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**ALEXA, IS AMAZON A SURVEILLANCE CAPITALIST?
PRIVACY ISSUES AND OTHER CONCERNS REGARDING THE
SURVEILLANCE CAPITALIST ECONOMIC LOGIC**

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Dedicated to the memory of Dulce Miel

Abstract

As cyberspace has become an important part of our everyday life, we can come across with plenty of smart devices, sometimes even without realizing it. Data collection has become a normality, but a big part of that data goes for undisclosed commercial practices of extraction, prediction, and sales. Therefore, it is important to understand the reasons behind that data collection and whether our confidential information is being protected or actually used against us. Zuboff explains the surveillance capitalist economic logic conveying the theoretical framework she created with real-world experiences and cases. It is clear here, that surveillance capitalism presents a current threat to cyberspace and the way we interact with it. Moreover, Zuboff acknowledges through her book the existence of evidence that suggests Amazon is directed towards surveillance capitalist methods. This study aimed to prove that this, in fact, is the case. This information was obtained paying close attention to interviews, press releases, company programs, and policies related to Amazon. Through this paper, it has become evident that Amazon has, and plans to continue having, surveillance capitalist practices. It is important to scrutinize Amazon and other big tech companies that claim to protect its users. The reality is different since, at the end of the day, companies serve their own interests.

Keywords: *Amazon, behavioral modification, cyberspace, privacy, surveillance capitalism.*

Introduction

As Internet connections have become essential for everyday life, more and more parts of our identity are migrating online. We have accounts in several social media, we keep a professional profile on LinkedIn, get the latest news from Twitter, share most of our lives on Facebook or Instagram, and do videos on TikTok¹. We are increasingly integrating new technologies into our daily lives. Nowadays, it seems like every product is becoming “smart” in some way or another. Not so long ago, the idea of door locks or light bulbs that we could control remotely seem ludicrous². However, in the era of the Internet of Things (IoT)³, the possibilities have become endless.

On a regular basis, we can come across with plenty of smart devices, sometimes even without realizing it. We are regularly with a phone in our hands, we have devices controlling our homes, and similar technologies in workplaces, businesses, and public spaces. On the one hand, it is true that these devices can help us in many ways. On the other, they are constantly collecting data about us⁴. Although this kind of data collection might sound reasonable for research and development purposes, the truth is that a big part of that data goes for

¹ Selby, N., & Vescent, H. (2017). *Cyber attack survival manual: From identity theft to the digital apocalypse and everything in between* (p. 47). Simon and Schuster. San Francisco: Weldon Owen.

² Selby, N., & Vescent, H. (2017, p. 73).

³ Selby, N. & Vescent, H. (2017) defined the Internet of Things (IoT) as “a network of interconnected objects that send and receive data via the Internet using Bluetooth or Wi-Fi”.

⁴ Deibert, R. (2013). *Black code: Surveillance, privacy, and the dark side of the Internet* (Expanded edition). Signal | McClelland & Stewart.

undisclosed commercial practices of extraction, prediction, and sales⁵. Therefore, it is important to understand the reasons behind that data collection and whether our confidential information is being protected or actually used against us. We need to start asking what kind of data is being extracted from us, how secure it is being stored, and who ultimately owns it. Presently, private tech companies, such as Amazon, Facebook, Google, and Microsoft, are the ones who own most of that data, which means they don't have to ask you what they can or can't do with it. As we know, most businesses are driven by money, and our data is money⁶.

Through the years, diverse researchers have studied aspects of this phenomenon to comprehend where this new business logic comes from and how it works. One particular scholar, Shoshana Zuboff, delved into this topic, giving life and conceptualizing the framework of what she calls as "surveillance capitalism"⁷. In her book: *"The Age of Surveillance Capitalism"*, Zuboff explains this economic logic using mostly the actions and practices of Google, Facebook, and Microsoft to convey the theoretical framework she created with real-world experiences and cases. However, Zuboff acknowledges through her book the existence of evidence that suggests Amazon is also taking a big step towards surveillance capitalist practices. For that reason, I intend to focus on Amazon to understand whether it is a key player in this economic logic and if so, analyze to what degree and how that has changed their business logic. In order to obtain this information,

⁵ Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. New York: Public Affairs.

⁶ Selby, N., & Vescent, H. (2017, p. 76-77).

⁷ Zuboff, S. (2019).

I will be following part of Zuboff's methodology, paying close attention to interviews, press releases, company programs, and legal documents related to Amazon.

Correspondingly, I expect to explore more in detail the privacy notice and terms of use involved with this data collection and understand to what extent our privacy is being protected. It is important to note that this paper will focus on the company's business and practices in the United States, considering that their services are well established here and the privacy notices and terms of use of their devices can change by country. Although this topic is prominent in the United States, it is also important to notice that these issues are relevant far beyond than the US. Amazon and other big tech companies are considerably established in countries such as Australia, Brazil, Canada, France, Mexico, the United Kingdom, among others. As Amazon continues to expand rapidly, contemplating these issues will be further relevant in more and more regions and countries.

Studying this particular topic is important these days because surveillance capitalism could be a practice that, if left unchecked, could negatively affect what we understand today as privacy and Internet freedom⁸. There is an increasing amount of our data stored online (in some cases *forever*), and as our everyday lives unfurl, our public and personal privacy come under threat in unprecedented ways⁹. Using Zuboff's words directly from her book: "We cannot fully reckon with the gravity of surveillance capitalism and its consequences unless we can trace

⁸ Deibert, R. (2013).

⁹ Selby, N., & Vescent, H. (2017, p. 48).

the scars they carve into the flesh of our daily lives". Taking all this under consideration, it is vital for us to shape and control cyberspace¹⁰, not the other way around.

In essence, this paper will be constituted of three parts. Part I defines the issue presented in this study; and the chapter is divided into two sections. The first one, explains what is surveillance capitalism and related concepts relevant to the discussion. The second section includes the privacy issues that surveillance capitalism raises and other possible concerns. Part II describes Amazon's background and who they are, what it does, and the evolution in their business logic. Lastly, Part III aims to understand Amazon practices under the surveillance capitalism logic using Alexa, Amazon's digital assistant¹¹, and the devices and services in which Alexa is integrated. This chapter is divided into three sections. The first section is about how Alexa and the Echo devices operate under the surveillance capitalist logic and some background to what Alexa is and the evolution of the Echo devices. The second section is about Alexa's terms of use and privacy policy. Finally, the third section's goal is to further understand Amazon's surveillance practices and behavioral data collection.

¹⁰ The term "cyberspace" refers to an environment where the entities and objects that exist within the global computer network (Internet) interact. It can be also defined as the electronic medium of computer networks, in which online communication takes place.

¹¹ Also known as virtual assistants. This term could be interchangeable throughout the paper.

Part I: Defining the Issue

The first section of this chapter will focus on surveillance capitalism as an analytic concept mainly focused on Shoshana Zuboff's framework¹². The second one will be centered on the issues and concerns surveillance capitalism raises over how we think about privacy, what it means, and how or if it should be protected. It is important to note that for the purpose of this paper, I will further describe here only a fragment of the conceptual framework Zuboff created, given that her book contains thorough definitions and explanations of what surveillance capitalism is. In addition to, illustrations of its different manifestations, the theoretical framework behind it, how it is different from capitalism or how it evolves from it and introduces several novel concepts in order to give form to this economic logic.

What is Surveillance Capitalism?

Through the years, a number of scholars have explored this phenomenon and given a variety of definitions to big tech corporations practices. Shoshana Zuboff was the author, however, to establish a comprehensive structure for this unprecedented economic logic. It is worth noting that, as surveillance capitalism continues to advance and become more popular among companies, an array of surveillance capitalists practices could emerge.

¹² Zuboff, S. (2019).

At the beginning of the book, *"The Age of Surveillance Capitalism"*, Zuboff gives multiple definitions of what 'surveillance capitalism' is. However, for the purpose of this paper, I will be focusing principally on two of the definitions she presented. These two definitions are:

1. "A new economic order that claims human experience as free raw material for hidden commercial practices of extraction, prediction, and sales."
2. "A rogue mutation of capitalism marked by concentrations of wealth, knowledge, and power unprecedented in human history".

These definitions will be further used and explained in detail here. Moreover, Zuboff describes surveillance capitalism as a logic that utilizes Technology as its main instrument to operate, which means surveillance capitalism can employ many technologies and, yet, is not inherent in any of them. That point is crucial to pay attention to as big tech companies want us to conclude that such practices are natural side-effects of technology usage. This makes surveillance capitalist's practices seem inevitable to high tech when in reality these companies carefully calculate and fund these practices for self-serving commercial ends.

In a nutshell, surveillance capitalism is not an accident, but *rogue capitalism* that has learned to manipulate its historical circumstances cleverly to ensure and sustain its success¹³. It is worth mentioning that, while surveillance capitalism does not abandon established capitalist "laws", such as profit maximization, productivity, and growth; these earlier dynamics now operate in the context of a new logic of accumulation, which introduces its own distinctive "laws of motion"¹⁴.

To illustrate the claim before, that surveillance capitalist's practices are the ones who weaponize technology for the companies' favor, Zuboff presents a clear example with Google. Back in 2009, the public became conscious of the fact that Google keeps our search history indefinitely and makes that data available to intelligence agencies and police forces. When former Google's CEO, Eric Schmidt, was asked about this, he responded: "The reality is that search engines, including Google, do retain this information for some time"¹⁵. However, Zuboff claims that the reality is that surveillance capitalist practices are the ones who find convenient holding on this information indefinitely. Search engines don't magically retain information, they are deliberately configured to collect and hoard data for commercial ends.

Accordingly, Zuboff considers Google the pioneer of surveillance capitalism. In *"The Age of Surveillance Capitalism"*, she describes:

¹³ Zuboff, S. (2019, pp.15-17).

¹⁴ Zuboff, S. (2019, p.67). The expression "laws of motion" is taken directly from Zuboff's theoretical framework, but in this context could be also understood as 'motives'.

¹⁵ Zuboff, S. (2019, pp.9-10).

“Google launched an unprecedented market operation into the unmapped spaces of the Internet, where it faced few impediments from law or competitors, like an invasive species in a landscape free of natural predators. Its leaders drove the systemic coherence of their businesses at a breakneck pace that neither public institutions nor individuals could follow.” ...[“Google is to surveillance capitalism what the Ford Motor Company and General Motors were to mass-production-based managerial capitalism.”].¹⁶

Zuboff explains that Google established a way to translate the nonmarket interactions of its users into surplus raw material for its real customers, *the advertisers*, who eventually target us. Google recognized that in order to increase the effectiveness of users’ ads targeting, they needed the most possible information they could obtain from its users. They noticed that inferring and deducing the thoughts, feelings, intentions, and interests of its users would constitute a highly lucrative asset in a new marketplace where low-risk bets about the behavior of users are valued, bought, and sold. This realization enabled privileged access to behavioral data gathered with artificial intelligence¹⁷, which operates as a one-way mirror, disregarding a person’s awareness and consent to these practices.

¹⁶ Zuboff, S. (2019, pp.9-10).

¹⁷ Artificial intelligence is composed of systems that allow computers to imitate human cognitive processes or perform tasks usually done by humans.

From that moment on, Google not only mines behavioral data with the purpose of improving its services but also to decode our interests, whereas those interests are deduced from our online behavior¹⁸. The fact that these mechanisms are automated makes it even more frightening to see how easily our own behavior can be modified and automated. Given this information, there should be no surprise to discover that Alphabet, Google's parent company, is currently dominating as the world's leader in digital ad revenue. "In 2019, the company generated nearly \$162 billion [usd] in revenue," ... along with more than \$34 billion in profit. But Alphabet, along with other big tech companies, remains under regulatory scrutiny for some of its business practices. In Europe, the company is appealing rulings that found that it restricted competitor's ads and broke data privacy laws. And in the U.S., regulators are investigating allegations of similar violations"¹⁹.

A main takeaway of this new or evolved capitalist logic is that the behavioral surplus, in which part of Google's wealth resides, can be considered as *surveillance assets*. Meanwhile, these assets are the key to *surveillance revenues*, and later on converted into *surveillance capital*. The entire logic of this capital accumulation is most precisely understood as *surveillance capitalism*, which is the foundational framework for a surveillance-based economic order: a *surveillance economy*²⁰.

¹⁸ Zuboff, S. (2019, p.93).

¹⁹ Fortune. (2020, May 18). Fortune 500 | Alphabet | Rank 11. Retrieved from <https://fortune.com/company/alphabet/fortune500/>.

²⁰ Zuboff, S. (2019, p.94).

Moreover, digital connections are now meant to other profitable ends. At its core, surveillance capitalism is dangerous and self-explanatory. Zuboff describes it as a revival of Karl Marx's image of capitalism as a vampire that feeds on labor, but with an unexpected turn. "Instead of labor, surveillance capitalism feeds on every aspect of every human's experience"²¹. It is important to note that, in the stage where surveillance capitalism's evolution is, the means of production are subordinated to an increasingly complex and comprehensive "means of behavioral modification". In this way, surveillance capitalism gives life to a new type of power that Zuboff labeled as *instrumentarianism*. This *instrumentarian power* identifies and shapes human behavior toward others' ends. She describes:

"Instrumentation is the puppet, the ubiquitously connected material architecture of sensate computation that renders, interprets, and actuates human experience. Instrumentalization denotes the social relations that orient the puppet masters to human experience as surveillance capital wields the machines to transform us into means to others' market ends"²².

To summarize, Zuboff eloquently explains the era of surveillance capitalism as the origin of a new instrumentarian power that asserts dominance over society and raises new challenges for a "market democracy". She characterizes surveillance capitalism as a boundary-less form that ignores older distinctions between market and society, market and the world, or market and

²¹ Zuboff, S. (2019, p.9).

²² Zuboff, S. (2019, p.352).

person. Surveillance capitalism unilaterally appropriates over human, societal, and political territories extending far beyond the traditional institutional ground of private companies or the market.

All things considered, it should be a crucial matter for us to scrutinize surveillance capitalism. Even though most existing regulatory frameworks are flawed in one way or another, they are intended to defend society, at least to some extent, from capitalism's destructive power. Surveillance capitalism's wrongful practices of expropriation of human experiences have yet to encounter real barriers from regulatory institutions. This economic logic must be reckon as a profoundly anti-democratic social force²³. It is surprising to see how, for most people, realizing the existence of these practices and the purpose of them doesn't seem particularly astonishing. This demonstrates the profound mental assimilation we, as a society, have acquired to the increasingly tyrannical transformations of capitalists methods²⁴.

²³ Zuboff, S. (2019, p. 514).

²⁴ Zuboff, S. (2019, p. 78).

Finally, it is important to point out that Zuboff suggested in her book the existence of evidence that Amazon has directed itself towards a surveillance capitalist approach²⁵. In Chapter 9 of *"The Age of Surveillance Capitalism"*, Zuboff started the conversation on Amazon's ambitions with Alexa and their Echo devices, however, she doesn't go into the intricacies of their mechanisms. Therefore, I will further explain how Amazon's practices are closely related to surveillance capitalist methods.

Privacy Issues and Other Concerns

Cyberspace is all around us. "By the end of 2012, there were more mobile devices on the planet than people: cellphones, laptops, tablets, gaming consoles, even Internet-connected cars."²⁶. Taking this into consideration, it seems that cyberspace moves at the speed of light, while public policy concerning cyberspace travels at the speed of bureaucratic institutions²⁷. Big Data has become a crucial component of cyberspace, and with each passing day, the amount of data, as well as the importance of these issues, keeps increasing. As Ronald Deibert describes in *"Black code: Surveillance, privacy, and the dark side of the Internet"*:

"Information related to each and every one of us (and everything we do) is taking on a life of its own. It, too, has become an object of geopolitical struggle.

²⁵ Zuboff, S. (p. 9).

²⁶ Deibert, R. (2013, p.10).

²⁷ Deibert, R. (2013, p.16).

Every call we make, every text and email we send, increasingly everything we do as we go about our daily lives, is recorded as a data point, a piece of information in the ever-expanding world of “Big Data” that is insinuating itself deeper and deeper into our lives and the communications environment in which we live”²⁸.

Consequently, it is essential that we start finding solutions and protections for our data. We need to understand how this data is being used and with what purpose. We need to know that when we entrust more and more information to these big tech companies, we are not leaving behind legal protections that should be guaranteed by those who have access to our data. We need to establish the boundaries today so tomorrow there will be a set of basic rights to privacy, standards on data protection, regulations on data collection and retention, and all around, Internet freedom. It is important to keep updating these standards as surveillance capitalism keeps evolving.

Although it is apparent these days that personal privacy becomes more lenient as generations grow deeply connected to the Internet; it is also true that regardless of age, we always have secrets that we desire to keep to ourselves. Despite this, some people might be inclined to say “if you have nothing to hide you have nothing to fear”, but I would respond that it would be similar to witnessing wrongdoing and stood by justifying it²⁹. That famous remark trivializes what’s at

²⁸ Deibert, R. (2013, p.49).

²⁹ Deibert, R. (2013, p.131).

stake, given that, checks and balances are established to prevent the abuse of power^{30 31}.

Certainly, these kinds of data collection raise serious questions about how secure and confidential all our data remains. Tech companies tend to assure us that their services are in fact secure and that our data is protected at all times, but this is not always the case. Sometimes, for the sake of their business, companies don't disclosure data breaches³² or when their systems have been hacked or compromised in some way³³. What mostly concerns me about it is that, since we don't fully comprehend the type or amount of data we allow these companies to collect from us, we cannot recognize the risks of this information being disclosed.

With this in mind, it is important to highlight a point we often overlook: how easily we "accept" those long terms of use or privacy policies that pop up the first time we use a service³⁴. There are many cases where companies change those policies or conditions without having to notify its users. So how could we *not* click "I agree"? After all, we can't use their services if we don't accept the terms imposed. But knowing this, how can we delegate authority and power to companies that operate outside proper scrutiny and without fundamental rights protection? Who would really look out for the interests of the *users*? So far, there

³⁰ Deibert, R. (2013, pp.xiii-xiv).

³¹ Zuboff, S. (2019).

³² A data breach is defined as the intended or unintended disclosure of sensitive or confidential information of users to an unauthorized party.

³³ Selby, N., & Vescent, H. (2017).

³⁴ Deibert, R. (2013, p. 132).

should be one thing clear, we are no longer just *customers* for these businesses, but *users* of their services. When we buy a smart device we act as *customers*, but we still become *users* of the services these companies integrate into their devices. They provide us with services for *free*, as long as we accept those complicated terms of use and privacy notices. However, in a capitalist world, everything comes at a price.

Considering all this, a surveillance capitalist practice that should worry us is the passive data collection. This can be defined as the gathering of users' data, including capturing their preferences and usage behavior, without users being actively notified³⁵. Then, the data collected in our visits usually gets sold or shared with other companies. A perfect example of this is the use of cookies and other kinds of browser trackers that follow your activity from site to site. This immediately presents the problem that, as soon as you enter these websites, they start tracking you even before you "accept the cookies". In fact, if you don't want to be tracked, you rather have to specify it in your browser settings or utilize particular browsers that block trackers, such as DuckDuckGo, Firefox, Tor, among others. The irony in all this is that, for companies, it is actually *voluntary* to honor our wishes of not wanting to be tracked. At the end of the day, there is no win unless we start questioning the intention behind these trackers, what kind of information they collect, and understand to what degree we can avoid or choose not to be tracked.

³⁵ Selby, N., & Vescent, H. (2017).

To summarize, although it is challenging to pinpoint a constantly moving target, it is crucial that we, *the users*, give form to cyberspace as much it molds us. Cyberspace is already part of our everyday lives but it can benefit us as much as it can harm us. We need to reckon this and act before we run out of time. If left unrestrained, surveillance capitalism will result in the progressive disintegration of what we hope to achieve for humanity: an open and free global Internet environment that protects our rights³⁶.

Surveillance capitalism's unprecedented nature has facilitated the circumvention of current policies and regulations because our existing concepts cannot completely grasp it. Even though the privacy issues concerning this topic are very important, we need to redefine existing concepts and think beyond current frameworks. For that reason, it is important that we continue having conversations about these issues, without distinction on complexity. We need to question the actions of these companies since, at the end of the day, they are watching over their own commercial interests, in other words, their surveillance capitalists' objectives.

³⁶ Deibert, R. (2013, p. 13, p. 235).

Part II: Understanding Amazon and What it Does

This second part of the paper will focus on explaining who is Amazon as a company and the evolution in their business logic. This includes a general timeline of Amazon's progressive expansions in the online commerce industry, among other industries, and how those decisions made the company we see today. For this chapter it would be important to keep in mind that, even if Amazon hasn't fully transitioned to surveillance capitalism, it does not imply that their operations don't already raise a variety of significant issues.

Amazon's background and business evolution

Amazon³⁷, founded by Jeffrey P. Bezos, first opened in July 1995 with headquarters in Seattle, Washington. It started as an Internet-based retailer company with a great selection of books of more than one million different titles. It praised itself in being forty times larger than a typical bookstore and containing more than five times as many books as the largest book superstore back in that time. Interestingly, Amazon's name and motivation were based on the Amazon River in South America. Jeff Bezos wanted Amazon to be compared to the largest river in the world, being able to surpass far beyond its competitors. This quickly became a real possibility since, in just its first four weeks of operation, the

³⁷ Also known as Amazon.com.

company shipped books to customers in all fifty US states and more than forty-five countries. In two months, sales reached \$20,000 US dollars a week, growing faster than Bezos and his initial team had envisioned³⁸.

Since the beginning, Amazon's priority was its customers and their shopping experience. The company was first composed of a small group of "programmers, editors, executives and all-around book lovers"³⁹. Back then, the company had a free subscription to a personal notification service that allowed its customers to register their preferences in categories such as authors and genres. Later with this information, whenever a new book that matched its user's interests was published, Amazon automatically sent the user an email to notify them. However, Amazon quickly became something far beyond this.

In 1997, Bezos decided to expand its senior management team by adding five vice presidents. "We're bringing on board the management we need to cement and expand Amazon.com's leadership position in online commerce"... "If we're to build a lasting and important company, we must have a world-class management team", said Jeff Bezos, Amazon's founder, and CEO⁴⁰. The new management team included senior executives with expertise from a variety of Fortune 500⁴¹

³⁸ Amazon. (1995, October 4). Press release | World's largest bookseller opens on the Web. Retrieved from

<https://press.aboutamazon.com/news-releases/news-release-details/worlds-largest-bookseller-opens-web>.

³⁹ Amazon. (1995, October 4).

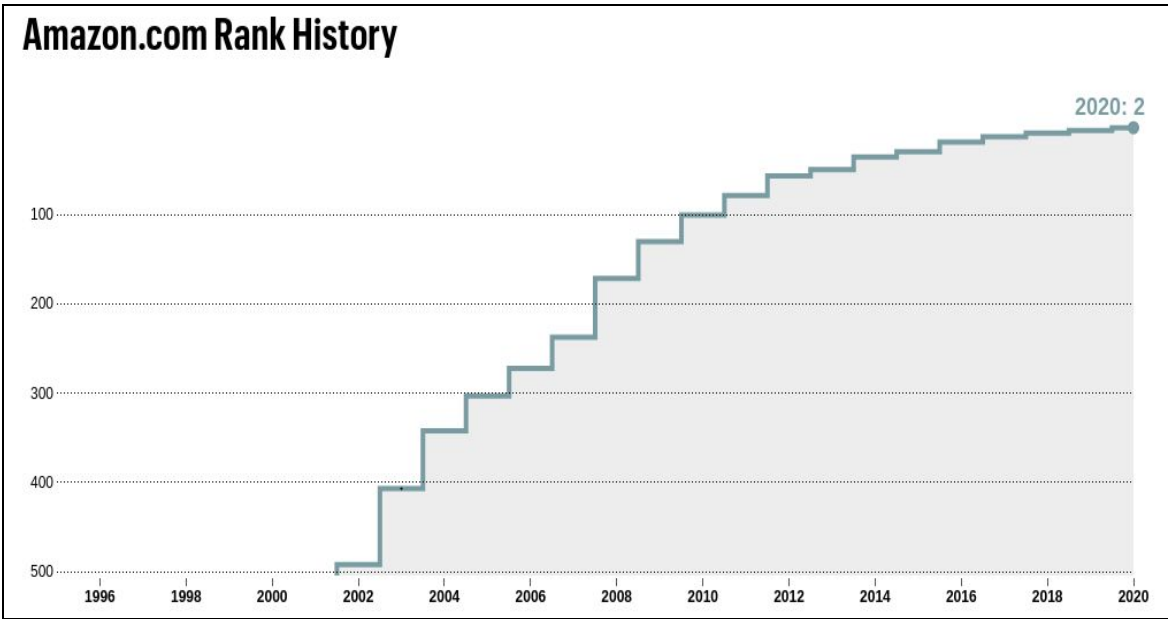
⁴⁰ Amazon. (1997, January 28). Amazon.com expands its senior management team with the addition of five vice presidents. Retrieved from

<https://press.aboutamazon.com/news-releases/news-release-details/amazoncom-expands-its-senior-management-team-addition-five-vice>

⁴¹ The *Fortune 500* is an annual list published by *Fortune* magazine that ranks 500 of the largest United States corporations by total revenue for the corresponding fiscal year. The list includes

companies. Interestingly, as can be seen below in figure 1, by 2001 Amazon made it to the Fortune 500 list in the 492nd spot. However, Amazon’s growth surpassed everyone’s expectations. Presently, the company holds the 2nd position in the Fortune 500 list, whereas in 2019 they were in the 5th place. Fortune describes Amazon as the company with the biggest jump in rank positions, followed by CVS Health, Alphabet⁴², Cigna, and JPMorgan Chase⁴³. The company’s rapid growth in revenues can be clearly observed in figure 1.

Figure 1. Amazon’s rank history in the Fortune 500 list.



Source: Fortune⁴⁴

publicly and privately held companies whose revenues are available publicly. The first list was published back in 1955.

⁴² Google’s parent company.

⁴³ Fortune. (2020). Fortune 500 companies with the biggest jumps in ranks. Retrieved from <https://fortune.com/fortune500/2020/search/?rankgain=true>

⁴⁴ Fortune. (2020, May 18). Fortune 500 | Amazon.com | Rank 2. Retrieved from <https://fortune.com/company/amazon-com/fortune500/>

This rapid growth can be explained due to the company's diversification in the market and their introduction into other industries. As early as 1997, Amazon began acquiring other companies. At first, Bezos started buying other online bookstores, but later on, he decided to expand to new markets and industries in accordance with the senior management expansion. Some of those first acquisitions enabled Amazon to quickly offer European consumers a selection, service, and value similar to what the company offered in the United States⁴⁵. Jeff Bezos continued to diversify Amazon's offering through retail partnerships in 1998, mostly for items such as CDs and videos, and later on through the years introduced clothes, electronics, office supplies, furniture, and many other items. Accordingly, in 1999, Amazon was making online agreements with companies such as Dell⁴⁶ and Google⁴⁷. By 2000, Bezos had plans to open their first customer service center on the East Coast, in response to Amazon's expanding global customer base⁴⁸.

⁴⁵ Amazon. (1998, April 27). Amazon.com acquires three leading Internet companies. Retrieved from

<https://press.aboutamazon.com/news-releases/news-release-details/amazoncom-acquires-three-leading-internet-companies>

⁴⁶ Amazon. (1999, March 10). Dell and Amazon.com announce online agreement. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/dell-and-amazoncom-announce-online-agreement>

⁴⁷ Amazon. (2003, April 3). Google Licenses Web Search and Sponsored Links to Amazon.com.

Retrieved from

<https://press.aboutamazon.com/news-releases/news-release-details/google-licenses-web-search-and-sponsored-links-amazoncom>

⁴⁸ Amazon. (2000, January 13). Amazon.com to Open Customer Service Center in Huntington, West Virginia, to Meet Rapid Growth. Retrieved from

<https://press.aboutamazon.com/news-releases/news-release-details/amazoncom-open-customer-service-center-huntington-west-virginia>

In 2006, the company launched its video-on-demand service, Amazon Instant Video, which today competes with platforms such as Netflix and Hulu. Despite this, there is no authentic competition with these platforms since Amazon acts as their cloud provider⁴⁹ via Amazon Web Services (AWS). Essentially, this means that it is convenient for Amazon that companies who use their cloud computing services succeed, given that a crucial part of their businesses infrastructure rests in AWS. Today, there are not many companies that can offer enough cloud computing power or services to host popular companies like Netflix or Hulu. For instance, two other big techs that have similar cloud computing services are Microsoft and Google, the latter offers cloud services to companies such as eBay, FedEx, PayPal, Scotiabank, Spotify, Twitter, and YouTube⁵⁰. Similarly, AWS has customers such as Intuit, Lyft, Samsung, Shell, several US government agencies and contractors⁵¹, Twitch⁵², and as mentioned before, Netflix and Hulu. Since 2017, AWS holds a steady market share of more than 30 percent of the worldwide cloud infrastructure services⁵³, a business that

⁴⁹ A cloud provider is a company that delivers cloud computing based services and solutions to other businesses and/or individuals. Cloud computing is the delivery of Information Technology resources over the Internet with a pay-as-you-go pricing. Instead of buying, owning, and maintaining physical data centers and servers, companies or individuals can access technology services, such as computing power, databases, storage, and support on an as-needed basis from a cloud provider like AWS. Retrieved from <https://aws.amazon.com/what-is-cloud-computing/>.

⁵⁰ This is a peculiar example since YouTube is a subsidiary of Google since 2006.

⁵¹ Amazon. (2011, August). Amazon Web Services announces AWS GovCloud, a new AWS region for the United States government. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/amazon-web-services-announces-aws-govcloud-new-aws-region-united>

⁵² Currently, Twitch is a subsidiary of Amazon. They acquired it in 2014.

⁵³ Holst, A. (2020, June 4). Global market share of cloud infrastructure services from 2017 to 2020, by vendor. Retrieved from <https://www.statista.com/statistics/477277/cloud-infrastructure-services-market-share/>

generated around \$100 billion US dollars in revenues for 2019 alone⁵⁴. As can be seen, AWS has become a big part of Amazon's business model and strategy.

Moreover, in 2007, Amazon released the Kindle, a digital book reader that allowed users to buy, download, and store their book selections in one place⁵⁵. In order to include audible books on the Kindle, Jeff Bezos decided to buy Audible.com, who was a leading provider of spoken audio information and entertainment on the Web. This acquisition is an example of companies that Amazon obtained in order to add services to their business model. Alexa.com, a company acquired by Amazon back in 1999, is another illustration of this, however, I will introduce it in Part III since it is crucial for the purpose of this paper.

In 2009, Amazon took a peculiar step to upgrade their business, the creation of their own private-label collection of electronic essentials, called AmazonBasics. The AmazonBasics line, at first, included audio video cables, blank DVD media, and some additional accessories. Paul Ryder, the 2009 vice president of the Amazon's Consumer Electronics branch, expressed the following regarding AmazonBasics: "We will continue to gather input from customers and evaluate opportunities for new products under the AmazonBasics brand. We aim to offer our customers as wide a selection as possible, and we think

⁵⁴ Richter, F. (2020, February 11). Amazon leads \$100 billion cloud market. Retrieved from <https://www.statista.com/chart/18819/worldwide-market-share-of-leading-cloud-infrastructure-service-providers/>

⁵⁵ Amazon. (2007, Nov 19). Introducing Amazon Kindle. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/introducing-amazon-kindle>

AmazonBasics makes a great addition to the brands we already carry”⁵⁶. Today, AmazonBasics has grown into an entire online department store. It includes automotive supplies, bedding, furniture, home accessories, luggage and travel accessories, pet supplies, fitness equipment, among others. This is one of the many reasons why Amazon today can closely compete with Walmart, the holder of the 1st rank position in the Fortune 500 list⁵⁷.

Another important step Jeff Bezos took in order to make Amazon the profitable business it is today, was the launch of “*Local Express Delivery*”, a shipping option that gave customers same-day delivery in seven major cities including New York, Philadelphia, Seattle, and Washington D.C. Presently, in Amazon Prime there are a handful of shipping options available, such as same-day shipping, next day, etc⁵⁸. Those changes in shipping options offered Amazon Prime users the convenience of not having to wait too much for their package to arrive. That dynamic shifted the way we see shopping online today. E-commerce is being considered a real option to get what we want quickly without having to set a foot on a store. Consequently, these days there are more and more companies offering faster shipping options, even if it's with an additional cost. It is worth noting that Amazon Prime membership has proved to be part of what

⁵⁶ Amazon. (2009, September 19). Amazon.com introduces AmazonBasics. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/amazoncom-introduces-amazonbasics>

⁵⁷ Fortune. (2020). Fortune 500 | Walmart | Rank 1. Retrieved from <https://fortune.com/company/walmart/fortune500/>

⁵⁸ Amazon. (2009, October 15). Amazon launches same day delivery in seven major cities and expands Saturday delivery options. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/amazon-launches-same-day-delivery-seven-major-cities-and-expands>

makes Amazon attractive. This is considering that, by 2016, around 60 percent of Amazon shoppers were Prime users⁵⁹. Currently, there are more than 150 million global subscribers of Amazon Prime⁶⁰.

In 2011, Bezos entered Amazon into the tablet market with the Kindle Fire. A few months later after the first version, a new generation called Kindle Fire HD came out, with the purpose of competing with Apple's iPad for less cost. However, as we know today, Kindle Fire HD does not entirely compete with the iPad. Not only is the quality compared to the price of both products different, but also Amazon and Apple have a *coopetitive relation*. Several researchers describe "coopetitive relationships" as companies having a collaborative relation with their competitors in order to obtain benefits or an advantage that they could not get by themselves. Examples of these include: co-marketing, collaborative innovation, sharing distribution channels, and share of risks and costs. *Coopetition* usually develops over time and can transform the competitiveness of firms as well as the short and long term logic of industries⁶¹. Jeff Bezos has been particularly vocal from early on in its understanding of how competitors can also have a collaborative relation in the market. Ritala, Golman, & Wegmann, described three particular instances where Amazon has shown a *coopetitive* business model.

⁵⁹ Burrus, D. (2016, June 28). Amazon's secret weapon: Being anticipatory. Retrieved from <https://www.linkedin.com/pulse/amazons-secret-weapon-being-anticipatory-daniel-burrus/?trk=m-p-reader-card/>

⁶⁰ Fortune. (2020, May 18). Fortune 500 | Amazon.com | Rank 2. Retrieved from <https://fortune.com/company/amazon-com/fortune500/>

⁶¹ Ritala, P., Golnam, A., & Wegmann, A. (2014). Coopetition-based business models: The case of Amazon.com. *Industrial marketing management*, 43(2), 236-249.

First, with the launch of Amazon Marketplace, where businesses, regardless of size, could take advantage of Amazon's e-commerce platform and customer base by offering their products on Amazon's website. The second illustration is how Amazon, via AWS, provides cloud infrastructure, power, and support for their competitors in other markets like Netflix and Hulu. Lastly, Amazon has also pursued cooperative benefits in making the Kindle app available for Apple and Windows users⁶². Overall, it is safe to say that the five tech giants, Amazon, Apple, Facebook, Google, and Microsoft, have, to some extent but not altogether the same way, a *cooperative relation*. However, this doesn't mean that Amazon, or any of the big tech, don't have similar relationships with other types of companies.

At that point, it is clear that Amazon's strategies and business model are increasingly successful since the yearly sales went from \$510,000 US dollars back in 1995 to over \$17 billion US dollars in 2011. Progressively, Amazon has expanded and diversified in a variety of markets and industries. That certainly has paid off, given that for the 2015 holiday season, for each US dollar spent online, 51 cents were spent on Amazon⁶³. Similarly, in 2016, of all online shopping made that year, 44 percent of it was done on Amazon⁶⁴.

By 2017, Jeff Bezos announced the acquisition of the grocery chain Whole Foods for \$13.7 billion US dollars in cash. This acquisition was done with the

⁶² Ritala, P., Golnam, A., & Wegmann, A. (2014).

⁶³ Burrus, D. (2016, June 28).

⁶⁴ Burrus, D. (2016, June 28).

intention of expanding Amazon services into the pickup and delivery of groceries through the Whole Foods Market⁶⁵. However, it is important to note that most Amazon services, including this one, are available only through the Amazon Prime membership. In September 2018, Amazon became the second tech giant to hit a market value of \$1 trillion US dollars. Apple was the first to get there, and recently, Microsoft and Alphabet followed⁶⁶.

Undoubtedly, Bezos has transformed Amazon into a massive company where we can get more than we have initially imagined or asked for. The company constantly emphasizes that its proven success comes from focusing on its customers instead of competitors. Although, through the Amazon Prime membership, Bezos found a way to exploit the maximum potential of *convenience*. This has made Amazon Prime services crucial for Amazon's e-commerce side. The company is constantly being reinvented and renovated which has given it the ability to be one step ahead of its competitors as well as anticipate the needs and desires of its users⁶⁷.

As can be seen, Amazon has become skilled at being anticipatory. Thanks to the data they gather from millions of *users*, they have found a way to spot trends and precisely predict changes in the market. However, if something should be clear here is that Amazon is not just a retailer. The company describes itself as

⁶⁵ Amazon. (2018, September 26). Amazon expands grocery delivery and pickup from Whole Foods Market to more cities. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/amazon-expands-grocery-delivery-and-pickup-whole-foods-market>

⁶⁶ Randall, D. (2020, January 16). Which company just hit \$1 trillion? Google it. Retrieved from <https://www.reuters.com/article/us-usa-funds-google-idUSKBN1ZF2SH>

⁶⁷ Burrus, D. (2016, June 28).

guided by four principles: “customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and long-term thinking”. Bezos identified a way to diversify its business cleverly and effectively. He developed Amazon into an expert in consumer behavior.

Part III: Surveillance Capitalism under Amazon

In this chapter, I will focus on explaining Amazon’s participation in the surveillance capitalist economic logic. For this, I will be analyzing Amazon’s practices using technologies like Alexa and the Echo Devices. In order to illustrate that, I will be looking into the terms of use as well as the privacy policies that involve these technologies and see how they relate with surveillance capitalist's practices. This chapter will first include a background of Alexa.com and how it developed into what it is today in Amazon. As well as a background on the Echo devices evolution.

Shoshana Zuboff pointed out that Google, Microsoft, and Samsung, had ambitions to dominate in the voice capture market. Nonetheless, she determined that in fact, Amazon with its virtual assistant Alexa and the expanding line of Echo devices, is the closest to achieve that domination. In her words directly: “Alexa appears to be a threshold event that will define Amazon not only as an aggressive capitalist but also as a surveillance capitalist”⁶⁸. Zuboff also argued that, back in

⁶⁸ Zuboff, S. (2019, p. 269).

2015, Amazon appeared to be migrating towards surveillance capitalism with *“its new emphasis on “personalized” services and third-party revenues”*⁶⁹.

However, it is worth noting that, in contrast with Zuboff’s argument, I argue that Amazon, in fact, had its focus on personalized services since the beginning. As mentioned in Part II, Amazon’s priority was always centered in customer service and user experience. In accordance with this, early on, Jeff Bezos started envisioning the power of personalized services, guided by the second and fourth principles of Amazon: “passion for invention” and “long-term thinking”.

At first, the company had a simple email subscription for a personal notification service that kept its users up-to-date in books that matched their preferences. However, that rapidly changed into more in-dept personalized services. A considerable part of their improvement was possible thanks to the acquisition of Alexa.com back in 1999. Using Alexa Internet’s infrastructure, they were able to quickly comprehend consumer behavior and further personalized their services. Taking this into consideration, I argue that over the years, Amazon progressively shifted to surveillance capitalist practices. Jeff Bezos found a way to take full advantage of this logic through the Internet of Things; with technologies like the Echo devices and Alexa as the brain behind them.

⁶⁹ Zuboff, S. (2019).

Alexa and the Echo Devices

In 1999, Amazon acquired Alexa Internet (Alexa.com), a privately held company founded in 1996 with base in San Francisco, which developed a free advertising-supported Web navigation service. It worked with Internet browsers to provide information about the website's views and, based on the user's patterns, it suggested them related sites⁷⁰. Alexa's services included website traffic information, statistics, and other tools to make strategic and consumer-based decisions⁷¹. However, it was not until October 2004, that Amazon announced a new service using Alexa.com infrastructure, that they called Alexa Web Information Services (AWIS). This gave developers access, for the first time, to the database of website information and usage data gathered by Alexa Internet. AWIS provided developers with programmatic access to the information Alexa collected from its *Web Crawl*, which at the time included more than a 100 terabytes of data from over 4 billion web pages⁷². Not even a month later of the

⁷⁰ Amazon. (1999, April 26). Amazon.com acquires Exchange.com, adding more than 12 million book and music items for sale and auction. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/amazoncom-acquires-exchange-com-adding-more-12-million-book-and-music-items-for-sale-and-auction>

⁷¹ Amazon. (2005, October 11). Alexa Web Information Service launches on Amazon Web Services web site; Web service available on Amazon Web Services web site let developers build innovative applications using data from Alexa's 4.5 billion web page, 16 million website Crawl. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/alexa-web-information-service-launches-amazon-web-services-web-site>

⁷² Amazon. (2004, October 4). New Amazon Web Services offerings give developers unprecedented access to Amazon product data and technology, and first-ever access to data compiled by Alexa Internet. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/new-amazon-web-services-offerings-give-developers-unprecedented-access-to-amazon-product-data-and-technology>

announcement, over 65,000 individuals registered and downloaded the Amazon Web Services Software Developers Kit, which included AWIS⁷³.

Geoffrey Mack, the Alexa Product Manager at the time, expressed the following about this: "We've only scratched the surface of the possible applications of the data captured by the enormous Alexa Crawl. There are many more types of businesses and people that we believe would benefit from customized applications of Alexa data. Rather than build all these applications ourselves, we are opening up and giving developers the opportunity to build them and create their own innovative businesses using our data"⁷⁴. As can be seen, Amazon saw Alexa's potential from early on. Alexa Internet, before becoming part of Amazon, had a huge amount of data that helped them understand consumer's behavior rapidly. Owning data of the frequency and purpose of users' visits for over 4 billion websites, gave Amazon a clear advantage in the market. As Alexa.com's company description says: "Information is power - if you have the right tools"⁷⁵. However, Amazon didn't stop there since they allowed developers to use this data to create their own applications. Of course, this was crucial for later on, given that it set a stepping stone for the 2015 AWS IoT, which will be further explained in this chapter.

⁷³ Amazon. (2004, October 21). Amazon.com Announces 76% Free Cash Flow Growth and 29% Sales Growth -- Expects Record Holiday Season with Expanded Selection, Lower Prices, and Free Shipping. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/amazoncom-announces-76-free-cash-flow-growth-and-29-sales-growth>

⁷⁴ Amazon. (2005, October 11).

⁷⁵ Alexa.com. (2020). About us. Retrieved from <https://www.alexa.com/about>

By 2006, Amazon launched the Alexa Top Sites web service on AWS. This service provided developers with programmatic access to lists of websites ordered by Alexa Traffic Rank. The Alexa Traffic Rank (simply known as the Alexa Rank), is a measure of a website's popularity. This rank is determined using site's estimated traffic and users engagement over the last three months. It represents one of the largest global samples and one of the most up-to-date Internet usage information available. The data from Alexa Top Sites helped developers build a wide-range of products and services and stimulated businesses to target users more effectively⁷⁶.

However, it is not until 2015, that Amazon fully integrated Alexa into the e-commerce industry with the Echo devices. The Amazon Echo is a hands-free voice control device, where users can ask the device for information from the Internet, music, news, traffic, weather, and others. When Echo detects the wake word, it lights up and streams audio to the cloud, using Alexa as the brain to communicate through AWS, in order to recognize and respond your request⁷⁷. In connection with this, later that year, Amazon announced AWS IoT⁷⁸, a platform that made it possible for manufacturers of smart-home devices such as, coffee

⁷⁶ Amazon. (2006, January 13). "Alexa Top Site" Web Service now available for developers through Amazon Web Services. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/alexa-top-sites-web-service-now-available-developers-through>

⁷⁷ Amazon. (2015, June 23). Amazon Echo now available to all customers. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/amazon-echo-now-available-all-customers>

⁷⁸ Amazon. (2015, October 8). Amazon Web Services announces AWS IoT. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/amazon-web-services-announces-aws-iot>

makers, dishwashers, light bulbs, smoke detectors, thermostats, and others, to connect to AWS services. With this, companies were able to analyze, process, and store the data generated by these connected devices on a global scale. “The promise of the Internet of Things is to make everyday products smarter for consumers, and for businesses to enable better, data-driven offerings that weren’t possible before”, expressed Marco Argenti, the vice president of Mobile and IoT in AWS⁷⁹. This resulted to be highly beneficial for Amazon since thanks to this, Alexa's "skills-set" increased rapidly. They were able to add functions to the Echo by integrating connections with these other manufacturers' devices using Alexa.

In 2016, David Limp, the senior vice president who oversaw Alexa and all of its Amazon devices, commented the following: “The nice thing about Amazon device business is that when we sell a device, generally people buy more blue jeans. And little black dresses. And shows. And so that’s good”⁸⁰. The remarks made by David Limp can be considered an illustration of behavioral modification, which is a surveillance capitalist practice. Alexa through the Echo devices is able to detect behavioral patterns based on your requests, this way it anticipates your needs and recommends you things. How easy and convenient it is to get anything we want just by talking? Amazon has found several ways to shorten the steps from the time we see something and the time we actually purchase it. Using

⁷⁹ Amazon. (2015, October 8).

⁸⁰ Zuboff, S. (2019, p. 261).

features such as the 1-Click ordering⁸¹, the Dash buttons⁸², and Alexa's ability to let you order things automatically by request. It is worth noting that, as part of Amazon and Samsung cooperative relationship, Samsung added a feature to its Samsung Family Hub smart refrigerators in which the user can access its Amazon's Dash Buttons through the smart refrigerator's touchscreen⁸³.

Similarly, in 2017, Amazon and Microsoft collaborated in order to get Alexa and Cortana to "talk to each other"⁸⁴. Currently, Amazon has similar collaborations with Apple and Google where users can access through some Echo devices the Google Assistant and Siri. Jeff Bezos expressed the following about this: "The world is big and so multifaceted. There are going to be multiple successful intelligent agents, each with access to different sets of data and with different specialized skill areas. Together, their strengths will complement each other and provide customers with a richer and even more helpful experience"⁸⁵. Bezos' words solidify the argument that Amazon has a cooperative business model.

⁸¹ The *1-Click ordering* let's you place orders automatically, skipping the shopping cart. This option is enabled the first time you order an item and enter a preferred payment method and shipping address. Then, when you use the 1-Click option, your order is automatically charged to the payment method and shipping address you chose in the 1-Click settings. Retrieved from <https://www.amazon.com/gp/help/customer/display.html?nodeId=201889620>

⁸² *Dash buttons* are personalized shortcuts to reorder items you have shown preference for. These buttons work only with products that are available for Prime shipping. If you purchase an item that gets typically reorder, Amazon will create a Dash button for you. Retrieved from https://www.amazon.com/b?node=17729534011&ie=UTF8&ref_=snk_ddb_ydb_lm

⁸³ Samsung. (2018, November 27). Exciting enhancements for Family Hub refrigerator owners. Retrieved from <https://news.samsung.com/us/exciting-enhancements-family-hub-refrigerator-owners/>

⁸⁴ Amazon. (2017, August 30). Alexa meet Cortana, Cortana meet Alexa. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/alex-meet-cortana-cortana-meet-alex>

⁸⁵ Amazon. (2017, August 30).

Through AWS and Alexa, Amazon has developed several successful and highly lucrative cooperative strategies over the years.

By 2019, Amazon had a complete line of Echo devices, that they called the Echo Family. The line includes around 20 different devices, and they keep adding more consistently. Amazon is creating a comprehensive line of, not only smart-home devices but also a variety of on-the-go devices like earbuds, glasses, and a finger ring⁸⁶. Presently, the Echo Frames⁸⁷ and Echo Loop⁸⁸ are part of the Day 1 Editions program where selected customers get early access to these products in order to contribute with feedback. The Echo Buds are currently available to all customers.

It is important to mention that, Alexa.com, is still a subsidiary company of Amazon, which provides analytical tools for agencies and marketers. These tools are meant to help firms improve their marketing strategies across different websites and browsers. Alexa gets comprehensive data from a sample of millions of Internet users as well as data from sites that have chosen to install an “Alexa script on their site and certify their metrics”⁸⁹. In other words, Amazon utilizes

⁸⁶ Amazon. (2019, September 25). Amazon introduces 8 new Echo devices. Retrieved from <https://press.aboutamazon.com/news-releases/news-release-details/amazon-introduces-8-new-echo-devices>

⁸⁷ The Echo Frames are eyeglasses that have Alexa inside. Just like other Echo devices, users can make calls, set reminders, create to-do lists, listen to music or podcasts, and control all the IoT devices connected with Alexa. They are compatible with prescription lenses and support access to Google Assistant and Siri. Retrieved from <https://www.amazon.com/Staging-Product-Not-Retail-Sale/dp/B07W72XKPJ>

⁸⁸ The Echo Loop is a finger ring with Alexa inside. Similar to other Echo devices, users can make calls, set reminders, get information from the Internet, ask for calculations, among other things. Retrieved from <https://www.amazon.com/Echo-Loop/dp/B07JPK4XJ6>

⁸⁹ Alexa.com. (2020). About us. Retrieved from <https://www.alexa.com/about>

Alexa.com for two different markets. On the one hand, we have Alexa Internet as a subsidiary company that helps businesses target website's users with ads that closely relate to a particular audience. On the other, we have Alexa as the virtual assistant that uses machine learning to gather information from users and observe their behavioral patterns in order to modify them.

When I talk about behavioral modification, I refer to a process where, with machine learning, companies like Amazon with Alexa, find ways to understand your behavior as a consumer to give you highly personalized advertisements. With this, the probability of a consumer purchasing what they get recommended increases considerably since the ads are based on your previous consumption patterns. However, for these tailored ads to work, companies need as much data as they possibly can get about our behavioral patterns; which they get through surveillance.

All things considered, I argue that based on Amazon's business model and evolution, we can observe a pattern of not only aggressive capitalist practices, but also a tendency to surveillance capitalist practices. Amazon, using the Echo devices, can get comprehensive data of not only our online activity, but also our behavior around our home, car, and almost everywhere in our lives depending how many of these devices you acquire. It is interesting to note that these devices seem cheaper compared to other high technology devices. I think the reason why the Echo Family, and similar, are within an affordable price range is because they want us to be able to get it easily. The lucrative business comes after you

purchase these devices. At the moment where they can actually understand our consumption behavior to steer us into buying more. This process is critical for surveillance capitalism and Amazon has been able to visibly exploit this.

Certainly, big tech companies argue that these devices protect users' privacy because it is important for them. However, the scary story is inside those terms of use and privacy notice which we are coerced to accept. For that reason, in the next section, I will be looking further into these in order to determine to what extent our privacy is being protected.

Alexa's term of use

The analysis provided on this section is based on Alexa's term of use for United States users updated on June 30, 2020. However, as stated on clause 3.3 "Changes to Alexa; Amendments", Amazon may:

"...change, suspend, or discontinue Alexa, or any part of it, at any time without notice. We⁹⁰ may amend any of this Agreement's terms at our sole discretion by posting the revised terms on the Amazon.com website. Your continued use of Alexa after the effective date of the revised Agreement constitutes your acceptance of the terms."⁹¹

⁹⁰ Refers to Amazon.com and its affiliates.

⁹¹ Amazon. (2020, June 30). Alexa terms of use. Retrieved from <https://www.amazon.com/gp/help/customer/display.html?nodeId=201809740>

As can be seen on this clause, Amazon can do any type of amendments to this agreement without having to notify its users. Customers who purchased an Echo device or use Alexa in any way, need to be aware of these terms on their own. This can raise serious issues since users automatically accept whatever terms this contains just by continuously using Alexa's services and without being notified of changes.

Moreover, Amazon describes in this term of use that they, in fact, share data with third party services. In clause 2.1 of "Third Party Services", they state the following:

"If you use a Third Party Service, we may exchange related information with that service, such as your ZIP code when you ask for the weather, your custom music stations, information about your Auxiliary Products, or the content of your requests. Your use of any Third Party Service is subject to this Agreement and any third party terms applicable to such Third Party Service. Certain of these third party terms can be found in the Legal Notices section of your Alexa App, or may be linked from your Alexa App, and may be updated from time to time. If you do not accept the third party terms applicable to a Third Party Service, do not use that Third Party Service"⁹².

This clause raises a series of questions. First, why are there only *certain* terms of these third party services available? Second, when we decline to

⁹² Amazon. (2020, June 30).

continue using these services, do they delete our data? And most importantly, how does Amazon expect its users to keep track of all the third party's legal notices, agreements, conditions of use, privacy notices, and other legal documents that can change at any time? They praise themselves for giving their users the maximum convenience, but this doesn't sound convenient at all. It is nonsensical to constantly check for updates on every legal document each company has. And yet, it is not clear how anyone can accept terms that they don't actually know.

Amazon's privacy notice

Amazon does not have a particular privacy notice for Alexa. The privacy notice that will be discussed here covers all Amazon Services, including Alexa. This notice was last updated on January 1, 2020. Here, Amazon states that they receive and store any information an user provides to its Amazon Services. However, if you chose not to provide certain information, you may not be able to use most of these services. Amazon explains that they can automatically store some data about your use of their services by using cookies and unique identifiers. Inside the notice, they have a list of examples of the information they collect. This data is obtained when you provide information while doing things such as: search or shop for products or service in their store; add or remove an item from your cart; place an order; download, stream, view, or use any content on Amazon.com or device; talk or interact with Alexa; communicate with them via

phone, email or other system; among other things. Amazon explains that, as a result of you performing any of the actions mentioned, users may provide them with the information shown below in figure 2:

Figure 2. Amazon Privacy Notice: Examples of information collected.

As a result of those actions, you might supply us with such information as:

- identifying information such as your name, address, and phone numbers;
- payment information;
- your age;
- your location information;
- your IP address;
- people, addresses and phone numbers listed in your Addresses;
- e-mail addresses of your friends and other people;
- content of reviews and e-mails to us;
- personal description and photograph in [Your Profile](#) ;
- voice recordings when you speak to Alexa;
- images and videos collected or stored in connection with Amazon Services;
- information and documents regarding identity, including Social Security and driver's license numbers;
- corporate and financial information;
- credit history information; and
- device log files and configurations, including Wi-Fi credentials, if you choose to automatically synchronize them with your other Amazon devices.

Source: Amazon.com⁹³

The company constantly assures us that it is not surveillance if we give this information on our own. However, most of the time users are coerced to give this

⁹³ Amazon. (2020, January 1). Amazon Privacy Notice. Retrieved from <https://www.amazon.com/gp/help/customer/display.html?nodeId=468496>

data because if we refuse to hand it, we couldn't get the *full potential* of their services. Amazon requires most of the information listed in figure 2, but in many cases, this data is not necessary for the actual functionality of their services. For surveillance capitalism, however, it is essential.

Later on, Amazon explains how they use your personal information for things such as purchase and delivery of products and services, improvements of Amazon Services, communicate with you, comply with legal obligations, etc. Nonetheless, they also acknowledge the use of that information for recommendations and personalizations and for advertising. In the recommendations and personalization section, Amazon states: “We use your personal information to recommend features, products, and services that might be of interest to you, identify your preferences, and personalize your experience with Amazon Services”⁹⁴. As can be seen, Amazon does not really explain how they identify your preferences.

For the advertising section, they invite you to learn more about it in the Interest-Based Ads notice⁹⁵. In the mentioned notice, Amazon states that it uses cookies to understand the effectiveness of the internet-based ads they show each user by measuring what ads are viewed or clicked, in order to provide “more useful and relevant ads”. Amazon states that they work with third parties such as, advertisers, social media networks, search engines, and others to increase ads

⁹⁴ Amazon. (2020, January 1).

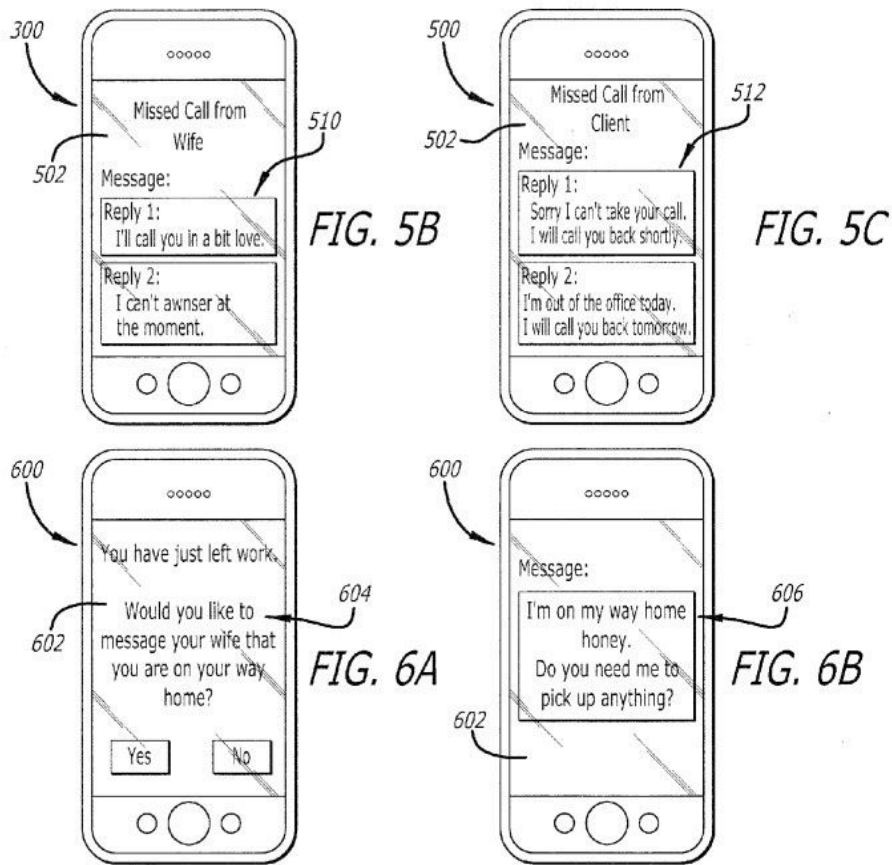
⁹⁵ Amazon. (2020). Internet-based ads. Retrieved from <https://www.amazon.com/gp/help/customer/display.html?nodeId=202075050>

relevance. “Some third-parties may provide us pseudonymized information about you (such as demographic information or sites where you have been shown ads) from offline and online sources that we may use to provide you more relevant and useful advertising”⁹⁶. To whom are these ads useful? For users? Or their yearly revenues? In these notices there are a large number of possible parties involved, which makes it harder for users to keep a record of. This situation creates loopholes that could potentially compromise our data.

Up until this point it should be evident that, in fact, Amazon has surveillance capitalist’s tendencies. In recent years, Amazon has submitted a group of patent applications that includes a series of alarming functionalities. In 2014, the company applied for a patent to give users customized speech options generated in response to a particular situation. For instance, when an user receives a call and can’t respond, the machine will generate possible options for replies based on previous behavioral patterns of the user. In figure 3 below, there are four illustrations of how this would work.

⁹⁶ Amazon. (2020).

Figure 3. Images of how could customized speech generation work



Source: US Patent Application Publication⁹⁷

⁹⁷ Noble, I. S., Halberg, G. M., Karakotsios, K. M., & Watanabe, Y. (2014). U.S. Patent No. 8,706,827. Washington, DC: U.S. Patent and Trademark Office. Retrieved from <http://appft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-bool.html&r=18&f=G&l=50&co1=AND&d=PG01&s1=amazon.AANM.&s2=conversational&OS=AANM/amazon+AND+conversational>

In this figure, we can see diagrams of four different cases. In the two top phone images, the user receives on the left a call from “Wife” and on the right a call from “Client”. In each case, we can see two different options to reply based on previous communication patterns of said user. In addition, the two phone images below show a linked case scenario. On the left, the machine *realizes* that the user is leaving work and that this usually results in the user texting the wife, which triggers the following: “Would you like to message your wife that you are on your way home?”. Then, if the user presses “yes”, the machine will generate a message based on previous communications patterns.

As illustrated, in order for Amazon to do this they will: monitor user’s communications, identify behavioral patterns based on users interactions with different contact groups, and generate context appropriate responses. This technology presents a variety of serious concerns about privacy, possible behavioral modification, and other issues. Moreover, among the group of patent applications Amazon has presented, there is a one in particular that I found the most unsettling. The patent application is for “Keyword determinations from conversational data”. This application has been mentioned by researchers and journalists in past years⁹⁸, however, Amazon updated the application back in January⁹⁹. Here, they explain that the purpose of the patent is to create “sniffer

⁹⁸ Maheshwari, S. (2018). Hey, Alexa, What Can You Hear? And What Will You Do With It. *The New York Times*, 31.

⁹⁹ Edara, K. K. (2020). *U.S. Patent No. 10,692,506*. Washington, DC: U.S. Patent and Trademark Office.

algorithms” or other processes to identify “trigger words” during an user conversation. Then, based on these trigger words, such as “love”, “enjoy”, or “dislike”, Amazon would store or transmit this data to a location accessible to advertisers or content providers to target users with things relevant to the conversation. Figure 4 shows a situation that illustrates how the algorithm would be employed.

Figure 4. Diagram of how the sniffer algorithm could work

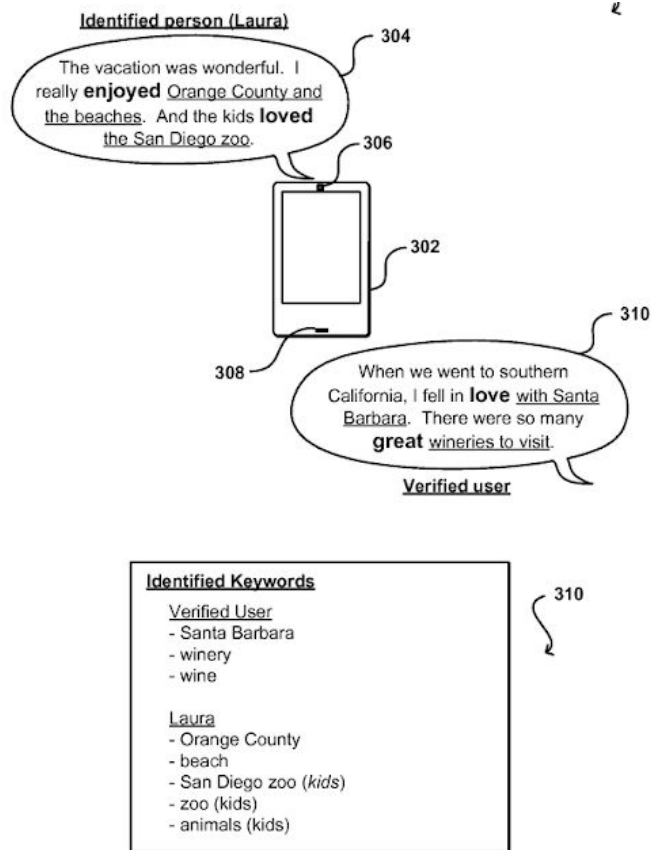


FIG. 3

Source: US Patent Application Publication¹⁰⁰

¹⁰⁰ Edara, K. K. (2020). Retrieved from <http://appft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fmetahtml%2FPTO%2Fsearch-bool.html&r=13&f=G&l=50&co1=AND&d=PG01&s1=amazon.AANM.&s2=conversational&OS=AANM/amazon+AND+conversational>

This diagram shows a conversation between two friends talking by phone, in which both mentioned things in their experiences that they liked. Based on the “identified keywords” shown in figure 4, Amazon created an illustration of a shopping recommendation’s page. On this page, they show recommendations for the “verified user” and the “identified person”, in the case shown, the identified person it’s named Laura. For the user, who mentioned Santa Barbara and its wineries, Amazon displays an ad about a “Wine of the Month” club, and a recommendation to buy a walking guide of Santa Barbara. Similarly, it shows the user a list of recommended items to purchase for Laura, like a beach towel, and for Laura’s kids, a San Diego Zoo season pass.

As demonstrated, this technology would give Amazon an excellent tool for surveillance capitalism. It is important to notice that in both examples, the company illustrates their drawings using phones, however, they clearly specify that it should be understood that these technologies could be implemented to any electronic device. This algorithm presents serious threats to privacy, especially when they not only recommend items for the “verified user”, but also for an “identified person” who does not necessarily agree to participate in this.

Conclusion

In conclusion, surveillance capitalism presents a current threat to cyberspace and the way we interact with it. This economic logic has evolved thanks to the lack of boundaries inside our regulatory institutions. These institutions should be there to serve society, not to protect companies. The questions raised here concern the fact that our lives are transformed into behavioral data while most users remain ignorant of these practices and methods. We should be the ones making risk and benefits assessments as to whether it is worthy to hand all our information in exchange for their services. However, as can be seen here, this is not the case.

Amazon has become a master of anticipatory techniques and an expert in consumer behavior. Their diversification in the e-commerce industry as well as others made the company we see today. Thanks to the data they gather from their million of *users*, Amazon has found ways to spot trends and precisely predict changes in the market. As demonstrated in this study, Amazon is not just a retailer. Bezos converted the company into a massively profitable business. However, if something should be clear is that Amazon has indeed veered to surveillance capitalist methods. As shown through this paper, users' privacy is not necessarily Amazon's top priority. Their practices raise several concerns and only a few have been covered here.

Despite this, society has become more and more numb to aggressive capitalist methods such as the ones performed by Amazon. We need to wake up before it is too late. There should be serious regulations as to how our data is used, stored, and shared. We need to keep scrutinizing these companies and protect ourselves from these dangerous methods. We need to keep having conversations regarding these topics in pressing times like these. We face extraordinary challenges concerning these issues, but this should not discourage us. We live in an increasingly interconnected political space, and to solve these problems, it is necessary to have an open, equal, and free cyberspace.

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