

CHAPTER 1

Setting the Stage: Technology and the Modern Enterprise

TECH'S TECTONIC SHIFT: RADICALLY CHANGING BUSINESS LANDSCAPES

LEARNING OBJECTIVE

After studying this section you should be able to do the following:

Appreciate how in the past decade, technology has helped bring about radical changes across industries and throughout societies.

This book is written for a world that has changed radically in the past decade.

At the start of the prior decade, Google barely existed and well-known strategists dismissed Internet advertising models.^[1] By decade's end, Google brought in more advertising revenue than any firm, on or off, and had risen to become the most profitable media company on the planet. Today billions of advertising dollars flee old media and are pouring into digital efforts, and this shift is reshaping industries and redefining skills needed to reach today's consumers.

A decade ago the iPod also didn't exist and Apple was widely considered a tech-industry has-been. By spring 2010 Apple had grown to be the most valuable tech firm in the United States, selling more iPhones and generating more profits from mobile device sales than any firm in the world.

Moore's Law and other factors that make technology faster and cheaper have thrust computing and telecommunications into the hands of billions in ways that are both empowering the poor and transforming the planet.

Social media barely warranted a mention a decade ago, but today, Facebook's user base is larger than any nation, save for China and India. Firms are harnessing social media for new product ideas and billions in sales. But with promise comes peril. When mobile phones are cameras just a short hop from YouTube, Flickr, and Twitter, every ethical lapse can be captured, every customer service flaw is ti-tagged on the permanent record that is the Internet. The service and ethics bar for today's managers has never been higher.

Speaking of globalization, China started the prior decade largely as a nation unplugged and offline. Today China has more Internet users than any other country and has spectacularly launched several globally traded Internet firms including Baidu, Tencent, and Alibaba. By 2009, China Mobile was more valuable than any firm in the United States except for Exxon Mobil and Wal-Mart. Think the United States holds the number one ranking in home broadband access? Not even close—the United States is ranked fifteenth.^[2]

The way we conceive of software and the software industry is also changing radically. IBM, HP, Oracle are among the firms that collectively pay thousands of programmers to write code that is given away for free. Today, open source software powers most of the Web sites you visit. And the rise of open source has rewritten the revenue models for the computing industry and lowered computer costs for start-ups to blue chips worldwide.

Cloud computing and software as a service is turning sophisticated, high-powered computing into a utility available to even the smallest businesses and nonprofits.

Data analytics and business intelligence are driving discovery and innovation, redefining modern marketing, and creating a shifting knife-edge of privacy concerns that can shred corporate reputations in a shantled.

And the pervasiveness of computing has created a set of security and espionage threats unimaginable to the prior generation.

As the last ten years have shown, tech creates both treasure and tumult. These disruptions aren't going away and will almost certainly accelerate, impacting organizations, careers, and job functions throughout your lifetime. It's time to place tech at the center of the managerial playbook.

KEY TAKEAWAYS

- In the prior decade, firms like Google and Facebook have created profound shifts in the way firms advertise and individuals and organizations communicate.
- New technologies have fueled globalization, redefined our concepts of software and computing, crushed costs, fueled data-driven decision making, and raised privacy and security concerns.

QUESTIONS AND EXERCISES

1. Visit a finance Web site such as <http://www.google.com/finance>. Compare Google's profits to those of other major media companies. How have Google's profits changed over the past few years? Why have the profits changed? How do these compare with changes in the firm you chose?
2. How is social media impacting firms, individuals, and society?
3. How do recent changes in computing impact consumers? Are these changes good or bad? Explain. How do they impact businesses?
4. What kinds of skills do today's managers need that weren't required a decade ago?
5. Work with your instructor to decide ways in which your class can use social media. For example, you might create a Facebook group where you can share ideas with your classmates, join Twitter and create a hash tag for your class, or create a course wiki. (See Chapter 7 for more on these and other services.)

2. IT'S YOUR REVOLUTION

LEARNING OBJECTIVE

After studying this section you should be able to do the following:

1. Name firms across hardware, software, and Internet businesses that were founded by people in their twenties (or younger).

The intersection where technology and business meet is both terrifying and exhilarating. But if you're under the age of thirty, realize that this is *your* space. While the fortunes of any individual or firm rise and fall over time, it's abundantly clear that many of the world's most successful technology firms—organizations that have had tremendous impact on consumers and businesses across industries—were created by young people. Consider just a few:

Bill Gates was an undergraduate when he left college to found Microsoft—a firm that would eventually become the world's largest software firm and catapult Gates to the top of the *Forbes* list of world's wealthiest people (enabling him to also become the most generous philanthropist of our time).