not.

European Union

The European Union (EU) has implemented the General Data Protection Regulation (GDPR) which came into effect in May 2018, enforcing strict laws about the handling of data of European citizens.

Australia

The country passed a law in 2018 in regard to requiring tech companies to provide access to encrypted communications to law enforcement agencies. Furthermore, in 2021 they introduced legislation that ensures that tech companies pay news organisations for content.

India

India has proposed several regulations including Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules in 2021. They have put forward other regulations as well, such as election interference, fake news and user privacy.

United Kingdom

An online safety bill was proposed by the British government in 2021 , aiming to make social media platforms and other online services more accountable for the content that is shared on their sites. The bill is focused on user safety and protection against misinformation and harmful content.

People's Republic of China

China is primarily centred around censorship and monitoring of online activities resulting in stringent regulations regarding the control of social media and search engines.

Timeline of Events

1960	The concept of hypertext and the idea of a "memex" is introduced by Ted Nelson, a computer pioneer.
1969	The development of ARPANET, the precursor to the modern internet, begins.
1971	The first email system is developed by Ray Tomlinson.
1978	Ward Christensen and Randy Suess create the first public computer bulletin board system (BBS)

1982 The term "Internet" is used for the first time.

1986 Internet Engineer Task Force founded to help shape the development of the Internet

1989 Tim Berners-Lee, a British scientist, proposes the World Wide Web (WWW) system, laying the foundation for modern web pages and URLs.

1990 Archie, the first search engine, is created.

1991 Gopher, a protocol for distributing, searching, and retrieving documents, is developed.

1993 Mosaic, the first widely-used web browser, is released.

1994 Yahoo! is founded by Jerry Yang and David Filo, becoming one of the first popular web directories

1994 Geocities, a web hosting service and social networking site, is founded

1995 TheGlobe.com, one of the first social networking sites, is launched.

1997 Six Degrees.com, considered the first recognizable social media site, is launched.

1998 Google is founded by Larry Page and Sergey Brin.

1998 The first activist social media site is launched, Moveon.org.

2003 The introduction of Google AdSense, allowing website owners to display targeted ads.

2003 LinkedIn, a professional networking site, is founded.

2004 Facebook is founded by Mark Zuckerberg, initially for Harvard University students.

2005 YouTube, a video-sharing platform, is founded by Steve Chen, Chad Hurley, and Jawed Karim.

2006	Twitter, a microblogging platform, is launched to the public.
2008	WhatsApp, a messaging app, is launched.
2009	Microsoft launches Bing, a search engine to compete with Google
2010	Instagram is launched.
2010s	Facebook - Cambridge Analytica Data Scandal.
2012	Facebook acquires Instagram.
2012	Pinterest, a visual discovery and bookmarking platform, gains widespread use.
2013	Vine, a short-form video hosting service, is launched (later discontinued in 2017).
2013	WhatsApp is acquired by Facebook
2016	TikTok is released internationally.
2018	Facebook reaches 2.2 billion monthly active users, making it the largest social media platform.
2018	GDPR (General Data Protection Regulation) is implemented in the European Union.
2019	Instagram removes public likes to combat social pressure and promote well-being.
2020	Due to Covid-19 Microsoft Teams and Zoom experience a surge in usage.

Possible Solutions

Transparency

Requiring the implementation of regulations that hold companies accountable for the consequences of their algorithms and mandate the disclosure of algorithmic changes, how algorithms influence user behaviour, and their content moderation policies (how it is prioritised, recommended, or filtered) would ensure transparency, enabling experts and the regular users to monitor and review the applications, search engines and web pages. Furthermore, establishing regulatory bodies consisting of experts from diverse fields to

oversee algorithmic processes, would assure they align with ethical standards and societal norms.

Data privacy and protection

Data minimization would enforce strict limitations on the collection and retention of user data and minimise the amount of personal information companies are able to gather for algorithmic targeting. Besides, user consent would safeguard that users provide informed consent for data collection, as a result empowering them to make conscious choices about their online privacy. Moreover, allowing them to have significantly greater control over their personal data and how it is used.

Research And Development

In order to create a comprehensive framework that is able to strike a balance between preserving user freedom, ensuring online safety, and regulating the influence of social media and internet search engine algorithms on society can only be done with thorough research and proper funding. Allocating resources for research on the impact of the aforementioned influences, enabling experts to understand evolving challenges and devise appropriate regulatory measures. In addition, providing grants and incentives for the development of alternative algorithms that would focus on prioritising user well-being and democratic values, would encourage the industry to explore ethical alternatives.

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