

Forum:	Legal Committee (GA6)
Issue:	Establishing a Legal framework to Reduce the Market Power of Big Tech
Student Officer:	Rita Theoria Ioannidi
Position:	Co-Chair

PERSONAL INTRODUCTION

Dear Delegates,

My name is Rita (Theoria) Ioannidi and I am honored to serve as the Co-Chair of the Legal Committee (GA6) in this year's Platon School MUN (PSMUN) conference. I am an 11th Grade student at Hellenic American Educational Foundation (HAEF), Athens College.

I would like to congratulate you on your initiative to participate in this conference and make clear that I look forward to helping you construct resolutions. Since this is my first time acquiring co-chairing duties this year, I hope we will all equally enjoy this year's conference, trying to make this experience unforgettable.

I would like to mention what a wonderful experience MUN is. During the 3 years of my MUN career, I have attended numerous conferences. Despite the pandemic, I have benefited from this experience, as I have met new people with common interests, and I have acquired extensive knowledge on matters affecting a global basis.

In the following study guide, you will find important information on the topic of evaluating the working conditions in the textile, clothing, leather, and footwear industries in LEDCs. I would like to remind you that the study guide serves as an introduction to the topic. It poses a detailed overview but requires additional research in order for you to understand the topic in depth. With that in mind, I would encourage you to contact me at tioannidi@athenscollege.edu.gr without hesitation if you have any questions on the topic.

I am looking forward to meeting you at this year's PS MUN conference!

Best Regards,
Rita Theoria Ioannidi

INTRODUCTION

The emergence of Big Tech firms has altered the digital environment and changed how we connect, consume information, and conduct business. Companies like Google, Apple, Amazon, Facebook, and Microsoft have grown to be a household, commanding market. Concerns regarding the effects of these digital companies' dominance on free speech, privacy, and competition have increased in size and scope along with the tech industry as a whole.

Big Tech firms have accumulated massive volumes of user data in their pursuit of innovation and efficiency. While this has enabled them to create tailored experiences and target advertising with incredible precision, it has also generated serious concerns about data privacy, user permission, and the potential for misuse. The extent to which these businesses manage and monetize data has emerged as a key concern in conversations about market dominance. Resulting in a change in Big Tech's main aim from innovation to acquisition of data and data monetisation.

Antitrust probes, litigation, and new legislation have sought to address possible abuses of market power and restore competition as governments and regulatory bodies wrestle with the consequences of Tech Giants' dominance. The public's perception of Big Tech's influence on society, politics, and information transmission has prompted calls for greater responsibility and regulation.

Viewing that the emergence of the Big Five has affected the global economy tremendously, certain nations are feeling compromised and concerned by the lack of privacy and the sales of data, which as a result are carrying out constant investigations. These ongoing investigations explore the general scenario surrounding Big Tech's market power in this area. The main focus of the studies is their primary actors, their areas of domination, the impact of data control, and acquisitions, as well as the increasing regulatory scrutiny and public concerns. There are indications that the studies will be continued further in the near future. As the digital landscape evolves, it is critical to comprehend the dynamics of Big Tech's market power.

The immense power of Big Tech is an issue that needs to be tackled immediately, seeing as Big Tech corporations have achieved a dominant position in the market. As a direct result, this oligopoly creates high barriers to entry, limiting competition in the market. This lack of competition limits innovation, and consumer choices, and hampers small businesses. This creates an urgent need for intervention.

To connect the topic with the conference's theme, which is "The paradox of progress" we have to consider a few vital factors. To start, the paradox of progress and the power of large technology companies are two interdependent concepts that reflect

the complex relationship between technological progress and societal challenges. What the paradox of progress essentially describes is that technological progress has both positive and negative effects. Technological development brings many benefits to society, such as increased productivity, improved health care, improved communications, and economic growth. However, these advances often come at a price.

Big technology companies like Google, Facebook, Amazon, and Apple have gained enormous power and influence in the digital age. These companies often control large amounts of user data, which raises issues of data protection and data security. They also dominate markets and hinder competition and innovation, limiting consumer choice. It is also important to remember that the algorithms used by these companies shape public opinion and can influence elections, public debate, and the dissemination of information. Finally, the big tech companies are examined in issues such as content moderation, censorship, and their role in the dissemination of disinformation.

The power of big tech companies deepens the paradox of progress. As these companies drive innovation and technological advancement, their mastery may also increase the negative effects of progress, such as data breaches, job relocation through automation, and the digital divide. Facing the paradox of the progress and power of big technologies requires a multifaceted approach that includes government regulation, corporate responsibility, ethical considerations in technology development, and social awareness. The balance between technological progress and social well-being is fundamental to facing these challenges in our times.

DEFINITION OF KEY TERMS

Barriers to Entry

Anything that prohibits the entry of a new firm (competitor) into a market.¹

Big Four

Alphabet's Google, Apple, Facebook and Amazon (GAFA) are often referred to as the Big Four tech companies in the West, being the most dominant and significant companies in the sector.²

¹ Hayes, Adam . "Barriers to Entry: What You Should Know." *Investopedia*, 30 Dec. 2022, www.investopedia.com/terms/b/barrierstoentry.asp.

²"Competition: Big Four Tech Companies Increasingly on Radar of European and US Regulators." *International Bar Association*, www.ibanet.org/article/B5375E06-0798-4C92-A2AB-DBFC42802DF5.

Big Five

The term “Big Five” refers to the five largest and most influential tech companies in the United States of America, namely Google, Apple, Facebook, Amazon and Microsoft, well-known as the acronym GAFAM. When entertainment is included in the list the Big Five contain Facebook, Apple, Amazon, Netflix and Google (FAANG).³

Big Tech

Big Tech, often referred to as the Tech Giants, concerns the most dominant companies in the information industry.⁴

Bundeskartellamt

Bundeskartellamt is “an independent competition authority whose task is to protect competition in Germany. The protection of competition is a key regulatory policy objective in a market economy.”⁵

Data Driven Economy

A data economy is a global digital ecosystem in which data is gathered, organized, and exchanged by a network of companies, individuals, and institutions to create economic value.⁶

Market Power

In economics, market power is defined as the ability of a firm to influence the price at which it sells a product or service by manipulating either the supply or demand of the goods or the services to increase economic profits.⁷

Metaverse

Metaverse is defined as a virtual-reality space in which users can interact with a computer-generated environment and other users.⁸

³ “Definition of Big Five.” *PCMAG*, www.pcmag.com/encyclopedia/term/big-five.

⁴ *Big Tech Regulation - In Search of a New Framework*, www.bis.org/fsi/fsipapers20.pdf.

⁵ “Navigation and Service.” *Bundeskartellamt*, www.bundeskartellamt.de/EN/AboutUs/Bundeskartellamt/bundeskartellamt_node.html.

⁶ Smichowski, Bruno Carballa, et al. “Data-Driven Economy: Challenges and Opportunities.” *Intereconomics*, 1 Jan. 1970, www.intereconomics.eu/contents/year/2019/number/4/article/data-driven-economy-challenges-and-opportunities.html.

⁷ Kenton, Will. “What Is Market Power (Pricing Power)? Definition and Examples.” *Investopedia*, Investopedia, www.investopedia.com/terms/m/market-power.asp.

⁸ “What Is the Metaverse?” *Meta*, about.meta.com/what-is-the-metaverse/.

Non-Fungible Tokens (NFTs)

The term NFTs includes “unique cryptographic tokens that exist on a blockchain and cannot be replicated”, such as representations of digital or real-world items like artwork and real estate.⁹

Privacy Sandbox

The Privacy Sandbox “aims to create technologies that both protect people's privacy online and give companies and developers tools to build thriving digital businesses”.¹⁰

Technology Monopoly

In economics, the term Technology Monopoly is defined as “a monopoly that occurs when a single firm controls manufacturing methods necessary to produce a certain product, or has exclusive rights over the technology used to manufacture it.”¹¹

The Law of Supply and Demand

In economics, the relationship between the quantity of a commodity that producers wish to sell at various prices (supply) and the quantity that consumers wish to buy (demand) is referred to as supply and demand and is the main model of price determination used in economic theory.¹²

BACKGROUND INFORMATION

Global Economic Impact of Big Tech Firms

Big Tech companies have recently joined financial services and have quickly risen to prominence. Financial services are known to account for more than 10% of Big Tech sales on average. They have a significant presence in some industrialized economies' payment systems as well as a broader range of financial services in emerging markets and developing economies.

In China, two Big Techs control 94% of the mobile payments market and also have a large presence in other financial services such as digital credit. Given that China has a population of over 1 billion people, it is obvious that China generates significant income for Big Tech, amounting to well over tens of billions of dollars. What is interesting is the fact that China remains hostile to Big Tech companies and makes

⁹ Sharma, Rakesh. “Non-Fungible Token (NFT): What It Means and How It Works.” *Investopedia*, Investopedia, www.investopedia.com/non-fungible-tokens-nft-5115211.

¹⁰ “Technology for a More Private Web.” *The Privacy Sandbox*, privacysandbox.com/.

¹¹ “Technological Monopoly.” *Monash Business School*, Monash University, 3 Apr. 2023, www.monash.edu/business/marketing/marketing-dictionary/t/technological-monopoly.

¹² NetSuite.com. “Finding the Balance between Supply & Demand.” *Oracle NetSuite*, www.netsuite.com/portal/resource/articles/erp/law-of-supply-demand.shtml.

efforts to reduce their influence within its borders, despite the fact that an increasing number of financial services of primary importance are dependent upon Big Tech companies. This sector is of such importance as it generates employment and a consistent source of income for the country.

Globally, Big Techs extended or facilitated more than \$500 billion in credit in 2019, and early indicators suggest that such credit may grow even more during the Covid-19 pandemic in 2020. Big Techs such as Google, Apple, Facebook, and Amazon in the United States, and Alibaba and Tencent in China, have market capitalisations that much exceed those of the largest banks.

The foundation of Big Tech business models is the ability to facilitate direct interactions among a huge number of people. This could be in e-commerce (Alibaba, Amazon, or Mercado Libre), social media (Facebook, Tencent, or Kakao), telecommunications (Safaricom or MTN), or search (Google or Baidu). They take advantage of natural network effects to generate additional user engagement and data that can be used to improve their product offering. Payment services, for example, provide transaction data, network externalities enable user interaction, and all of this serves the Big Techs in their other activities (such as credit or wealth management), increasing engagement with existing users and enticing new ones.

Data Driven Economy

It's not a secret that the world's economy is transitioning towards a data driven one. Although the legal sector is famous for its traditionalism and resistance to change, it is resilient and permeable to digital transformation. The hype, fueled by the latest advances in artificial intelligence and enabled by the changes in data storage and processing capacity has already impacted the legal sector. However, only few players compared to the total number of stakeholders in the legal sector have understood what is going on. Awareness is rising but more than often in the form of fear to the robolawyer. A global digital ecosystem in which data is gathered, organized, and exchanged by a network of companies, individuals, and institutions to create economic value.

Data driven economies are environments where big tech comps can thrive. Tech businesses are, in many respects, victims of their own success. They have become synonymous with the type of innovation that reshapes whole industries. Falling stock prices, on the other hand, signal that investors want IT businesses to move beyond growth at all costs. Organizations are increasingly targeting more sustainable growth by creating consistent cash flows, pursuing cost savings, increasing efficiency, and improving the customer experience. Better data management is a must for excelling across all of these levers for long-term growth. Benefiting from these practices, the Tech Giants generate growth whilst maximizing their productivity and operational

preciseness.

Market capitalisation of big techs and banks

The aforementioned activities generate additional data, which fuels a data-network-activity feedback loop. This has been dubbed the "big tech DNA" (BIS 2019)¹³. This DNA loop provides considerable benefits to users and the financial system. For example, Big Techs' business models can be effective in increasing efficiency and financial inclusion, particularly in countries with dominant financial incumbents. Furthermore, the incorporation of accurate user data from other business lines may lessen the need for costly backing for loans. At the same time, if uncontrolled, the DNA loop can introduce new concerns to privacy and consumer protection, market contestability, and, finally, economic security.

The advent of Big Tech businesses into financial services is examined in a recent article published in 2021, as well as how this affects existing trade-offs among public policy objectives such as financial stability and market integrity, efficiency and competitiveness, and data privacy and consumer protection. Such trade-offs can be elaborated around a policy triangle. The connection between competitiveness and liquidity has long been disputed by authorities. The two main ideologies suggest that more competition was not necessarily ideal or beneficial to financial stability because it affects bank profits and total brand value.

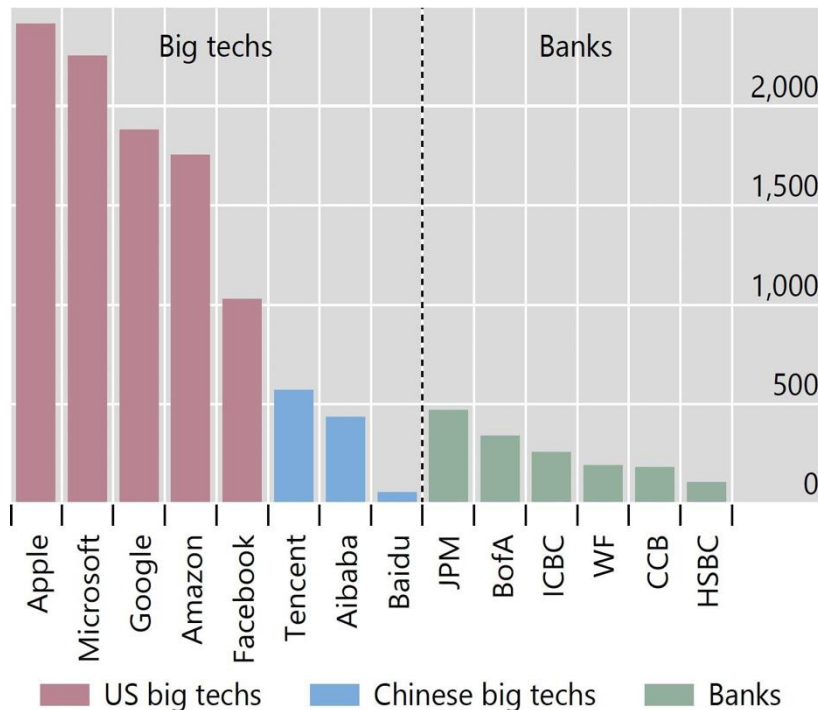


Figure 2: Column Chart of market capitalisation of big techs and banks

¹³ III. *Big Tech in Finance: Opportunities and Risks*, www.bis.org/publ/arpdf/ar2019e3.pdf.

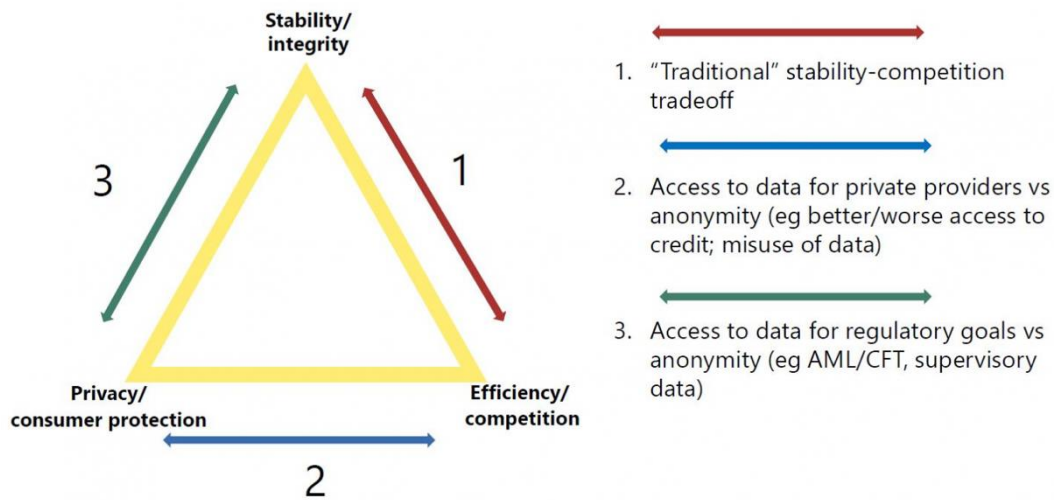


Figure 3: Triangle policy trade-offs from digital transformation in finance¹⁴

The preceding diagram is subject to modification in the event that the Big Ten enters economics. Companies having market dominance in their core sector may be able to extend that dominance into adjacent financial services, resulting in increasing concentration and market power. When huge digital platforms become the primary distribution route for their competitors, this can lead to conflicts of interest and potential market abuse.

COVID-19 Impact on Market Capitalisation

During the pandemic of COVID-19 the sudden change of lifestyle and the increased demands of technological goods and services resulted in the market capitalization of Big Tech, as it is visible in figure 5. In a matter of a few months GAFAM dominated the market and remarkably surpassed all the other competitive companies in the sector, reaching a combined revenue of over \$1.2 trillion. This differentiation provoked by the pandemic had an important impact on the financial sector, and later gave the opportunity to Tech giants to introduce new technological means and virtual products and spaces, such as Metaverse.

The S&P 500 ended 2022 with a nearly 20% overall decline, making it a difficult year for the stock market. The Dow Jones U.S. Technology Index, which tracks significant tech businesses, had a particularly difficult year for the industry. It fell by more than 35%. It was a turbulent year in 2022. The downturns, which included the conflict between Russia and Ukraine, the rising inflation and oil costs, the low pay for many workers, and the increase in interest rates, had an especially negative influence on technology. The NASDAQ experienced four quarters of declining prices for the first time in 2022. After 2008 and the collapse of the dot-com boom in 2000, it was the

¹⁴ "Home." CEPR, cepr.org/.

third worst year for the technology sector. Additionally, fewer IPOs were made this year, and several recently IPOed companies saw value losses of up to 80%. Crypto, which has experienced booms in recent years, also fell. Major cryptocurrency lost 60% of their value, including Bitcoin and Ether. Shares of Coinbase, the sole significant cryptocurrency company listed on the NASDAQ, fell by 86%.

When pinpointing the factors that affect the aforementioned market and sector-wide patterns, the Federal Reserve starting boosting interest rates is one of the reasons why tech stocks dropped. Tech startups and companies relied on the inexpensive financing that interest rates of virtually 0% offered. Even large corporations like Uber failed to make a profit. Instead, they have relied on borrowing and investment to maintain growth in the anticipation of future profits. As interest rates increased, investors started looking for immediate cash generating rather than investing in companies in the expectation of future profits.

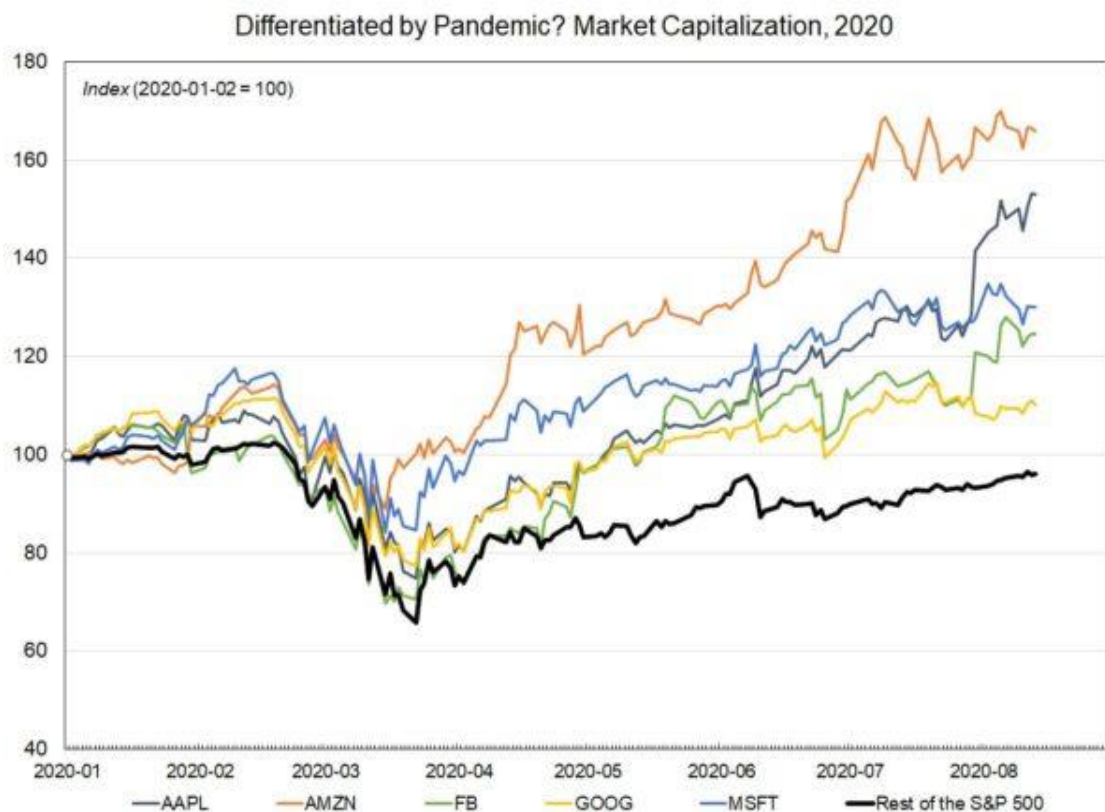


Figure 5: Market Influence and Capitalisation after the pandemic of COVID-19 in 2020¹⁵

The impact of inflation was also evident. Costs for numerous products and services surged, with transportation experiencing severe volatility as a result of fluctuating oil prices. This made it challenging for many e-commerce businesses that rely on delivering goods to customers' doors. A significant amount of the revenue for many software companies comes from advertising. Companies like Alphabet, Meta, and the

¹⁵"News: York University." *News@York*, 15 Aug. 2023, news.yorku.ca/.

newly private Twitter have witnessed a decline in ad sales as other businesses have reduced their advertising budgets in reaction to recession fears.

Another factor was the rising of the dollar. Many big tech firms were negatively impacted by American multinationals' reduced revenue from their international operations. The international operations were limited due to the fact that exchanges would be unfair for the foreign currency, viewing cash flows would be less profitable for tech comps.

Data Monetisation

The practice of converting data into revenue is known as data monetization. It entails deriving value from data that a corporation collects, develops, or processes. In the digital age, data is frequently perceived as one of the most significant possessions a company may have.

Data monetization allows businesses to generate an additional revenue stream, this is especially important in industries with low margins and strong rivalry. Businesses that successfully sell their data can acquire a competitive advantage. They have the ability to create new goods, improve client experiences, and make more educated business decisions. Customer behavior, preferences, and trends can be revealed through data monetization. These findings can help to shape marketing strategy, product development, and customer engagement activities.

Data monetization strategies are often the groundwork for organizations seeking to secure new revenue streams. In fact, a successful data monetization plan will result in new revenue streams and the necessary change management for maximizing data value. An efficient data monetization plan ought to offer the most straightforward means for obtaining insights from big data, whether it is for improving business performance or packaging insights for sale to third parties.

Any legal hazards, data protection barriers, competitive barriers, data availability issues, and data distribution methods should be carefully evaluated once the infrastructure is in place to provide data-driven insights. Inappropriate methods of data monetization can result in significant fines, cybersecurity risks, and permanent reputational harm.

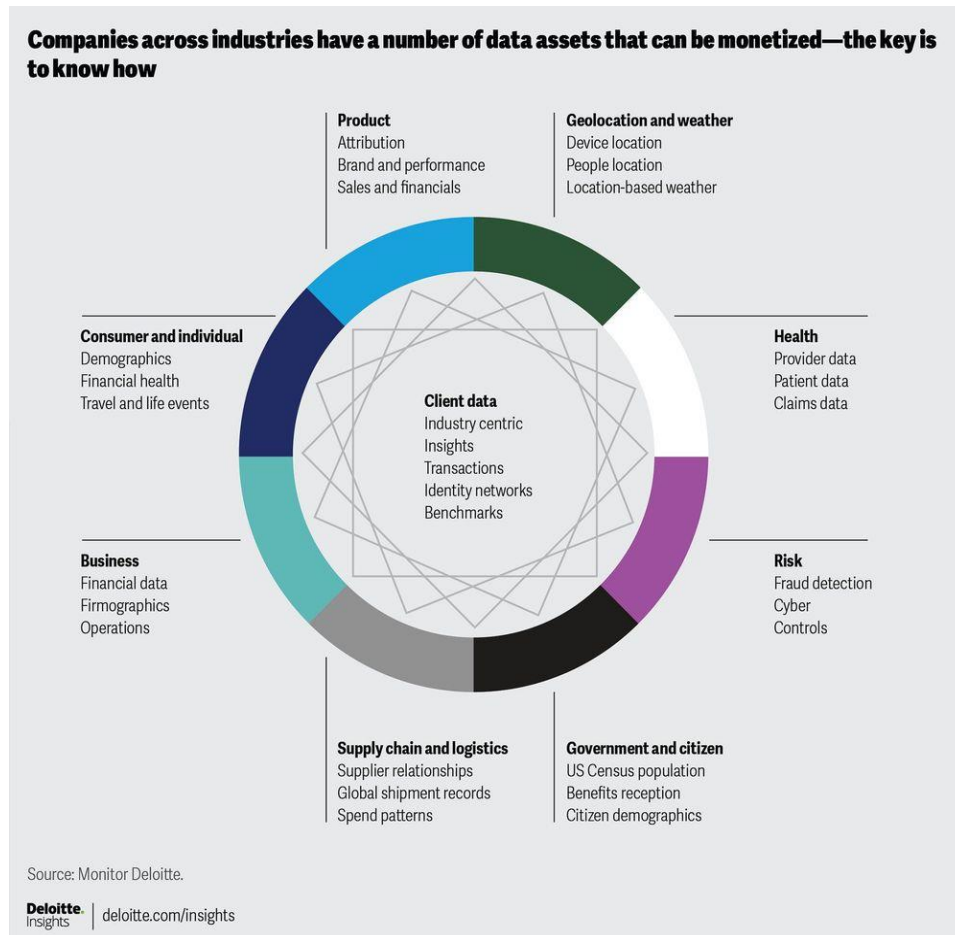


Figure 1: Aspects of Data Monetization¹⁶

Data-Driven Products

Designing and building products through large-scale Data-driven means making design decisions based on behavioral evidence from users, analysis and interpretation. The systems are learning from behavioral data generated by users, whether that data is explicit (ratings, reviews) implicit (clicks, views), or somewhere in between (purchases).

¹⁶ Blokdyk, Gerardus. “Amazon Cloudfront a Clear and Concise Reference.” *Amazon*, Emereo Publishing, 2018, aws.amazon.com/cloudfront/.

Data Licensing

Data licensing refers to the process of granting or obtaining legal permission to use and access data, typically through a contractual agreement between the data provider (licensor) and the data user (licensee). It establishes the terms and conditions under which the data can be accessed, utilized, and shared.

Targeted Advertising

“In online marketing, a targeted ad is one that is shown to a certain audience, which may be a certain demographic, a group, or an individual. Targeted advertising can simply mean that ads are chosen based on their relevance to the content of the site with the understanding that they will also be relevant to the audience of the site.”¹⁷

There are numerous types of targeted advertising depending on various factors. Contextual advertising targets people based on their online behavior, including the terms they enter and the websites they frequent. Based on their actions, such as the search terms they enter and the websites they visit, contextual advertising targets people. Data collected from these actions are used as an indicator of a user's interests to assist them in determining what advertising they would be interested in seeing. Another well-known advertising technique is social media targeting that utilizes a number of approaches so as to select an audience for the ad, based on the interactions of the user. Geotargeting is the technique used to locate buyers in the region where certain products or services are provided, so as to attract potential buyers. More importantly, retargeting, commonly referred to as remarketing, is the practice of showing people adverts for particular goods or services after they have visited a company website. This technology is proven to be the most effective due to the fact that it enables advertising to track users as they move across websites.

Data Enhanced Decision Makings

The primary function of this marketing strategy revolves around the idea of reliable decision-making of enterprises on the consumerist tendencies of potential buyers. This data collection method provides enterprises with further insight that can inform judgements, help determine the right course of action, and guide overall strategy. This approach remains one of the top trends in analytics because it helps to improve organizational efficiency and effectiveness by enabling companies to understand what happened in their

¹⁷ “Home.” *SendPulse*, 6 Dec. 2023, sendpulse.com/support/glossary/targeted-advertising.

organization, why it happened, and how specific decisions might shape future business outcomes.

Ownership and Unfair Pricing of Data

As competition and more efficient solutions frequently benefit customers, there are trade-offs between efficiency/competition and privacy/consumer protection. Big Tech companies may not be subject to regulatory monitoring that safeguards financial services consumers in many nations. Big Tech mobile money competes with bank payments services in terms of pricing and availability, but mobile money providers may have access to more personal data than banks.

With the rise of market power of data several issues have risen concerning the ownership and utilization of data. Since the legal framework does not predict this condition, the World Bank in 2021 suggested non-rivalry as a characteristic of data, as a consequence credit bureaus function according to this rule. Nevertheless, non-secured or non-supervised diffusion of data, such as open access to personal data, could compromise the right to privacy.

Allowing data producers to maintain a monopoly over the data, on the opposing conjunction, poses issues. It might discourage customers from swapping providers, or it might make room for pricing discrimination or algorithmic exclusion. Big Tech firms additionally are exceptionally adept at pricing data. They can subdivide a consumer group into very fine subcategories, each of which is charged a distinct price, signifying the highest price each individual is willing to spend. However, fine discriminatory pricing may intersect with protected categories such as gender or race. Regulators must strike a balance between innovation and efficiency and consumer protection, which may be dampened.

NFTs, Cryptocurrencies and Power of Tech Giants

The history of NFTs began in early 2014 with the creation of Quantum, a generative piece of art that was later digitized by the artist Kevin McCoy. But not until 2017 did the world become aware of their existence, due to the fact that numerous distinct NFT collections arose on the Ethereum blockchain. The development of NFTs was delayed by the early issues with NFT trading and ownership transfer on earlier blockchain networks. These problems have been addressed by Ethereum's blockchain, which provides a dependable option for token creation, programming, storage, and trading. People are now more likely to participate in NFTs as a result of this.

Before 2021, there were two major events that increased NFT pricing and sparked a lot of interest. When digital artist Beeple sold an NFT for \$69 million via a prestigious auction house, it was a turning point that greatly increased interest in NFTs. The exceptional value of Beeple's digital artwork sparked interest in non-fungible tokens.

Other highly valuable NFTs were sold, including a CryptoPunks NFT for about \$11 million and Edward Snowden's "Stay Free " NFT for \$5 million. Additionally, the "Right-click and Save As Guy " NFT for XCopy was sold in 2021 for \$7 million. Sales like these were extremely important in advancing NFT, particularly in the field of digital art.

NFTs gained new applications in blockchain games like Axie Infinity and virtual worlds like Decentraland, which increased their attractiveness. As they adjust to web3 technology and new trends in the industry, major brands including Taco Bell, Coca-Cola, Adidas, Nike, Gucci, Louis Vuitton, and Hot Wheels have also embraced NFTs.

Today, NFTs can be utilized in digital business activities as well as to claim ownership rights for tangible objects. Their market value has risen significantly and is estimated to continue augmenting, as new investment opportunities will arise. The economic importance of NFTs will increase as the economy of digital platforms develops. Due to the ability to authenticate and confirm ownership, the rarity and value of these collectibles has increased. The use of NFTs may create a secondary market for these assets, this might increase the marketability and worth of these items and open up new opportunities for economic growth.

What is even more interesting about NFTs is that they are utilized by the majority of the Tech Giants so as to serve numerous purposes. More precisely, NFT-based digital items and art are being produced and sold by Big Tech companies. These might be anything from one-of-a-kind digital artwork to exclusive digital products. For instance, businesses like Microsoft have made video game skins and souvenirs based on NFT available.

Not to mention that enterprises like Meta are massively investing in the metaverse and virtual worlds. In this case, NFTs are being utilized to represent ownership of virtual real estate, avatars, and virtual items within these digital environments.

More importantly, big digital platforms are looking into NFTs as a direct means of remunerating content producers for their efforts. In order to enable users to display their NFT collections on their accounts, Twitter, for instance, has been experimenting with NFT profile photo verification. NFTs have been implemented by businesses like Apple into their app ecosystems, enabling users to collect, trade, and use NFTs inside of apps and games to create fun and gamified experiences. As a result, users may enjoy a flawless NFT transaction experience thanks to these methods.

Issues Associated with the Metaverse

The controversy over the metaverse is still growing, spurred by Facebook's rebranding as Meta and made worse by each new company releasing its own take on the concept. The issue of privacy and security is one of the foremost concerns associated with metaverse. The gathering and sharing of personal data is becoming more common as

people spend more time in virtual environments. Data breaches, identity theft, and the improper use of personal information are raised by this. As an illustration of the vulnerability of virtual spaces, in 2021 Facebook experienced a data breach that exposed the private data of over 500 million members. Companies that do not protect user data risk legal repercussions, reputational damage, and a decline in confidence and user involvement in the metaverse. The costs of securing virtual environments against cyber threats can also be substantial, impacting the bottom line of both technology companies and businesses operating within the metaverse.

The Metaverse creates new gaps in technology and digital resource access. Not everyone has access to high-speed internet, powerful computing devices, or Virtual Reality (VR) technology at the same level. This digital divide has the potential to result in exclusion and inequality in the metaverse, where only those with the required means can fully engage.

This issue has the potential to exacerbate existing inequities from an economic standpoint. Businesses who rely on the metaverse for marketing, sales, or customer involvement may find that their customer base is confined to those who have access, leaving potential markets untapped. Furthermore, as the metaverse evolves, there will be a greater demand for professional employees who can create and maintain virtual settings, potentially offering job possibilities but simultaneously exacerbating the digital skills gap.

Furthermore, the metaverse questions traditional concepts of intellectual property and copyright. Within these virtual worlds, users can produce and exchange digital content, blurring the distinction between user-generated content and copyrighted material. As artists and rights holders want to preserve their intellectual property, this has resulted in ownership and royalty disputes. This issue has an economic impact on content creators as well as firms in the entertainment and gaming industries. For example, Fortnite, a famous metaverse-like game, was sued for using dance moves, showing the complex legal difficulties involving digital works within virtual environments. Uncertainty about intellectual property rights can stifle innovation and investment in the metaverse, limiting the sector's growth.

A few big technology corporations presently dominate metaverse, including Meta (previously Facebook), Google, and Microsoft. They have the resources and infrastructure to create and manage vast virtual ecosystems. However, their dominance raises worries about monopolistic behavior and economic power concentration. This concentration, from an economic sense, can restrict competition and limit chances for smaller enterprises and entrepreneurs. Companies like Meta can create the norms and standards in the metaverse, perhaps favoring their own products and services. This can raise entrance hurdles for new participants and stifle

innovation, reducing the economic gains that a more diversified and competitive metaverse could provide.

On these grounds Rana Foroohar, a global business commentator for the Financial Times, claims that the largest American technology corporations acquired success through invention first. However, once they had enough intellectual property, their focus shifted. Furthermore, she believes that "Big Tech companies, such as Meta, are no longer interested in innovation but in data monetisation and market capitalisation."¹⁸ She also stated that "Google, Facebook, and Amazon started to understand that they were no more in the field of technological advancement so much as they were in the industry of data monetization," during a brunch discussion at Asia Society on Wednesday. She specified that this predominantly concerns Facebook and Google, whose business models are not focused on producing something truly revolutionary, but on collecting as much data as possible and adjusting it with algorithms to allow for future growth and hyper-targeted advertising.

Legal Issues in the Tech Industry

A broad spectrum of concerns are currently the subject of legal disputes and arising gray areas, including novel and urgent worries regarding data privacy and security, rapid changes in the nature and treatment of intellectual property, the application of competition laws, and jurisdictional difficulties with regard to taxation and governance.

Firstly, given that the perception of justice differs around the globe, legal representation is not always provided to individuals or enterprises in a defensive state. That is why the influence of Big Tech threatens to such an extent civilians and specifically underrepresented minorities, as abuse of dominance, leak of personal data and copyright violation are common phenomena. Generally, when a company monopolizes the industry, this often means that a single entity withholds a vast amount of user data. However, the risk that the tech monopoly might not have as a main priority user privacy is high. More often than not, this can lead to the misuse of personal data and misleading practices like targeted advertising, and surveillance.

Monopoly power can lead to a lack of accountability, as not only is it much harder to have proper access to legal representation but also the dominant companies may face fewer consequences for potential violation of regulations. We should also keep in mind that this kind of power can significantly influence the regulatory process as it is and can also raise concerns about the impartiality of the decision-making.

¹⁸"Can Big Tech Be Disrupted?" *Harvard Business Review*, 14 Dec. 2021, hbr.org/2022/01/can-big-tech-be-disrupted.

Another thing to consider is that minorities might also be underrepresented in some cases adding to their hardships. In LEDCs, there is also the ongoing concern that legal representation is still limited, and the public is also not adequately educated about their legal rights, or even if they are legal services can also be extremely costly. This does not apply to the big techs as they can afford to have multiple legal representatives, but this is not the case for most people.

To efficiently tackle these concerns, we need to consider implementing regulatory measures, antitrust actions, and increased scrutiny of the practices of big tech companies to ensure a balance between innovation, competition, and protection of public interests.

MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED

Australia

As per usual major companies collect vast amounts of user data, which in some cases raise concerns about data security. In general, there has been some controversy about the adequacy of privacy. We should also keep in mind that fake news on social media platforms affects multiple countries all around the globe, and Australia is no exception. Consequently, questions have been raised about whether these platforms combat misleading content effectively. Also, the lack of transparency has also been noticeable, which can contribute to discrimination and bias. For this reason, the Australian Competition and Consumer Commission (ACCC) was established for the sole reason of regulating the market power. In 2019, the ACCC released the Digital Platforms Inquiry which makes some recommendations about how to regulate the power of such companies. Furthermore, Australia has implemented laws to protect consumers' information. Legal bodies such as the Office of the Australian Information Commissioner (OAIC) govern privacy regulations. As time progresses Australia has been trying to keep up with technological advancements to update their laws.

China

Due to the rapid growth of digital services Big tech in China have faced many allegations of monopolistic behaviors. This has led to regulatory scrutiny, with authorities investigating practices that hinder fair competition. Thus, the Chinese government with the assistance of Chinese regulatory authorities including the state administration for market regulation has tried to implement antitrust regulations into several major companies. Additionally, China has introduced regulations that have to do with data security and privacy such as the Data Security Law. As a main aim, they must enhance and establish clear guidelines for how big techs manage and store personal information. They also have prioritized excessive tutoring on online education platforms. Not to mention that China has implemented a cybersecurity

review process for companies involved in critical information infrastructure and data processing.

France

French authorities have been taking antitrust actions against certain big tech companies in coordination with the European Union. In general, these actions focus on anti-competitive practices and abuses of dominant market positions. Also, in alignment with the European Union's General Data Protection Regulation (GDPR), they have implemented data protection and privacy regulations. This is to ensure that user data is stored correctly and to show transparency. Not to mention, there have been proposed regulations known as the Digital Markets Act (DMA) and Digital Services Act (DSA) which essentially seek to establish a legal framework for the oversight of digital services, including measures to address user data storage and platform behavior. France also has been active in addressing hate speech and disinformation online, holding big techs accountable for the content shared on their platforms. France's main issue with big techs is that many major companies face scrutiny for their labor practices. Many issues have been raised such as inadequate working environment and conditions, and employee rights. It is also worth mentioning that there is still some lack of transparency in the algorithms that some companies use.

India

India continues to expand as the world's greatest start-up environment, with over 13,000 tech start-ups flourishing in the nation. The Indian government's "Make in India" policy heavily encourages foreign corporations to place funds in the Indian technology sector. Nevertheless, India established The Digital Personal Data Protection Bill 2023 which makes storage, processes, and transfers requirements easier for large global tech giants like Google, Meta, and Microsoft, as well as smaller businesses looking to expand internationally. Excluding the places barred by the government, the rule permits corporations to export data obtained from India. Currently, the bill needs government approval before Big Tech corporations may collect personal data. It also prohibits them from selling it for reasons not specified in the contract, for instance implying that no personal data can be anonymized for use in Artificial Intelligence (AI) training.

United States of America (USA)

Generally seeing as the US is affected greatly by the issue, the US government has tried multiple times through the Department of Justice and the Federal Trade Commission to enforce antitrust investigations into some major companies. These investigations were to determine whether the Big Techs have engaged in anti-competitive practices or if at any point they abused their market power. Also, they have established certain Congressional committees, such as the House Judiciary

Committee, that hold hearings to analyze the market dominance of major companies. This practice can allow lawmakers to examine and discuss current and potential regulatory measures. Moreover, The Antitrust Division is in charge of implementing national competition regulations. Anticompetitive behavior and mergers that deprive American consumers, taxpayers, and employees of the benefits of competition are prohibited by these statutes. However, there is still a lot of improvement that can be done especially when it comes to providing fair access to legal representation to all.

Bundeskartellamt

Bundeskartellamt ¹⁹ has always been a pioneer in attempting to incorporate EU data protection standards into competition enforcement in digital marketplaces in a strategic case against Facebook. That carefully watched (and long-running) lawsuit, which targets Facebook's' super profiling of users, based on its capacity to aggregate user data from different sources to flesh out a single high dimension per-user profile, this affair was transferred to Europe's highest court, COURIA.

Center for Economic Policy Research (CEPR)

After taking into consideration the need for markets-focused competition watchdogs and consumer-centric privacy regulators the CEPR had to think outside their respective 'legal silos', and has made an effort to find innovative ways to collaborate and to address the challenge of big tech market power, by organizing panel discussions. The CEPR has further suggested a policy triangle for Big Techs in finance, which aims to illustrate the trade-offs between three goals: financial stability, competition, and data privacy. To address these issues, increased coordination on laws and standards is required, on an international level.

Competition and Markets Authority (CMA)

The UK's CMA is investigating a number of major antitrust complaints against tech giants, including Apple's App Store and Google's plan to depreciate support for third-party tracking cookies, the so-called 'Privacy Sandbox'²⁰, the latter being an investigation in which the CMA has actively engaged the UK's privacy watchdog (the ICO) to collaborate.

In June 2021, the competition watchdog stated that it was willing to accept a set of legally binding commitments offered by Google, which could result in a quasi co-design' process between the CMA, the ICO, and Google over the shape of the key

¹⁹“Navigation and Service.” *Bundeskartellamt*, www.bundeskartellamt.de/EN/AboutUs/Bundeskartellamt/bundeskartellamt_node.html. Accessed 8 Feb. 2024.

²⁰ Joseph, Seb. “WTF Is Google’s Privacy Sandbox?” *Digiday*, 26 July 2023, digiday.com/marketing/wtf-googles-privacy-sandbox/.

technology infrastructure that eventually replaces tracking cookies, which is a significant advancement.

TIMELINE OF EVENTS

DATE	DESCRIPTION OF EVENT
4 April 1975	Microsoft is founded by Bill Gates and Paul Allen, whose main goal was to sell BASIC interpreters for the Altair 800.
1 April 1976	AppleComputer Inc is founded by Steve Jobs and Steve Wozniak, aiming to achieve a new company vision of how people viewed computers.
4 September 1998	Computer Scientists Larry Page and Sergey Brin, PhD students at Stanford University, invent Google.
12 March 1989	Sir Tim Burners Lee prepares the groundwork for World Wide Web at CERN.
5 April 1993	The Nvidia corporation is founded in California.
4 February 2004	Facebook is founded by Mark Zuckerberg, Dustin Moskovitz and Chris Hughes.
9 August 2011	Apple Inc becomes the leading company in the technology market.
10 June 2014	Quantum is sold by Sotheby's for \$140,000.
2 October 2015	Alphabet Inc is founded, becoming the parent company of Google and several former Google subsidiaries.
28 October 2021	The Facebook parent company rebrands itself as Meta and promulgates an upbeat and expansive vision for the metaverse.
2 March 2021	Microsoft introduces Mesh as a new platform that promises to synchronize virtual collaboration.
29 June 2022	Siemens and Nvidia partner on the Industrial Metaverse.
30 April 2023	Big Tech sees a revival, as 7 large US (Apple, Microsoft, Alphabet, Amazon, Tesla, Netflix and Nvidia) have collectively regained 34% of its market value.

PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

Antitrust investigations and Lawsuits carried by governments

In October 2020, the U.S. government, along with eleven state attorney generals, launched a series of antitrust investigations and lawsuits against the market dominance of large digital companies, targeting Google, Facebook, and Apple. The investigation focused on anti-competitive behavior and abuse of dominant market positions. Federal and state governments have accused these large technology companies of limiting competition and monopolizing certain sectors. These investigations have had the advantage of promoting fair competition, ensuring consumer choice, and ensuring that these internet companies comply with antitrust rules. However, some critics have argued that the investigations pose certain problems, such as lengthy legal proceedings, potential over-regulation, and the difficulty of effectively regulating fast-growing technology markets. In addition, the lawsuits encountered legal hurdles and differing interpretations of antitrust laws, making the campaign to limit the market power of large technology companies complex and controversial. Although these investigations have been concluded, the US government and the US Attorney General's Office opened further investigations around September of the following year. Unfortunately, they did not change the situation and did not provide any additional information or remarkable evidence.

China's Antitrust Action against Alibaba

Alibaba Group Holding Limited, commonly known as Alibaba Group is a large China-based technology company owned by SoftBank Group Corp, which works primarily in e-commerce, internet, and technology. However, Alibaba Group recently faced a major scandal that appears to be the biggest data leak in its history. The transaction was so significant that it attracted the attention of the Chinese intelligence services. In April 2001, Alibaba was fined \$2.8 billion for its anti-competitive practices. This means giving up its market position to allow people to choose only their platform. The authority proposes modernizing competition rules by introducing new rules for large online platforms. In addition to the investigation into Alibaba, competition authorities have imposed smaller fines on companies that failed to notify takeovers in advance. Nevertheless, the Chinese government's campaign has already begun to affect the operation of these giant Chinese Internet companies. "As companies grow and online services become part of people's lives, we need to take more responsibility for users, governments, and society." Martin Lau, CEO of Tencent, said on a conference call with analysts.²¹

²¹ Frater, Patrick. "Tencent's Martin Lau Explains China's Tech Sector Crackdown." *Variety*, 18 Aug. 2021, variety.com/2021/global/asia/tencent-martin-lau-china-tech-crackdown-1235043624/.

Australia's News Media Bargaining Code (ACCC)

The Mandatory Code of Conduct for Media and Digital Platforms is a mandatory code of conduct aimed at ensuring the sustainable development of public interest journalism in Australia. It aims to rebalance negotiations between digital platforms and Australian news organizations. Under the code, news organizations are allowed to negotiate with digital platforms over fees due for publications on their platforms and services. The Australian Competition and Consumer Commission (ACCC) has a statutory obligation to collect data for these reports, to review commercial agreements between digital platforms, and to effectively assess their contribution to and implementation of the digital platforms code. Several commercial agreements between Australian digital platforms will expire next year. The government expects digital platforms with significant bargaining power to negotiate in good faith, renewing existing agreements and possibly negotiating new ones.

European Digital Markets Act and Digital Service

The Digital Markets Act (DMA) and the Digital Services Act (DSA) are comprehensive EU laws introduced to tackle the challenges posed by digital platforms. These laws aim to address the growing competition, consumer protection, and liability issues related to digital platforms. The DMA and DSA aim to promote a balance between innovation and competition while ensuring consumer protection and a safe online environment. The introduction of these policies essentially shows a growing awareness of the need to regulate the digital sector and align it with social values principles.

The DMA was designed primarily as an access regulator for companies with significant market power and influence. The DMA takes a broader approach, covers a wider range of digital intermediation services, and imposes stricter requirements on mega-platforms and search engines to manage the social risks associated with their activities. The scope of these provisions also varies significantly. While the Digital Services Act aims to promote a fair and competitive digital marketplace, the Digital Agenda aims to address EU concerns about the growing impact of online platforms on political debates, disinformation campaigns, the spread of fake news before elections, and the social impact of hate speech. Overall, the Digital Services Act aims to create a safer digital space, protect users' fundamental rights and create a level playing field for EU businesses.

POSSIBLE SOLUTIONS

Ensuring data security and strengthening antitrust regulations

To start, one way to effectively tackle the issue that arises with big techs is through robust data privacy regulations. By imposing strict data protection laws, governments

can ensure that these companies cannot exploit the user's personal data for monopolistic purposes. Legislation, such as the European Union's General Data Protection Regulation, can serve as a model for protecting users' data and limiting unjustified benefits for high-tech companies. To add to that, antitrust rules should be reviewed and strengthened to counteract monopolistic tendencies in large technologies. Therefore, it is evident that there is a need to shift the focus to the assessment of the overall impact on the market rather than the harm caused to consumers. In conclusion, by eliminating monopolies, preventing anti-competitive mergers and imposing proper penalties proportionate to the company's revenues, society could promote a level playing field between incumbents and new entrants.

Encourage interoperability and promote innovation

Promoting interoperability and data portability between platforms can contribute to healthy competition. If users can easily switch from one service to another with their data, the impact of big techs on users is reduced. Open standards and protocols can drive innovation by enabling smaller businesses to create additional services that can be easily integrated into existing platforms. Governments can also play an important role in reducing the dominance of big technologies by investing in R&D Funding start-ups, supporting innovation poles, and providing incentives to explore new technologies that can create a competitive environment in which new players can develop successfully. Public-private partnerships can further stimulate innovation by exploiting the strengths of both sectors.

Public education

By promoting digital literacy, we can ensure that users all around the world understand just how their data is used and how they can effectively protect themselves online. It is essential to educate consumers about the effects of their online choices and about the power dynamics of big techs. By improving digital literacy, people will be able to make decisions about the platforms they use, that will essentially serve their best interests and that will actively keep them protected and supported at all times. As a result, educated individuals will be able to demand more transparency from companies. At that point, consumers are more likely to support alternatives, as they will be able to identify the complexity of the issue and they will choose the company that best interests them and, thus, contribute to a more competitive and inclusive market.

Promoting other companies and encouraging competition

One way to tackle this problem is to support other companies, as well as to promote a diverse and competitive market. Initially through funding and resources for start-ups and smaller businesses operating in knowledge-based industries. Member States can

also continue to invest in RnD initiatives focusing on new technologies and, therefore, encouraging pluralism within the market. By promoting cooperation between research institutes, start-ups, and existing companies a lot of innovative steps can be made. This includes the concept of creating a business-friendly environment through tax breaks, subsidies, and business development programs. Encouraging the creation of new corporations allows them to compete with technology giants. Finally, it would be wise to encourage a diversity of voices and points of view, which could undermine the control of tech giants over the flow of information.

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