DIGITAL CAPITALISM UNVEILED: UNDERSTANDING ITS IMPACT FOR SOCIETY THROUGH CASES OF FACEBOOK AND UBER

Cansu ARISOY GEDİK*
Assistant Professor, Istanbul Kent University, Public Relations and Advertising
ORCID: 0000-0001-7231-8139. Email: cansu.arisoy@kent.edu.tr

ABSTRACT

The convergence of digital capitalism and political economy offers a profound area for exploration, highlighting the complex interactions between technology and economy in today's global digital landscape. Central to this study are the digital technologies that reshape traditional economic paradigms, influencing consumption and employment significantly. Utilizing Dan Schiller's theoretical framework, this paper examines the impacts of these technologies on economic structures and social behaviours, alongside the associated risks through the lens of political economy. A critical analysis is presented through the case studies of Facebook and Uber, emblematic of social media networks and the gig economy respectively. Facebook, with its business model based on the commodification of user data, exemplifies digital capitalism's vulnerabilities as showcased during the Cambridge Analytica scandal, where data privacy breaches had far-reaching implications on policy and regulatory frameworks. This incident emphasizes the urgent need for strict data protection laws that mandate clear user consent and ensure data mobility. Uber's model highlights the unstable nature of gig work under digital capitalism. By classifying drivers as independent contractors, Uber not only minimizes costs but also shifts substantial risk onto the workers, illustrating the need for policies that redefine worker classifications and provide comprehensive rights and benefits to gig workers. These case studies not only reflect Schiller's critique of digital economic models but also emphasize the transformative potential of digital technologies, stressing the need for robust regulatory frameworks that protect interests of all stakeholders in the digital capitalism ecosystem. This analysis contributes significantly to our understanding of digital capitalism, particularly in how it interfaces with governance and societal structures, offering critical insights into the formulation of policies that safeguard social and economic welfare in the digitized age.

Keywords*: Digital Capitalism, Economic Transformation, Data Privacy, Gig Economy, Societal Change*

* Research Article, Received: 10.02.2024, Accepted: 23.10.2024
In this article, Ethical Committee Approval is not needed.

DİJİTAL KAPİTALİZMİN AÇIĞA ÇIKIŞI: FACEBOOK VE UBER ÖRNEKLERİ ÜZERİNDEN TOPLUMSAL ETKİLERİNİN ANLAŞILMASI

ÖZ

Dijital kapitalizm ile ekonomi politiğin yakınsaması, günümüzün küresel dijital ortamında teknoloji ve ekonomi arasındaki karmaşık etkileşimleri vurgulayarak derin bir araştırma alanı sunmaktadır. Bu çalışmanın merkezinde de geleneksel ekonomik paradigmaları yeniden şekillendiren, tüketimi ve istihdamı önemli ölçüde etkileyen dijital teknolojiler yer almaktadır. Dan Schiller'in teorik çerçevesini kullanan bu makale, bu teknolojilerin ekonomik yapılar ve sosyal davranışlar üzerindeki etkilerini ve ilgili riskleri ekonomi politiğin merceğinden incelemektedir. Sırasıyla sosyal medya ağlarının ve esnek ekonominin sembolü olan Facebook ve Uber'in örnek olay incelemeleri aracılığıyla eleştirel bir analiz sunulmaktadır. Facebook, kullanıcı verilerinin metalaştırılmasına dayanan iş modeliyle, veri gizliliği ihlallerinin politika ve düzenleyici çerçeveler üzerinde geniş kapsamlı sonuçlara yol açan Cambridge Analytica skandalı sırasında sergilenen dijital kapitalizmin güvenlik açıklarına örnek teşkil etmektedir. Bu olay, açık kullanıcı rızasını zorunlu kılan ve veri hareketliliğini güvene alan katı veri koruma yasalarına olan acil ihtiyacı vurgulamaktadır. Uber'in modeli, dijital kapitalizm altında geçici işlerin istikrarsız doğasını vurgulamaktadır. Uber, sürücüleri bağımsız yükleniciler olarak sınıflandırarak yalnızca maliyetleri en aza indirmekle kalmaz, aynı zamanda önemli riskleri çalışanların üzerine yıkar; bu da işçi sınıflandırmasını yeniden tanımlayan ve iş çalışanlarına kapsamlı haklar ve faydalar sağlayan politikalara olan ihtiyacı göstermektedir. Bu vaka çalışmaları yalnızca Schiller'in dijital ekonomik modellere yönelik eleştirisini yansıtmakla kalmaz, aynı zamanda dijital kapitalizm ekosistemindeki tüm paydaşların çıkarlarını koruyan sağlam düzenleyici çerçevelere olan ihtiyacı vurgulayarak dijital teknolojilerin dönüştürücü potansiyelini de vurgular. Bu analiz, dijital kapitalizme ilişkin anlayışa, özellikle de yönetim ve toplumsal yapılarla nasıl etkileşime girdiği konusunda önemli ölçüde katkıda bulunarak, dijitalleşen çağda sosyal ve ekonomik refahı koruyan politikaların formülasyonuna yönelik kritik içgörüler sunmaktadır.

Anahtar Kelimeler: ***Dijital Kapitalizm, Ekonomik Dönüşüm, Veri Gizliliği, Gig Ekonomisi, Toplumsal Değişim***

INTRODUCTION

The intersection of digital capitalism and political economy offers fertile ground for inquiry, providing valuable insights into the intricate interplay of technology, economics, and governance in our increasingly digitized global landscape. Digital capitalism delineates an economic paradigm propelled by digital technologies, platforms, and networks, exerting profound transformations across production, consumption, and distribution processes. Within the purview of political economy, scrutinizing this phenomenon facilitates a critical examination of power dynamics, regulatory frameworks, and socio-economic ramifications.

The primary aim of this paper is to explore how digital technologies redefine economic architectures, influence social behaviours, and introduce new risks. It also seeks to assess the varied effects of societal values, regulatory frameworks, and power dynamics on the development and utilization of these technologies. By employing a political economy perspective, this study puts forward the complex interactions between technological innovations and socio-economic structures. Illustrated through the case studies of Facebook and Uber, this investigation contributes to a nuanced understanding of the modern landscape of digital capitalism and its extensive implications for governance and societal organization.

In this exploration of digital capitalism, Dan Schiller's theoretical framework serves as a guiding principle to navigate the complexities inherent in this evolving economic landscape. Schiller's conceptualization of digitalization as a fundamental aspect of digital capitalism offers a holistic perspective to dissect the integration of digital tools into production processes. Through the lens of Schiller's insights, the study unveils the underlying mechanisms propelling the progression of digital capitalism and its ramifications for contemporary economic frameworks. By embracing Schiller's theoretical framework, the research anticipates illuminating insights into the transformative potential of digital technologies within the capitalist economy, thus elucidating the intricate interplay among technology, economics, and societal dynamics.

Two illustrative case studies—Facebook's data commodification model and Uber's gig economy structure—provide empirical evidence of these dynamics. Facebook, through its engagement in extensive data mining and user surveillance, typifies the exploitative economic practices under digital capitalism, as exposed by the Cambridge Analytica scandal. This incident

not only highlighted the massive implications of data privacy breaches but also triggered global discourse on the need for robust data governance frameworks, exemplifying the critical need for transparency and user data protection in digital platforms.

Conversely, Uber's operational model, which classifies drivers as independent contractors rather than employees, reflects the precarious employment standards within the gig economy—a sector based on digital platforms' dominance. This classification minimizes labour costs and maximizes operational flexibility at the expense of worker security and benefits, thus sparking significant legal and social debates on the redefinition of employment and labour rights in the digital age.

These case studies highlight the significant impact of digital technologies on reshaping economic paradigms, deepening discussions on the socio-economic and governance challenges brought about by digital capitalism, as described by Schiller. They validate Schiller's theoretical framework and reveal how these theories play out in real-world scenarios, often revealing problematic issues. This analysis provides a thorough view of how digital technologies can be both transformative and disruptive. Furthermore, this paper will suggest specific policy interventions aimed at reducing the negative effects and maximizing the positive aspects of digital capitalism. These policies will focus on refining regulatory frameworks, improving labour conditions, and protecting data privacy, all with the goal of creating a fairer digital marketplace.

RISE OF DIGITAL CAPITALISM: A NEW ERA UNFOLDS

The term "digital capitalism" came into use in the late 1990s to explain how digital technologies were affecting the course of economic globalization. However, there lacks a singular theory comprehensively elucidating the origins and evolution of this phenomenon. Various concepts rooted in Marxist theories delineate the novel dynamics of capitalism's evolution encapsulated by digital capitalism. These frameworks underscore the significance of information and communication technologies engendered by the globalization surge within capitalist structures. Pace introduces several definitions of digital capitalism (Pace, 2018: 1):

Digital capitalism now signifies several phenomena at once: transformations in technologies of production (Fuchs, 2013), in objects of production (Nachtwey & Staab, 2015), in property regimes of ownership (Schiller,

1999), in work styles of laborers (Betancourt, 2010; Qiu, 2014), and in managerial styles of firms (Wajcman, 2015). The concept is effectively working overtime, generating more confusion than clarity.

Among the scholars who studied digital capitalism, Dan Schiller (1999) delineates the evolution of the digital capitalism concept. Within this seminal work, American scholar Schiller emerges as the inaugural critic of the capitalist underpinnings driving the Information and Communication Technology (ICT) revolution. Employing empirical analyses of various industries, he demonstrated the pervasive integration of information networks within the capitalist economy and culture to an unprecedented extent. These networks have emerged as indispensable instruments for capitalist advancement, precipitating a notable transition in the political economy toward digital capitalism. Schiller shifts the focus from solely examining the new economic dynamics resulting from the digital technological revolution to exploring the intrinsic connection between digitalization and capitalist evolution that is based on information and communications technologies.

In Schiller's view, the Internet and large telecommunications systems have made it easier for economic activities to happen across borders, which has greatly increased the cultural and social effects of capitalism. Schiller explores the concept of digital capitalism by examining digitalization, which entails the use of digital tools for production. This practice not only enhances efficiency but also exerts a substantial influence on both the economy and politics, surpassing mere facilitation of corporate communication. Schiller underscores the surge in digitalization, particularly coinciding with the ascendancy of neoliberalism, and emphasizes the concurrent proliferation of the internet.

Schiller believes digital capitalism highlights the increasing importance of communication and information in the global economy. The rise of the information-driven economy, especially during the 1990s, triggers significant changes in economic transitions. In essence, digital capitalism denotes a form of capitalism conducted primarily through internet connectivity. This highlights the crucial role of the internet in shaping the new economic landscape, as it serves as the foundational infrastructure for digital capitalism to thrive. Through the lens of Schiller's insights, exploring the internet's role becomes essential in understanding how communication and information technologies have fundamentally reshaped economic structures and dynamics in the contemporary era.

EXPLORING THE INTERNET'S ROLE IN SHAPING THE NEW ECONOMIC LANDSCAPE

Neoliberalism, perceived as a contemporary phase of capitalism emerging in the mid-1970s, attained global diffusion throughout the 1980s and burgeoned into a worldwide phenomenon by the 1990s. Within this paradigm of capitalism, the acquisition of knowledge and information constitutes the foundation for accumulation and profit: "The slippery and uncertain structure of the internet is affected by the structure of the neoliberal environment and its results can be easily manipulated. The internet connection, which allows the right to be accepted as wrong and the wrong as right, needs to be viewed together with the neoliberal policies that dominate today" (Çelik and Arisoy, 2015: 4).

The contemporary manifestation of capitalism, referred to as digital capitalism, originated in the 1970s and has experienced steady growth since the late 1980s. According to Schiller (2023: 527): "during the 19th and early 20th centuries, capitalist industrialization reorganized every major sector while also establishing new industries; so too today, a digital growth pole has been activated generally." This activation has led to various changes.

Firstly, there has been a restructuring and automation of production and management processes centred around information. This entails a fundamental transformation in how goods and services are produced and managed, with a strong emphasis on leveraging information technologies.

Secondly, there has been a heightened level of adaptability in product manufacturing and procedural workflows. This increased flexibility allows businesses to respond more dynamically to changing market demands and technological advancements.

Thirdly, there has been a dispersion of production and decision-making, giving rise to a novel hierarchical model characterized by network utilization. This decentralization of operations enables greater agility and responsiveness within organizations, fostering innovation and collaboration.

Lastly, there has been the emergence of extensive collaboration among enterprises, alongside the establishment of new business divisions both within and across sectors. This collaborative ecosystem facilitates knowledge sharing, resource pooling, and joint ventures, driving

synergies and enhancing competitiveness in the global marketplace. Today "from production and commerce to socialization and political mobilization, from governance and finance to urban development and labour relations, it is hard to imagine a domain that has not been subject to the multifaceted implications of digital platforms" (Yeşilbağ, 2022: 1). Therefore, throughout this transformation, telecommunications have become essential in both developed and underdeveloped economies.

From the 1990s onward, during the Internet era, the United States underwent a phase that dubbed the new economy, characterized by low inflation rates, robust employment figures, and swift economic expansion. This period lauded the information technology revolution, fostering a belief that concepts such as the knowledge economy and the information economy held the potential to resolve all capitalist challenges:

In the development of America's 'new economy' in the 1990s we can place the role of the fourth wave of soft-tech development on a par with the activating forces of information technology. Soft technology innovations, such as global management, venture capital, innovation in the stock market, transnational merger techniques, virtual organization techniques and modern physical distribution technology have prepared the way for the rapid application of information technology, the Internet and biotechnology in the world's markets; and they have enabled overall improvements in industrial efficiency, as well as facilitating the development of intellectual service industries (Jin, 2005: 25-26).

Schiller notes that the notion of the information economy blurs the line between perceiving information solely as a practical instrument and as a commodity generated by individuals employed to sell in the market for wages. Nevertheless, during the 1990s, digital capital had not yet fully evolved into digital capitalism:

This split had not yet occurred in 1999, when I first framed an account of digital capitalism. At that time, the US enjoyed unchallenged primacy. Indeed, with the collapse of the Soviet Union; the decision by China's party-state to reinsert China into global capitalism; and the immobilization of the Non-Aligned Movement – the anti-imperialist bloc formed decades before by nations of the Global South - the United States seized the opportunity during the 1990s to reorder the world. (Schiller, 2023: 528).

Today, in modern times, the world has witnessed the widespread adoption of internet, mobile devices, digital platforms, Internet of Things (IoT), Virtual Reality (VR), Big Data and Artificial Intelligence (AI). These developments have propelled the digital economy to the forefront of socioeconomic progress, showcasing both its benefits and drawbacks. This surge in digitalization has sparked a considerable increase in interest surrounding digital capitalism and related concepts. Various terms such as "digital capitalism," "digital economy," "platform economy," have emerged to delineate novel organizational structures reliant on digital technology. The digital economy incorporates data and digital knowledge as crucial elements of production, utilizing modern information networks and information and communication technologies (ICT) to improve productivity and strengthen economic structures. The platform economy revolves around efficiently orchestrating social production and reproduction processes by harnessing the capabilities of data collection, transfer, calculation, and processing. Lafuente (et al., 2022:3) call this as "the platformization of the economy" and emphasize that it "has reshaped the structure of markets. In this new context, digital platforms have become the leaders of the digital platform economy with private regulatory power". In this sense, digital platforms are very important for both the digital economy, where economic activities are done using digital technology, and the platform economy, which looks at how businesses organize their production methods. So, these platforms are key players in both types of economies. In the context of digital capitalism, the examination of digitalization's impact on capitalism encompasses an analysis of how these platforms shape economic activities and production methods within the broader capitalist system.

Digital capitalism closely examines how digitalization affects the way capitalism works, using a perspective like classical Marxist analysis. Considering historical patterns, the emergence of digital capitalism can be discerned from capitalists' efforts to address economic challenges. During the 1970s, confronted with economic stagflation—characterized by a combination of stagnant economic growth and high inflation—and heightened international competition, Western nations sought to elevate interest rates and enhance competitiveness. To attain this goal, they instigated transformations within their economies through the adoption of disruptive innovation. At the core of this transformation was the digital economy, which spearheaded a revolutionary shift in production methodologies via advancements in information technology. Not only did it furnish digital

infrastructure conducive to globalization and financialization, but it also evolved into a pivotal component of monopoly capital.

Throughout the last decades, the fluctuations in digital capital have emerged as a crucial facet of the evolving capitalist economy. It resembles a historical ledger documenting capitalists' attempts to navigate economic crises, alternating between success and failure. "Geographically, this 'world economy' of the sixteenth century expanded to western, southern, and east-central Europe, and included the Mediterranean, Latin America, and the coast of West Africa" (Heller, 2020: 82). According to Marx's theory, as capitalism advanced through industrialization, it led to the creation of a global market, increased connections between economies worldwide, defined how labour was distributed globally, and allowed the Britain to become dominant in international trade across various key industries. In this sense, Silverwood and Berry emphasize that (2023: 123) "state capitalism in Britain has rarely been bound to the geographical limitations of the nation-state; it has been a transnational project, centred variably on empire, Europe and the global market, with industrial policy tailored to enable the British economy to exploit and/or service these various spaces by 'making markets' (meaning creating, structuring, and sustaining markets)".

Thus, when assessing the impact of digital capitalism on the global market, it is important to consider its role in driving globalization and the growth of platform capital. While digital capitalism often presents itself as an economic revolution, it can also mask issues like privatization, exploitation, and inequality. Additionally, noticeable changes in consumption and employment have emerged as these processes became increasingly digital and modernized.

EVOLUTION OF CONSUMPTION: THE DIGITAL CAPITALIST SHIFT

Under the auspices of digital capitalism, significant shifts have transpired not only in employment patterns but also in consumption dynamics. The digital economy has significantly revolutionized daily purchasing habits, offering greater convenience, variety, and personalization. Furthermore, it has enhanced backend operations such as logistics and warehousing, resulting in cost reductions and expedited transactions: "During the period following the Covid-19 pandemic, we observe that a large portion of shopping centres have transitioned to digital platforms. During this time,

internet users have become accustomed to shopping online for various reasons, making e-commerce platforms increasingly the new living spaces of the digitalized consumer […] Even sellers who resisted switching to e-commerce until [the pandemic period] were forced to sell online" (Arisoy Gedik & Pirol, 2022: 150-151). Digital capitalism has brought about significant modernization in consumption patterns, which plays a crucial role in generating surplus value. The sector associated with consumption in the realm of digital capitalism is experiencing rapid growth, outpacing the overall growth rate of the Gross Domestic Product (Ding & Chai, 2022: 37). As a result, it has become a significant source of wealth for digital capital on a global scale.

Online shopping platforms have become predominant in the retail sector due to their capabilities in intelligent product recommendations, personalized matching, one-click purchasing, expedited delivery, end-to-end tracking, and incorporation of consumer feedback for enhancement. As a result, in these days "consumption is no longer simply an activity arising out of necessity. It has become a part of people's lifestyles" (Arisoy Gedik & Pirol, 2022: 144). Numerous service platforms have swiftly seized market share by leveraging many digital resources and live interactions. Consequently, online media, social networking sites, video streaming, and gaming platforms have emerged as primary arenas for cultural consumption among people.

Wi-Fi has become as indispensable as air and water in contemporary times. Digital capitalism has significantly transformed consumption patterns in the digital era, particularly through the proliferation of e-commerce platforms. These platforms serve as key components of digital capitalism, leveraging digital technologies to facilitate online transactions between consumers and businesses. With the ease of online shopping, consumers can now browse and purchase a wide variety of products and services with just a few clicks, and this is transcending geographical boundaries and time constraints. This seamless integration of technology into the consumption process has reshaped traditional retail practices, leading to a paradigm shift in how goods and services are bought and sold. Moreover, e-commerce platforms often employ data-driven strategies to personalize the shopping experience, leveraging consumer insights to tailor product recommendations and marketing campaigns. This convergence of digital capitalism and e-commerce underscores the symbiotic relationship between

technological innovation, consumer behaviour, and economic dynamics in the digital age.

The evolution of e-commerce within digital capitalism has significant implications for information security too. As exemplified by platforms like Facebook, as consumers increasingly engage in online interactions the volume of sensitive data exchanged over digital channels has surged. However, this increased connectivity also exposes individuals and businesses to greater risks of data breaches, cyber-attacks, and identity theft. In the digital capitalist context, where data is a valuable commodity, solid information security measures are crucial to protect against these evolving threats.

As a result, while e-commerce offers unprecedented convenience and accessibility, it also underscores the need for vigilant risk management strategies to reduce the inherent vulnerabilities of digital interactions. These platforms illustrate the critical balance between leveraging data for business innovation and ensuring the privacy and security of users in the digital capitalist era.

EVOLUTION OF RISK: INFORMATION SECURITY IN DIGITAL CAPITALISM

Given consumers' significant daily engagement with social media platforms, marketers increasingly prioritize designing advertising campaigns that enhance customer engagement to maximize the effectiveness of their advertisements. This trend is further amplified by the growing influence of influencer marketing. The integration of personalized ads into consumers' social media feeds is considered the most effective method for promoting brand or product recall. On one hand digital capitalism has increased consumption efficiency, on the other hand it has introduced consumers to widespread risks, notably including information security vulnerabilities.

Today, for elevated ease of access, consumers are required to grant access to their personal data, thereby jeopardizing data security. Furthermore, the collection of consumer preference data for personalized advertising aims to influence purchasing decisions, often leading to irrational and excessive spending. This is an issue that is also studied psychologically (Pellegrino, et al.: 4). When consumers shop online, excessive, or unnecessary purchases may develop compulsive buying. Compulsive buyers prefer to use the Internet or social media to avoid others discovering their dysfunctional

purchase behaviour and to avoid being exposed to others' opinions; as a result, compulsive buyers who usually shop to improve their feelings or relieve psychological pressure are more prone to Internet compulsive buying intentions and behaviours.

Consumer traits might be employed for screening purposes, leading to instances of price differentiation or potential access bias. For example, individuals may be denied access to private healthcare coverage or employment interviews on digital platforms based on certain unfavourable traits revealed by their data. It is crucial to acknowledge that while data-driven decision-making can bolster efficiency, it also elicits ethical apprehensions, particularly when it engenders discrimination or unjust treatment predicated on personal characteristics.

There are many examples of how consumer characteristics can lead to either price discrimination or access discrimination. For example, e-commerce platforms leverage consumer data to dynamically adjust prices based on variables such as geographic location, browsing history, or device type. For instance, individuals residing in affluent neighbourhoods may encounter higher product prices compared to those in less prosperous areas. Insurance providers also utilize personal data, including health records and lifestyle choices, to ascertain premium rates. This could result in individuals with specific health conditions or high-risk behaviours facing elevated premiums or even being denied coverage entirely. In the realm of online recruitment, some organizations deploy automated systems to analyse applicants' personal data. If certain attributes are perceived as unfavourable, such as age, gender, or socioeconomic status, this could lead to discriminatory practices during the hiring process. Financial institutions similarly employ personal data to evaluate lending risk, with individuals possessing lower credit scores or financial behaviours potentially offered loans with higher interest rates compared to those with more favourable financial profiles. Finally, admission processes at educational institutions may be influenced by personal data, potentially leading to discriminatory outcomes. Algorithmic biases could favour applicants from specific demographic groups, thereby impacting access to educational opportunities. Additionally, misuse of consumer privacy data poses risks such as financial fraud and personal attacks. Furthermore, the societal emphasis on garnering a large online following and attention exacerbates issues like cyberbullying.

Another risk associated with digital capitalism pertains to diminished information quality. Despite the aggregation of vast amounts of data at a minimal cost, there has been insufficient improvement in the calibre and variety of information. For instance, the integrity of search engine ranking mechanisms, whether they are organic or influenced by capital, is often at odds with the profit model of digital capitalism.

Other risks pertain to information distraction, where individuals across various age groups, including teenagers, adults, and the elderly, have access to valuable digital resources but often find themselves immersed in continuous online entertainment. Therefore, in our day, personal progress in the digital age relies on using digital tools effectively for self-improvement, while avoiding distractions online. In this sense, in July 2018, the French Parliament passed legislation prohibiting elementary and middle school students from bringing "cell phones and other electronic communication devices […] [to] kindergartens, elementary schools, and middle schools" (Library of Congress, 2018). This development brings us to the concept of "attention economy" which was originally introduced by Herbert A. Simon in the late 1960s as stated by United Nations Economist Network (2023) to describe the challenge of information overload within an economic framework. However, its relevance has surged in recent years, particularly with the proliferation of the internet, which has exponentially increased the availability of content. In this digital landscape, attention has emerged as the scarce resource that dictates the consumption of information, with an abundance of content vying for limited attention spans (United Nations Economist Network, 2023). According to Reena and Udita (2020: 1), the phenomenon also known as "the goldfish effect" suggests that users' attention spans on social media average are around 8 seconds. This limitation provides marketers with a brief window of opportunity to convey their messages effectively and influence consumers' perceptions.

Within the framework of digital capitalism, the Internet transcends its traditional role as a sole communication and production tool; instead, it serves as a crucial gateway to access information. Information exerts a profound influence on the industrial domain, governing inputs, operations, and the allocation of digital capital for profit, transcending its conventional status as a mere commodity. Financial monopolies' strategic investments in information technology underscore a critical aspect of employment

dynamics in the digital capitalist era. In this respect Schiller states that: "to understand digital capitalism therefore requires us to look beyond the familiar suppliers of consumer markets – Google, Meta, Amazon, Microsoft, Apple – to include both many diversified suppliers and, above all, corporate tech users on the demand side" (2023: 527).

Schiller's statement emphasizes the need to broaden our understanding of digital capitalism beyond the prominent consumer market suppliers such as Google, Meta (formerly Facebook), Amazon, Microsoft, and Apple. He suggests that it is essential to consider not only these well-known companies but also the diverse range of suppliers and, importantly, the corporate users of technology on the demand side. In other words, Schiller is advocating for a more comprehensive analysis that includes not just the major tech companies but also the various entities that utilize digital technologies for their operations and activities. By doing so, we can gain a deeper understanding of how digital capitalism operates and its implications for different stakeholders in the economy. By leveraging advancements in data acquisition, transmission, and processing, these entities maintain a stronghold over the financial landscape, perpetuating the legacy of financial monopoly capitalism.

This emphasis on data-driven power dynamics highlights the digital capitalist framework, where access and control over data play vital roles. Similarly, Schiller's statement underscores the importance of considering corporate tech users on the demand side, which aligns with the emphasis on data-driven power dynamics and the evolving nature of employment within the digital capitalist framework. This highlights the central role of data access and control in shaping employment opportunities and dynamics in the digital era. This issue touches on the critical role of data in modern digital capitalism, a theme that is exemplified through the case study of Facebook, particularly during the Cambridge Analytica scandal.

CASE STUDY 1: FACEBOOK AND DATA PRIVACY

By leveraging advancements in data acquisition, transmission, and processing, entities like Facebook maintain a stronghold over the financial landscape, perpetuating the legacy of financial monopoly capitalism in the digital age.

Facebook's model of data commodification shows how digital platforms use user-generated content as a core asset, turning privacy into a

commodity and manipulating consumer behaviours through precision targeting. The Cambridge Analytica scandal serves as a stark example of how such practices not only influence economic and social behaviours but also have profound political implications, thereby intensifying the need for comprehensive data governance frameworks which will be given in detail below.

Based on Schiller's analysis underlining the importance of considering corporate tech users, in the context of Facebook, the platform's strategy to maximize revenue through data exploitation illustrates the central role of data access and control in shaping broader socio-economic dynamics. This case highlights the complex interplay between technological advancements and socio-economic structures within digital capitalism, emphasizing the transformative yet disruptive impact of digital technologies on societal organization.

This alignment with Schiller's theoretical insights into digital capitalism reveals the profound implications of data-centric business models on the global economic landscape, reflecting both opportunities and challenges in ensuring fair employment practices, protecting user privacy, and regulating monopolistic behaviours in the digital era. This captures the complexities and ethical considerations surrounding Facebook's business model in the digital capitalism era, particularly in relation to data commodification and its broader socio-economic impacts. This leads directly to the necessity for solid policy frameworks to address these issues which can be found below:

- Given Facebook's model of leveraging user-generated data, there is a critical need for strict data protection laws that go beyond existing frameworks like the GDPR. Policies should enforce not only consent but also clarity on how data is used, ensuring that users are fully aware of the implications of their consent.
- Policies should require platforms like Facebook to disclose their data processing and monetization practices transparently. This includes detailed reports on what data is collected, how it is used, and who it is shared with, providing users with clear information and control over their data.
- Regulations should ensure that companies using data-driven models for revenue also commit to fair employment practices. This includes providing fair compensation and career development opportunities to

employees whose work supports data collection and analysis functions.

- Considering the Cambridge Analytica scandal, there is an evident need for stricter oversight of political advertising on social media platforms. Policies should ensure transparency of funding sources, the authenticity of message origins, and strict penalties for misinformation.
- Comprehensive consumer data rights legislation that empowers users with ownership rights over their digital data, thus limiting how corporations can exploit personal information for profit should be implemented.

These policy offerings specifically target the critical issues arising from Facebook's data-centric practices. They strive to harmonize the economic advantages of digital technologies with the imperatives of privacy, consumer protection, and equitable socio-economic structures. By adopting these policies, governments and regulatory bodies can safeguard against the adverse effects of digital capitalism's growth, ensuring it does not undermine individual privacy, democratic integrity, and fair market competition. This approach aligns with Dan Schiller's perspectives on digital capitalism, emphasizing the necessity for a comprehensive regulatory strategy that addresses both the benefits and challenges of the digital economy, especially concerning employment, privacy, and socio-economic equality.

EVOLUTION OF EMPLOYMENT: DYNAMICS IN THE DIGITAL CAPITALIST ERA

In digital capitalism, the structure of employment has exhibited heightened flexibility and adaptability, marked by the swift and efficient dissemination of job market information. This period has witnessed a proliferation of diverse part-time employment opportunities, concomitant with the burgeoning prevalence of alternative employment structures such as the gig economy and sharing economy. To start with the gig economy, it involves a scenario where numerous self-employed individuals provide services and receive compensation based on the completion of tasks, facilitated by online intermediaries. On the other hand, the sharing economy revolves around the utilization of underutilized resources and time through rental agreements to engage in economic transactions.

The concept of the gig economy emerges in the process of sharing economy. It is a free-market system where organizations and freelancers

participate in short-term work arrangements. McKinsey (2023) defines it as deriving primary income from independent work. We now have access to project-based work and flexibility in our working hours. According to the ADP Research Institute, the gig economy has grown by 6 million people since 2010 (Lin, 2021). Furthermore, it is stated that (TeamStage, 2021) about 76% of gig workers indicate that they will not give up this type of employment method for a full-time job, largely due to the advantages of this type of employment. With the increasing popularity of "gigging," which involves engaging in multiple freelance jobs simultaneously, according to Gallup data, 36% of US workers were involved in the gig economy in 2018. The gig economy is projected to constitute 40% of the American workforce by 2020. Also, it is expected that the size of the gig economy, based on the principle of resource sharing, will reach $335 billion by 2025 (Hunt and Samman, 2019: 10).

Throughout history, technology has continuously shaped the way we work in every sector. During the days when we had to work from home due to the Covid-19 pandemic, the impact of technology on the work environment was felt in a radical way. While the effects of the pandemic may have been devastating, working by utilizing all the possibilities of technology has also created opportunities for many skilled workers who could not adapt to traditional working hours due to living conditions. In particular, women often have to choose between their careers and their lives at home. However, the pandemic has changed the world and led us to embrace entirely new life norms, all under the overarching influence of digital capitalism, which leverages technology to reshape economic structures and work dynamics.

In the realm of digital capitalism, workers experience a dichotomy of effects, encompassing both advantageous and detrimental outcomes. Positively, this paradigm fosters adaptability among workers, encouraging skill development that may culminate in augmented remuneration and diminished susceptibility to complete unemployment. However, it is imperative to acknowledge that the heightened flexibility in employment, particularly evident in large corporations and digital platforms, predominantly serves the interests of these entities, affording them enhanced autonomy in recruitment practices and workforce organization. The primary focus lies in companies' endeavours to procure labour at minimal expense, minimizing associated risks and responsibilities

while maintaining a substantial pool of available workers. Furthermore, capitalism has pervaded individuals' daily routines through communication media, subtly blurring the distinction between leisure and work hours by shaping our time allocation patterns. In several countries, there has been a growing trend of newly created jobs being part-time and characterized by instability. As a result, the working class, or proletariat, is increasingly vulnerable and exposed to higher levels of risk in terms of employment security and financial stability.

The advent of technologies such as data analytics, cloud computing, and artificial intelligence, originally envisioned to facilitate human progress and contribute to endeavours such as ecological preservation, peacekeeping, and global equity, have been co-opted as instruments for profit generation and reproduction within the realm of digital capitalism. Today, instead of reducing how much capitalists exploit people, digital technology has expanded the ways they exploit people's work by involving every aspect of their lives through digital media. Digital labour generates a substantial volume of data for online platforms, which subsequently accrues as digital capital. Digital capitalists perpetuate the expansion of this digital capital by extracting surplus value from digital labour. The contemporary endeavour to exert control over and derive profit from the internet manifests as a subtler yet more potent manoeuvre than previous iterations.

In the current era dominated by digital capitalism, there is a noticeable decrease in the availability of secure, full-time employment positions. Industries such as retail, publishing, manufacturing, and even education, with the rise of online training opportunities, are considered traditional sectors that have particularly felt the effects of digital capitalism. In both developed and developing countries, jobs in labour-intensive sectors have been replaced due to the increasing presence of technology conglomerates, AI, data analysis, and digital platforms. Nonetheless some of the giant technology firms have been known to achieve significant valuations with relatively small numbers of employees. Hartmans (2020) mentions that "by the time Instagram was bought by Facebook in 2012, it only had 13 employees — including founders Kevin Systrom and Mike Krieger". Furthermore, Uță (2018) states that one week following its launch, Instagram had 100.000 users and by December 1 million users and by 2013, WhatsApp had 200 million active users and a staff of 50 (…) In 2014, WhatsApp was acquired by Facebook for $22 billion.

Another notable facet of employment is the growing prevalence of the piece-wage system. As Ding and Chai state (2022: 39), Karl Marx viewed the piece-wage system as the most fitting form of compensation within the capitalist mode of production. With the progress of data computing, storage, and transmission, digital capitalism has attained increased authority over work procedures. As a result, the piece-wage system, which compensates workers based on the amount of work completed, is not limited to traditional manufacturing and service sectors. It has expanded into advanced scientific and technological service domains, exemplified by the gig economy. Under various labels like "crowdsourcing, subcontracting, and outsourcing" (ibid.), this model has increased the workload and risks for workers. While some workers may receive higher pay, the majority face greater exploitation.

A different characteristic of employment involves the increasing fusion of working hours with leisure time. During the Industrial Revolution: "as the US became industrialised, so households had more luxuries and whale oil lamps were greatly desired. Public buildings were lit by them" (Pitt, 2022). In parallel with this development, contemporary digital communication technologies and the immediate competitive demands enforced by digital capitalists exacerbated this trend.

As a result, digital workers may experience sleep deprivation due to the incessant demands of the digital economy. Social communication applications and platforms have integrated into professional environments, shaping work dynamics in the digital era. Notably, terms such as "996" and "007" have emerged to characterize work schedules prevalent in contemporary workplaces (Jie, et al., 2022). "996" denotes a schedule requiring people to work from 9 AM to 9 PM for six consecutive days each week; while "007" conveys the expectation of perpetual availability for work, symbolizing readiness to work 24/7. These terms have gained currency as buzzwords within the digital landscape, shedding light on the demanding and connected work cultures, particularly prevalent in the technology sector. This is exemplified by the case of Uber, a central player in the gig economy, which has reshaped labour relations through its operational model.

CASE STUDY 2: UBER AND THE GIG ECONOMY

Uber, as a flagship of the gig economy, capitalizes on the digital infrastructure

to facilitate a marketplace where drivers, as independent contractors, offer transportation services. This model is reflective of the heightened flexibility and adaptability, where employment is no longer tied to long-term engagements but is project-based and task-oriented. Uber's platform allows drivers to connect with customers efficiently, exemplifying the fast dissemination of job market information and the accessibility of part-time work.

However, this model also raises critical questions regarding the stability and security of such employment, as drivers do not receive the same benefits or protections as full-time employees. In the context of Uber, there are potential offerings related to policy that could be considered:

- Given how gig work operates on platforms like Uber, it's important to create policies that better define worker classifications. These policies should set clear criteria to distinguish between independent contractors and employees, ensuring that workers involved in key activities of a platform are recognized as employees and receive the benefits they deserve.
- Policies could mandate that gig economy platforms contribute to a fund that provides gig workers with social security benefits such as health insurance, pension contributions, and unemployment benefits. This would address the lack of security and benefits typically associated with gig work.
- Implementing minimum wage guarantees for gig workers could ensure they earn a liveable income despite the fluctuating nature of gig work. This policy could help reduce the financial instability often faced by workers in gig economy roles.
- New laws and regulations could be put in place to make platforms like Uber responsible for their workers' well-being. This would include making sure that fare details are clear, there are ways to address complaints, and safety standards are upheld.
- Legislation that allows benefits to be carried from one gig job to another, helping workers who engage with multiple platforms to maintain continuous coverage and accumulate benefits across gigs can be supported.

These policy offerings are consistent with the overarching theme of digital capitalism, addressing both the flexibility and the inherent insecurities of

gig economy work structures. The objective of advocating for these reforms is to maximize the advantages of the gig economy while minimizing its associated risks, thereby ensuring that the digital transformation of the job market positively influences worker welfare and economic stability. This strategy supports workers' rights and contributes to the stabilization of the gig economy sector, enhancing its sustainability within the digital economic landscape.

CONCLUSION

Digital capitalism has truly transformed how businesses function, moving from traditional models that struggled with data extraction to platforms that effectively utilize the vast potential of big data. This change is clearly demonstrated through the case studies of Facebook and Uber, which each represent different aspects of digital capitalism.

Facebook, for instance, shows the monopolistic tendencies that can arise within digital capitalism. By mastering data acquisition, transmission, processing, Facebook has not only established a dominant position within the social media landscape but also set precedents for how personal data can be commodified and utilized to drive significant economic gain. The Cambridge Analytica event underlined the profound implications of such data practices, highlighting the need for enhanced data protection regulations and transparency in data usage, as discussed in the policy offerings of this article. These reforms aim to reduce the risks associated with data monopolies and ensure a fairer digital marketplace.

Uber exemplifies the rise of new economic models such as the gig economy. By leveraging digital platforms to connect freelance workers with customers, Uber has facilitated a flexible yet unstable employment model. The gig economy, while offering independence and flexibility, also exposes workers to significant economic vulnerabilities due to the lack of traditional employment protections. The proposed policy regulations in this article (such as redefining worker classifications, ensuring minimum wage guarantees, and establishing platform accountability) aim to address these challenges, promoting a more sustainable and equitable gig economy.

Furthermore, the shift towards digital capitalism has indeed escalated the risks associated with digital operations, particularly cybersecurity threats and privacy breaches. These concerns necessitate solid cybersecurity frameworks and privacy laws to protect both businesses and individuals

from potential harms, ensuring the integrity and security of digital interactions.

Consequently, the intersection of digital capitalism and political economy unveils a dynamic landscape where technology, economics, and governance converge. Through the theoretical lens provided by Dan Schiller, this paper has explored how digital technologies reshape economic paradigms, influencing everything from consumption to employment.

The case studies of Facebook and Uber, along with the associated policy offerings, have been instrumental in illustrating the complex interplay between technology and socio-economic systems. By considering these examples and embracing Schiller's framework, this study has aimed to illuminate the transformative and disruptive potential of digital technologies within the capitalist economy, providing a deeper understanding of digital capitalism's contemporary landscape and its implications for governance and societal organization.

REFERENCES

[1] Arısoy Gedik, C., & Pirol, M. (2022). Salgın Sonrası Yeni Gerçeklikle Yüzleşmek: Dijital Tüketicilerin Değişen Tepki ve Uyum Süreçleri. *TAM Akademi Dergisi*, 1(2), 139-160. https://doi.org/10.58239/tamde.2022.02.004.x

[2] Betancourt, M. (2010). Immaterial value and scarcity in digital capitalism. *CTheory*, no pagination. http://ctheory.net/ctheory_wp/immaterial-value-and-scarcity-in-digital-capitalism/

[3] Celik, H., & Arısoy, C. (2015). Bilginin Özgürleşememe Sorunu: Neoliberal Ortam İnternet İçeriğine Müdahaleler. *LaborComm 2015 – 6. Uluslararası İşçi ve İletişim Konferansı*, 1-22.

[4] Ding, X., & Chai, Q. (2022). The rise of digital capitalism and the social changes it caused: How to develop the digital economy in socialist China. *China Political Economy*, 6(1), 35-43. doi:10.1108/CPE-10-2022-0017

[5] Fuchs, C. (2013). Capitalism or information society? The fundamental question of the present structure of society. *European Journal of Social Theory*, 16 (4), 413–434. doi:10. 1177/1368431012461432

[6] Hartmans, A. (2020, April 20). Instagram only had 13 employees when

it was bought by Facebook for $1 billion. A decade later, here's where they've all ended up. *Business Insider Africa*. https://africa.businessinsider.com/tech/instagram-only-had-13-employees-when-it-was-bought-by-facebook-for-dollar1-billion-a/zhzc9q6

[7] Heller, H. (2020). The birth of capitalism in global perspective. In K. Yazdani & D. M. Menon (Eds.), *Capitalisms* (pp. xx-xx). Oxford University Press. https://doi.org/10.1093/oso/9780199499717.003.0008

[8] Hunt, A., & Samman, E. (2019). Gender and the gig economy Critical Steps for Evidence-Based Policy. *Working Paper 546*, 3-43. https://euagenda.eu/upload/publications/untitled-198213-ea.pdf

[9] Jie, G., Sym Foong, P., Yifan, Y., Weilin, J., Yijie, C., Xiayin, Y., & Perrault, S. (2022). From 996 to 007: Challenges of Working from Home During the Epidemic in China. *ACM*, *January*, 1-16.

[10] Jin, Z. (2005). *Global Technological Change from Hard Technology to Soft Technology*. Intellect Books.

[11] Lafuente, E., Ács, Z. J., & Szerb, L. (2022). Analysis of the digital platform economy around the world: A network DEA model for identifying policy priorities, *Journal of Small Business Management*, 1-45 doi:10.1080/00472778.2022.2100895

[12] Library of Congress. (2018, October 30). *France: Government Adopts Law Banning Cell Phone Use at School*. Retrieved February 9, 2024, from https://www.loc.gov/item/global-legal-monitor/2018-10-30/france-government-adopts-law-banning-cell-phone-use-at-school/

[13] Lin, J. (2021, June 25). *Reconstructing The Gig Economy Equation: How This Founder Is Optimizing Income and Opportunity For Gig Workers*. Forbes. Retrieved February 9, 2024, from https://www.forbes.com/sites/jessicalin/2021/01/25/reconstructing-the-gig-economy-equation-how-this-founder-is-optimizing-income-and-opportunity-for-gig-workers/?sh=7aab816f16f0

[14] McKinsey & Company. (2023, August 2). *What is the gig economy?* Retrieved February 9, 2024, from https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-the-gig-economy

[15] Nachtwey, O., & Staab, P. (2015). Die Avantgarde des digitalen Kapitalismus. *Mittelweg*, 36(6), 59-84. http://www.his-online.de/zeitschrift/mw36-archiv/1225/62015

[16] Pace, J. (2018). *The Concept of Digital Capitalism. Communication Theory,* 28(3), 254–269.
doi:10.1093/ct/qtx009

[17] Pellegrino, A., Abe, M., & Shannon, R. (2022). The Dark Side of Social Media: Content Effects on the Relationship Between Materialism and Consumption Behaviors. *Front Psychol*, *April 13*(870614), 1-16. doi:10.3389/fpsyg.2022.870614

[18] Pitt, M. (2022, July 14). *The Story of Oil 1822–1922*. Retrieved February 9, 2024, from https://www.thechemicalengineer.com/features/the-story-of-oil/

[19] Qiu, J. L. (2014). Goodbye iSlave: Foxconn, Digital Capitalism, and Networked Labor Resistance. Chinese Journal of Sociology, 34(4), 119–137. doi:10.15992/j.cnki.31-1123/c. 2014.04.010

[20] Reena, M., & Udita, K. (2020). Impact of Personalized Social Media Advertisements on Consumer Purchase Intention. *Annals of Dunarea de Jos University of Galati Fascicle I Economics and Applied Informatics*, 26(2), 15-24.

[21] Schiller, D. (1999). *Digital capitalism: Networking the global market system*. Cambridge, MA: MIT Press.

[22] Schiller, D. (2023). Digital capitalism in the 2020s: Dividing the world. *Etkileşim*, 12, 526-542. doi: 10.32739/etkilesim.2023.6.12.232

[23] Silverwood, J., & Berry, C. (2023). The distinctiveness of state capitalism in Britain: Marketmaking, industrial policy and economic space. *Economy and Space*, 55(1), 122-142. doi:10.1177/0308518X221102960

[24] TeamStage. (n.d.). *Gig Economy Statistics: Demographics and Trends in 2023*. Retrieved February 9, 2024, from https://teamstage.io/gig-economy-statistics/

[25] United Nations Economist Network. (2023, March 23). *New Economics for Sustainable Development: Attention Economy*. UN.org. Retrieved February 9, 2024, from https://www.un.org/sites/un2.un.org/files/attention_economy_feb.pdf

[26] Uţă , I. C. (2018, October 2). *The Story of Instagram and WhatsApp Founders Leaving their Facebook-acquired companies*. Retrieved February 9, 2024, from https://brandminds.com/the-story-of-instagram-and-whatsapp-founders-leaving-their-facebook-acquired-companies/

[27] Yeşilbağ, M. (2022). New geographies of platform capitalism: The case of digital monopolization in Turkey. *Big Data & Society*, *9*(2), 1-14. doi:10.1177/20539517221124585