To Trust or Not To Trust

Why Do People Distrust Technology Companies?

by

Jonathan Noah Edelstein

An honors thesis submitted in partial fulfillment of the requirements for the degree of Bachelor of Science Undergraduate College Leonard N. Stern School of Business New York University

May 2021

Professor Mary Billings
Professor Marti G. Subrahmanyan
Faculty Adviser

Professor Adam Alter
Thesis Advisor
Acknowledgements

When I was a freshman, my statistics teaching assistant told me about her thesis paper. Still trying to find my footing, I thought the opportunity to write an Honors thesis was a pipe dream. And then I was offered the chance to apply.

When I was accepted and asked who I thought would make a suitable advisor, I suggested Professor Adam Alter, who I had heard speak in a Marketing Society meeting my freshman year. I thought it was unlikely that he would be available but am now thrilled to have been a beneficiary of his guidance and expertise.

Over the course of the last twelve months, I have had the unique opportunity to explore technology in an academic context. I have struggled with my question, my scope, and my senior year conducted via Zoom. I have oscillated between companies, case studies, and questions.

I am proud to have had the opportunity to connect with students and professors and to have been challenged in a particularly unique way. As I leave Stern, I am most proud of myself for how I grew in new ways through unexpected opportunities. Writing this thesis was definitely one of those opportunities.

So, thank you Professor Alter, Professor Subrahmanyam, Professor Billings, and my family. You have supported me this year academically and, despite graduating amidst a global pandemic, ensured I had a year just as challenging, fulfilling, and enjoyable as the rest of my time at Stern.
Introduction

What does it mean to (dis)trust a technology company? When I started working on this thesis, I was focused on bringing clarity to a dynamic and nuanced topic. More than anything, I wanted to define what “trust” means. To do this, I will blend subjectivity and objectivity. Accordingly to Meriam-Webster’s dictionary, trust is the “assured reliance on the character, ability, strength, or truth of someone or something.”¹ Subjectively, I translate that term to technology companies in the following way: when you think about a technology company, be that Facebook, Twitter, Amazon, or Apple, does your mind more quickly jump to the way these companies support or are slowly melting the foundation of what you consider society. This paper will use case studies to look at trust within the context of personal privacy and social media content moderation. Within the frame of each case, I will ask one simple question: do you have an “assured reliance”² that the company in question will do what’s best for the broader community?

Over the course of this thesis, I will try to argue that consumers should trust Apple and Twitter by looking at two case studies of when the companies collided with society in public view. This is undeniably a controversial opinion, but it is also a needed one. I believe there is an extreme dearth of unique, fresh opinions about technology companies. My approach may also concern you. You may argue that the cases are irrelevant based on when they occurred or too specific to the topics they address to draw conclusions from. However, they are purposeful for

---

² “Definition of TRUST.”
one reason: these events represent moments when these companies were under intense scrutiny from the consumers they serve and the public whose trust they wish to earn. Therefore, there are no better examples through which to analyze how these companies publicly operate and manage their optics.

Apple was thrust into the spotlight in the aftermath of the San Bernadino terrorist attack. They refused to create a backdoor to the terrorist’s iPhone and sparked a debate between personal privacy and national security. Twitter was thrust into public view last spring when they flagged President Trump’s Tweets and ignited the debate over how content is moderated on social media. They faced increased pressure after banning President Trump following January’s Capitol riot. When you were following this crisis, what was your reaction? Did you immediately argue that Twitter was right to ban the President to save our democracy? Or, did you argue that his ban was a signal of decreasing free speech on the internet? For Apple, did you show your friends your most recent texts, photos, and emails to illustrate your ‘technological openness’ and prioritization of national security? Or, did you increase the complexity of your password to show your support for personal privacy?

I will start each case study by presenting an unbiased view of what each of these companies does through a description of their histories and how they came to dominance before delving into their respective debates. Because, before we bring in our judgements, it is crucial to bring context to companies that dominate our daily lives and are omnipresent in our societies. We need to answer basic questions about them. Most importantly: is our (dis)trust in them misplaced?
Apple

Started in 1976, Apple created the boot-strapped startup culture that is prevalent and sought-after today.\(^3\)\(^4\) The company’s first product was “simply a working circuit board,” followed by “a stand-alone machine in a custom-molded plastic case” that was strikingly different from other computers available at the time.\(^5\) Fast forward to today, and for all that Apple has changed, it is still just as similar. It continues to be the bedrock of Silicon Valley innovation, even as they have massively expanded their reach. Their product line now includes a smartphone business currently jockeying with fellow tech titan, Samsung, for market share.\(^6\)

<table>
<thead>
<tr>
<th>Global Smartphone Market</th>
<th>SHIPMENT (MILLION)</th>
<th>SHARE (%)</th>
<th>GROWTH (YoY %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAMSUNG</td>
<td>296.9</td>
<td>255.7</td>
<td>20%</td>
</tr>
<tr>
<td>APPLE</td>
<td>195.6</td>
<td>201.1</td>
<td>13%</td>
</tr>
<tr>
<td>HUAWEI</td>
<td>238.7</td>
<td>187.7</td>
<td>16%</td>
</tr>
<tr>
<td>XIAOMI</td>
<td>124.7</td>
<td>145.8</td>
<td>8%</td>
</tr>
<tr>
<td>OPPO</td>
<td>120</td>
<td>111.8</td>
<td>8%</td>
</tr>
<tr>
<td>VIVO</td>
<td>113.7</td>
<td>108.5</td>
<td>8%</td>
</tr>
<tr>
<td>REALME</td>
<td>25.7</td>
<td>42.4</td>
<td>2%</td>
</tr>
<tr>
<td>LENOVO GROUP</td>
<td>40.6</td>
<td>33.3</td>
<td>3%</td>
</tr>
<tr>
<td>LG</td>
<td>28.4</td>
<td>24.7</td>
<td>2%</td>
</tr>
<tr>
<td>TECNO</td>
<td>21.6</td>
<td>22.8</td>
<td>1%</td>
</tr>
<tr>
<td>OTHERS</td>
<td>273.1</td>
<td>198.9</td>
<td>18%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1470.1</td>
<td>1332.5</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Counterpoint Research: Quarterly Market Monitor Q4 2020

---

5 “Apple Inc. | History, Products, Headquarters, & Facts.”
Their wearables business quickly took over a nascent market by capturing a staggering 75% market share\(^7\) in its first quarter of availability.\(^8\) These are complemented by products built for the home, such as AppleTV and HomePod, a tablet business, and a computer business currently being reinvented by them yet again through their M1 chip, which has forever altered the value chain of personal computing devices.\(^9,10\) While seemingly just historical context, understanding their product landscape is crucial to understanding the core of my thesis, because their extensive product portfolio begets their status as a tech titan. In other words, the company’s product portfolio renders them relevant in any conversation about technology and, when the conversation centers on them, it immediately defines technology today and in the future. This was just as true 45 years ago as it is today.\(^11,12\) They have consistently dictated how we relate to technology as society has sought to understand how it relates to us.

Apple has also been a company known for secrecy. In an interview with The Verge, famed technology columnist, Walt Mossberg, described his experience when Steve Jobs showed him the first iPod.\(^13\) It was “under a cloth, even though it was only... a few of [them] in the room and [Mossberg] was the only one who had never seen it.”\(^14\) Jobs “just [liked] to do it this way” with “a black cloth.”\(^15\) While this may seem like an irrelevant and personal anecdote,
it is instead one that long-time Apple fans remember from Jobs’ keynotes and is a microcosm of the company’s far-reaching secrecy. In Danny Boyle’s *Steve Jobs*, an adaptation of Walter Isaacson’s biography, Jobs is preparing for the launch of the Macintosh in 1984. While attempting to solve a last-minute issue, Apple engineer Andy Hertzfeld explains why “if it’s a hardware problem, [they] can’t get into the back” because the computer was put together using “special tools,” since Jobs “didn’t want users to be able to open it.” So, whether a black cloth for theatrical purposes or “special” screws to control the user experience, these stories highlight a company built upon secrecy and control. They are a look at the DNA of a company with a meticulous, detail-oriented, and controlling approach that extends itself from product launches to PR releases. You simply can’t understand Apple without understanding its shroud of secrecy.

This controlling approach was forced into public view on December 2, 2015, when San Bernardino, California experienced a horrific act of terrorism at the hands of “[m]arried couple Syed Rizwan Farook and Tashfeen Malik [who] fired automatic weapons on community members at the Inland Regional Center (IRC).” Early in the investigation, the FBI was able to recover one of the suspects’ iPhones; however, it was unable “to access data on the iphone 5c that San Bernadino County issued Farook in connection with his employment,” according to a

---

17 Boyle.
18 Boyle.
19 Boyle.
21 “San Bernardino Shooting | CLEAR Case Study.”
“Contract for Assistance” shared by the FBI. So, the FBI shared a request with Apple “ordering it to make specialized software that would allow the FBI to unlock an iPhone used by Syed Farook.” Thus started a debate that would forever change our notions of privacy and security, whether that be digital or domestic. The answer, as it was for me, seemed obvious: give the FBI access. That perspective was driven by a world where terrorism was becoming an increasingly more pressing concern, in my mind, than letting the government gain back-door access to my family’s text messages. Was that a justified fear? To analyze that, it is necessary to understand the surge in terrorism around that time catalyzing my fear.

In 2011, there were 10 acts of terrorism in the US. By 2016, that number was seven times higher. And 2015, the year in which San Bernadino was the site of an act of terrorism, the US was already experiencing four times more acts of terrorism annually compared to 2011; San Bernadino was one of 38. Collectively, our country was also falling victim to the “terror” these devastating events unleash on those both directly involved and those following from a different coast. For instance, my high school’s summer agenda involved installing bullet-proof glass in every window and creating school shooting drills. I know we were far from unique in this. These attacks have unleashed such horror that there are YouTube videos devoted to navigating active shooter situations, and parents have increasingly begun to discuss family protocols for ensuring each other’s safety during such events. And, this fear is bi-partisan.

---

25 “Terrorism.”
26 “Terrorism.”
Between 2015 and 2019, both Republicans and Democrats “worried [that] they or a member of their family [would] be a victim of a terrorist attack” almost equally with the share of Republicans hovering between 58% and 43% and Democrats rising from 43% to 49%. While these figures are only 2 years old, American society has been fundamentally disrupted since 2019. Still, as of February 2021, 72% of Americans were concerned about “[i]nternational terrorism” and 82% of Americans were worried about “[c]yberterrorism/use of computers to cause disruption/fear in society.” In fact, despite this survey being taken amidst a global pandemic, both of these fears were equal to or greater than the “[s]pread of infectious diseases throughout the world.” It is clear that national security is a serious threat that causes bipartisan concern and still strongly permeates our societal consciousness. This fear is even more troubling when the technologies we use get accused of enabling the attacks themselves. So, when technology is at the nexus of our broader fear, are we properly balancing the risks to national security and personal privacy?

When the feud between Apple and the FBI started, the course of action may have seemed obvious, especially against the backdrop of rising terrorism. However, the need for access was fairly ambiguous with the FBI citing the “data... [that] could reveal, among other things, terrorist ties and individual contacts maintained by Farook.” The primary objective of

---

29 “Infographic.”
30 “Infographic.”
31 “Contract for Assistance Regarding Syed Farooks iPhone.”
gaining access to the phone’s data was to “help the FBI determine whether the attack in San Bernadino was an isolated incident or whether it was part of a broader plan supported by a terrorist network.”

Within the context of the increasing terrorism, as discussed before, this is justifiable. Within the context of the attacker’s social media profile, it was reasonable, too, as “[Tashfeen] Malik had posted a message on her Facebook page, pledging loyalty to Abu Bakr al-Baghdadi, the leader of the Islamic State.” Beyond that, however, there was no indication “on whether the couple had accomplices or whether it was directed by the Islamic State.” While it was understandable for the FBI to want to exhaust all options to identify terrorist threats and protect national security, an underlying discussion began to cloud their pursuit.

That underlying discussion was far more concerning. During the feud that ensued between Apple and the FBI, it was suggested “that the FBI’s legal fight... was more focused on creating legal precedent than it was on accessing one device.” While questioning these motives may seem like I am questioning the trustworthiness of the FBI, I am instead worrying about the very same thing as Apple CEO Tim Cook. That is, the FBI’s intent “on creating legal precedent” transforms a national discussion about terrorism into a much broader one centering on the future of technology policy. It creates a clear line between evidence, an act of terrorism, and the future of personal computing. So, Cook fought back against the request,

32 “Contract for Assistance Regarding Syed Farooks IPhone.”
34 Nakashima and Albergotti.
36 Crocker.
because he was “convinced that a new unlocked version of iOS would be very, very dangerous. It could be misused, leaked, or stolen, and once in the wild, it could never be retrieved. It could potentially undermine the security of hundreds of millions of Apple users.” More poignantly, in a quote since seared into the brains of millions of Americans trying to grasp the implications of this debate, Cook said the FBI was requesting “[t]he ‘[s]oftware [e]quivalent [o]f [c]ancer.” Cook knew that Apple’s creating specialized access, given the security standards across all devices, would compromise every device, not just one used by a terrorist. Yet, given the rise of terrorism and bi-partisan fear, the FBI’s request and goal of protecting national security seems more-than-reasonable; however, such access created a precedent impacting iPhone users far beyond San Bernadino. Which is more important?

Consumers, at the time, were no more decisive than you likely are now. When asked, users’ opinions split almost evenly across three polls. In one, “51 percent of people said Apple should unlock the iPhone to help the FBI;” in another, “46 percent agreed with Apple’s stance;” a final survey that analyzed “positive and negative emojis in people’s [T]weets... found a fairly even split between those who sided with Apple and those who supported the FBI.” It is clear that “[t]his experience was unprecedented, and many did not know what to think.” I am sure you still don’t know who to trust, so I’ll explain why Apple was right.

37 Kahney, “Cook Fights the Law, and Wins.”
40 Kahney, “Cook Fights the Law, and Wins.”
41 Kahney.
42 Kahney.
43 Kahney.
The fight between Apple and the FBI was public and contentious. It was, however, resolved in a way that did not compromise the investigation, because the FBI was able “to gain access.”\textsuperscript{44} It ended up using “a small Australian hacking firm” before “a court order” was fully pursued.\textsuperscript{45} Called “Azimuth Security,” the “publicity-shy company… secretly crafted the solution the FBI used to gain access.”\textsuperscript{46} While the company and method of entry are interesting, they are mere semantics in a much more important debate.

That is the debate between personal privacy and national security in the context of personal computing devices. Apple’s perspective is clear: the company “has a tense relationship with security research firms,” because “the company believes researchers should disclose all vulnerabilities to Apple so that the company can more quickly fix them.”\textsuperscript{47} More than anything, as will be explored later, it’s “reputation[al].”\textsuperscript{48} Yet, “the ability of government agencies to unlock iPhones has also spared Apple from direct conflict with these governments.”\textsuperscript{49} That is why some argue that “Azimuth came to Apple’s rescue by ending a case that could have led to a court-ordered back door to the iPhone.”\textsuperscript{50} That “court-ordered back door” would have set “a very bad precedent”\textsuperscript{51} for Apple and for society. While it was avoided, that resolution carries tremendous philosophical weight in the technology community. Because, while some may look to the company’s commercial risks for their motivations, it is important not to confuse those

\begin{flushleft}
\textsuperscript{44} Nakashima and Albergotti, “The FBI Wanted to Unlock the San Bernardino Shooter’s iPhone. It Turned to a Little-Known Australian Firm.”
\textsuperscript{45} Nakashima and Albergotti.
\textsuperscript{46} Nakashima and Albergotti.
\textsuperscript{47} Nakashima and Albergotti.
\textsuperscript{48} Nakashima and Albergotti.
\textsuperscript{49} Nakashima and Albergotti.
\textsuperscript{50} Nakashima and Albergotti.
\textsuperscript{51} Nakashima and Albergotti.
\end{flushleft}
with the tech titan’s concerns about the future of technology being fought for today, just as it was 45 years ago.\textsuperscript{52,53} Setting personal privacy precedents today is crucial, which may be why “[i]n October 2018, Alphabet Inc’s... Google announced a... system... for secure backups.”\textsuperscript{54} This “system... said users could back up their data to its own cloud without trusting the company with the key.”\textsuperscript{55} Most interestingly, the company “picked a time to announce it when encryption was not in the news.”\textsuperscript{56} In other words, Google took a firm step towards prioritizing personal privacy, but did so covertly to avoid the very debate Apple had to navigate.

Further signifying the magnitude of this debate, after they were able to gain access, “FBI officials were relieved but also somewhat disappointed,” because “[t]hey knew they were losing an opportunity to have a judge bring legal clarity to a long-running debate over whether the government may compel a company to break its own encryption for law enforcement purposes.”\textsuperscript{57} That being said, it is not as if the FBI is worse off. Security experts have agreed that “0day sales,” which is what the FBI used to gain access, “are a safer solution for law enforcement than requiring vendors to create backdoors,”\textsuperscript{58} because “Azimuth’s exploit saves us all from a mandated back door then, & the court precedent that would force backdoors

\begin{flushleft}
\textsuperscript{52}Rawlinson, “Apple Was 41 Years Old in April, Here’s Some History,” 41.
\textsuperscript{53}“Apple Inc. | History, Products, Headquarters, & Facts.”
\textsuperscript{55}Menn.
\textsuperscript{56}Menn.
\textsuperscript{57}Nakashima and Albergotti, “The FBI Wanted to Unlock the San Bernardino Shooter’s IPhone. It Turned to a Little-Known Australian Firm.”
\textsuperscript{58}Katie Moussouris (she/her) is 1/2 vaccinated, “‘A Month or 2 after the FBI Unlocked the Terrorist’s IPhone, Mozilla Discovered the Flaw & Patched It in a Routine Update. So Did Apple. The [$900,000] Exploit Was Rendered Useless.’ 0day Sales Are a Safer Solution for Law Enforcement than Requiring Vendors to Create Backdoors,“ Tweet, @k8em0 (blog), April 14, 2021, https://twitter.com/k8em0/status/1382342066911412229.
\end{flushleft}
elsewhere.” It is dangerous “to order Apple & others to self-sabotage the security of all customers,” especially in hindsight since the FBI found “[n]othing of real significance” and “subsequently abandoned its legal bid.” Still, suppose they had found something. Since encryption standards are consistent across devices, generating access to one iPhone generates access to all iPhones. What stops one employee from leaking such software? Therefore, Apple was correct to emphasize consumer privacy.

More enlightening, however, is how Apple navigated this debate. After the exploit, Apple pursued the hacker who found it, first by trying “to recruit” him, then by bringing legal action against his company in order to get him “to divulge information about hacking techniques that may have aided governments and agencies such as the FBI.” Then, “Apple dropped [their] plan for encrypting backups after [the] FBI complained.” This is most significant, because “[i]t shows how much Apple has been willing to help U.S. law enforcement and intelligence agencies, despite taking a harder line in high-profile legal disputes with the government and casting itself as a defender of its customers’ information.” Politically, as of December 2019, there had been bi-partisan rhetoric “against end-to-end encryption.” So why did Apple act as it did?

---

59 Katie Moussouris (she/her) is 1/2 vaccinated, “Selling Exploits to Law Enforcement Removes Their Plausible Cause to Petition Courts to Order Apple & Others to Self-Sabotage Security of All Customers. Azimuth’s Exploit Sale Saved Us All from a Mandated Back Door Then, & the Court Precedent That Would Force Backdoors Elsewhere.,” Tweet, @k8em0 (blog), April 14, 2021, https://twitter.com/k8em0/status/1382342069033656324.
60 Katie Moussouris (she/her) is 1/2 vaccinated.
61 Nakashima and Albergotti, “The FBI Wanted to Unlock the San Bernardino Shooter’s iPhone. It Turned to a Little-Known Australian Firm.”
62 Nakashima and Albergotti.
63 Menn, “Exclusive.”
64 Menn.
65 Menn.
Apple’s approach was right, if covered in their corporate culture. Personal privacy is a fundamental issue. But so is national security. As is explored in the next case, “[w]hen rare events actually occur, they often have a far greater effect on people’s subsequent decisions than can be justified by objective analysis.” So, when a terrorist attack rocked our shores and the FBI put an iPhone and encryption between itself and the answers, people are far more likely to follow two lines of rational. First, as my advisor Adam Alter explains, “[o]ur response to privacy isn’t rational: we don’t want to sound insane.” Yet, people also have to “know the limits.” In the immediate aftermath of a terrorist attack, however, most people know that the texts between them and their loved ones are far from the primary concern of law enforcement. They also know that promoting the protection of their photos over that of life, limb, and national security is far from “rational.” So, most people will side with the FBI. That being said, Apple CEO Tim Cook pursued a strategy to provide long-term perspective. Again, as my advisor pointed out, he was “more dominant” and “more masculine.” And, “[i]n the wake of a crisis, you want someone more dominant.” Cook’s rhetoric ensured people did not fall victim to biases that can often plague them, especially following a national crisis. His approach also reminded people of the importance of personal privacy after Jennifer Lawrence’s phone was hacked, which attracted national headlines as well. So why did Apple loosen the privacy on its backups?

---

There should not be a trade-off between personal privacy and national security. Doing so would force the tech industry to enter a broader conversation on individual responsibility versus collective action it desperately, and rightfully, wants to avoid. Apple wants to avoid a stand-off with legislators69 and support investigations that protect our collective security. But it wants to do so by staying true to its DNA. It wants control, whether that be control of the narrative or the point of entry.70 That is why Cook’s perspective was more responsible, even if it was not fully obvious to consumers. A reactionary approach to privacy was irresponsible, so Cook reassured consumers before aiding the government. Consumers should have and should continue to trust Apple, because the company is doing what’s best for the broader community it works within.

69 Menn, “Exclusive.”
70 Nakashima and Albergotti, “The FBI Wanted to Unlock the San Bernardino Shooter’s IPhone. It Turned to a Little-Known Australian Firm.”
Twitter

It started with a Tweet, literally. A former NYU undergrad who “dropped out... one semester short of graduating,”71 Jack Dorsey founded “what would become the Twitter platform.”72 Then, “Dorsey posted the first Twitter message on March 21, 2006,”73 which famously and simply says “just setting up my twttr.”74 Since then, however, the company has grown into one of the world’s biggest tech giants and, both internally and externally, has strayed far from Dorsey’s innocent first test Tweet as it finds itself at the center of much broader societal battles.

From 2010 to 2020, the company’s revenue increased 131.4x.75,76 And, as of February 2020, Twitter had the 6th highest “[g]lobal active usage penetration of leading social networks” with 23% “of internet users [having] accessed [Twitter].”77 Moreover, 4 of the top-5 are Facebook-owned with the other being Alphabet’s Youtube.78 In terms of “share of visits,” which is defined by the “percent of all social media site visits in the United States in January 2021,” Twitter ranked third at 14.47% following second-place Pinterest and first-place Facebook.79 It is more-than-clear that Twitter is a tech company with outsized influence. And, that influence is

73 “Jack Dorsey | Biography, Twitter, & Facts.”
78 “Global Penetration Social Media 2020.”
spread across a user base of 322.4 million monthly active users as of 2021 that is expected to grow to 340.2 by 2024. So how does this growth become a cause for complexity?

Before analyzing Twitter today, it is crucial to understand the history of the platform. At its most basic level, “Twitter” is an “online microblogging service for distributing short messages among groups of recipients via personal computer or mobile telephone.” In essence, it enables people to communicate; it is that simple. The “brief messages, or ‘[T]weets,” are shared “to a list of other users (known as followers).” Twitter has built a feature-set on top of this basic communicative functionality to become an even more powerful enabler for their users. This includes users’ ability “to track specific topics, creating a dialogue of sorts and pushing the number of followers in a given Twitter feed into the millions.” Additionally, these “Tweets may be on any subject... but they cannot exceed [28]0 characters.”

At its most functional level, the platform is inspiring. It can connect entrepreneurs across the globe, hockey fans across the country, and Marvel comic enthusiasts across time zones. Twitter has changed the way we communicate; however, as the adage goes, “no good deed goes unpunished.” For every community of artists and football fans, there is a community centered on nearly every polarizing issue we face in society. And, as Twitter grew, it began to struggle with that scale. Consumer comments that may have started with suggestions of how to

---

82 “Twitter | History, Description, & Uses.”
84 “Twitter | History, Description, & Uses.”
85 “Twitter | History, Description, & Uses.”
improve group chat functionality have now extended to criticism that the company is enabling violence, hate speech, and the destruction of our democracy. This changing attitude can be tied to the broader narrative that Twitter has transformed itself from a platform enabling niche communities to one that has become a foundational pillar for public speech and the dissemination of news. This transition started “in April 2009, when actor Ashton Kutcher emerged as the victor in a race with CNN to become the first Twitterer to collect more than a million followers.” This only accelerated as “businesses soon began sending [T]weets about promotions and events, and political campaigns discovered the value of Twitter as a communication tool.” The latter, however, is most significant. Just as Twitter is able to supercharge grassroots organizing, it also puts controversial politics on steroids. And this was never more prominently on display than during the spring of 2020 when former President Trump had his Tweets flagged.

I write this on April 22nd, two days after Derek Chauvin was convicted of the murder of George Floyd. On May 29, 2020, “as protests and sporadic looting rocked Minneapolis” following Floyd’s death, former President Trump responded with a [T]weet that was flagged by Twitter for “glorifying violence.” The specific contents of the Tweet are less important than the implications of the flagging. Light grey text above his remarks said “[t]his Tweet violated Twitter Rules about glorifying violence. However, Twitter has determined that it may be in the public’s interest for the Tweet to remain accessible.” As our society, our country, and our

---

88 “Twitter | History, Description, & Uses.”
89 “Twitter | History, Description, & Uses.”
91 Yglesias.
globe was just learning to deal with a global pandemic, we were reminded of our fight against racial injustice. Then, President Trump responded by threatening Section 230.92

Section 230 is one of the most foundational and controversial pieces of legislation pertaining to the modern internet. Created in 1996 as part of “the Communications Decency Act (CDA),” Section 230’s “original purpose... was to restrict free speech on the Internet.”93 Instead, “Section 230 says that ‘no provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.’”94 More articulately, Section 230 protects internet companies from being liable for the information posted on their sites. Even more simply, it protects the messenger. For a nascent internet in 1996, “CDA 230 create[d] a broad protection that... allowed innovation and free speech online to flourish.”95 It enabled “Twitter to offer social networking to hundreds of millions of Internet users.”96 For small companies uber-focused on growth, Section 230 was a game-changer. Rather than worrying about the complexities of user-generated content, they could simply focus on building the best platform they could. This strategy worked until the platforms outgrew their legislation. Amidst rising political polarization, dangerous communities focused on niche interests, and a President with a hot Twitter handle, critics on both sides began to question how well platforms like Twitter were walking the line between their Community Guidelines and the freedom from restrictions offered by Section 230. Most interestingly, especially within the context of President Trump’s flagged Tweets, is the

92 Yglesias.
94 “Section 230 of the Communications Decency Act.”
95 “Section 230 of the Communications Decency Act.”
96 “Section 230 of the Communications Decency Act.”
argument that social media firms protected by Section 230 shouldn’t be allowed to moderate and flag content. While I can argue both for and against that, it is not the focus of my thesis. My broader belief is simple: with these technology firms becoming integral parts of our society and definitional to people’s notion of “public speech” online, it is crucial to understand how we engage with these platforms in an open, healthy, and positive way. That’s less legislation than moderation, if that term hasn’t been tainted already. To avoid its connotations, I prefer user interaction, because, fundamentally, that’s what it is.

When President Trump threatened “the repeal of Section 230,” he reignited and forever sped up the debate over how users interact with these platforms.\(^97\) Shortly after President Trump’s first Tweet was flagged, he responded with a series of Tweets attacking “Twitter [for]... doing nothing about all of the lies & propaganda being put out by China or the Radical Left Democrat Party,” retweeted accusations that “The President has been targeted by Twitter” and that it was time to “[r]egulate Twitter if they are going to start regulating free speech,” while he loudly pronounced that it was time to “REVOKE 230!”\(^98\) His response demonstrates the difficult relationship social media has with our society. On a basic level, his response shows the new notions of free speech we are now grappling with. On a higher level, it once again represents an imbalance between Section 230 and Twitter’s Community Guidelines. The latter protect the Twitter community against fifteen tenets divided into three categories called a) “Safety” b) “Privacy” and c) “Authenticity.”\(^99\) To add even more complexity to this, Twitter made it clear

throughout their more difficult interactions with the President that his position gave him “special treatment.”100 In other words, during his Presidency, “Trump had been allowed to [T]weet and share things that were inflammatory and, at times, not accurate, but given leeway because he was a world leader.”101 While this balance was already delicate and is clearly far-from-sustainable, it was thrown further into flux on January 6, 2021.102

On January 6, 2021, the United States Capitol was stormed by a group that “had gathered earlier in the day for the ‘Save America’ rally.”103 More interestingly, however, is the accusation that the protestors were encouraged by Trump. While I will not be discussing this debate in order to avoid a deep dive into the linguistics and semantics of arguments, the fallout is another crucial reminder of society’s troubled interaction with social media platforms. Two days after the Capitol was stormed, Twitter announced the “[p]ermanent suspension of @realDonaldTrump.”104 While the company’s previous guidelines granted President Trump clemency from such actions, Twitter cited “the risk of further incitement of violence.”105 Most interestingly, the company references their “public interest framework” and notes “that these accounts are not above [their] rules.”106 The suspension announcement also links to the

101 Graham.
103 Washington and Dc 20036.
105 “Permanent Suspension of @realDonaldTrump.”
106 “Permanent Suspension of @realDonaldTrump.”
company’s pages called “World Leaders on Twitter: principles & approaches”\textsuperscript{107} and “Defining public interest on Twitter.”\textsuperscript{108} The former broaches on how Twitter handles the social media accounts of “world leaders,”\textsuperscript{109} while the latter discusses the much more complex intersection created “if a Tweet from a world leader does violate the Twitter rules but there is a clear public interest value to keeping the Tweet on the service.”\textsuperscript{110} To, again, avoid a discussion around semantics, I will stop short of providing a more in-depth analysis of their language and instead point out something more startling: Twitter requires 3 levels of policy to construct, support, and defend their decisions on user interactions with their platform. It is arguably unsustainable for interacting with the average user and undeniably unsustainable for interacting with POTUS.

Social media companies are redefining how we interact with others and engage in public discourse; however, consumer sentiment does not reflect positively on our futures together.\textsuperscript{111,112} More specifically, as of 2018, 75\% of females either had “[s]ome” or “[n]ot much” trust in social media sites, while males were just lower at 73 percent.\textsuperscript{113} By comparison, less than 15\% for both genders stated having “[a] lot” of trust in social media.\textsuperscript{114} Fast forward to June 2020, and the sentiment towards social media by political party is even more stark.\textsuperscript{115} In

\textsuperscript{109} “World Leaders on Twitter.”
\textsuperscript{110} “World Leaders on Twitter.”
\textsuperscript{113} “U.S. Social Media Site Trust by Gender 2018 l Statistic.”
\textsuperscript{114} “U.S. Social Media Site Trust by Gender 2018 l Statistic.”
\textsuperscript{115} “U.S. Approval Social Media Labeling Politician Posts as Inaccurate 2020.”
considering the “[s]hare of adults in the United States who approve of social media companies labeling posts from elected officials as inaccurate or misleading,” 71% of Republicans either “[s]omewhat” or “[s]trongly disapprove,” while 72% of Democrats either “[s]omewhat” or “[s]trongly approve.” This is clearly unsustainable. While the argument can be made that many of our current problems with social media derive from President Trump, I prefer to make the longer-term argument that our interactions with these platforms need to change. And, since sentiment for President Trump’s ban was also mixed, I believe it is the more dire argument. As a whole, I think consumer sentiment is misplaced as we interact with these platforms in a moderating environment buckling under the weight of mis-aligned guidelines and a view that fails to “be justified by objective analysis” and long-term thinking.

Jack Dorsey, a former NYU undergrad, launched Twitter “in March 2007.” In addition to Twitter, he is the CEO of Square, which is a growing financial technology (“fintech”) company, and, based on the “#bitcoin” in his Twitter bio, is clearly a proponent of decentralization, at least when it comes to currency. Most interesting, however, is when

---

116 “U.S. Approval Social Media Labeling Politician Posts as Inaccurate 2020.”
120 Sunstein, Worst-Case Scenarios.
121 “Jack Dorsey.”
122 “Twitter | History, Description, & Uses.”
he shares ideas across these disciplines of expertise, as in Bluesky. Shortly after banning President Trump, Jack Dorsey “took time to call out a nascent Twitter-sponsored initiative called ‘[B]luesky,’ which is aiming to build up an “open decentralized standard for social media.” The project “could fundamentally shift the power dynamics of the social web” and “will ultimately ensure that platforms like Twitter have less centralized responsibility in deciding which users and communities have a voice on the internet.”

This is a fairly significant issue, as indicated by Senator Ted Cruz’s recent questioning of Jack Dorsey during October’s Congressional hearings. While intensely focusing on the debacle between the New York Post and Twitter, Cruz argues that “Mr. Dorsey... ha[s] the power to force a media outlet... that [he] can sit in Silicon Valley and demand that the media, that [he] can tell them what stories they can publish, that [he] can tell the American people what reporting they can hear.” The consumer sentiment around technology, specifically social media, clearly comes to form through a view of top-down content moderation. The CEOs of Facebook, Mark Zuckerberg, and Twitter, Jack Dorsey, are public-facing executives, and it has become the prevailing feeling that these individuals have outsized influence on online public discourse today. Whether or not they actually do is less of a problem than the discomforting feeling that arises when we feel our conversations have a centralized overlord, especially when

---

127 “Twitter’s Decentralized Future.”
128 “Twitter’s Decentralized Future.”
130 Thompson.
that overlord is a single billionaire who is, first and foremost, a technologist. This sentiment has
turned the phrase content moderation, an incredibly dry term created for computing to
describe “the practice of monitoring and applying a pre-determined set of rules and guidelines
to user-generated submissions to determine best if the communication (a post, in particular) is
permissible or not,”131 into one distorted and tainted by bias, “political pursuits,”132 and
emotional reactions.

This sentiment breeds consumer distrust that I believe is misplaced. To start, as has
been clear for much of this case study, I avoid the term ‘content moderation’ in favor of ‘user
interaction.’ I believe it is a less muddied term, and it better represents what these companies
and projects are doing: managing how consumers interact with these platforms, whether that
be what they see, can post, or share. Bluesky also addresses the much more pressing issue: we
need a more sustainable approach to user interaction on social media. Our current approach
does not work, as is clear from Senator Cruz’s frustration, the broader consumer sentiment it
implies, and the banning of President Trump discussed earlier. The proposal is promising: “a
decentralized social network protocol operat[ing] without central governance.”133 It is, in
essence, a shared system underlying each unique social media platform. While this is inspiring
for the future of social media more broadly, it is incredibly promising for the future of user
interaction with social media more specifically. Because “[a] widely adopted, decentralized
protocol is an opportunity for social networks to ‘pass the buck’ on moderation responsibilities

131 “Content Moderation,” TaskUs, accessed April 26, 2021, https://www.taskus.com/about/glossary/content-
moderation/.
132 Leslie Odom, Jr., Lin-Manuel Miranda & Original Broadway Cast of “Hamilton” – The World Was Wide Enough,
hamilton-the-world-was-wide-enough-lyrics.
133 “Twitter’s Decentralized Future.”
to a broader network,” which “allow[s] individual applications on the protocol to decide which accounts and networks its users are blocked from accessing.”134 This accomplishes two crucial things: a) it improves the optics for social media firms by removing the perception that one individual is making judgements on public discourse online, and b) it moves online discourse closer to what it is in the real world by being open and with judgement being made by those participating. Ideally, “such a system would also provide a meaningful measure against government censorship and protect the speech of marginalized people across the globe.”135 More broadly, the “protocol” is focused on “keep[ing] controversy and outrage from hijacking virality mechanisms,’ as well as... develop[ing] ‘customizable mechanisms’ for moderation.”136 There are “[i]nherent risks,” especially the fear that decentralized platforms will become a haven for “right-wing extremists.”137 Issues could also arise as it becomes “an open pluggable system by which you can go in and try different algorithms and see which one suits you or use the one that your friends like,” because that could breed confirmation bias and dangerous niche communities.138 It could also breed healthy online discourse. Either way, what is an innovation or improvement without a possible negative side effect? I would be more concerned if this solution was an idealistic approach for social media brought to reality. That is what we thought Twitter and Facebook were to begin with, and that did not work out as well as we initially imagined.

134 “Twitter’s Decentralized Future.”
135 “Twitter’s Decentralized Future.”
136 “Twitter’s Decentralized Future.”
137 “Twitter’s Decentralized Future.”
138 “Twitter’s Decentralized Future.”
Twitter should be trusted, but, in doing so, consumers will need to reframe their perspective of social media companies. Consumers’ decision-making is clouded, because “[w]hen rare events actually occur, they often have a far greater effect on people’s subsequent decisions than can be justified by objective analysis.”\(^{139}\) More, it is often found that “the overreaction occur[s] in the immediate aftermath of a personal encounter with the threat.”\(^{140}\) This is also called “[a]vailability” or “recency bias,”\(^{141}\) and it explains why there is such a dramatic reaction to social media immediately following an attack on the Capitol, the banning of the President, or a controversial *New York Post* article. I think it is more beneficial to have a long-term focus on procedural-driven change, rather than post-driven change.\(^{142}\) I find the latter far less sustainable and scalable. Meanwhile, the former will move society towards a healthier relationship with these platforms. I also think it is important to acknowledge something quite troubling: since the first major scandal involving a social media company in 2016, little has been done to substantially improve how they operate in our society. Instead, we have layers of complex policy, a new Supreme-Court-like board that will “mak[e] principled, independent decisions regarding content”\(^{143}\) and “will [only] review a select number of highly

\(^{139}\) Sunstein, *Worst-Case Scenarios*.

\(^{140}\) Sunstein.


\(^{142}\) The Hill, *WATCH: Jack Dorsey Gives His Opening Remarks at a House Hearing on Social Media*, 2021, https://www.youtube.com/watch?v=cTQTnc8gFDU.

emblematic cases," and content moderators suffering from PTSD. In short, what we have done since consumers were first seeded with distrust hasn’t worked. Either, we have guidelines that are more difficult to follow or a new system for content moderation that does nothing to solve the optics of the old one. Meanwhile, consumers and moderators continue to suffer and complain. At an even more basic level than the procedural improvement Bluesky promises, social media needs a new approach. That is why consumer should trust Twitter, because the platform is working to do what’s best for the broader community it operates within.

It is important, therefore, to address these problems carefully. It is important to remember that these platforms have room for growth and improvement and are younger than many of their users. It is also critical to manage society’s broader polarization before we pin blame on specific companies. Consumers are falling victim to a confluence of poorly-aligned regulations, guidelines, biases, and an inability to see the more sustainable future these platforms are working to create. I understand and encourage disagreement with this perspective, but I also hope I have changed yours. Beyond any specific guidelines or changes or protocols or products, I hope I have provided a crucial first step for you: a fresh, new perspective from which to view social media. My favorite tech blog, Stratechery, provided that to me, and I hope I have provided that to you.

---

144 “Oversight Board | Independent Judgment. Transparency. Legitimacy.”
Conclusion

When offered the chance to write this thesis, I knew I wanted to ask a question about technology that seemed, somehow, unasked. Why do people distrust technology companies? Our societal views of these firms have become so well entrenched that many questions feel answered before they are even asked. However, as these firms continue to dominate and as our regulators still struggle to understand their dynamic business models, I think it is crucial to step back and answer for yourself: why do we (dis)trust these companies? While their approaches may be strategized, these companies deserve our trust. While they struggle underneath the optics of their current businesses, their intentions are enabling a future where we can co-exist in a healthful and innovative way with technology. By viewing these firms through a new perspective, consumers will see companies that are not actively working against public opinion and the state of our democracy. It is important to understand their long-term strategies and intentions, even if they get shrouded in corporate culture. There is a lot to look forward to as we grow alongside these companies, because they are just as focused on the healthful evolution of their businesses as we are.

Most importantly, I want to be clear about the purpose of this thesis. I believe we are at an inflection point with technology. We are working to define how these companies and their technologies relate to us today and in the future. That is why I think open dialogue with new opinions should not just be welcomed, but necessary. Therefore, I welcome your disagreement. In writing this paper, it helped me reaffirm my viewpoints and challenge my assumptions. I do not define the success of my thesis by whether or not you agreed with it. I define it by whether it gave you a new perspective on technology companies. So, whether your answer to the
The following question has changed is less important than whether the logic you used to arrive at is

The following question has changed is less important than whether the logic you used to arrive at is

has: do you trust these firms or not?

Bibliography


expertise, Full Bio Follow LinkedIn Follow Twitter Adam Hayes is a financial writer with 13+ years experience as a derivatives trader Besides his extensive derivative trading, Adam is an expert in economics Adam received his master’s in economics from The New School for Social Research, his Ph D. from the University of Wisconsin-Madison in sociology He is a CFA charterholder as well as holding FINRA Series 7, 63 licenses He currently researches, and teaches at the Hebrew University in Jerusalem Learn about our editorial policies Adam Hayes. “9 Cognitive Biases That Affect Your Business.” Investopedia. Accessed April 27, 2021. https://www.investopedia.com/articles/investing/022015/how-cognitive-bias-affects-your-business.asp.


Katie Moussouris (she/her) is 1/2 vaccinated. “‘A Month or 2 after the FBI Unlocked the Terrorist’s IPhone, Mozilla Discovered the Flaw & Patched It in a Routine Update. So Did Apple. The [$900,000] Exploit Was Rendered Useless.’ 0day Sales Are a Safer Solution for Law Enforcement than Requiring Vendors to Create Backdoors.” Tweet. @k8em0 (blog), April 14, 2021. https://twitter.com/k8em0/status/1382342066911412229.

———. “Selling Exploits to Law Enforcement Removes Their Plausible Cause to Petition Courts to Order Apple & Others to Self-Sabotage Security of All Customers. Azimuth’s Exploit Sale Saved Us All from a Mandated Back Door Then, & the Court Precedent That Would Force Backdoors Elsewhere.” Tweet. @k8em0 (blog), April 14, 2021. https://twitter.com/k8em0/status/1382342069033656324.


The Hill. **WATCH: Jack Dorsey Gives His Opening Remarks at a House Hearing on Social Media,** 2021. https://www.youtube.com/watch?v=cTQTnc8gFDU.


The Verge. **40 Years of Apple with Walt Mossberg,** 2016. https://www.youtube.com/watch?v=82J2UZjKUBI.


