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Article

The Rising Influence of Social Media, as Reflected by Data

ANDREW HUTCHINSON

Learning Outcomes

After reading this article, you will be able to:

- See the marketing relevance of a generation that has grown up with social media as a customary mode of interaction.
- Discern the value in looking to industry leaders for models of marketing strategies.
- Discuss how the modern configuration of "social" is being approached by leaders in the business world.

A recent study found that in 2013, 75% of higher education students used social media in their process of deciding where to enroll. There were several articles on this, most highlighting the growing use of social media in the higher ed sector, but the point missed by many is that this stat is more indicative of demographics than sector. Yes, social media has had a huge impact on higher education process, providing new ways for institutions to connect and engage with current and prospective students, but it makes perfect sense that this age group, for whom social media has existed for as long as they can remember, would be most likely to conduct their research via social platforms. But it isn't just their future education this relates to. It's everything. The shoes they're going to buy, the movies they're going to watch, places they're going to visit—social media is where the next generation do their research, on all decisions. And this reliance on social as their go-to resource is only going to grow.

This Is What They've Learned

The increasing reliance on social media can sometimes be missed when looking at the effectiveness of social as a business platform. Many still see it as fun, as a platform for kids to share updates about what they had for dinner or pictures of themselves pouting in the sun. But amidst those interactions, habits develop, learned processes, and those actions become part of what they do, of how they live, in a wider sense. The best comparison is the Internet–twenty-five years ago, the Internet was a slow, clunky, dial-up service. At that time, many of us were using DOS prompts to navigate our own PCs, let alone having any sort of rational functionality on the web. But as the Internet developed, people started to use it more—you'd check for something on Yahoo!, you created a Hotmail account, maybe you even used a message board to voice your thoughts. Over time, these things become part of your normal process till eventually you can't imagine how you ever got by without them. You don't send letters anymore, right? Young people these days don't make phone calls at anywhere near the same rate. For the next generation, social media has always been—it's a part of how they've grown, how they've learned to interact. See stats like 75% of students are using social media for research not only expected, it underlines the baseline trends highlighted by every study and every research paper looking at the impact of social on the global communications landscape.

Slower Growth Is Still Growth

This is also what's interesting about seeing reports of Facebook's slowdown in youth demographics or Twitter's issues with attracting new users (somewhat alleviated by their latest results). While youth take-up has slowed, the fastest growing user-bases are in older demographic groups. This makes sense—five years ago, a large proportion of the 25–34 demographic were in the 18–24 category. Logically, as generations move through, you'd expect those high adoption rates from younger brackets to continue to spread through into the

tiers, as those people continue using the platforms they've become aligned to. Slowing growth rates in youth categories generally reflect that they're hitting peak take-up, its the increases among older demographics that represent the more important aspect for the future of social business. More generations active on social means more businesses heading there to reach them—and more businesses utilising social, leads to more of their competition doing the same. Rolling increases in user growth rates underline the need to take social seriously, and to initiate yourself and your business to the opportunities in the wider social space.

Look to Industry Leaders

While the numbers all indicate that social media isn't a fad and that social business is going to become a crucial part of all marketing strategies moving forward, there are still many businesses who aren't yet ready to allocate the time or money to undertake the necessary learning and monitoring of social platforms. Yes, it takes some time to understand, and yes, there will be additional requirements, in terms of posting, interacting and listening. But if the trends aren't enough to sway you, maybe you should look to how social is being approached by leaders in the business world. As of 2013, 77% of Fortune 500 companies maintain an active Twitter presence. 70% have Facebook profiles, 69% have YouTube accounts. That is a huge amount, and while you could surmise that a Fortune 500 business would have more money to allocate to new media, you can also be assured that they wouldn't do so without good reason. ROI remains a contentious point, one which marketers are still trying to clearly define, but one aspect that cannot be ignored is the numbers—the data suggests social business is only going to become more important. It's not going to go away, you're not going to see social media switch off and people revert back to phones and faxes. Do you think the Internet's going away? Imagine what it would do to your business if it did? In a few years' time, you'll likely to be looking at social in the exact same way.

Critical Thinking

1. If we can trust the overwhelming indications that social media is not a fad, why are so many businesses reluctant to allocate time and money to learn how to exploit it?
2. What demographic considerations are most important for the future of social business, and why?

Create Central

www.mhhe.com/createcentral

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Article

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How Psychology Will Shape the Future of Social Media Marketing

JAYSON DEMERS

Learning Outcomes

After reading this article, you will be able to:

- Identify, from a marketing perspective, some of the major shortcomings of current technology.
- Discuss how the degree of sophistication in an algorithm can affect its usefulness in brand promotion.
- Enumerate what DeMers calls the "four elements of any action."
- Recognize that basic psychological concepts are always applicable to social media marketing.

With marketing analytics software so pervasive, marketing professionals have the power to monitor everything on a business's social media accounts. How many retweets did a post get? Did customers favorite or reply to it? Thanks to automatic alerts, like Google Alerts, staff can also know immediately when their business gets mentioned, allowing them to take action if necessary.

One major shortcoming with current technology, however, is its inability to accurately detect context in human behavior. As the *Washington Post* recently pointed out, some businesses are relying on natural language processing software to sift through millions of social media posts being generated each day. While this technology is effective in pinpointing mentions of keywords specified by a user, it lacks the human touch. To correct this, developers are now relying on psychological principles to develop more sophisticated algorithms.

The Human Touch

If your business relies on technology like alerts, the *W Post* article points out the weakness in depending on to find instances of a brand's mention. You may b every time your brand name is mentioned online, but know when someone misspells your name or uses the ated version of your name?

Technology will never replace the human ability meaningful data from volumes of information. If a hu to sift through each post and identify only those i pertain to him, he'd likely pull out more than he'd thought. The same applies to brands and social media might think it only needs to be alerted when some tions it or a competitor by name, but what about a lo that misses a post along the lines of, "Looking for a g to eat tonight. Any suggestions?" As technology brands can expect more sophisticated algorithms to att challenges.

Contextual Sifting

Another shortfall for technology-based searches is A complaint from a social media user who is consta plaining about companies online carries less weig complaint from a social media user whose posts are positive or neutral. Companies are often required to d into a user's profile to determine if a post will be ta seriously by the poster's followers.

Current technology also lacks the ability to dete personality traits like sarcasm; posts tend to be taken Because of this, if an algorithm is set to extract any

posts on a company, it may miss a post stating that someone "Really loved the experience" at a particular establishment, followed by a hashtag stating that the company sucks. Over time, developers will be required to enhance software to address that, as well.

Different Platforms

Another area of context that poses problems for current technology is the context surrounding the platform through which posts are made. As I pointed out in my post Twitter vs. Facebook: How Do They Compare?, each social media site has its own unique uses. Facebook tends to connect users with people they know personally, while Twitter allows more anonymity. Facebook also tends to be more of a way to capture snippets of people's lives, while Twitter is a great way to keep up with news and celebrities outside of a person's life.

These major differences have an impact on how users respond to marketing messages. A Twitter user will likely have completely different expectations for his newsfeed than a Facebook user. When your marketing message is scattered among family vacation photos and forwarded recipes on Facebook, it might be perceived differently than it would on Twitter, where it's more likely to be surrounded by links to articles of interest and photos of celebrities.

Choosing the right platform

Algorithms vs. People

What algorithms miss today will likely be solved in the near future. Still, the human ability to reason is difficult to duplicate. Many users don't even realize that they filter their perceptions based on the medium through which they receive communication. Even a savvy marketer may recognize and address the differences between Facebook and Twitter without putting those differences into words. Posts are simply tweaked to address the separate audiences and adjusted as responses are calculated.

Even if algorithms are tweaked to directly address these issues, professionals need to tweak their own thinking. Whether reaching out to users on Facebook, Twitter, Instagram, Pinterest, Vine, or one of the other many social media outlets, businesses must consider the platform and its users, adjusting messages to ensure users will respond to them.

Understanding Customer Motivations

One way businesses can better reach customers is to develop an understanding of why customers interact the way they do. As I wrote in my article "The Four Elements of Any Action, And How To Use Them In Your Online Marketing Initiative," there are four elements that define any action a person takes, and those elements apply to social media. They are

- Opportunity
- Ability
- Incentive
- Willpower

When a business initiates a social media marketing campaign, it immediately addresses the first of those four elements, opportunity. If a customer isn't first aware of a business's existence, that customer can't take action. Ability is a little more challenging for businesses, since social media sites don't make it easy for users to click to purchase an item or service. ClickMeeting blogger Agnes Jozwiac suggests providing an array of access points that "involves a mash-up of the three basic learning styles: visual, audio, and kinesthetic."

Once a customer is aware of your business and able to easily order from you, that customer must have an incentive to take action. What will have the power to lure social media users away from their newsfeeds, ideally to make a purchase? Once a customer has been lured away, it's important to feed into the fourth element, willpower, which prompts a person to overcome barriers to completing a task. In the social media marketing world, this means your shopping and checkout process should be so straightforward and challenge-free, your customers carry through until the end.

A Call to Action

Underneath all of these psychological factors is the fact that businesses must incite a call to action from customers to be successful. Simply posting about your great product may build awareness, but it won't result in any ROI. Customers should feel compelled to click on links within your photos and text and, once they've clicked, to take the action you're requesting, whether it's enjoying savings using a coupon or signing up for an e-mail newsletter.

If you want something, don't be afraid to ask. Small things like asking customers to like, share, or retweet an item can make a difference in your results. In fact, an independent study by SocialBakers found that simply asking followers to retweet led to a greater response rate than when a post didn't request that action. If you provide an incentive for sharing like an entry in a contest, you'll see even better results.

Social media marketing is still a relatively new field, but basic psychological concepts still apply. The best way to succeed in reaching your customer base is to begin to see things as they do. Study your online results and make notes on which behaviors get the best response and soon, you'll have a roadmap for getting better results.

Article

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How Google Dominates Us

JAMES GLEICK

Learning Outcomes

After reading this article, you will be able to:

- Understand how Google, Facebook, and other sites collect demographic and behavioral data about their users.
- Understand the trade-offs between advantages and risks of sharing information on social networks.
- Understand how you pay to visit the most popular websites through the sale of your preferences to advertisers.
- Articulate Google's business model and, in particular, the model of making money by giving away service for free.

Tweets Alain de Botton, philosopher, author, and now online aphorist:

The logical conclusion of our relationship to computers: expectantly to type "what is the meaning of my life" into Google.

You can do this, of course. Type "what is th" and faster than you can find the *e* Google is sending choices back at you: what is the *cloud?* what is the *mean?* what is the *american dream?* what is the *illuminati?* Google is trying to read your mind. Only it's not your mind. It's the World Brain. And whatever that is, we know that a twelve-year-old company based in Mountain View, California, is wired into it like no one else.

Google is where we go for answers. People used to go elsewhere or, more likely, stagger along not knowing. Nowadays you can't have a long dinner-table argument about who won the Oscar for that Neil Simon movie where she plays an actress who doesn't win an Oscar; at any moment someone will pull out a pocket device and Google it. If you need the art-history meaning of "picturesque," you could find it in *The Book of Answers,* compiled two decades ago by the New York Public Library's reference desk, but you won't. Part of Google's mission is to make the books of answers redundant (and the reference librarians, too). "A hamadryad is a wood-nymph, also a poisonous snake in India, and an Abyssinian baboon," says the narrator of John Banville's 2009 novel, *The Infinities.* "It takes a god to know a thing like that." Not anymore.

The business of finding facts has been an important gear in the workings of human knowledge, and the technology has just been upgraded from rubber band to nuclear reactor. No wonder there's some confusion about Google's exact role in that—along with increasing fear about its power and its intentions.

Most of the time Google does not actually *have* the answers. When people say, "I looked it up on Google," they are committing a solecism. When they try to erase their embarrassing personal histories "on Google," they are barking up the wrong tree. It is seldom right to say that anything is true "according to Google." Google is the oracle of redirection. Go there for "hamadryad," and it points you to Wikipedia. Or the Free Online Dictionary. Or the Official Hamadryad Web Site (it's a rock band, too, wouldn't you know). Google defines its mission as "to organize the world's information," not to possess it or accumulate it. Then again, a substantial portion of the world's printed books have now been copied onto the company's servers, where they share space with millions of hours of video and detailed multilevel imagery of the entire globe, from satellites and from its squadrons of roving street-level cameras. Not to mention the great and growing trove of information Google possesses regarding the interests and behavior of, approximately, everyone.

When I say Google "possesses" all this information, that's not the same as owning it. What it means to own information is very much in flux.

In barely a decade Google has made itself a global brand bigger than Coca-Cola or GE; it has created more wealth faster than any company in history; it dominates the information economy. How did that happen? It happened more or less in plain sight. Google has many secrets but the main ingredients of its success have not been secret at all, and the business story has already provided grist for dozens of books. Steven Levy's new account, *In the Plex,* is the most authoritative to date and in many ways the most entertaining. Levy has covered personal computing for almost thirty years, for *Newsweek* and *Wired* and

in six previous books, and has visited Google's headquarters periodically since 1999, talking with its founders, Larry Page and Sergey Brin, and, as much as has been possible for a journalist, observing the company from the inside. He has been able to record some provocative, if slightly self-conscious, conversations like this one in 2004 about their hopes for Google:

"It will be included in people's brains," said Page. "When you think about something and don't really know much about it, you will automatically get information."

"That's true," said Brin. "Ultimately I view Google as a way to augment your brain with the knowledge of the world. Right now you go into your computer and type a phrase, but you can imagine that it could be easier in the future, that you can have just devices you talk into, or you can have computers that pay attention to what's going on around them. . . ."

. . . Page said, "Eventually you'll have the implant, where if you think about a fact, it will just tell you the answer."

In 2004, Google was still a private company, five years old, already worth $25 billion, and handling about 85 percent of Internet searches. Its single greatest innovation was the algorithm called PageRank, developed by Page and Brin when they were Stanford graduate students running their research project from a computer in a dorm room. The problem was that most Internet searches produced useless lists of low-quality results. The solution was a simple idea: to harvest the implicit knowledge already embodied in the architecture of the World Wide Web, organically evolving.

The essence of the Web is the linking of individual "pages" on websites, one to another. Every link represents a recommendation—a vote of interest, if not quality. So the algorithm assigns every page a rank, depending on how many other pages link to it. Furthermore, all links are not valued equally. A recommendation is worth more when it comes from a page that has a high rank itself. The math isn't trivial—PageRank is a probability distribution, and the calculation is recursive, each page's rank depending on the ranks of pages that depend . . . and so on. Page and Brin patented PageRank and published the details even before starting the company they called Google.

Most people have already forgotten how dark and unsignposted the Internet once was. A user in 1996, when the Web comprised hundreds of thousands of "sites" with millions of "pages," did not expect to be able to search for "Olympics" and automatically find the official site of the Atlanta games. That was too hard a problem. And what was a search supposed to produce for a word like "university"? AltaVista, then the leading search engine, offered up a seemingly unordered list of academic institutions, topped by the Oregon Center for Optics.

Levy recounts a conversation between Page and an AltaVista engineer, who explained that the scoring system would rank a page higher if "university" appeared multiple times in the headline. Alta Vista seemed untroubled that the Oregon center did not qualify as a major university. A conventional way [to] universities would be to consult experts and assess mea[sures] quality: graduate rates, retention rates, test scores. The G[oogle] approach was to trust the Web and its numerous links, fo[r] and for worse.

PageRank is one of those ideas that seem obvious [after] fact. But the business of Internet search, young as it w[as] fallen into some rigid orthodoxies. The main task of a [search] engine seemed to be the compiling of an index. People [gene]rally thought of existing technologies for organizing the [world's] information, and these were found in encyclopedias [and dic]tionaries. They could see that alphabetical order was [also] become less important, but they were slow to appreci[ate] dynamic and ungraspable their target, the Internet, re[ally] Even after Page and Brin flipped on the light switch, mo[st] panies continued to wear blindfolds.

The Internet had entered its first explosive phase, boo[m] then bust for many ambitious startups, and one thing e[very]one knew was that the way to make money was to attract and [keep] users. The buzzword was "portal"—the user's point of [entry] like Excite, Go.com, and Yahoo—and portals could not [make] money by rushing customers into the rest of the Internet. "S[tick]iness," as Levy says, "was the most desired metric in we[b] at the time." Portals did not want their search functions [to be] *too good.* That sounds stupid, but then again how did G[oogle] intend to make money when it charged users nothing? [Its] interface at first was plain, minimalist, and emphatically [free] of advertising—nothing but a box for the user to type a [query] followed by two buttons, one to produce a list of results and [one] with the famously brash tag "I'm feeling lucky."

The Google founders, Larry and Sergey, did ever[ything] their own way. Even in the unbuttoned culture of Silicon [Valley] they stood out from the start as originals, "Montessori [kids]" (per Levy), unconcerned with standards and proprieties, [play]ing big red gym balls over office chairs, deprecating org[aniza]tion charts and formal titles, showing up for business me[etings] in roller-blade gear. It is clear from all these books that [they] believed their own hype; they believed with moral fer[vor] the primacy and power of information. (Sergey and Larry [did] not invent the company's famous motto—"Don't be evil"—[but] they embraced it, and now they may as well own it.)

As they saw it from the first, their mission encompass[ed] just the Internet but all the world's books and images, too. [And] Google created a free e-mail service—Gmail—its compet[itors] were Microsoft, which offered users two megabytes of st[orage] of their past and current e-mail, and Yahoo, which offered [four] megabytes. Google could have trumped that with six or [eight] instead it provided 1,000—a *giga*byte. It doubled that a [year] later and promised "to keep giving people more space for[ever]."

They have been relentless in driving computer sci[ence] forward. Google Translate has achieved more in ma[ny]

translation than the rest of the world's artificial intelligence experts combined. Google's new mind-reading type-ahead feature, Google Instant, has "to date" (boasts the 2010 annual report) "saved our users over 100 billion keystrokes and counting." (If you are seeking information about the Gobi Desert, for example, you receive results well before you type the word "desert.")

Somewhere along the line they gave people the impression that they didn't care for advertising—that they scarcely had a business plan at all. In fact it's clear that advertising was fundamental to their plan all along. They did scorn conventional marketing, however; their attitude seemed to be that Google would market itself. As, indeed, it did. Google was a verb and a meme. "The media seized on Google as a marker of a new form of behavior," writes Levy.

Endless articles rhapsodized about how people would Google their blind dates to get an advance dossier or how they would type in ingredients on hand to Google a recipe or use a telephone number to Google a reverse lookup. Columnists shared their self-deprecating tales of Googling themselves. . . . A contestant on the TV show *Who Wants to Be a Millionaire?* arranged with his brother to tap Google during the Phone-a-Friend lifeline. . . . And a fifty-two-year-old man suffering chest pains Googled "heart attack symptoms" and confirmed that he was suffering a coronary thrombosis.

Google's first marketing hire lasted a matter of months in 1999; his experience included Miller Beer and Tropicana and his proposal involved focus groups and television commercials. When Doug Edwards interviewed for a job as marketing manager later that year, he understood that the key word was "viral." Edwards lasted quite a bit longer, and now he's the first Google insider to have published his memoir of the experience. He was, as he says proudly in his subtitle to *I'm Feeling Lucky*, Google employee number 59. He provides two other indicators of how early that was: so early that he nabbed the e-mail address doug@google.com; and so early that Google's entire server hardware lived in a rented "cage."

Less than six hundred square feet, it felt like a shotgun shack blighting a neighborhood of gated mansions. Every square inch was crammed with racks bristling with stripped-down CPUs [central processing units]. There were twenty-one racks and more than fifteen hundred machines, each sprouting cables like Play-Doh pushed through a spaghetti press. Where other cages were right-angled and inorganic, Google's swarmed with life, a giant termite mound dense with frenetic activity and intersecting curves.

Levy got a glimpse of Google's data storage a bit later and remarked, "If you could imagine a male college freshman made of gigabytes, this would be his dorm."

Not anymore. Google owns and operates a constellation of [illegible] forms spread around the globe—huge windowless structures, resembling aircraft hangars or power plants, some with cooling towers. The server farms stockpile the exabytes of information and operate an array of staggeringly clever technology. This is Google's share of the cloud (that notional place where our data live) and it is the lion's share.

How thoroughly and how radically Google has already transformed the information economy has not been well understood. The merchandise of the information economy is not information; it is attention. These commodities have an inverse relationship. When information is cheap, attention becomes expensive. Attention is what we, the users, give to Google, and our attention is what Google sells—concentrated, focused, and crystallized.

Google's business is not search but advertising. More than 96 percent of its $29 billion in revenue last year came directly from advertising, and most of the rest came from advertising-related services. Google makes more from advertising than all the nation's newspapers combined. It's worth understanding precisely how this works. Levy chronicles the development of the advertising engine: a "fantastic achievement in building a money machine from the virtual smoke and mirrors of the Internet." In *The Googlization of Everything (and Why We Should Worry)*, a book that can be read as a sober and admonitory companion, Siva Vaidhyanathan, a media scholar at the University of Virginia, puts it this way: "We are not Google's customers: we are its product. We—our fancies, fetishes, predilections, and preferences—are what Google sells to advertisers."

The evolution of this unparalleled money machine piled one brilliant innovation atop another, in fast sequence:

1. Early in 2000, Google sold "premium sponsored links": simple text ads assigned to particular search terms. A purveyor of golf balls could have its ad shown to everyone who searched for "golf" or, even better, "golf balls." Other search engines were already doing this. Following tradition, they charged according to how many people saw each ad. Salespeople sold the ads to big accounts, one by one.
2. Late that year, engineers devised an automated self-service system, dubbed AdWords. The opening pitch went, "Have a credit card and 5 minutes? Get your ad on Google today," and suddenly thousands of small businesses were buying their first Internet ads.
3. From a short-lived startup called Go To (by 2003 Google owned it) came two new ideas. One was to charge per click rather than per view. People who click on an ad for golf balls are more likely to buy them than those who simply see an ad on Google's website. The other idea was to let advertisers bid for keywords—such as "golf ball"—against one another in fast online auctions. Pay-per-click auctions opened a cash spigot. A click meant

a *successful* ad, and some advertisers were willing to pay more for that than a human salesperson could have known. Plaintiffs' lawyers seeking clients would bid as much as fifty dollars for a single click on the keyword "mesothelioma"—the rare form of cancer caused by asbestos.

4. Google—monitoring its users' behavior so systematically—had instant knowledge of which ads were succeeding and which were not. It could view "click-through rates" as a measure of ad quality. And in determining the winners of auctions, it began to consider not just the money offered but the appeal of the ad: an effective ad, getting lots of clicks, would get better placement.

   Now Google had a system of profitable cycles in place, positive feedback pushing advertisers to make more effective ads and giving them data to help them do it and giving users more satisfaction in clicking on ads, while punishing noise and spam. "The system enforced Google's insistence that advertising shouldn't be a transaction between publisher and advertiser but a three-way relationship that also included the user," writes Levy. Hardly an equal relationship, however. Vaidhyanathan sees it as exploitative: "The Googlization of everything entails the harvesting, copying, aggregating, and ranking of information about and contributions made by each of us."

   By 2003, AdWords Select was serving hundreds of thousands of advertisers and making so much money that Google was deliberating hiding its success from the press and from competitors. But it was only a launching pad for the next brilliancy.

5. So far, ads were appearing on Google's search pages, discreet in size, clearly marked, at the top or down the right side. Now the company expanded its platform outward. The aim was to develop a form of artificial intelligence that could analyze chunks of text—websites, blogs, e-mail, books—and match them with keywords. With two billion Web pages already in its index and with its close tracking of user behavior, Google had exactly the information needed to tackle this problem. Given a website (or a blog or an e-mail), it could predict which advertisements would be effective.

This was, in the jargon, "content-targeted advertising." Google called its program AdSense. For anyone hoping to—in the jargon—"monetize" their content, it was the Holy Grail. The biggest digital publishers, such as *The New York Times,* quickly signed up for AdSense, letting Google handle growing portions of their advertising business. And so did the smallest publishers, by the millions—so grew the "long tail" of possible advertisers, down to individual bloggers. They signed up because were so powerfully, measurably productive. "Google co the advertising world with nothing more than applie ematics," wrote Chris Anderson, the editor of *Wired.* " pretend to know anything about the culture and conver advertising—it just assumed that better data, with better cal tools, would win the day. And Google was right." Nev and other traditional media have complained from time about the arrogation of their content, but it is by absor world's advertising that Google has become their most tive competitor.

Like all forms of artificial intelligence, targeted ad has hits and misses. Levy cites a classic miss: a gory *Post* story about a body dismembered and stuffed in a bag, accompanied on the *Post* website by a Google ad tic bags. Nonetheless, anyone could now add a few code to their website, automatically display Google start cashing monthly checks, however small. Vast trac Web that had been free of advertising now became Goo ners. Today Google's ad canvas is not just the search the entire Web, and beyond that, great volumes of e-m potentially, all the world's books.

Search and advertising thus become the matched a sharp sword. The perfect search engine, as Sergey a imagine it, reads your mind and produces the answer y The perfect advertising engine does the same: it shows ads you want. Anything else wastes your attention, th tiser's money, and the world's bandwidth. The dream ous advertising, matching up buyers and sellers to the b all. But virtuous advertising in this sense is a contrad terms. The advertiser is paying for a slice of our limit tion; our minds would otherwise be elsewhere. If our and the advertisers' were perfectly aligned, they would to pay. There is no information utopia. Google users ar to a complex transaction, and if there is one lesson to b from all these books it is that we are not always wittin

Seeing ads next to your e-mail (if you use Goog e-mail service) can provide reminders, sometimes of how much the company knows about your inner s without your e-mail, your search history reveals pl Levy says, "your health problems, your commercial your hobbies, and your dreams." Your response to ad reveals even more, and with its advertising programs began tracking the behavior of individual users from c net site to the next. They observe our every click (wh can) and they measure in milliseconds how long it ta decide. If they didn't, their results wouldn't be so u effective. They have no rival in the depth and breadth data mining. They make statistical models for everyth know, connecting the small scales with the large, from and clicks to trends in fashion and season, climate and

It's for your own good—that is Google's cherished belief. If we want the best possible search results, and if we want advertisements suited to our needs and desires, we must let them into our souls.

The Google corporate motto is "Don't be evil." Simple as that is, it requires parsing.

It was first put forward in 2001 by an engineer, Paul Buchheit, at a jawboning session about corporate values. "People laughed," he recalled. "But I said, 'No, *really*.'" (At that time the booming tech world had its elephant-in-the-room, and many Googlers understood "Don't be evil" explicitly to mean "Don't be like Microsoft"; i.e., don't be a ruthless, take-no-prisoners monopolist.)

Often it is misquoted in stronger form: "Do no evil." That would be a harder standard to meet.

Now they're mocked for it, but the Googlers were surely sincere. They believed a corporation should behave ethically, like a person. They brainstormed about their values. Taken at face value, "Don't be evil" has a finer ring than some of the other contenders: "Google will strive to honor all its commitments" or "Play hard but keep the puck down."

"Don't be evil" does not have to mean transparency. None of these books can tell you how many search queries Google fields, how much electricity it consumes, how much storage capacity it owns, how many streets it has photographed, how much e-mail it stores; nor can you Google the answers, because Google values its privacy.

It does not have to mean "Obey all the laws." When Google embarked on its program to digitize copyrighted books and copy them onto its servers, it did so in stealth, deceiving publishers with whom it was developing business relationships. Google knew that the copying bordered on illegal. It considered its intentions honorable and the law outmoded. "I think we knew that there would be a lot of interesting issues," Levy quotes Page as saying, "and the way the laws are structured isn't really sensible."

Who, then, judges what is evil? "Evil is what Sergey says is evil," explained Eric Schmidt, the chief executive officer, in 2002.

As for Sergey: "I feel like I shouldn't impose my beliefs on the world. It's a bad technology practice." But the founders seem sure enough of their own righteousness. ("'Bastards!' Larry would exclaim when a blogger raised concerns about user privacy," recalls Edwards. "'Bastards!' they would say about the press, the politicians, or the befuddled users who couldn't grasp the obvious superiority of the technology behind Google's products.")

Google did some evil in China. It collaborated in censorship. Beginning in 2004, it arranged to tweak and twist its algorithms and filter its results so that the native-language Google.cn would omit results unwelcome to the government. In the most notorious example, "Tiananmen Square" would produce sightseeing guides but not history lessons. Google figured out what to censor by checking China's approved search engine, Baidu, and by accepting the government's supplementary guidance.

Yet it is also true that Google pushed back against the government as much as any other American company. When results were blocked, Google insisted on alerting users with a notice at the bottom of the search page. On balance Google clearly believed (and I think it was right, despite the obvious self-interest) that its presence benefited the people of China by increasing information flow and making clear the violation of transparency. The adventure took a sharp turn in January 2010, after organized hackers, perhaps with government involvement, breached Google's servers and got access to the e-mail accounts of human rights activists. The company shut down Google.cn and now serves China only from Hong Kong—with results censored not by Google but by the government's own ongoing filters.

So is Google evil? The question is out there now; it nags, even as we blithely rely on the company for answers—which now also means maps, translations, street views, calendars, video, financial data, and pointers to goods and services. The strong version of the case against Google is laid out starkly in *Search & Destroy*, by a self-described "Google critic" named Scott Cleland. He wields a blunt club; the book might as well been have been titled *Google: Threat or Menace?!* "There is evidence that Google is not all puppy dogs and rainbows," he writes.

Google's corporate mascot is a replica of a Tyrannosaurus Rex skeleton on display outside the corporate headquarters. With its powerful jaws and teeth, T-Rex was a terrifying predator. And check out the B-52 bomber chair in Google Chairman Eric Schmidt's office. The B-52 was a long range bomber designed to deliver nuclear weapons.

Levy is more measured: "Google professed a sense of moral purity . . . but it seemed to have a blind spot regarding the consequences of its own technology on privacy and property rights." On all the evidence Google's founders began with an unusually ethical vision for their unusual company. They believe in information—"universally accessible"—as a force for good in and of itself. They have created and led teams of technologists responsible for a golden decade of genuine innovation. They are visionaries in a time when that word is too cheaply used. Now they are perhaps disinclined to submit to other people's ethical standards, but that may be just a matter of personality. It is well to remember that the modern corporation is an amoral creature by definition, obliged to its shareholder financiers, not to the public interest.

The Federal Trade Commission issued subpoenas in June in an antitrust investigation into Google's search and advertising practices; the European Commission began a similar investigation last year. Governments are responding in part to organized

complaints by Google's business competitors, including Microsoft, who charge, among other things, that the company manipulates its search results to favor its friends and punish its enemies. The company has always denied that. Certainly regulators are worried about its general "dominance"—Google seems to be everywhere and seems to know everything and offends against cherished notions of privacy.

The rise of social networking upends the equation again. Users of Facebook choose to reveal—even to flaunt—aspects of their private lives, to at least some part of the public world. Which aspects, and which part? On Facebook the user options are notoriously obscure and subject to change, but most users share with "friends" (the word having been captured and drained bloodless). On Twitter, every remark can be seen by the whole world, except for the so-called "direct message," which former Representative Anthony Weiner tried and failed to employ. Also, the Library of Congress is archiving all tweets, presumably for eternity, a fact that should enter the awareness of teenagers, if not members of Congress.

Now Google is rolling out its second attempt at a social-networking platform, called Google+. The first attempt, eighteen months ago, was Google Buzz; it was an unusual stumble for the company. By default, it revealed lists of contacts with whom users had been chatting and e-mailing. Privacy advocates raised an alarm and the FTC began an investigation, quickly reaching a settlement in which Google agreed to regular privacy audits for the next twenty years. Google+ gives users finer control over what gets shared with whom. Still, one way or another, everything is shared with the company. All the social networks have access to our information and mean to use it. Are they our friends?

This much is clear: We need to decide what we want from Google. If only we can make up our collective minds. Then we still might not get it.

The company always says users can "opt out" of many of its forms of data collection, which is true, up to a point, for savvy computer users; and the company speaks of privacy in terms of "trade-offs," to which Vaidhyanathan objects:

> *Privacy* is not something that can be counted, divided, or "traded." It is not a substance or collection of data points. It's just a word that we clumsily use to stand in for a wide array of values and practices that influence how we manage our reputations in various contexts. There is no formula for assessing it: I can't give Google three of my privacy points in exchange for 10 percent better service.

This seems right to me, if we add that privacy involves n just managing our reputation but protecting the inner life w may not want to share. In any case, we continue to make pr cisely the kinds of trades that Vaidhyanathan says are impos ble. Do we want to be addressed as individuals or as neurons the world brain? We get better search results and we see mo appropriate advertising when we let Google know who we a And we save a few keystrokes.

Critical Thinking

1. What is the overwhelming source of Google's revenue? Why do you think Google invests so heavily in products separate from their principal revenue sources? Why do you think Google offers so many of their products for free? Do you think this business model is sustainable? Do you think i would work for other companies today? Why or why not?
2. Gleick says "what it means to own information is very much in flux." What do you think it means to own informa tion? Does Google own your information? Does Facebook Do they possess your information? Do they have the right to make decisions about how to use it? Sell (or license) it? Show it to the government? Deprive you of access to it? Delete it?
3. Much is made of Google's PageRank algorithm, what is it? Consider Gleick's description of PageRank and how it displaced AltaVista's simpler search algorithm. How has PageRank technology impacted us beyond simply making Google the leading search engine?

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Article

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AmazonFresh is Jeff Bezos' Last Mile Quest for Total Retail Domination

Amazon upended retail, but CEO Jeff Bezos—*Who just bought the* Washington Post *for $250 million*—insists it's still "day one." What comes next? A relentless pursuit of cheaper goods and faster shipping. The competition is already gasping for breath.

J. J. McCorvey

Learning Outcomes

After reading this article, you will be able to:

- Understand the differential advantages Amazon has created to gain dominance in the marketplace.
- Understand the issues driving the creation of an Internet sales tax and why Amazon, the biggest retailer of them all, is in favor of this tax.

The first thing you notice about Jeff Bezos is how he strides into a room.

A surprisingly diminutive figure, clad in blue jeans and a blue pinstripe button-down, Bezos flings open the door with an audible whoosh and instantly commands the space with his explosive voice, boisterous manner, and a look of total confidence. "How are you?" he booms, in a way that makes it sound like both a question and a high-decibel announcement.

Each of the dozen buildings on Amazon's Seattle campus is named for a milestone in the company's history—Wainwright, for instance, honors its first customer. Bezos and I meet in a two-floor structure known as Day One North. The name means more than the fact that Amazon, like every company in the universe, opened on a certain date (in this case, it's July 16, 1995). No, Day One is a central motivating idea for Bezos, who has been reminding the public since his first letter to shareholders in 1997 that we are only at Day One in the development of both the Internet and his ambitious retail enterprise. In one recent update for shareholders he went so far as to assert, with typical I-know-something-you-don't flair, that "the alarm clock hasn't even gone off yet." So I ask Bezos: "What exactly does the rest of day one look like?" He pauses to think, then exclaims, "We're still asleep at that!"

He's a liar.

Amazon is a company that is anything but asleep. Amazon, in fact, is an eyes-wide-open army fighting—and winning—a battle that no one can map as well as its general. Yes, it is still the ruthless king of books—especially after Apple's recent loss in a book price-fixing suit. But nearly two decades after its real day one, the e-commerce giant has evolved light-years from being just a book peddler. More than 209 million active customers rely on Amazon for everything from flat-panel TVs to dog food. Over the past five years, the retailer has snatched up its most sophisticated competition—shoe seller Zappos and Quidsi, parent of such sites as Diapers.com, Soap.com, Wag.com, and BeautyBar.com. It has purchased the robot maker Kiva Systems, because robots accelerate the speed at which Amazon can assemble customer orders, sometimes getting it down to 20 minutes from click to ship. Annual sales have quadrupled over the same period to a whopping $61 billion. Along the way, incidentally, Amazon also became the world's most trusted company. Consumers voted it so in a recent Harris Poll, usurping the spot formerly held by Apple.

Amazon has done a lot more than become a stellar retailer. It has reinvented, disrupted, redefined, and renovated the global

marketplace. Last year, e-commerce sales around the world surpassed $1 trillion for the first time; Amazon accounted for more than 5% of that volume. This seemingly inevitable shift has claimed plenty of victims, with more to come. Big-box retailers like Circuit City and Best Buy bore the brunt of Amazon's digital assault, while shopping-mall mainstays such as Sears and JCPenney have also seen sales tank. Malls in general, which once seemed to offer some shelter from the online pummeling, have been hollowed out. By Green Street Advisors' estimate, 10% of the country's large malls will close in the next decade. It has become painfully clear that the chance to sift through bins of sweaters simply isn't enough of a draw for shoppers anymore. "It has been this way in retail forever," says Kevin Sterneckert, a research VP at Gartner who focuses on shopping trends, and who lays out a strategy that should blow nobody's mind: "If you don't innovate and address who your customers are, you become irrelevant." And now that means fending off threats from every phone, tablet, and laptop on the planet.

Amazon's increasing dominance is now less about what it sells than how it sells. And that portends a second wave of change that will further devastate competitors and transform retail again. It's not just "1-Click Ordering" on Amazon's mobile app, which is tailor-made for impulse buying. It's not just the company's "Subscribe & Save" feature, which lets customers schedule regular replenishments of essentials like toilet paper and deodorant. It's not just Amazon's "Lockers" program, in which huge metal cabinets are installed at 7-Elevens and Staples in select cities, letting customers securely pick up packages at their convenience instead of risking missed (or stolen) deliveries.

No, it's all this, plus something more primal: speed. Bezos has turned Amazon into an unprecedented speed demon that can give you anything you want. Right. Now. To best understand Amazon's aggressive game plan—and its true ambitions—you need to begin with Amazon Prime, the company's $79-per-year, second-day delivery program. "I think Amazon Prime is the best bargain in the history of shopping," Bezos tells me, noting that the service now includes free shipping on more than 15 million items, up from the 1 million it launched with in 2005. Prime members also gain access to more than 40,000 streaming Instant Video programs and 300,000 free books in the Kindle Owners' Lending Library. As annoying as this might be to Netflix, it is not intended primarily as an assault on that business. Rather, Bezos is willing to lose money on shipping and services in exchange for loyalty. Those 10 million Prime members (up from 5 million two years ago, according to *Morningstar*) are practically addicted to using Amazon. The average Prime member spends an astounding $1,224 a year on Amazon, which is $700 more than a regular user. Members' purchases and membership fees make up more than a third of Amazon's U.S. profit. And memberships are projected to rise 150%, to 25 million, by 2017.

Robbie Schwietzer, VP of Prime, is more candid than his boss when explaining Prime's true purpose: "Once you become a Prime member, your human nature takes over. You w leverage your $79 as much as possible," he says. "Not o you buy more, but you buy in a broader set of categorie discover all the selections we have that you otherwise wo have thought to look to Amazon for." And what you Amazon you won't buy from your local retailer.

Prime is phase one in a three-tiered scheme tha involves expanding Amazon's local fulfillment capabiliti a nascent program called AmazonFresh. Together, these will remake consumers' expectations about retail. Bezos to relish the coming changes. "In the old world, you could a living by hoping that your customer didn't know w your price was actually competitive. That's a very"— pauses for a second to rummage for the least insulting w "tenuous strategy in the new world. [Now] you can't co people you have the low price; you actually have to ha low price. You can't persuade people that your delivery s are fast; you actually have to have fast delivery speeds!" that last challenge, he erupts in a thunderous laugh, ing his cleanly depilated head so far back that you can s dark fillings on his upper molars. He really does seem to something the rest of us don't. We're still asleep, he says alarm clock at Amazon went off hours ago. Whether the the retail world has woken up yet is another question.

Amazon's 1-million-square-foot Phoenix fulfillment ter produces a steady and syncopated rhythm. It is the mechanical conveyor belts, the thud of boxes hitting met beeping of forklifts moving to and fro, and the hum of than 100 industrial-size air conditioners whirring away. T the sound of speed—a sonic representation of what it ta serve millions of customers scattered across the globe.

In centers like this one, of which there are 89 globally more to come), Amazon has built the complex machine make sure a product will ship out in less than 2.5 hours fro time a customer clicks place your order. From that click, a algorithms calculates the customer's location, desired shi speed, and product availability; it then dispatches the pur request to "pickers" on duty at the nearest fulfillment c The system directs the new order to the picker who is close the floor to that product, popping up with a bleep on the er's handheld scanner gun. These men and women roa sea of product shelves with carts, guided by Amazon's s hand to the precise location of the product on the color-c shelves. The picker gathers the item and puts it into a bin other customer orders. And from there, the item zooms a conveyor belt to a boxing station, where a computer ins a worker on what size box to grab and what items belo that box. After the packer completes an order, the word su lights up in big green letters on a nearby computer screen. the package goes back on a conveyor, where the fastest de method is calculated by scanning the box, which is then k down a winding chute to the appropriate truck.

Amazon-Proof Retail

How one store merges digital and physical

If anyone can design a brick-and-mortar store for an e-commerce world, it should be Nadia Shouraboura. She used to be Amazon's VP of global supply chain and fulfillment technology and has since created Hointer, a fully automated store run on software algorithms and machinery. She calls it a "microwarehouse" that marries digital's instant gratification with in-store benefits. "In apparel, this will win," she predicts. It works like this:

Step 1. Search
A customer enters the spare store, where there's only one of every product in view. She pulls up the Hointer app, scans the QR code on a pair of jeans she likes, and enters her size.

Step 2. Deliver
Within 30 seconds of scanning the code, a pair of jeans in her size travels through a chute and lands in her dressing room. She can scan as many items as she likes.

Step 3. Refine
Inside the dressing room, she tries on the jeans, but they're too baggy. So she chucks them down another chute and selects a smaller size from the app.

Step 4. Purchase
The jeans fit! She pays on her phone or swipes her card at a kiosk, and leaves the store with her purchase. No sales clerk necessary.

The process is efficient, but still lower tech than it could be. Although Amazon shelled out $775 million last year for those orange Kiva robots, it says it's still "evaluating" how to deploy the bots, and they're nowhere to be seen here. "Fulfillment by Amazon" is still a very human endeavor—and the company's creativity thrives within that limitation. A team at the Phoenix center is constantly thinking of ways to chip away at the 2.5-hour processing time. For instance, when products arrive from Amazon's vendors and the 2 million third-party merchants who sell their goods on the site, workers now scan them into Amazon's inventory system (again, with a handheld gun) instead of entering the details manually. Also, products have been stowed on shelves in what otherwise might appear to be a random way—for example, a single stuffed teddy bear might be next to a college biology book—because it reduces the potential distance a worker must trek between popular products that might be ordered together. Small tweaks like these have an impact: In the past two years, Amazon has reduced the time it took to move a product by a quarter. During the past holiday season, the company processed 306 items per second worldwide.

These centers aren't just about warehouse speed, though: They're also about proximity. Over the past several years, Bezos has poured billions into building them in areas closer and closer to customers. The Phoenix warehouse, one of four in the region, serves a metro area of nearly 4 million. Robbinsville, New Jersey, is roughly one hour from 8 million New Yorkers. Patterson, California, is an hour and a half from 7 million people living in the San Francisco Bay Area. Three locations in Texas—Coppell, Haslet, and Schertz—will serve not only the nearly 9 million citizens of the Dallas and San Antonio metro areas but also the other 17 million or so customers in the state (and possibly neighboring states too) who live only a few hundred miles away.

"What you see happening," Bezos explains, "is that we can have inventory geographically near major urban populations. If we can be smart enough—and when I say 'smart enough,' I mean have the right technology, the right software systems, machine-learning tools—to position inventory in all the right places, over time, your items never get on an airplane. It's lower cost, less fuel burned, and faster delivery."

The holy grail of shipping—same-day delivery—is tantalizingly within reach. Amazon already offers that service in select cities, what it calls "local express" delivery, but the big trick is to do it nationally. And the crucial element of this ambitious plan is revealed by something wonkier than a bunch of buildings. It is something only an accountant could see coming: a cunning shift in tax strategy.

If you were a competitor who knew what to listen for, you'd practically hear the Jaws theme every time Bezos said the word taxes. For years, Amazon fervently avoided establishing what is called a "tax nexus"—that is, a large-enough physical presence—in states that could potentially force it to collect sales tax from its customers, something brick-and-mortar and mom-and-pop stores had long argued would finally remove Amazon's unfair pricing advantage. In states that dared to challenge Amazon, the company would quickly yank operations. The scrutiny even extended to its sale of products by other merchants. "We had to be very careful, even with the third-party business, about not incurring tax-nexus stuff," recalls John Rossman, a former Amazon executive and current managing director at Alvarez and Marsal, a Seattle-based consulting firm.

But Amazon has since changed its mind. It determined that the benefits of more fulfillment centers—and all the speed they'll provide—will outweigh the tax cost they'll incur. So it began negotiating with states for tax incentives. South Carolina agreed to let the company slide without collecting sales tax until 2016, in exchange for bringing 2,000 jobs to the state. In California, Amazon was given a year to start collecting taxes in exchange for building three new

warehouses. And at the end of 2011, Amazon even threw its support behind a federal bill that would mandate all online retailers with sales of more than $1 million to collect tax in states in which they sold to customers. In 2012 alone, Amazon spent $2.5 million lobbying for issues that included what's known as the Marketplace Fairness Act—the same law, essentially, it had once moved heaven and earth to eradicate. The bill recently cleared the U.S. Senate and awaits passage in the House.

"The general perception is companies thinking, Oh, great, finally a level playing field," Rossman says. "But other retailers are going to regret the day. Sales tax was one of the few things impeding Amazon from expanding. Now it's like wherever Amazon wants to be, whatever Amazon wants to do, they are going to do it."

There's yet another weapon in Amazon's offensive, and it's ready for rollout. It's called AmazonFresh, a grocery delivery service that has long been available only in Seattle. The site has a selection of 100,000 items, and from my hotel room in that city on a recent Saturday at 11 a.m., I gave it a try. I clicked on chips, bananas, apples, yogurt, and a case of bottled water—along with a DVD of Silver Linings Playbook and a Moleskine reporter's notebook. After checking out and paying the $10 delivery fee, I requested my goods to arrive during the 7 p.m. to 8 p.m window. At 7:15 that evening, De, my AmazonFresh delivery woman, showed up in the lobby. She helped carry my bags up the elevator and to my hotel room, and tried several times to refuse a $5 tip for the trouble I put her through in the name of research. It was simple, easy—and for Amazon competitors, very threatening.

De and the Kiva robots are central to what Amazon sees as the future of shopping: whatever you want, whenever you want it, wherever you want it, as fast as you demand it. AmazonFresh is expected to expand soon to 20 more urban markets—including some outside America. Los Angeles became the second AmazonFresh market, this past June, and customers there were offered something the folks in Seattle must wish they got: a free trial of Prime Fresh, the upgrade version of Amazon Prime, which provides free shipping of products and free delivery of groceries for orders over $35. Subscribers will pay an annual fee of $299. Considering that grocery delivery otherwise costs between $8 and $10 each time (depending on order size), the subscription covers itself after about 30 deliveries—which busy families will quickly exceed.

Bezos, in his cagey, friendly way, seems more excited about my Fresh experience than he is about describing Fresh's future. He seems almost surprised that the service worked so well at a hotel, given that it was designed for home delivery. "Thank you!" he shouts. After peppering me with questions on how, precisely, the delivery went down, he finally gets around to addressing the service's business purpose.

"We'd been doing a very efficient job with our curr distribution model for a wide variety of things," Bezos sa "Diapers? Fine, no problem. Even Cheerios. But there ar bunch of products that you can't just wrap up in a cardbo box and ship 'em. It doesn't work for milk. It doesn't work hamburger." So he developed a service that would work—n because he suddenly wanted to become your full-service gro but because of how often people buy food.

AmazonFresh is actually a Trojan horse, a service desig for a much greater purpose. "It was articulated [in the init internal pitch to Bezos] that this would work with the broa rollout of same-day delivery," says Tom Furphy, a for Amazon executive who launched Fresh in 2007 and ran it u 2009. Creating a same-day delivery service poses tremend logistical and economic hurdles. It's the so-called last- problem—you can ship trucks' worth of packages from a w house easily enough, but getting an individual package to w its way through a single neighborhood and arrive at a single c sumer's door isn't easy. The volume of freight and frequency delivery must outweigh the costs of fuel and time, or else last mile is wildly expensive. You can't hire a battalion of unless they earn their keep. So by expanding grocery deliv Amazon hopes to transform monthly customers to weekly— even thrice-weekly—customers. And that, in turn, will prod the kind of order volume that makes same-day delivery w investing in. "Think of the synergy between Prime, same- delivery, and Fresh," says Furphy. "When all of those th start working in concert, it can be a very beautiful thing."

AmazonFresh is arguably the last link in Bezos's big p to make Amazon the dominant servicer—not just seller—of entire retail experience. The difference is crucial. Third-p sellers, retailers large and small, now account for 40% of A zon's product sales. Amazon generally gets up to a 20% s of each transaction. Those sellers are also highly incentiv to use Fulfillment by Amazon (known as FBA). Rather t shipping their products themselves after a sale is made on Amazon site, these retailers let Amazon do the heavy lift picking and packing at places like the Phoenix center. For sellers, an FBA agreement grants them access to Prime s ping speeds, which can help them win new customers and allow them to sell at slightly higher prices. For Amazon, it increases sales, profits, and the likelihood that any shopper find any item on its website.

The burgeoning AmazonFresh transportation net will help expand these numbers. In Los Angeles and Se a fleet of Fresh trucks delivers everything from full-co meals to chocolate from local merchants. The bright g branded trucks—with polite drivers in branded uniforms— Amazon personify its brand, giving it the same kind of t worthy familiarity that fueled the rise of UPS in the 1930 you have all kinds of fly-by-night operations coming to

door, people don't like that," says Yossi Sheffi, professor and director of the MIT Center for Transportation and Logistics. "It's different with someone in a U.S. Postal Service or FedEx uniform. Those brands inspire confidence."

As Amazon evolves into a same-day delivery service, its ctive transportation fleet could become yet another competi- ve advantage. By supplementing its long-term relationships ith UPS and FedEx with its own Fresh trucks, Amazon ay well be able to deliver faster than retailers that depend ntirely on outside services. "Pretty soon, if you're a retailer ith your online business, you're going to be faced with a oice," says Brian Walker, a former analyst at Forrester esearch who is now with Hybris, a provider of e-commerce ftware. "You're not going to be able to match Amazon, so u're going to have to consider partnering with them and veraging their network."

This shift could even turn Amazon into a competitor to UPS d FedEx, the long-standing duopoly of next-day U.S. ship- g. "If Amazon could do it at enough scale, they could offer pping at a great value and still eke out some margin," says lker. "In classic Amazon fashion, they could leverage the rastructure they've built for themselves, take a disruptive proach to the pricing, and run it as an efficiency play."

Amazon has been down this road before. Its Web Services an as an efficient, reliable back end to handle its own web rations—then became so adept that it now provides digital rices for an enormous range of customers, including Netflix reportedly, Apple. It's not impossible to imagine Amazon g the same with shipping. Last year, the company cut its ping costs as a percentage of sales from 5.4% to 4.5%. As ilds more distribution centers, installs more lockers, and ds out its fleet, Amazon is likely to drive those efficiency s down even further.

o is Amazon Freight Services Bezos's next mission? When the laugh lines vanish from his face as if someone flipped itch on his back. He contends that same-day delivery is xpensive outside of urban markets and that it only makes for Amazon to deliver its own products within the Fresh am. In China, he explains, Amazon does in fact deliver cts via many couriers and bicycle messengers. "But country like the United States," he says, "we have such histicated last-mile delivery system that it makes more for Amazon to use that system to reach its customers in d and accurate way." When I ask whether he would con- say, buying UPS, with its 90,000 trucks—or even more lly, purchasing the foundering USPS, with its 213,000 s running daily through America's cities and towns— scoffs. But he won't precisely say no.

als aren't waiting for an answer. EBay has launched Now, a $5 service that uses its own branded couriers York, San Francisco, and San Jose, to fetch products from local retail stores like Best Buy and Toys "R" Us and deliver them to customers within an hour. Google, fully aware that Amazon's market share in product search is substantial (now 30% to Google's 13%), has launched a pilot service called Google Shopping Express, which partners with courier companies. Walmart—which has booted all Kindles from its stores—started testing same-day delivery in select cities dur- ing the last holiday season, shipping items directly from its stores. (Joel Anderson, chief executive of Walmart.com, even suggested paying in-store shoppers to deliver online orders to other customers the same day. Come for a handsaw, leave with a job!)

These are the sort of ideas that retailers—both e-commerce and physical, large and small—will have to consider as Amazon expands. Guys like Jeff Jordan, partner at well-known venture firm Andreessen Horowitz, will make sure of it. His firm fol- lows and invests in direct-to-consumer businesses. "We won't invest in a company," he says, "unless they can tell us why they won't get steamrolled by Amazon."

Given the astounding growth of Amazon, and the seemingly infinite ways it has defied the critics, Bezos may have proved himself the best CEO in the world at taking the long view. But he doesn't like talking about it. "Did you bring the crystal ball? I left mine at home today," he quips. He does, however, like discussing what the future might bring for his customers. In fact, he likes talking about his customer so much that the word can seem like a conversational tic; he used it 40 times, by my count, in just one interview. "It's impossible to imagine that 10 years from now, I could interview an Amazon customer and they would tell me, 'Yeah, I really love Amazon. I just wish your prices were a little higher,'" he says. "Or, 'I just wish you'd deliver a little more slowly.'" In Bezos's world, the goal of the coming decade is a lot like the goal of the past two: Be cheap. Be fast. That's how you win.

There is, naturally, no guarantee that Bezos will simply win and win and win. The bigger Amazon gets, the greater the num- ber and variety of stakeholders required to make the Amazon machine hum. Many seem to be getting increasingly frustrated. Consider Amazon's third-party sellers—that group making up 40% of the company's product sales. Earlier this year, Amazon issued a series of fee hikes for use of its fulfillment services, ranging from as low as 5 cents per smallish unit to as much as $100 for heavier or awkwardly shaped items (like a whiteboard, say, or roll-away bed). Many sellers took to Amazon's forums to complain, and others threatened to go to eBay, which mostly leaves fulfillment to its sellers. "I think Amazon is a necessary evil," says Louisa Eyler, distributor for Lock Laces, a shoelace product that sells as many as 3,000 units per week on Amazon. After the price hike, Eyler says her total fees for the $7.99 item went from $2.37 to $3.62. She says Amazon now makes more per unit than she does.

Article

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Can Online Piracy Be Stopped by Laws?

Considering the legal responsibilities of Internet intermediaries in the aftermath of the Stop Online Privacy Act controversy.

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Learning Outcomes

After reading this article, you will be able to:

- Describe the controversy over piracy of digital media.
- Articulate arguments for and against legislation to protect digital media copyright.

While on a scuba diving trip in the Seychelles Islands earlier this year, I found myself worrying about pirates. Real pirates, as in people who attack boats, take hostages, and sometimes kill their prey. This kind of piracy has become unfortunately common in that part of the world.

On board our ship were four former British special forces soldiers who served as security guards. They were armed with semiautomatic weapons and on patrol, 24/7, for the entire trip. The danger was not just hypothetical. The frigate berthed next to us as we boarded had 25 pirates in its brig.

Waking up every morning to the prospect of encountering real pirates added brio to our excursion. It also induced reflections on use of the word "piracy" to describe copyright infringements. Downloading music is really not in the same league as armed attacks on ships.

As we were cruising from Mahe to Aldabra, I expected to be far away from it all. But the ship got a daily fax of the main stories being published in the *New York Times*. Among them were stories about the controversy over the proposed legislation known as the Stop Online Piracy Act (SOPA). SOPA would have given the entertainment industry new legal tools to impede access to foreign "rogue" Web sites that host infringing content and to challenge U.S.-directed Web sites that the industry thought were either indifferent or acquiescent to storage of infringing materials.

For a time, it seemed virtually inevitable that SOPA would become law. Yet because strong opposition emerged from technology companies, computer security experts, civil liberties groups and members of the general public, SOPA has been put on hold. It is unlikely to be enacted in anything like its original form.

This column will explain the key features of SOPA, why the entertainment industry believed SOPA was necessary to combat online piracy, and why SOPA came to be perceived as so flawed that numerous sponsors withdrew their support from the bill.

Blocking Access to "Foreign Rogue Web Sites"

As introduced, SOPA would have empowered the Attorney General (AG) of the U.S. to seek court orders requiring foreign Web sites to cease providing access to infringing copies of U.S. works. Because "rogue" Web sites seemed unlikely to obey a U.S. court order, SOPA further empowered the AG to serve these orders on U.S. Internet intermediaries who would then have been required to take "technically feasible and reasonable measures" to block their users from accessing the foreign Web sites. This included "measures designed to prevent the domain name of the foreign infringing site . . . from resolving to that domain name's Internet protocol address." These measures needed to be undertaken "as expeditiously as possible," but no later than five days after receipt of the orders.

Upon receiving a copy of a rogue-Web site order, search engines would have been required to block access to the sites even if users were searching for items that would otherwise have brought the sites to their attention. Internet service providers would have had to ensure that users who typed certain URLs (for example, http://thepiratebay.se) into their browsers

could not reach those sites. Payment providers (such as Visa or Mastercard) would have had to suspend services for completing transactions. Internet advertising services would have had to discontinue serving ads and providing or receiving funds for advertising at these sites.

Those who failed to comply with the DNS blocking obligations could expect the AG to sue them. The AG was also empowered to sue those who provided a service designed to circumvent this DNS blocking (for example, a plug-in or directory that mapped blocked URLs with numerical DNS representations).

Frustrated by the weak enforcement of intellectual property rights (IPRs) abroad, the U.S. entertainment industry urged Congress to adopt SOPA as the best way to impede online infringements. Foreign rogue Web sites might still be out there, but if U.S.-based Internet intermediaries blocked access to the sites, users would not be able to access infringing materials through U.S. intermediaries.

Because ISPs in the U.S. and abroad have no duty to monitor what users do on their sites, it is easy for sites to become hosts of large volumes of infringing materials. Some operators seemingly turn a blind eye to infringement, some encourage posting of infringing content, while other sites may just be misused by infringers. By cutting off sources of transactional and advertising revenues, the hope was to discourage these sites from continuing to operate.

Challenging U.S.-Directed Web Sites

SOPA would also have given holders of U.S. intellectual property rights (IPRs) power to challenge "U.S.-directed sites dedicated to the theft of U.S. property." At first blush, it might seem that reasonable persons should support a law crafted to target such sites. But "dedicated to the theft of U.S. property" was defined in a troublingly ambiguous and overbroad way. It included operators of sites that were taking "deliberate actions to avoid confirming a high probability of the use of [that] site to carry out acts" in violation of copyright or anti-circumvention rules. Also included was any site that was "primarily designed or operated for the purpose of, ha[d] only a limited use other than, or [wa]s marketed by its operator or another acting in concert with that operator in, offering goods or services in a manner that engages in, enables, or facilitates" violations of copyright or anti-circumvention laws.

SOPA would have enabled firms who believed themselves to be harmed by one of these sites to send letters to payment providers and/or to Internet advertising services to demand that they cease providing services to sites alleged to be "dedicated to the theft of U.S. property" shortly after receiving such letters.

Payment providers and Internet advertising services were tasked with notifying the challenged sites about the "dedica to-theft" allegations against them. Challenged sites could co these allegations by sending counter-notices to the payment viders and Internet advertising services. But without a co notice, payment providers and Internet advertising service to cease further dealings with the challenged Web sites.

Content owners could also sue dedicated-to-theft directly to enjoin them from undertaking further actions evidenced their dedication to theft. SOPA also authorized tent owners to sue payment providers or advertising ser who failed to comply with demands that they cease de with challenged Web sites.

SOPA's Flaws

The main problems with SOPA insofar as it would employed DNS blocking to impede access to foreign Web sites were, first, that it would undermine the securi stability of the Internet as a platform for communicatio commerce and second, that it would be ineffective.

SOPA is fundamentally inconsistent with DNSSEC Security Extensions), a protocol developed to avoid a redirections of Internet traffic, whether by criminals cratic governments, or other wrongdoers. Computer s experts spent more than a decade developing DNSSEC is now being implemented all over the world, including government agencies.

As the USACM Public Policy Committee observed i ter sent to members of Congress, DNSSEC Web site op cannot reliably block offending sites "and so may be fac the choice of abandoning DNSSEC or being in viola issued court orders."

This letter explained why DNS blocking would be tive. "[I]t is effectively impossible to bar access to a DNS servers around the globe because there are mil them on the Internet." Use of those servers "allows for ing of DNS blocking." Circumvention of DNS bloc moreover, "technically simple and universally av Browser add-ons to avoid DNS blocking have alrea developed and would be available on servers outside even if illegal in the U.S.

The main problems with the dedicated-to-theft prov SOPA were, first, that it was too imprecise and secon represented a dramatic change in the rules of the road Internet intermediaries.

What does it mean, for instance, for an Internet in ary to take "deliberate actions to avoid confirming a h ability" of infringement on the site? If Viacom tells it has found infringing clips of "South Park" shows o does YouTube become a site dedicated to the theft of

property if it does not investigate these claims? If Universal Music Group objects to the resale of MP3 files of its music on eBay, does eBay become a site dedicated to theft of Universal's property because one or more of its users offer the MP3 files for sale there?

Many Internet companies considered the dedicated-to-theft definition to be fundamentally inconsistent with the safe harbors established by the Digital Millennium Copyright Act (DMCA). Under the DMCA, Internet intermediaries are obliged to take down infringing materials after they are notified about specific infringements at specific parts of their Web sites. They have no obligation to monitor their sites for infringement. The safe harbors have been an important factor in the extraordinary growth of the Internet economy.

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It may be apt to characterize sites such as Napster, Aimster, and Grokster as having been dedicated to the theft of U.S. intellectual property, but existing copyright law supplied copyright owners with ample tools with which to shut down those sites.

Had the entertainment industry sought more narrowly targeted rules aimed at inducing payment providers and Internet advertising services to stop the flow of funds to sites that were really dedicated to infringement, such a law might have passed. But that was not SOPA.

Conclusion

The collapse of support for SOPA was principally due to concerted efforts by Internet service providers (including Wikipedia, which went "dark" one day to protest SOPA), computer security experts, civil society groups, and millions of Internet users who contacted their Congressional representatives to voice opposition to the bill.

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Because SOPA was a flawed piece of legislation, the collapse was a good thing. It would, however, be a mistake to think the battle over Internet intermediary liability for infringing acts of users has been won for good.

The entertainment industry is almost certainly going to make further efforts to place greater legal responsibilities on Internet intermediaries. This industry believes intermediaries are the only actors in the Internet ecosystem who can actually affect the level of online infringements that contributes to entertainment industry panics.

An odd thing about the entertainment industry is its deeply skewed views about piracy. In movies such as *Pirates of the Caribbean*, the industry glamorizes brigands who attack ships by depicting them as romantic heroes who have great adventures and engage in swashbuckling fun. Yet, it demonizes fans who download music and movies as pernicious evildoers who are, in its view, destroying this vital part of the U.S. economy. Something is amiss here, and it is contributing to a profound disconnect in perspectives about how much the law can do to bring about changes in norms about copyright.

Critical Thinking

1. The RIAA likens people who acquire music from "rogue" websites (sites populated with mustic, video, games, or software that host torrents or other file sharing applications) to pirates or criminals. Do you agree?
2. If legislation such as SOPA and PIPA are not the answer to protecting copyright in the digital age, what is the answer? Might different, scaled down, legislation work? Might there be a technological solution? Or might there be a business model solution to this dilemma?

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