

“This is that rare book that not only informs but entertains. You’ll never look at these four companies the same way again.”

—JONAH BERGER, author of *Contagious* and *Invisible Influence*

the
f o u r



THE HIDDEN DNA OF AMAZON,
APPLE, FACEBOOK, AND GOOGLE

Scott Galloway

the
four

The Hidden DNA of
Amazon, Apple, Facebook, and Google

Scott Galloway

PORTFOLIO / PENGUIN



Portfolio/Penguin
An imprint of Penguin Random House LLC
375 Hudson Street
New York, New York 10014



Copyright © 2017 by Scott Galloway

Penguin supports copyright. Copyright fuels creativity, encourages diverse voices, promotes free speech, and creates a vibrant culture. Thank you for buying an authorized edition of this book and for complying with copyright laws by not reproducing, scanning, or distributing any part of it in any form without permission. You are supporting writers and allowing Penguin to continue to publish books for every reader.

9780735213654 Hardcover
9780735213661 eBook
9780525533306 International

Illustrations by Kyle Scallon
Cover concept by Luidmilla Morozova

Version_1

For Nolan & Alec

*I look up, see the stars, and have questions.
I look down, see my boys, and have answers.*

Contents

[Title Page](#)

[Copyright](#)

[Dedication](#)

[**Chapter 1 The Four**](#)

[Who are these companies and why write about them?](#)

[**Chapter 2 Amazon**](#)

[How Amazon became the most disruptive firm in the largest economy.](#)

[**Chapter 3 Apple**](#)

[Tech goes luxury.](#)

[**Chapter 4 Facebook**](#)

[Love is key to longevity—and great advertising](#)

[**Chapter 5 Google**](#)

[Our modern-day god](#)

[**Chapter 6 Lie to Me**](#)

[The Four and funny business](#)

[Chapter 7 Business and the Body](#)

[All businesses appeal to one of three organs](#)

[Chapter 8 The T Algorithm](#)

[What it takes to get to a trillion](#)

[Chapter 9 The Fifth Horseman?](#)

[Who will be next?](#)

[Chapter 10 The Four and You](#)

[Follow your talent, not your passion](#)

[Chapter 11 After the Horsemen](#)

[Where are the Four taking us?](#)

[Acknowledgments](#)

[Illustration Credits](#)

[Notes](#)

[Index](#)

Chapter 1

The Four

OVER THE LAST TWENTY YEARS, four technology giants have inspired more joy, connections, prosperity, and discovery than any entity in history. Along the way, Apple, Amazon, Facebook, and Google have created hundreds of thousands of high-paying jobs. The Four are responsible for an array of products and services that are entwined into the daily lives of billions of people. They've put a supercomputer in your pocket, are bringing the internet into developing countries, and are mapping the Earth's land mass and oceans. The Four have generated unprecedented wealth (\$2.3 trillion) that, via stock ownership, has helped millions of families across the planet build economic security. In sum, they make the world a better place.

The above is true, and this narrative is espoused, repeatedly, across thousands of media outlets and gatherings of the innovation class (universities, conferences, congressional hearings, boardrooms). However, consider another view.

The Four Horsemen

Imagine: a retailer that refuses to pay sales tax, treats its employees poorly, destroys hundreds of thousands of jobs, and yet is celebrated as a paragon of business innovation.

A computer company that withholds information about a domestic act of terrorism from federal investigators, with the support of a fan following that views the firm similar to a religion.

A social media firm that analyzes thousands of images of your children, activates your phone as a listening device, and sells this information to

Fortune 500 companies.

An ad platform that commands, in some markets, a 90 percent share of the most lucrative sector in media, yet avoids anticompetitive regulation through aggressive litigation and lobbyists.

This narrative is also heard around the world, but in hushed tones. We know these companies aren't benevolent beings, yet we invite them into the most intimate areas of our lives. We willingly divulge personal updates, knowing they'll be used for profit. Our media elevate the executives running these companies to hero status—geniuses to be trusted and emulated. Our governments grant them special treatment regarding antitrust regulation, taxes, even labor laws. And investors bid their stocks up, providing near-infinite capital and firepower to attract the most talented people on the planet or crush adversaries.

So, are these entities the Four Horsemen of god, love, sex, and consumption? Or are they the Four Horsemen of the apocalypse? The answer is yes to both questions. I'll just call them the Four Horsemen.

How did these companies aggregate so much power? How can an inanimate, for-profit enterprise become so deeply ingrained in our psyche that it reshapes the rules of what a company can do and be? What does unprecedented scale and influence mean for the future of business and the global economy? Are they destined, like other business titans before them, to be eclipsed by younger, sexier rivals? Or have they become so entrenched that nobody—individual, enterprise, government, or otherwise—stands a chance?

State of Affairs

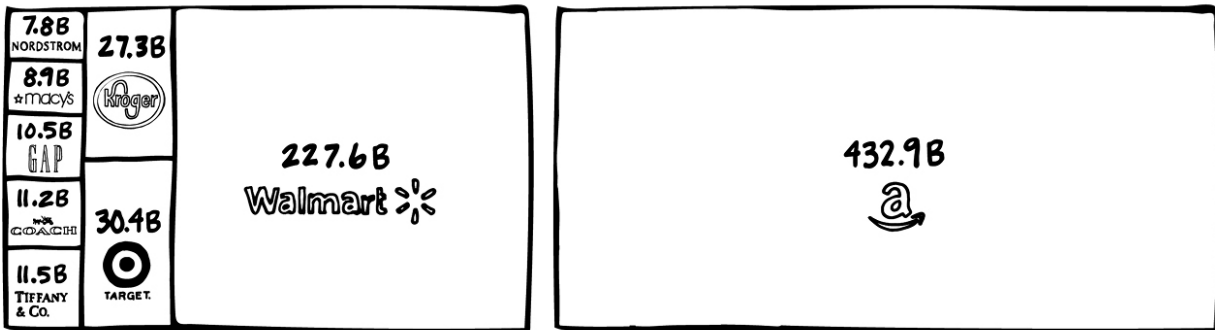
This is where the Four stand at the time of this writing:

Amazon: Shopping for a Porsche Panamera Turbo S or a pair of Louboutin lace pumps is fun. Shopping for toothpaste and eco-friendly diapers is not. As the online retailer of choice for most Americans, and increasingly, the world, Amazon eases the pain of drudgery—getting the stuff you need to survive.^{1,2} No great effort: no hunting, little gathering, just (one) clicking. Their formula: an unparalleled investment in last-mile infrastructure, made possible by an irrationally generous lender—retail investors who see the most compelling, yet simple, story ever told in business: Earth's Biggest Store. The story is coupled with execution that rivals D-Day (minus the whole courage and sacrifice to save the world part). The result is a retailer worth more than Walmart, Target, Macy's,

Kroger, Nordstrom, Tiffany & Co., Coach, Williams-Sonoma, Tesco, Ikea, Carrefour, and The Gap combined.³

MARKET CAPITALIZATION

AS OF APRIL 25, 2017



Yahoo! Finance. <https://finance.yahoo.com/>

As I write this, Jeff Bezos is the third wealthiest person in the world. He will soon be number one. The current gold and silver medalists, Bill Gates and Warren Buffet, are in great businesses (software and insurance), but neither sits on top of a company growing 20 percent plus each year, attacking multibillion-dollar sectors like befuddled prey.^{4,5}

Apple: The Apple logo, which graces the most coveted laptops and mobile devices, is the global badge of wealth, education, and Western values. At its core, Apple fills two instinctual needs: to feel closer to God and be more attractive to the opposite sex. It mimics religion with its own belief system, objects of veneration, cult following, and Christ figure. It counts among its congregation the most important people in the world: the Innovation Class. By achieving a paradoxical goal in business—a low-cost product that sells for a premium price—Apple has become the most profitable company in history.⁶ The equivalent is an auto firm with the margins of Ferrari and the production volumes of Toyota. In Q4 of 2016, Apple registered twice the net profits Amazon has produced, in total, since its founding twenty-three years ago.^{7,8,9} Apple's cash on hand is nearly the GDP of Denmark.^{10,11}

Facebook: As measured by adoption and usage, Facebook is the most successful thing in the history of humankind. There are 7.5 billion people in

the world, and 1.2 billion people have a daily relationship with Facebook.^{12,13} Facebook (#1), Facebook Messenger (#2), and Instagram (#8) are the most popular mobile apps in the United States.¹⁴ The social network and its properties register fifty minutes of a user's typical day.¹⁵ One of every six minutes online is spent on Facebook, and one in five minutes spent on mobile is on Facebook.¹⁶

Google: Google is a modern man's god. It's our source of knowledge—ever-present, aware of our deepest secrets, reassuring us where we are and where we need to go, answering questions from trivial to profound. No institution has the trust and credibility of Google: About one out of six queries posed to the search engine have never been asked before.¹⁷ What rabbi, priest, scholar, or coach has so much gravitas that he or she is presented with that many questions never before asked of anybody? Who else inspires so many queries of the unknown from all corners of the world?

A subsidiary of Alphabet Inc., in 2016 Google earned \$20 billion in profits, increased revenues 23 percent, and lowered cost to advertisers 11 percent—a massive blow to competitors. Google, unlike most products, ages in reverse, becoming more valuable with use.¹⁸ It harnesses the power of 2 billion people, twenty-four hours a day, connected by their intentions (what you want) and decisions (what you chose), yielding a whole infinitely greater than the sum of its parts.¹⁹ The insights into consumer behavior Google gleans from 3.5 billion queries each day make this horseman the executioner of traditional brands and media. Your new favorite brand is what Google returns to you in .0000005 second.

Show Me the Trillions

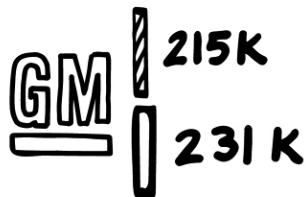
While billions of people derive significant value from these firms and their products, disturbingly few reap the economic benefits. General Motors created economic value of approximately \$231,000 per employee (market cap/workforce).²⁰ This sounds impressive until you realize that Facebook has created an enterprise worth \$20.5 million per employee . . . or almost a hundred times the value per employee of the organizational icon of the last century.^{21,22} Imagine the economic output of a G-10 economy, generated by the population of Manhattan's Lower East Side.

RETURN ON HUMAN CAPITAL

2016

NUMBER OF EMPLOYEES

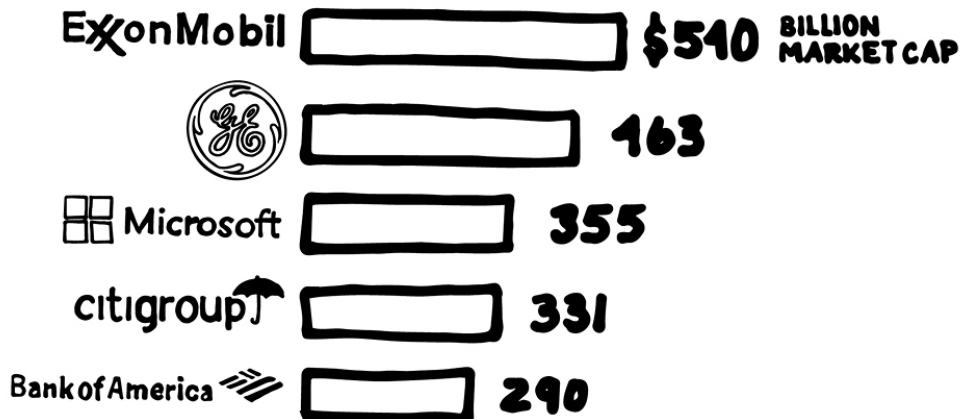
MARKET CAP PER EMPLOYEE



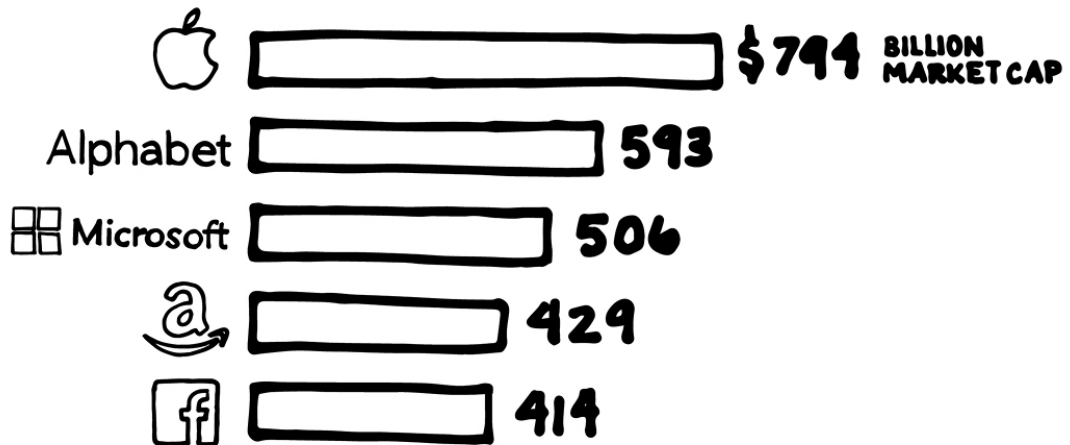
Forbes, May, 2016. <https://www.forbes.com/companies/general-motors/>
Facebook, Inc. <https://newsroom.fb.com/company-info/>
Yahoo! Finance. <https://finance.yahoo.com/>

The economic value accretion seems to be defying the law of big numbers and accelerating. In the last four years, April 1, 2013–April 1, 2017, the Four increased in value by approximately \$1.3 trillion (GDP of Russia).^{23,24}

THE FIVE LARGEST COMPANIES IN 2006



IN 2017



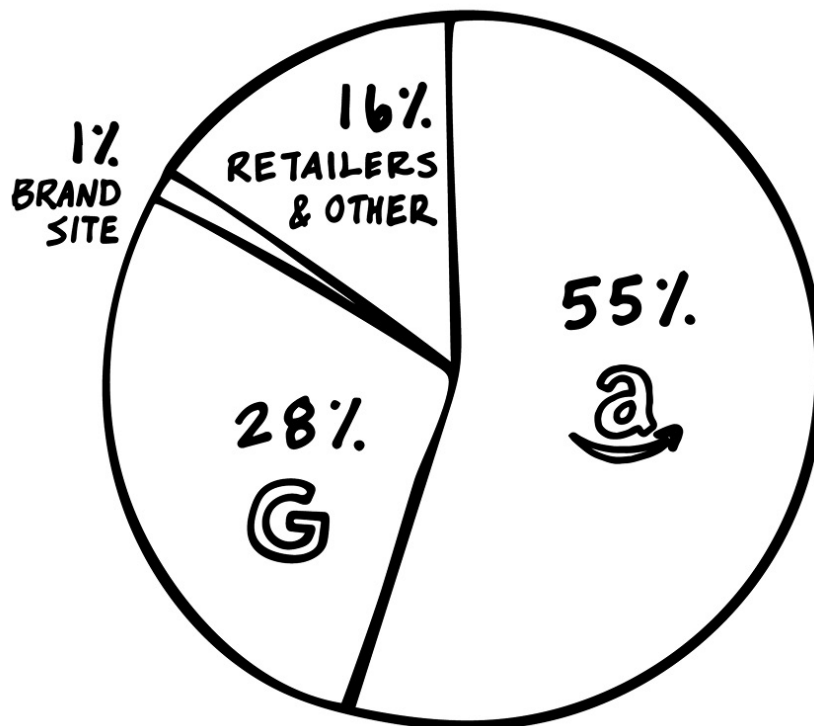
Taplin, Jonathan. "Is It Time to Break Up Google?" *The New York Times*.

Other tech companies, old and new, big and bigger, are losing relevance. Aging behemoths, including HP and IBM, barely warrant the attention of the Four. Thousands of start-ups fly by like gnats hardly worth swatting at. Any firm that begins to show the potential to bother the Four is acquired—at prices lesser companies can't imagine. (Facebook paid nearly \$20 billion for five-year-old, fifty-employee instant messaging company

WhatsApp.) Ultimately, the only competitors the Four face are . . . each other.

WHERE PEOPLE START PRODUCT SEARCHES

2016



Soper, Spencer. "More Than 50% of Shoppers Turn First to Amazon in Product Search." Bloomberg.

Safety in Hatred

Governments, laws, and smaller firms appear helpless to stop the march, regardless of the Four's impact on business, society, or the planet. However, there's safety in hatred. Specifically, the Four hate each other. They are now competing directly, as their respective sectors are running out of easy prey.

Google signaled the end of the brand era as consumers, armed with search, no longer need to defer to the brand, hurting Apple, who also finds itself competing with Amazon in music and film. Amazon is Google's

largest customer, but it's also threatening Google in search—55 percent of people searching for a product start on Amazon (vs. 28 percent on search engines such as Google).²⁵ Apple and Amazon are running, full speed, into each other in front of us, on our TV screens and phones, as Google fights Apple to be the operating system of the product that defines our age, the smartphone.

Meanwhile, both Siri (Apple) and Alexa (Amazon) have entered the thunderdome, where two voices enter, and only one will leave. Among online advertisers, Facebook is now taking share from Google as it completes the great pivot from desktop to mobile. And the technology likely creating more wealth over the next decade, the cloud—a delivery of hosted services over the internet—features the Ali vs. Frazier battle of the tech age as Amazon and Google go head-to-head with their respective cloud offerings.

The Four are engaged in an epic race to become the operating system for our lives. The prize? A trillion-dollar-plus valuation, and power and influence greater than any entity in history.

So What?

To grasp the choices that ushered in the Four is to understand business and value creation in the digital age. In the first half of this book we'll examine each horseman and deconstruct their strategies and the lessons business leaders can draw from them.

In the second part of the book, we'll identify and set aside the mythology the Four allowed to flourish around the origins of their competitive advantage. Then we'll explore a new model for understanding how these companies exploit our basest instincts for growth and profitability, and show how the Four defend their markets with *analog moats*: real-world infrastructure designed to blunt attacks from potential competitors.

What are the horsemen's sins? How do they manipulate governments and competitors to steal IP? That's in chapter 8. Could there ever be a Fifth Horseman? In chapter 9, we'll evaluate the possible candidates, from Netflix to China's retail giant Alibaba, which dwarfs Amazon on many metrics. Do any of them have what it takes to develop a more dominant platform?

Finally, in chapter 10, we'll look at what professional attributes will help you thrive in the age of the Four. And in chapter 11, I'll talk about

where the Four are taking us.

Alexa, Who Is Scott Galloway?

According to Alexa, “Scott Robert Galloway is an Australian professional football player who plays as a fullback for Central Coast Mariners in the A-League.”

That bitch . . .

Anyway, while not a fullback, I’ve had a front-row seat to the Hunger Games of our age. I grew up in an upper-lower-middle-class household, raised by a superhero (single mother) who worked as a secretary. After college I spent two years at Morgan Stanley in a misguided attempt to be successful and impress women. Investment banking is an awful job, full stop. In addition, I don’t have the skills—maturity, discipline, humility, respect for institutions—to work in a big firm (that is, someone else), so I became an entrepreneur.

After business school, I founded Prophet, a brand strategy firm that has grown to 400 people helping consumer brands mimic Apple. In 1997, I founded Red Envelope, a multichannel retailer that went public in 2002 and was slowly bled to death by Amazon. In 2010, I founded L2, a firm that benchmarks the social, search, mobile, and site performance of the world’s largest consumer and retail brands. We use data to help Nike, Chanel, L’Oreal, P&G, and one in four of the world’s one hundred largest consumer firms scale these four summits. In March 2017, L2 was acquired by Gartner (NYSE: IT).

Along the way, I’ve served on the boards of media companies (The New York Times Company, Dex Media, Advanstar)—all getting crushed by Google and Facebook. I also served on the board of Gateway, which sold three times more computers annually than Apple, at a fifth the margin—it didn’t end well. Finally, I’ve also served on the boards of Urban Outfitters and Eddie Bauer, each trying to protect their turf from the great white shark of retail, Amazon.

However, my business card, which I don’t have, reads “Professor of Marketing.” In 2002, I joined the faculty of NYU’s Stern School of Business, where I teach brand strategy and digital marketing and have taught over six thousand students. It’s a privileged role for me, as I’m the first person, on either side of my family, to graduate from high school. I’m the product of big government, specifically the University of California, which decided, despite my being a remarkably unremarkable kid, to give

me something remarkable: upward mobility through a world-class education.

The pillars of a business school education—which (remarkably) does accelerate students’ average salaries from \$70,000 (applicants) to \$110,000 plus (graduates) in just twenty-four months—are Finance, Marketing, Operations, and Management. This curriculum takes up students’ entire first year, and the skills learned serve them well the rest of their professional lives. The second year of business school is mostly a waste: elective (that is, irrelevant) courses that fulfill the teaching requirements of tenured faculty and enable the kids to drink beer and travel to gain fascinating (worthless) insight into “Doing Business in Chile,” a real course at Stern that gives students credits toward graduation.

We require a second year so we can charge tuition of \$110,000 vs. \$50,000 to support a welfare program for the overeducated: tenure. If we (universities) are to continue raising tuition faster than inflation, and we will, we’ll need to build a better foundation for the second year. I believe the business fundamentals of the first year need to be supplemented with similar insights into how these skills are applied in a modern economy. The pillars of the second year should be a study of the Four and the sectors they operate in (search, social, brand, and retail). To better understand these firms, the instincts they tap into, and their intersection between technology and stakeholder value is to gain insight into modern-day business, our world, and ourselves.

At the beginning and end of every course at NYU Stern, I tell my students the goal of the course is to provide them with an edge so they too can build economic security for themselves and their families. I wrote this book for the same reason. I hope the reader gains insight and a competitive edge in an economy where it’s never been easier to be a billionaire, but it’s never been harder to be a millionaire.