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Google and Facebook as a Way of Life for Millions of People in a Digital Society

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Abstract

The article explores Google and Facebook platforms as quite innovative companies that provide services and create many new products enjoyed by millions. Apart from providing services, advertisers know the details of users' lives and offer their services to them with extreme accuracy based on their social network profile. Facebook has created a number of innovations that track users on the Internet, constantly updating the window of life interests. At the same time, no one sees what happens to the data generated by all the "likes", how the social network's data mining mechanism works, and how our data and hobbies are identified.

The aim of the article is to conceptualize the activities of Google and Facebook platforms that provide a way of life for millions of people in the digital society. The subject of the study is Google and Facebook as a lifestyle of millions. The object of the study is the impact of digital society on the improvement of Google and Facebook through information and communication and information and communication technologies.

Keywords

Google, Facebook, lifestyle, digital society

Introduction

Social media has been criticized as a result of violating laws, including human privacy (Van Schaik et al., 2018), child safety (Biernesser et al., 2020), and the dissemination of speech that sows racial and social inequality (Chetty & Alathur, 2018). These campaigns are not the only ones using our personal data, the same applies to Twitter campaigns, Instagram, hundreds of other companies, so you should manage your data with care.

For the article, we rely on the research of Mark Goodman (2016), titled "Future Crimes: Everything Is Connected, Everyone Is Vulnerable and What We Can Do About It." Goodman is widely recognized as a leading expert in the field of online counterterrorism, specializing in the exploration of corporate crimes related to emerging technologies such as artificial intelligence, the Internet of Things, nanotechnology, and virtual reality. Therefore, we draw lessons from Mark Goodman's work, particularly his recommendations on how to safely navigate information flows and technologies to avoid harm. A particularly informative and relevant contribution to this study comes from the interview of Oleg Maltsev and Elizabeth Haas Edersheim, titled "Insight into theory and business practice" (Centre for Criminology, 2021a).

Furthermore, we utilize articles by V. Voronkova et al. (2020, 2021), R. Andriukaitene, V. Nikitenko et al. (2021), R. Oleksenko (2017), and O. Punchchenko to enrich the theoretical and practical aspects of our research. In terms of methodology, our approach involves systematic analysis, which serves as a framework for organizing and structuring the issues at hand. We employ rationality and explore alternative means to achieve our research goals. Additionally, we apply general philosophical methods such as analysis and synthesis, abstraction, generalization of scientific findings, comparison of research outcomes, correlations between elements of the digital society, construction of hypotheses, drawing inferences, and making generalizations. These methods contribute to a rational and objective research process, imbuing it with meaningful and content-rich insights.

Emerging platform leaders are reshaping their trajectories towards success by realigning their organizations with their unique values. They are advancing by implementing novel strategies, attracting fresh clientele, and establishing innovative business models that set new rules of the game, surpassing giants like Facebook and Google. These tech behemoths exported typically American values, characterized by self-centered consumerism and social disengagement, to the world. The automation and artificial intelligence they harnessed morphed into tools for manipulating ideas, creating the illusion of power while exacerbating democratic flaws. Attackers exploited the full capabilities of Facebook and Google to disseminate misinformation and hate speech, aiming to sway citizens during elections. Through the Facebook and Google platforms, these attackers sought to undermine democracy, civil rights, privacy, civic well-being, and innovation. Regrettably, these platforms themselves bear significant responsibility for the extensive harm inflicted upon ordinary citizens.

In just a few years, Google has undergone a significant transformation. What started as a simple search engine has evolved into a powerhouse that millions of people turn to for various purposes. It has become the go-to platform for receiving instructions, managing schedules, maintaining address books, voicemail, making phone calls, watching videos, and indulging in entertainment while navigating the vast realm of the World Wide Web. Google's influence extends to the realm of applications, with billions of downloads, and it plays a central role in a multitude of tasks, from banking and cooking to organizing and preserving cherished memories, effectively shaping our understanding of ontology, society, and mentality.

The human connection to the internet spans across various devices, including laptops, cell phones, iPads, and an array of other gadgets such as devices, cable boxes, game consoles, television receivers, and Apple TV digital media players. In this digital age, billions of individuals willingly share the most intimate aspects of their lives on platforms like Facebook, Twitter, and Instagram. These platforms grant access to what can be termed as "our personal

social network," encompassing both personal and business communications. Simultaneously, we actively engage with social media, sharing information about our aspirations, goals, and desires, while receiving updates from our friends, family, and colleagues (Voronkova et al., 2021).

Article Relevance

The significance of this research topic becomes evident when we consider that in the digital society, our identity is intricately tied to the technological facets of modern life, specifically the essential services of algorithmic culture on which we have grown increasingly dependent. Every day, millions of individuals spend over five hours online using their digital devices. These platforms document our lives, chronicling pivotal moments such as meetings, graduations, real estate transactions, the arrival of pets, marriages, divorces, births, and much more. Furthermore, social networks have demonstrated their potential to influence geopolitical events, as evidenced by various incidents in Ukraine, Belarus, Kazakhstan, and around the world. Digital services can wield a dual-edged sword, serving both constructive and destructive purposes.

The allure of these digital tools is self-evident. Most of us dedicate our leisure time to scouring the internet for music, recipes, investment insights, news updates, guidance, business prospects, social interactions, and sports results (Houghton et al., 2020). Giants like Google, Facebook, Twitter, YouTube, and TikTok offer us valuable services such as email, news, video content, and a platform to share advertisements and photos, all seemingly for free. However, in return, we provide them with information about ourselves, fulfilling our needs in one way or another.

Today, Google has expanded its offerings to include itinerary services and the capability to track our physical movements, phone calls, voicemail messages through voice recognition and transcription, essentially monitoring our every action when we carry our smartphones with us. Despite assurances regarding privacy policies, these companies possess comprehensive and detailed profiles of our activities within their digital realms. In essence, an individual is not merely a customer of Google but also its product, as the company is committed to extracting the maximum amount of information from each of us. Google processes a staggering 24 petabytes of data daily, equivalent to 1 million gigabytes or thousands of terabytes, underlining the immense power derived from possessing such vast datasets. All of this underscores the formidable influence wielded by these platforms in their continuous pursuit of technological advancement and data acquisition.

Research Methods

This study of Google and Facebook as social phenomena, representing the lifestyle of millions in the digital age, relies on the information method. This method has been evolved thanks to the digital society, characterized by high-tech features such as artificial intelligence, robotics, implanted technologies, new digital realities, pervasive computerization, the Internet of Things, the emergence of big data (BIG DATA), and the role of artificial intelligence in decision-making, as well as 3D production.

The novelty of this approach in studying Google and Facebook lies in the application of complexity theory, systemic analysis, synergetics, and structural-functional methodology. These components are employed to analyze the digital society. Structural-functional analysis helps us view the digital society as a complex, nonlinear social system with multiple subsystems that continually interact with the environment. The combination of synergetic and systemic

methods allows us to explain the intricacies of the digital society.

Anthropological and socio-axiological approaches are also integral to uncovering the dimensions of the digital society, which revolves around individuals, education, knowledge, and human engagement in the society of knowledge and innovation (Christian & Griffiths, 2016).

Systemic analysis and synthesis play a pivotal role in dissecting Google and Facebook as social phenomena. System methodology offers a structured approach to managing complex, interconnected activities. It allows for the analysis of constituent components and their systematic integration. The essence of the system approach can be distilled into the following steps:

- 1. Defining goals and establishing their hierarchy.
- 2. Attaining these objectives at the lowest possible cost through a comparative analysis of alternative approaches and methods for achieving them, followed by the selection of the most suitable option.
- 3. Quantitative quantification of goals, rooted in a comprehensive evaluation of all possible developmental pathways for the digital society and its platforms (Voronkova, 2005).

We should concur with Oleg Maltsev in his statement that the work of analysts is to process all the necessary information and, at the first level, to provide a certain concept of further actions (Centre for Criminology, 2021c). The second level is informational, and here we collect all available and less available information. At the third level, it is important for us to have our apparatus, which is capable of creating the conditions we need in the market to realize what we have planned. In the classical version, these three levels are like three keys on which the solution to a problem in the market stands, i.e., they are the keys to solving the equation (Centre for Criminology, 2021c). This study respects the coherent relationship between analysis and synthesis, inductive and deductive models, as well as the principle-postulate of truth validity, which evolves as the driving force and source of any evolution (Oleksenko, 2017).

Results

Our analysis has revealed that Google's initial objective was to organize the global information space, primarily by creating a superior search engine. However, as the computer world underwent a profound transformation towards the "cloud," this objective converged with the development of internet-based products and services funded by advertising revenues.

- 1. The study delves into the position and significance of the global information system. Undoubtedly, there are undeniable positive aspects to this technological evolution. Hence, the primary objective of this research was to conduct a comprehensive analysis of the advantages and disadvantages associated with Facebook as a way of life for millions.
- 2. The study identifies the place and role of Facebook within the digital society. During its initial emergence, Facebook was perceived as a platform of global significance that had the potential to bring positive technological changes to the world. The expectation was that it would easily amass 100 million users, marking a remarkable success. However, little did anyone anticipate that such success could bring about consequences other than happiness.
- 3. The study scrutinizes the underlying values propagated on Facebook. In practice, Facebook has established and maintains a sophisticated structure built around a value system that increasingly clashes with the principles held by the users it serves.
- 4. The study reveals the technologies employed by Facebook. Among these techniques, persuasion plays a prominent role because there is a universal desire for validation from others. The "like" button has gained significance precisely due to our innate need for social approval, and Facebook essentially deals in the currency of user attention.

1. The place and role of the global information system

The positive aspects of this technological evolution are undeniable, so we decided to explore the pros and cons of Facebook as a way of life for millions. The mutual connectivity that the Internet provides through its fundamental architecture means that people around the world can now be brought together in society, ontology, and humanity like never before. While the benefits of the online world are well attested and often highlighted in the tech industry, there is a downside to this mutual connectedness. Every day, more and more people "connect" their daily lives to the global information network, which makes our lives easier and more efficient without stopping for a moment. But each of us has to ask ourselves: what does this really mean (Goodman, 2016).

At the same time, Facebook's internet platforms manipulate attention and harm millions of people, refusing to take responsibility for the consequences of their actions. They resort to fictitious ways to profit from the most vulnerable parts of human psychology, collecting and using personal data, and developing business models without protecting citizens (Montgomery, 2015; Sørensen, 2016; Van Der Schyff et al., 2020). It leads to degradation and de-evolution. Network users should learn to be skeptical of their favorite products that harm humans, hold platforms accountable for the consequences of their decisions, and encourage lawmakers to regulate them to protect the public interest.

Indeed, technology is opening up the world and providing access to knowledge that was out of reach for previous generations. Technology has enabled humanity to accomplish incredible things, but all of this comes at a price. Technology, starting with television, is changing the way humans interact with the world, transforming active citizenship with ideas into passive consumption of content and conversations into communication in a digital environment. Information networks subtly transform us from citizens to consumers, as Facebook is primarily a business aimed at maximizing profits, managed by a single person (Gupta, 2018).

Facebook functions as a colossal artificial intelligence entity that wields influence across users' activities, spanning both political and non-political realms. It continually deepens its understanding of each user, while its tools evolve into formidable weapons. Some experts argue that new technologies themselves are neither inherently good nor bad; their impact depends on how people employ them. In the digital society, the line between the physical and digital worlds is fading, creating layers of concealed information imperceptible to the naked eye. However, with augmented reality glasses, a wealth of personalized and interactive hidden data becomes accessible. For instance, the 2.0 network introduced multimedia content, interactive advertising, and social networking. The convergence of fast 5G, augmented reality devices, countless sensors, and robust artificial intelligence now allows for the overlay of digital images onto the physical environment. Virtual reality (Kuai & Hao, 2019) immerses individuals in an artificially constructed continuum, achieved by immersing oneself in an inherent order and imagining one's presence in the information environment.

Certain companies provide a feature known as "visual search," transitioning users into a new matrix of audiovisual reality where they engage with like-minded individuals as well as affective artificial entities. In 2017, Google introduced Google Lens, a visual search engine capable of identifying purchasable items and deciphering the surrounding environment. The competition among companies has propelled information and communication technologies to new heights (O'Connor & McDermott, 1997).

By the close of 2018, the number of visual search engines had surpassed one billion. Today, reality itself evolves into a marketplace characterized by interdynamics and interevolution, generating objectively (materially) metabolized correlations and relationships. We are rapidly approaching a future in which artificial intelligence will conduct the majority of our shopping, continuously presenting us with products and services we did not even know we needed. These impending changes pose a significant threat to traditional advertisers while

offering numerous advantages to consumers within the new information landscape of the global information system (O'Neil, 2016).

The rapid advancement of technology propels us forward on the path toward "computerized wealth and prosperity." Demonetization is already well underway, with affordable electricity ensuring clean water, and autonomous vehicles representing a cornerstone of clean and cost-effective transportation and housing.

The fusion of artificial intelligence, 5G connectivity, and augmented/virtual reality is shaping novel models (sub-models) of affordable education (Calvert & Abadia, 2020), healthcare (Javaid & Haleem, 2020), and personal development, constituting the innovative evolutionary framework of the digital society. Information and communication technologies are effectively contributing to making the world a better place.

2. Facebook as a Potent Economic Force in the Digital Society

During its inception, Facebook was seen as a global platform with the potential to use technology for positive world-changing impacts. The expectation was that it would effortlessly amass 100 million users, heralding a resounding success. However, its founders likely did not anticipate the flip side of this success, which involved the development of influence and manipulation technologies. Facebook possessed two significant advantages over earlier social networks: it encouraged genuine identity and granted users control over their personal information.

From a business perspective, Facebook's initial public offering was an overwhelming success, driving an influx of users who engaged in computerized interactions, expanding horizons. For individuals, this platform deepened their emotional connections, perceptions, imaginings, and interpretations within the information models of the digital society. As a result of its public offering, Facebook experienced a substantial user boom, instilling investor confidence. Over approximately eight and a half years, Facebook evolved into a potent economic force, continually updating its algorithms and capitalizing on advertising. Since 2012, the integration of ads into the news feed enabled precise ad targeting, which has continuously improved within the framework of an ever-evolving timeline.

Facebook facilitates personalization, interactivity, and the sharing of information among individuals, materializing these aspects through verbal-optical dialogues, along with computer-generated holograms, schemes, and polymodels. When 2.2 billion users click on links, share posts, and engage in commenting activities every month, with 1.47 billion of them doing so weekly, Facebook's artificial intelligence accumulates an extensive understanding of its users, surpassing their own comprehension. Although this information is securely stored, it remains potentially enticing to malicious actors, despite protective measures. Facebook's core business model revolves around providing access to this data for those willing to pay for it (Voronkova et al., 2021).

Platforms engage in fierce competition to captivate the "autonomous simulacrum" of users, which is addressed by artificial intelligence to curate content that elicits emotional responses. Facebook benefits significantly when an emotionally charged user becomes even more engaged with emotionally resonant content. With comprehensive knowledge about each user, Facebook has the capacity to purposefully mold the news feed to enhance emotional reactions within the "autonomous simulacrum." In postmodern society, humans configure themselves into virtual artifacts, grouping themselves into virtual communities, often comprising family, friends, and Facebook groups, functioning as digital counterparts of the reality we belong to.

Social networking enables us to expand our social circles, forming a remarkably diverse virtual community that mimics quasi-reality. The news feed allows us to surround ourselves with like-minded individuals. When we receive content from these like-minded connections, such as family, friends, or groups, our defenses tend to lower, contributing to the prevalence

of misinformation on Facebook. Facebook offers the creation of groups spanning various interests, from hobbies and entertainment to sports teams, communities, religious congregations, celebrities, and a wide array of political affiliations. Facebook values these groups as they simplify advertising targeting, and malicious actors exploit them for similar reasons, exploiting the illusions of sensory and emotional quasi-socialization (Nikitenko et al., 2021).

Research indicates that when individuals with a penchant for discourse engage in discussions on various issues, their viewpoints tend to become more radicalized. This phenomenon can erode the credibility of rational discourse and its connection to reality. Facebook often fosters the notion that it merely serves as a platform for others' actions and is not accountable for the actions of third parties. Moreover, in today's world, there are more mobile phones than there are people, and these devices have seamlessly integrated into our lives, supplanting cameras, computers, calculators, calendars, address books, radios, televisions, and gaming consoles. They constantly collect data about us, including our location, interactions, photos, preferences, and more, serving as a perpetual source of information. As a result, platforms like Google and Facebook have become an integral aspect of the digital lives of millions, shaping linguistic interpretations and creating illusory subject-objects within the virtual world that people immerse themselves in (Voronkova et al., 2020).

3. Values Promoted on Facebook

In reality, Facebook has established and maintains a complex set of values that increasingly clash with user values. While Facebook claims that users have control over their experience, it is actually artificial intelligence, algorithms, and menus designed by its engineers that dictate every facet of the individual experience. The competition for attention among various media and technologies shapes an artificial culture and influences social behavior.

As analyses have shown, radical viewpoints tend to garner more attention from consumers, leading platforms to recommend content aligning with these views. Filter bubbles facilitate news feeds in effectively retaining consumers' attention. Unfortunately, once ensconced within these filter bubbles, individuals become more susceptible to echo chambers, isolation, and extremism, gravitating toward ideas and individuals they are comfortable with. The internet allows for the expression of even the most socially unacceptable ideas, amplifying radical voices over moderate ones. Platforms with no boundaries can inadvertently encourage hate speech (Castaño-Pulgarín et al., 2021), rendering this "cultural" sphere an immersive experience, drawing upon spatial and dimensional aspects of online interactions (Oleksenko, 2017).

Internet platforms often employ the rhetoric of free speech to justify their business practices, which can inadvertently fuel radicalism in various ways. This allows individuals to be drawn into this subject matter. Extremists frequently connect with one another, creating a semblance of legitimacy bridging the virtual and real-world societal realms. The protection of real-world stigmas takes the communication between extremists on online platforms to a more perilous level, and the platforms' algorithms can push users towards increasingly radical thinking. Filter bubbles prolong users' time on the site, thereby increasing revenue. Within these bubbles, users construct an alternative reality centered around shared values, whether political, religious, or otherwise, placing themselves within the fundamental contours of an "ontology inside out."

In the context of shaping the values promoted on Facebook, only the group's interests hold significance, and anything necessary for its growth is permitted. Consequently, such values often stand at odds with the foundations of democracy and are powerless against the longstanding evolution of societal taste bubbles. Facebook, as a virtual reality landscape today, serves as an ideal breeding ground for these ephemeral bubbles that eventually burst, leaving nothing behind. Those seeking to manipulate individuals within the sphere of shared sympa-

thies can do so by simply infiltrating a group and deploying the right triggers, thereby easily capturing attention. Network users at times adopt the ideas offered by these platforms as their own, presenting them as something genuinely virtual, akin to a holographic representation of the informational landscape (O'Neil, 2016).

There exists an array of tools through which platforms influence the choices made by their users. Some of these tools pertain to the interface design of each platform's menu, news feed, or notifications. While Facebook platforms suggest that users are in control, this sense of control is an illusion, and maintaining this illusion is crucial to the success of any platform. Consequently, Facebook, despite the trust placed in it, operates in a particularly subtle manner. Additionally, development teams actively employ "hidden patterns" to achieve desired outcomes by persuading users to take specific actions. The primary purpose of Facebook's Terms of Service is to shield the company from legal liability.

Facebook also utilizes the concept of an "endless" news feed, which is like a bottomless bowl, keeping users engaged indefinitely. This continuous scrolling can lead to millions of people experiencing sleep deprivation as they watch videos, check Instagram, or browse Facebook. Notifications serve as another way for platforms to exploit the vulnerabilities of human psychology. Users are drawn in by a simple, low-cost action, but this action triggers a process for which they may end up paying more, and the true cost of this engagement is often unpredictable. Users often perceive these notifications as highly personal, overlooking the fact that they are automatically generated and not necessarily tailored to their individual preferences.

Google's Android operating system, offered for free to developers and users, allows the company to gather a wealth of data. Along with your mobile phone number, Android provides Google with network information, device location, call logs, contact lists, and access to various sensors that can record movement, determine location, and even assess ambient conditions like temperature, humidity, and noise levels.

For instance, as early as 2013, Facebook reported having 945 million mobile monthly users, with 53% of its revenue coming from mobile advertising, amounting to billions of dollars (Goodman, 2016). This evolution not only led to a better user interface but also introduced new methods for collecting extensive data from users' mobile devices. Oleg Maltsev and Elizabeth Haas Edersheim point out that managing information services isn't solely about financial gains; it should also prioritize improving people's lives (Centre for Criminology, 2021b). Unfortunately, not everyone follows this approach, exacerbating the existing problems. In essence, the values promoted on Facebook depend on an individual's ontologically social activity and their creative contributions, while for Facebook, income generated from network usage acts as a symbol-paradigm of the well-being of rationally acceptable existences.

4. Facebook's technologies

Facebook's technologies employ various persuasive techniques to tap into our innate desire for validation from others. The "like" button, for instance, has gained significance because of our need for social approval, and Facebook thrives on user attention as its currency. Social approval is closely linked to reciprocity, with millions of users daily engaging in actions like sharing likes and friend requests, often unaware that these behaviors are actively encouraged by the platform. Notifications like a "friend" tag on a photo serve as powerful forms of recognition, setting off a cycle of reciprocity. The act of "adding people as friends" was a pivotal development for Facebook, as each tagged photo becomes a valuable source of data and metadata related to location, activities, and social connections, all of which can be used to tailor advertisements effectively.

Facebook's online platform business solutions also incorporate less benevolent persuasion techniques. While platforms make significant efforts to increase user numbers, they often view users as a collective rather than individuals, and using these platforms inherently entails consenting to their rules. In such a situation, few individuals can resist the allure of

these persuasion technologies, leaving us with only the option to minimize their impact or completely avoid them. Each facet of persuasion technology serves as a means to subtly manipulate the user.

Discussion

The issues associated with internet platforms on smartphones extend beyond addiction, as they contribute to the pollution of the public space by amplifying negative voices at the expense of positive ones. Facebook's internet culture has historically championed free speech and autonomy, which worked well on a smaller scale. However, the developers of the World Wide Web failed to anticipate that on a global scale, this dynamic would shift to the detriment of public discourse. To address this, they have banned hate speech in the format of their service platform, thereby removing some legal liability.

Nevertheless, the dynamics of online platforms often favor those with malicious intent. Attackers can disseminate mischief, misinformation, and conspiracy theories on fringe websites where the most radical and sensational statements find a home, contributing to the deterioration of public discourse. Simultaneously, there is a lack of regulation regarding non-violent speech, insufficient protection for users, and companies should proactively work to mitigate emotional contagion before it leads to significant harm. Companies should also assume social responsibility for the actions of their users. Notably, Facebook has recently been pushing for hundreds of millions of mobile app users to adopt its new "Photo Sync" feature, designed to automatically upload every photo taken by a phone to the social network's servers.

Furthermore, Facebook wields a substantial impact on democracy, as technology no longer merely serves humanity but often impedes progress. Technological innovations employ various psychological techniques to capture user attention, and children are particularly vulnerable to these strategies. It is no surprise that today, children receive more medical diagnoses related to technology use (Chester et al., 2020). Internet platforms, video games, and deceptive messaging give rise to a range of issues that are more addictive than similar products two decades ago. People of all ages now devote an extensive portion of their active daily hours to internet platforms. Children and adolescents spend a lot of time watching screens, including smartphones, tablets, gaming consoles, TVs, and computers. On average, children ages 8-12 in the United States spend 4-6 hours a day watching or using screens, and teens spend up to 9 hours (The American Academy of Child and Adolescent Psychiatry, 2020).

Excessive media consumption is not a new concern, but social media apps on smartphones have elevated its impact (Mylonopoulos & Theoharakis, 2020). The convenience and immersive user experiences offered by smartphones allow app developers to replicate the addictive qualities of slot machines and video games, making apps significant attention monopolizers. Today's smartphones and internet platforms must be approached with humane design principles to mitigate the potential harm they can cause (Brailovskaia et al., 2019; Sternberg et al., 2020).

Google, as one of the foremost global technology giants, exerts a profound impact on the digital landscape and the lives of millions. The key aspects of Google's offerings include:

- Search Engine. Serving as the world's most popular search engine, Google is a primary information gateway for users exploring diverse topics, from recipes and scientific articles to local businesses and news.
- *Email.* Gmail, a leading email service, is a versatile tool used for messaging, professional correspondence, and managing personal and work-related emails.
- Office Applications. Google's suite of cloud-based office applications, comprising Google Docs, Google Sheets, and Google Slides, empowers users to effortlessly create, edit, and collaborate on documents, spreadsheets, and presentations.
- Android. Developed by Google, the Android operating system stands as the most

widely adopted OS for mobile devices, serving the needs of millions of smartphone and tablet users.

Facebook, another prominent global technology giant, offers a range of features that deeply influence social connections and information sharing. The key aspects of Facebook's offerings encompass:

- *Social Connections*. As one of the largest social platforms globally, Facebook enables users to maintain connections with friends, family, and colleagues. It serves as a space for sharing messages, photos, and videos, fostering social interactions.
- News and Information. Facebook functions as a significant source of news and information, providing users with updates from various publications, organizations, and public figures.
- Advertising and Marketing. Offering a platform for targeted advertising and marketing, Facebook plays a crucial role as a tool for businesses and marketers to reach specific audiences effectively.
- *Virtual Communication*. Beyond its main platform, Facebook extends its reach through subsidiaries such as Instagram, WhatsApp, and Oculus VR. These entities allow users to engage in virtual and augmented worlds, expanding the scope of communication and interaction.

Both Google and Facebook, as major players in the digital landscape, have encountered challenges related to data protection, privacy, and concerns about monopolistic practices. Their roles are pivotal in shaping the digital ecosystem and influencing communication, information retrieval, and business operations. In the digital society, both companies wield significant influence, particularly in the following aspects:

1. Impact on the Digital Economy

Digital Advertising and Marketing. Google and Facebook play a pivotal role in the realm of digital advertising and marketing. Their platforms provide advertisers with the means to target specific audiences and optimize advertising campaigns, thereby influencing the monetization of online content and shaping the business models of numerous websites and apps.

Artificial Intelligence and Machine Learning. Both giants actively engage in artificial intelligence and machine learning, contributing to technological advancements and innovation within the digital economy.

2. Data Control and Privacy

- Data Collection. Google and Facebook amass substantial amounts of user data, prompting concerns and discussions about privacy and data security. Questions arise regarding how these companies utilize and safeguard users' personal information.
- Blocked Access to Services. In certain countries, instances have been reported of Google and Facebook blocking or restricting access to their services for political or regulatory reasons. Such actions fuel debates about the influence and control these companies wield over digital access.

3. Discussions about Monopoly and Antitrust Investigations

Google and Facebook have been subject to investigations and discussions related to potential violations of antitrust laws in multiple countries. The concern stems from their dominant market positions, with questions raised about the impact on competition and consumer protection.

Both companies persist in their evolution and expansion, introducing new technologies and services like artificial intelligence, virtual reality, and cloud computing. Their continued influence in the digital society remains a significant topic of debate, especially concerning issues of competition, regulatory oversight, and data security.

Conclusions

In essence, Facebook's primary problem lies within Facebook itself. Back in 1998, Google's initial mission statement was "to organize the world's information and make it universally accessible and valuable." In contrast, Facebook articulated its mission as "Making the world more open and connected." Unfortunately, it has become clear that Facebook's mission statement is rather narrow in scope. Both companies have achieved substantial material success driven by their founders, but this success has spawned numerous unintended consequences for their users. Facebook and Google have effectively exported typically American values centered around self-centered consumerism and social disengagement. Automation and artificial intelligence, while providing the illusion of empowerment, have deepened the flaws within democracies, eroding citizens' critical thinking abilities.

Malicious actors have exploited Facebook and Google to disseminate misinformation, hate speech, and influence citizens during elections. Through these platforms, attackers have sought to undermine democracy, civil rights, privacy, civic well-being, and innovation. Paradoxically, the platforms themselves bear significant responsibility for the harm inflicted upon ordinary citizens. Democracy relies on the exchange of information, facts, and values. However, the economics of journalism have suffered, and the information marketplace has become oversaturated due to the influence of these platforms. Information and misinformation on Facebook often appear identical, with misinformation often garnering more attention and revenue, making it more appealing. Facebook's algorithms tend to favor extreme messages over neutral ones and conspiracy theories over facts. The platform's design is inherently vulnerable to abuse, as every action is governed by terms of service, and its primary focus is profit.

Facebook applies corporate standards that frequently align with the interests of the powerful, often at the expense of peaceful individuals' demands. During the 2016 presidential election, the rule of law was violated, highlighting a real threat to democracy. Facebook has faced allegations of manipulative artificial intelligence sharing user information with third-party companies, resulting in millions of leaked user profiles being exploited by malicious actors, thus compromising privacy and security.

Facebook indeed presents challenges to innovation by sometimes stifling the emergence of new ideas and technologies due to its dominant position in the social media landscape. Its size and influence can make it challenging for smaller, more innovative platforms to compete and gain traction. While Facebook may tout its ability to connect 2.2 billion people as a significant advantage, it has also given rise to the phenomenon of tribalism. This involves people forming groups based on territorial, cultural, religious, political, and other interests, often leading to polarization and antagonism towards those who do not share the same interests.

In today's digital landscape, Facebook has assumed a role that, in many ways, parallels the responsibilities of governments, especially concerning information dissemination and communication. However, unlike a democratically elected government, Facebook operates without being directly accountable to its users or the countries it affects. This raises questions about the platform's ethical and societal responsibilities and highlights the need for a reevaluation of its role and influence in the digital age.

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