

Access Rules: Freeing Data From Big Tech for a Better Future

Viktor Mayer-Schönberger and Thomas Ramge

In *Access Rules: Freeing Data From Big Tech for a Better Future*, authors Viktor Mayer-Schönberger and Thomas Ramge examine the role of Big Tech in shaping the digital economy through its control over vast amounts of data, also called *Big Data*, that it collects. This dominance affects not only innovation, but also affects democratic structures and equity by posing challenges to society in a world ruled by capitalism. In today's data-driven world, information is a critical asset, influencing everything from technological breakthroughs to political discourse, and even the markets. *Access Rules* serves as a follow-up to the book *Reinventing Capitalism in the Age of Big Data (2018)*, previously co-authored by Mayer-Schönberger and Ramge, which argues that Big Data is causing a revolution in modern-day capitalism where data is the new form of capital, and it is going to replace money as the key driver of markets. In this previously published book, the authors largely establish that meaningful economic growth overwhelmingly depends on data innovation, and that regulating market competition requires rethinking equitable data access.

In *Access Rules*, the authors dissect the subject of equitable data access by discussing the power that freely shared information derived from Big Data can have in propelling innovation. They also examine the mechanisms through which Big Tech consolidates this power, such as stifling competition and employing large armies of lobbyists in places like Washington and Brussels, often at the expense of societal innovation and equity. The authors state that equitable

access to data is critical for dismantling these monopolies and fostering progress and future innovation across industries. Big Tech's growing dominance stems from this immense power and control over large amounts of data.

Mayer-Schönberger and Ramge structure their primary argument around the premise that data monopolies not only harm competition, but also overall societal progress. They contend that, contrary to the promises of early economic and digital pioneers, the digital age has only exacerbated information asymmetries. The authors frame data as a "non-rivalrous good" whose value multiplies through use. They write, "Data doesn't disappear as more and more people use it. That's because data turns into value only by being used. And its value increases with every additional use." Hence, it would be unwise to allow a few data-rich corporations to continue to maintain exclusive control over vast amounts of data. Instead of removing this data from its collectors, the solution lies in rewriting laws to ensure broader access - by implementing policy and legislation that enables innovation and fosters competition.

To support their arguments, Mayer-Schönberger and Ramge provide a wide range of anecdotes, starting with Benjamin Franklin's story of circulating the *Pennsylvania Gazette* with his vision of a free press that paved the way for American democracy, and extending to the more recent role of Google and Apple in managing, or rather withholding, data access arbitrarily during the COVID-19 pandemic. These anecdotes, which alternate between historical and modern contexts, are engaging and are able to effectively highlight the political and social implications of limited data access. Mayer-Schönberger and Ramge convincingly use these embedded anecdotes to illustrate how innovation, driven by free-market competition and liberal capital from venture capitalists in the past, shaped the post World War II landscape and laid the foundation for today's world of modern technology and conveniences. They make a compelling

case that without equitable access to data, considered the new form of capital, society is at risk of experiencing stagnation in a world devoid of progress and innovation.

Chapter 1 of the book opens with a historical parallel by using Benjamin Franklin's struggles against postal monopolies as a metaphor for modern challenges in controlling the flow of information. The authors highlight how companies like Apple and Google became powerful by collecting vast amounts of data and gaining exclusive control over it. They also reflect on the vision of technological pioneers like Alan Turing and Vint Cerf, who imagined the digital revolution as a means to improve the world, reshaping social and economic structures and expanding individual empowerment. However, the authors argue that today's reality has shifted toward centralized power structures, which is in sharp contrast with these original ideals. To explore the problematic nature of this evolution, Mayer-Schönberger and Ramge discuss recent antitrust and regulatory efforts aimed at rebalancing information power. They successfully examine what has been, what is, and what may come in terms of data collection and the concentration of power in tech monopolies, they pose a crucial question: *How do we legitimize—and limit—the power of knowledge?*

Chapter 2 explores the transformative potential of data, starting with the 2004 DARPA Grand Challenge, where self-driving vehicles competed for a million-dollar prize. This weaves into highlighting how companies like Google and Baidu have created systems that generate and use far more valuable data than their competitors, leading to significant advantages through machine learning and increasing information asymmetries. Mayer-Schönberger and Ramge critique how these companies create self-reinforcing systems that grow more dominant with each interaction, arguing that if data access were democratized, the benefits could be more widely shared. The authors discuss how "data alchemy" is more attainable than most people believe, and how traditional companies' resistance to this reality prevented them from becoming digital giants

early on. Their argument is that anyone can do it. Anyone who can pay for computing power has access to it, can hire the same talent as tech companies, and have access to open-source data that is available to all. They emphasize that it is the issue of data access that inhibits everything else. The authors overlook a key point: while equitable data access is important, companies with deep pockets still have a significant advantage. They can attract top talent, maintain an edge, outbid smaller competitors, and acquire them, further consolidating their dominance.

Chapter 3 introduces Joseph Schumpeter, whose insights and perspective are central to the core vision of this book. His ideas drive much of the narrative and analysis throughout. Schumpeter was an economist in the 1930s who believed that innovation and entrepreneurship drive economic development through a process of "creative destruction," where new innovations disrupt and replace outdated systems. While it's true that industry and technology have changed significantly since Schumpeter's era, Mayer-Schönberger and Ramge are able to present recent insights from experts such as NYU economist Thomas Philippon, to shed light on the factors responsible for the decline in market diversity and competition. By contrasting examples from the past and present, the authors illustrate the growing disconnect that is contributing to the centralization of power.

In Chapter 4, the focus shifts to the economic implications of data monopolization. The authors introduce the term "data colonialism" to describe how global corporations exploit data from developing nations while providing minimal returns. The chapter includes perspectives from various prominent figures in tech, whose testimonies support this claim. One particularly engaging example is Lewis Branscomb's analogy of *The Darwinian Sea*. Branscomb, former head of the U.S. National Bureau of Standards and chief scientist at IBM, who describes this sea as teeming with a wide variety of species. He chose the image of the Darwinian Sea to emphasize that a healthy environment for innovation is not a monoculture. This chapter offers

valuable insights for anyone seeking a broader understanding of the world of data capitalism, and is particularly effective in drawing parallels between historical resource exploitation and modern data practices, emphasizing the urgent need for equitable data governance.

In Chapter 5, *Might and Machines*, the authors examine the symbiotic relationship between artificial intelligence (AI) and data monopolization. They argue that Big Tech's dominance in AI development is inherently tied to its control over vast datasets, which serve as the raw material for training machine learning models. Mayer-Schönberger and Ramge effectively outline the challenges posed by the intertwining of AI and data, emphasizing that access to data is crucial for success in an AI-driven economy. This chapter highlights relevant instances of governance when it comes to Big Tech, like the Biden administration's efforts to break up Facebook and the impact of GDPR. On data innovation, they write, "Too many data resources aren't being mined. Those who extract and store data often have no use for it." While this could be unsettling for individual users to read, the authors present a balanced argument, addressing corporate fears about mandatory data-sharing by highlighting potential benefits, such as broader access to data for innovation.

In Chapters 6 and 7, Mayer-Schönberger and Ramge transition from diagnosing the problem of data monopolization to offering practical solutions, focusing on mandated data-sharing frameworks and real-world examples of successful open-data initiatives. Chapter 6 proposes a system where corporations are required to share anonymized datasets to democratize access and foster innovation, critiquing existing regulations like the GDPR for failing to address systemic data-sharing needs. What would a world with open data access look like? How can global considerations and the public sector enable innovation through data access, and what factors must be considered? Mayer-Schönberger and Ramge address these questions and paint a

vivid picture of such a world by providing tangible examples of necessary actions, such as implementing data portability and ensuring data anonymization.

Chapter 8, the last one of the book is titled: *The End of Data Colonialism*, and ties together earlier arguments to advocate for global solidarity in data governance. The authors draw parallels between the current model of data extraction to historical colonialism, emphasizing how developing nations are often relegated to supplying raw data while wealthier nations benefit from it. Mayer-Schönberger and Ramge conclude by making a compelling case for the value of open access, using the example of the tech giant AT&T. They leave readers with a thought-provoking question: Is this an idealistic utopia or a feasible vision? They answer it by circling back to their opening example of Benjamin Franklin, who firmly believed that access to information is the most critical foundation for democratic discourse, economic development, and political justice.

Access Rules is an essential read for anyone seeking to understand the true value of data and why open access and data sharing are critical to the broader well-being of society. Its critique of Big Tech aligns with the broader criticism but distinguishes itself through its focus on proactive solutions. While works like Shoshana Zuboff's *The Age of Surveillance Capitalism* emphasize the dangers of data monopolization, Mayer-Schönberger and Ramge go a step further by proposing actionable policies to address these issues.

Throughout the book, they provide numerous examples that blend historical context with modern-day applications, illustrating how industry and innovation have evolved. The historical narratives that Mayer-Schönberger and Ramge present, particularly in the first half of the book, occasionally feel disconnected from the modern context. How do these past events remain relevant when capitalism's structure has evolved so significantly?

I felt there was something critical missing in the book: decisions in today's world are increasingly driven by data, as the authors clearly demonstrate throughout - the use of data to make decisions for public good. While not every situation requires such data, including more evidence-based arguments would have strengthened the case for the open access initiative, especially for those who might have been skeptical. This is particularly important regarding the authors' claim that open access would ultimately benefit large companies in the long run. While the authors do provide the example of AT&T at the end, illustrating how Bell Labs patents, made available to all, led to an unprecedented knowledge dividend, this could have been further emphasized. Imagine if someone from a big tech company were to see the statistics behind that example, having access to such concrete data could make all the difference in changing perceptions and convincing skeptics. After all, these companies are the ones fighting hardest to maintain the status quo that currently benefits them, using their influence and resources to protect their interests. For change to occur, these companies must be persuaded to reconsider their position and step back from the extensive lobbying efforts they are currently engaged in. These efforts, backed by substantial financial resources, have the power to influence policies in their favor. Convincing them to shift their stance will require addressing their concerns and showing that the benefits of change can outweigh the advantages they presently hold. This message must be communicated in the objective language of *data* that they understand, and I believe there is significant potential in this book to present a strong case in this manner.

Overall, their work is an essential read for policymakers, academics, and technologists seeking to navigate the complexities of digital governance surrounding Big Tech and open data sharing for societal progress.

Works Cited:

Mayer-Schönberger, V., & Ramge, T. (2022). *Access Rules: Freeing Data From Big Tech for a Better Future*. [University of California Press].