PART ONE

Reimagine Your Business

REIMAGINE YOUR BUSINESS
Scope
Business model
Platform

Chapter 1

Business Scope

In 1960, Theodore Levitt, a Harvard Business School professor, published a provocative paper in *Harvard Business Review* in which he argued that companies were too focused on products and not enough on customer needs. To help managers address this problem, he asked, "What business are you really in?"[1] More than five decades later this fundamental question has become even more important, as companies are moving from products to platforms and as industry boundaries are getting blurred. Yet even though the majority of firms are trying to become customer-centric, it is not uncommon to hear senior executives, be it from General Motors or Walmart, define their businesses, their industries, and their competition by the products they produce and sell.

Let's look to Amazon to see the advantage of heeding Levitt's advice.

What Business Is Amazon In?

When Amazon first launched its website, in July 1995, founder Jeff Bezos's goal was to use the internet to sell books at low prices. He created a virtual store with lower fixed costs and a larger inventory than those of most brick-and-mortar bookstores. The concept quickly became popular, and Bezos realized that consumers shopping for other types of goods might also appreciate this concept. So he began adding dozens of categories to Amazon's online assortment, including music, DVDs, electronics, toys, software, home goods, and many more. Amazon's low prices and large selection, and the convenience online retailing provided consumers, posed a significant threat to traditional retailers like Best Buy, Toys "R" Us, and Walmart.

Five years later Amazon opened its site to third-party sellers, who could post their products on Amazon's site for a modest service fee. This move was a win-win: third-party sellers increased Amazon's assortment without Amazon having to stock extra inventory, and sellers got access to the ever-increasing pool of consumers who enjoyed shopping on Amazon's site. Adding third-party sellers also transformed Amazon from an online *retailer* to an online *platform*, which required Amazon to develop new capabilities of acquiring, training, and managing sellers on its sites without losing control or damaging customer experience. And its competitive set expanded to include eBay, Craigslist, and others.

Other online retailers, such as Flipkart in India, are undergoing a similar transition and realizing that this seemingly simple move from an inventory-based model to a marketplace model requires a significant shift in the capabilities and operations of the company.[2]

The introduction of iTunes, in 2001, dramatically changed consumers' behavior as they started downloading digital music instead of buying CDs in a store. Recognizing this trend, Amazon launched its video-on-demand service, initially called Unbox and later renamed as Amazon Instant Video, almost a year before Netflix introduced video streaming. Once again Amazon followed its customers and shifted from selling CDs and DVDs to offering streaming services that required it to develop new capabilities and pitted it against a new set of competitors, such as Apple and Netflix.

In 2011, in partnership with Warner Bros., Amazon launched Amazon Studios to produce original motion-picture content. Suddenly it was competing against Hollywood studios. Why does it make sense for Amazon, which started as an online retailer, to move in this direction?

Because video content helps Amazon convert viewers into shoppers. In a 2016 technology conference near Los Angeles, Jeff Bezos said, "When we win a Golden Globe, it helps us sell more shoes."[3] According to Bezos, the original content of Amazon Studios also encourages Prime members to renew their subscription "at higher rates, and they convert from free trials at higher rates" than Prime members who do not stream videos.[4] Launched in 2005, Prime offers free two-day shipping for a subscription fee, which started at $79 a year and was later increased to $99 a year. By 2017, Amazon had almost 75 million Prime members worldwide.[5] Not only does the subscription fee generate almost $7.5 billion in annual revenue for Amazon, but Prime members also spend almost twice the amount of money than other Amazon customers do.[6] In addition to creating loyalty among Prime members, original content is also a means of attracting new customers. In 2015, Amazon's CFO Tom Szkutak credited Amazon's $1.3 billion investment in original content as a key driver for attracting new customers to other parts of Amazon's business, including Prime.[7] In 2017, Amazon spent almost $4.5 billion on original video content.[8]

But Amazon's business scope did not end with retailing and content. In 2007, Amazon released the Kindle, almost three years ahead of the iPad. Now Amazon, which started as an online retailer, was in the hardware business. The Kindle was designed to sell ebooks as consumers shifted from physical products to digital goods. It is important to recognize that Amazon's strategy for the Kindle is quite different from Apple's strategy for the iPad. Apple makes most of its money from hardware, whereas Amazon treats the Kindle as a "razor," selling it at a low (or even break-even) price in order to make money on the ebooks, which would be akin to the "blades." As consumers started spending more and more time on their mobile devices, Amazon launched its own Fire phone in July 2014. It failed to gain traction, but was pursuing that market a mistake? Perhaps. However, the upside from a successful launch would have been enormous.

More recently, Amazon launched additional devices: Dash buttons, which let users order products from over a hundred brands when users' supplies get low, and Echo, a voice-activated virtual assistant, which can be used to stream music, get information, and of course, order products from Amazon in an even more convenient fashion.[9] Echo was launched in November 2014, and within two years Amazon had sold almost eleven million Echo devices in the United States and developers had built over twelve thousand apps or "skills" for this device. As voice increasingly becomes the computing interface for consumers, Amazon is well positioned with Echo.

Amazon also started its own advertising network, which put the company squarely in competition with Google. Amazon's large customer base, and more specifically the company's knowledge of consumers' purchasing and browsing habits, provides Amazon with a rich source of data for targeting its customers with relevant ads. While Google only knows a consumer's intention to buy a product, Amazon has information on whether or not a consumer actually bought a product on its site—highly valuable information for product manufacturers, which is encouraging them to shift digital advertising dollars to Amazon. This shift has allowed Amazon to generate almost $3.5 billion of ad revenue in 2017.[10] But an even bigger goal for Amazon is to replace Google as a search engine for products, so that customers start their product search on Amazon rather than on Google. This would not only reduce Amazon's ad spend on Google but would also give Amazon tremendous market power. In October 2015, a survey of two thousand US consumers revealed that 44 percent go directly to Amazon for a product search, compared with 34 percent who use search engines such as Google or Yahoo.[11] Eric Schmidt, Google's executive chairman, acknowledged this shift. "People don't think of Amazon as search," said Schmidt, "but if you are looking for something to buy, you are more often than not looking for it on Amazon."[12]

Perhaps the most controversial choice was Bezos's decision to enter the cloud-computing market with the launch of Amazon Web Services (AWS). Suddenly a completely new set of companies—for instance, IBM—became Amazon's competitors. What is an online retailer doing in cloud computing? AWS helps Amazon scale its technology for future growth. It allows Amazon to learn from other e-commerce players who use its platform. And it enables Amazon to leverage and monetize its excess web capacity. Effectively AWS is a way for Amazon to build its technology capability to become one of the largest online players and monetize that capability at the same time.

However, this was certainly a risky move and many experts questioned Bezos's decision. A 2008 *Wired* magazine article criticized this decision. "For years, Wall Street and Silicon Valley alike have rolled their eyes at the legendary Bezos attention disorder," wrote *Wired*. "What's the secret pet project? Spaceships! Earth to Jeff: You're a retailer. Why swap pricey stuff in boxes for cheap clouds of bits?"[13] Bezos had a pithy response to AWS critics: "We're very comfortable being misunderstood. We've had lots of practice."[14] In the fourth quarter of 2017, AWS generated over $5 billion in revenue, representing annual revenue of more than $17 billion and 43 percent year-over-year growth.[15]

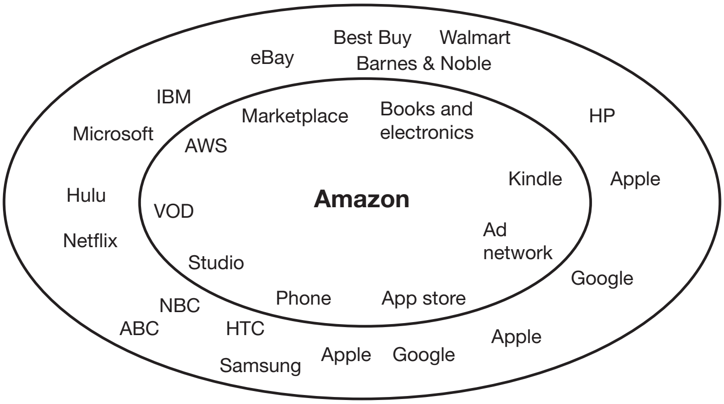
Amazon's success in broadening the scope of its business while continuing to focus on consumer needs is undeniable: Since its inception, Amazon has grown at a staggering pace, with almost a 60,000 percent increase in its stock price.

Define Your Business Around Your Customers, Not Your Products or Competitors

Amazon's varied products and services, and the company's correspondingly numerous and varied competitors, can be seen at a glance in figure 1-1. As an online retailer, Amazon competes with Barnes & Noble, Best Buy, and Walmart. As an online platform, Amazon competes with eBay. In cloud computing, it battles for market share with IBM, Google, and Microsoft. In streaming services, it has Netflix and Hulu as formidable competitors. Amazon Studios puts the company up against Disney and NBC Universal Studios. Its entry into mobile phones put it in the crosshairs of Apple, HTC, and Samsung. Its ad network made it Google's rival.

FIGURE 1-1

Amazon's business and its competitors



Most companies define their business by either their products or their competitors—for example, you may consider yourself in the banking business or the automobile industry. But it is hard to define Amazon in this traditional fashion. Amazon expanded its scope around its customers.

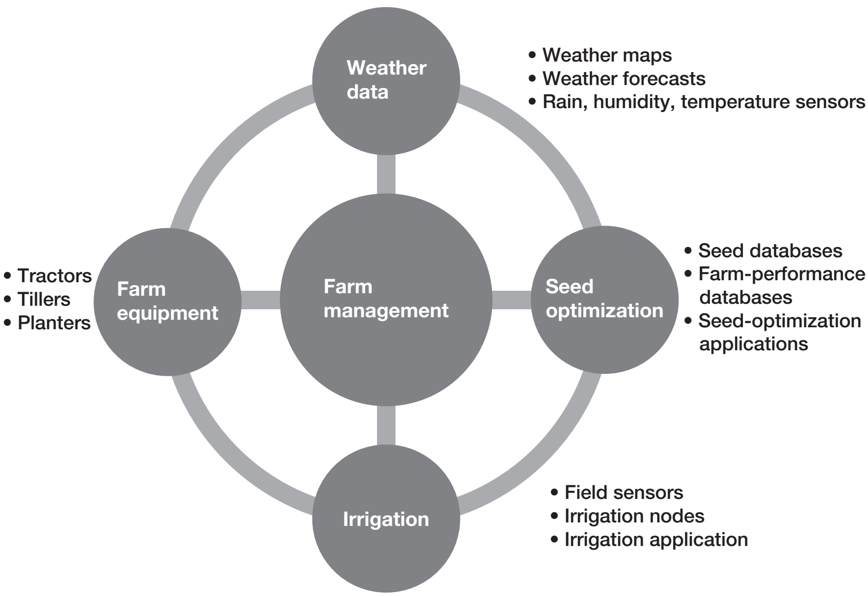
Redefining your business around customers is not limited to technology companies. John Deere, the heavy-machinery and farming-supply company, was founded in 1837 by a blacksmith who sold steel plows to farmers.[16] By 2014, the company had $36 billion in sales worldwide and employed nearly 60,000 people.[17] For decades, John Deere had been very successful selling its heavy machinery to farmers and construction companies, but in the early 2000s the company began adding software and sensors to its products. Its newest farming equipment includes guided-steering features so accurate that the equipment can stay within a preset track without wavering more than the width of a thumbprint.[18] Later, John Deere formed two new divisions: a mobile-technology group and an agricultural-services group.

By the mid-2000s, John Deere had collected data from over 300,000 acres to help farmers optimize their fertilizer use.[19] Soon the company transitioned from a farm-equipment manufacturer to a farm-management company that provided predictive maintenance, weather information, seed optimization, and irrigation through remote sensors (see figure 1-2). The company is planning to open the platform's application programming interfaces (APIs) to outside developers, so that the information can be used in new ways.[20]

Automobile companies, which used to see themselves as being strictly in the business of manufacturing and selling vehicles, have to wake up to the new competition from ride-sharing companies like Uber, which are providing mobility without the need to own or even lease a car. Now, as a defensive move, all automakers are positioning themselves within the "mobility" business and offering their own ride-sharing services, even though these services have the potential to reduce the demand for cars, a concern shared by most auto manufacturers. However, these services, such as Mercedes car2go and BMW DriveNow, also have the potential to

FIGURE 1-2

John Deere's transformation



Source: Adapted from Michael E. Porter and James E. Heppelman, "How Smart, Connected Products Are Transforming Competition," *Harvard Business Review,* November 2014.

generate interest among millennials, who may not have considered these brands otherwise but who will do so on a low-cost, trial basis, possibly leading to greater brand loyalty in the future.

Competition Is No Longer Defined by Traditional Industry Boundaries

It should be clear from the discussion so far that competition is no longer defined by traditional product or industry boundaries. The rapid development of technology is making data and software integral to almost all businesses, which is blurring industry boundaries faster than ever before. In a 2014 *Harvard Business Review* article, Michael E. Porter and James E. Heppelmann suggested that smart, connected devices—or the internet of things—shift the basis of competition from the functionality of a single product to the performance of a broad system, in which the firm is often one of many players.[21]

Typically new players, either startups or companies from different industries, enter a market and catch incumbents by surprise. Amazon surprised Google by becoming the dominant competitor in the search market. Apple is hiring automobile engineers at a rate that is scaring the auto industry. Netflix and, more recently, streaming services by HBO and CBS are causing concern for Comcast and other cable players.

Often incumbents leave an opening for new players by ignoring a shift in customer needs in response to changes in technology. Netflix changed customers' expectations about on-demand streaming, and although cable providers eventually pursued the so-called TV Everywhere concept to allow their subscribers to stream content anywhere, it took them several years to develop this service, and it is still a work in progress. During a conference in late 2015, Reed Hastings, Netflix's CEO, said, "We've always been most scared of TV Everywhere as the fundamental threat. That is, you get all this incredible content that the ecosystem presents, now on demand, for the same [price] a month. And yet the inability of that ecosystem to execute on that, for a variety of reasons, has been troubling."[22] Had Comcast understood the shift in customer needs and transformed its business around those needs, it might have prevented the threat of cord-cutting (which is cable customers canceling their subscriptions in favor of such streaming services as Netflix, Hulu, and HBO Now). Similarly, Uber might not have been so successful had taxi companies kept in touch with consumer needs and provided consumers a convenient way to order and pay for taxi rides.

Competitive Advantage No Longer Comes from Low Cost or Product Differentiation

In 1979, Michael Porter, one of my colleagues at Harvard Business School, published a landmark paper in which he argued that a company could follow one of two potential strategies for competitive advantage: either by being cheaper (that is, as a low-cost producer) or by being different (with differentiated products that command higher prices).[23] This view suggested that the core competencies required to become a low-cost producer include scale and operational efficiency, whereas a differentiation strategy requires the ability to create innovative products and services. As the scope of a business expands and both its competition and its industry boundaries are defined more broadly than before, a company needs to rethink its core competencies and its competitive advantage.

What is Amazon's core competency that allows it to enter into such disparate business areas as online retailing, cloud computing, hardware, digital advertising, media streaming, and content creation? Although Amazon started as a low-cost player without the fixed cost of stores, it is not product-centric knowledge that gives it an advantage of differentiation or low cost. Instead, Amazon has mastered three skills:

- Deep knowledge of *customers* obtained from mining customer data. This is embedded in the recommendation system for books and movies as well as in the introduction of new products and services.

- Back-end *logistics* for warehousing and shipping that could rival the logistics systems of FedEx and UPS. With its investment in drones and now its own trucking business, Amazon is further strengthening this part of its competency.
- Knowledge of and ability to manage *technology* infrastructure. This has allowed it to become not only one of the largest online retailers but also a dominant player in cloud computing.

These skills provide a unique advantage to Amazon, an advantage that makes it difficult for Amazon's rivals to compete. For example, a deep understanding of customers and their demand patterns allows Amazon to have a cash conversion cycle of minus fourteen days, in contrast to the cash conversion cycle of ten days for Walmart and twenty-seven days for Target.[24] (The cash conversion cycle is calculated by adding the number of inventory days and accounts-receivable days and subtracting accounts-payable days. Amazon reduces its inventory days by accurately forecasting consumer demand. Its accounts-receivable days are low since it gets payment from consumers almost immediately, and it pays its suppliers in thirty to sixty days. With a cash conversion cycle of minus fourteen days, Amazon is effectively letting its suppliers fund its growth.) An accurate estimation of demand also allows Amazon to prestock the right products in a particular warehouse and promise delivery of these items within two hours in that geography through its recently launched Prime Now service.

Complementary Products and Network Effects Provide Strong Competitive Advantage

In today's connected world, sustainable competitive advantage comes from offering a system of connected and complementary products, and from creating a platform with strong network effects that increase consumers' switching costs. Mobile-phone companies such as Nokia were product-based until smartphone players such as Apple moved to a platform-based model whereby the value of the iPhone increased with the development of new apps. The iPhone's product advantage over Samsung's Galaxy phones has lessened dramatically over time, yet the iPhone has managed to maintain its leadership position largely due to complementary services, such as iTunes and FaceTime, that make it harder for consumers to switch.

Traditional retailers like Walmart and Best Buy have started their own e-commerce operations and often find it frustrating that their operations have not gotten the needed traction even though Walmart and Best Buy prices are not only comparable but, in many cases, lower than those of Amazon. Although Amazon started as a low-cost player, over time it has built a series of complementary services (e.g., free music and video to Prime members) that have redefined its competitive advantage.

Paytm, an Indian startup backed by Alibaba, illustrates the idea of complementary products very well. Paytm began its operations as an online mobile-recharge company that offered consumers the convenience of adding money to their prepaid mobile phones. It charged mobile operators a small fee for this service. Soon it added new complementary services: Consumers could use money from their Paytm wallet to buy bus and train tickets. They could use it to pay for Uber and other online-to-offline (O2O) services. They could use it for peer-to-peer payments. They could use it to pay offline merchants, including millions of mom-and-pop shops, who put QR codes in their shops for consumers to scan with their mobile phones, instead of installing expensive POS machines to accept credit cards. (Unlike credit-card companies, Paytm did not charge any fee to small merchants for accepting Paytm money. Paytm did charge large merchants, and consumers were charged a fee if they took money out of the Paytm system. This encouraged consumers to keep the money within the Paytm network.) And, finally, consumers could use money from their Paytm wallet to buy products online. In 2015, Reserve Bank of India, the country's central bank, gave banking licenses to Paytm and several mobile operators to provide mobile banking services to millions of consumers who did not have access to banking services in India. By adding these complementary services, Paytm made its wallet increasingly valuable to consumers. By mid-2017, Paytm had more than 200 million wallets. In the process of adding these new services, Paytm expanded the scope of its business, developed new capabilities (e.g., running an online marketplace, becoming a bank), and started competing with a diverse set of players.

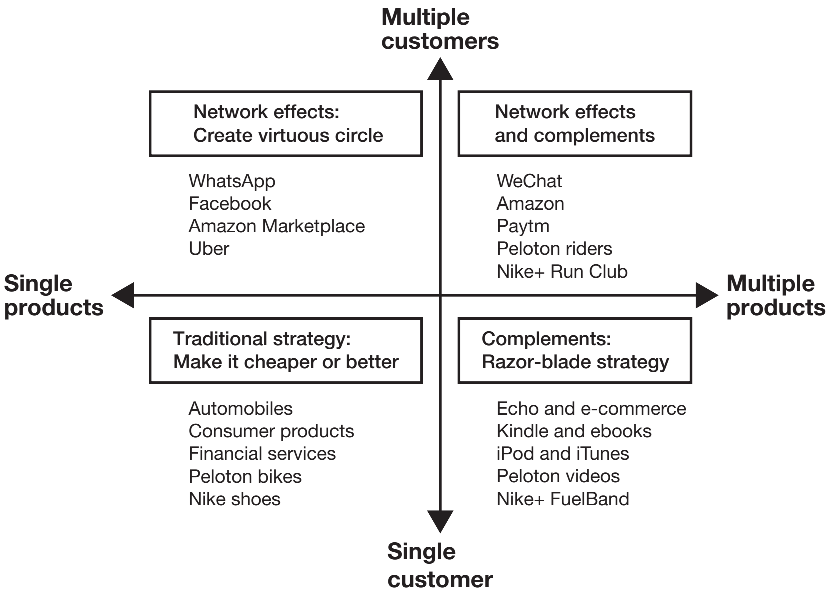
In many cases the value of a product (e.g., WhatsApp) increases as more consumers use it, without any change in the product's features or functionality. This is the *direct network effect.* In addition, as a product becomes a *platform* that connects, say, buyers and sellers (e.g., eBay), it gains from *indirect network effect.* That is, as buyers join the platform in increasing numbers, more sellers have an incentive to be part of it. This virtuous circle leads to a winner-take-all environment that makes it harder for any other player—even those with better products or lower costs—to compete effectively. Companies enjoying strong indirect network effects include Uber, Airbnb, Match.com, Flipkart, and others.

Figure 1-3 shows how the traditional way of providing value to customers has changed dramatically in the digital age. In the last several decades companies have been organized by products, and each business unit's goal has been to provide product value for every single target customer, effectively focusing on a single product and a single customer (the bottom left quadrant of figure 1-3). The traditional strategic framework espoused by Michael Porter worked well here, and companies focused on making their products cheaper or better. Automobiles, consumer products, banking products, all have used this traditional approach.

However, companies like Amazon exploit the synergy between complementary products by using the razor-blade strategy, in which the razor (e.g., Kindle) can be sold almost at a loss in order to make money on the blades (e.g., ebooks). Note that for this strategy to work, an organization's structure and its incentive systems have to move away from one built around traditional product units. The performance of a Kindle manager cannot be measured and evaluated based on the profitability of his business unit.

FIGURE 1-3

New ways to provide value to customers and create competitive advantage



His goal is not to make money on the Kindle but to help sell more ebooks. It can become very hard for a rival to compete with a firm whose strategy is based on complementary products. In 2016, Amazon made over $1 billion in small-business loans to more than 20,000 merchants who sell products on its platform.[25] Amazon could easily decide to offer these loans at a much lower rate than traditional banks, because Amazon can use these loans as a razor to make money on the merchant transactions on its platform. If the core product of banks were to become a complement for Amazon, banks would find it very hard to compete.

In the connected world, the value of a product such as WhatsApp or Uber increases as more people use it, without any changes in the product features. This creates a winner-take-all scenario that makes it very hard for competitors who are competing solely on the basis of low cost or product differentiation. Amazon was an online retailer without any network effects until it added the marketplace that allowed third-party sellers to join. In chapter 3 we will discuss how traditional companies like GE are rethinking their strategy by moving from products to platforms to take advantage of these network effects.

The most ambitious strategy is to devise an approach that benefits from both complements and network effects. When Tencent launched WeChat in China in 2011, the product was designed as a messaging application, similar to WhatsApp, and it benefitted from network effects. As it gained in popularity and became the favorite messaging medium for almost all Chinese consumers, Tencent started building complementary services within WeChat. Now, WeChat consumers can use the application to pay their utility bills, order a pizza, book a doctor's appointment, and scan a QR code at a supermarket. WeChat's payment service has become a serious threat to Alibaba's Alipay.

This strategy is not limited to technology companies. Nike launched FuelBand to help runners track their activities and later created the Nike+ Run Club that encouraged people to run and train with the global Nike+ community. Peloton, when introducing a new exercise bike, didn't simply claim that its bike was better than competing products. It launched a series of exercise videos that users subscribe to on a monthly basis. Peloton also introduced live classes that users can stream from the comfort of their own homes, and as part of the streaming, the user's performance metrics—exertion level, heart rate, rank in the class—are displayed at the bottom of the screen. It is not uncommon for a few hundred people to be participating in a live class. This not only creates a sense of community but also, for many, creates a competitive environment that gives them an additional incentive to put in that extra effort in their exercise routine. US Foods, a company that distributes food to restaurants, provides complementary services to its clients to help them manage inventory, reduce waste, and optimize labor. It is also building a platform to connect several smaller suppliers to its large client base, similar to what Amazon did when it added third-party sellers on its platform.

Data and Customers Become Critical Assets of a Company

The two most valuable assets of a company today are its data and its customer base, yet they don't show up in the balance sheet. The financial reporting system, which reflects how companies have traditionally managed their business, focuses on physical assets instead.

Customers create a powerful network effect, and they also provide an opportunity for introducing complementary services. Amazon has used this strategy very effectively. It is not hard to imagine how Amazon may leverage its large base of Prime customers to introduce new services. In May 2017 Amazon was rumored to be exploring a move into the $465 billion US pharmaceutical market. If the company can deliver books and other products to its trusted Prime customers, why couldn't it also deliver prescription drugs to those very same customers? T-Mobile, a wireless service provider in the United States, has over seventy million customers. The company started offering its customers free pizza on Tuesdays, which soon expanded to include offerings of free movie tickets and magazine subscriptions and discounts on gas. The exchange is mutually advantageous. Providers of these free products get access to T-Mobile's customer base in order to generate trial offerings and acquire new customers, and T-Mobile gets to offer additional value to its customers at no cost.

"Data is the new oil" is the often-quoted mantra these days, and for good reason. Unlike physical assets, data does not get "used up." It can be replicated and used in multiple applications without diminishing its value. In fact, the value of data increases as more data is collected—sort of a "data network effect." Amazon's Echo gets better as people use it more and as Amazon refines its functions. Tesla improves its self-driving algorithms and updates its software regularly as it gets more data from its cars. Artificial intelligence and the internet of things are creating products with the ability to learn and improve the more the products are used, because the more they're used, the more data they collect, and the more data they collect, the more refined their functioning becomes. These data network effects also create a powerful competitive advantage. Even if General Motors and Ford can create cars with better physical product features, Tesla's wealth of data from its autonomous vehicles, which fuels the development of its algorithms, will continue to give the company a strong competitive advantage for a long time.

A Broader Business Scope Requires Building New Capabilities

During the launch of the Kindle 2, Jeff Bezos explained how Amazon shifted from selling electronics to manufacturing them: "There are two ways to extend a business … Take inventory of what you're good at and extend out from your skills. Or determine what your customers need and work backward, even if it requires learning new skills. Kindle is an example of working backward."[26] Traditionally companies expand into adjacent businesses where they can leverage their existing core capabilities. However, a customer-centric view requires a firm to follow shifts in customer needs and to develop new capabilities to meet those needs.

By 2006, half of John Deere's employees were engineers and the company planned to hire even more engineering talent to support new capabilities, such as artificial intelligence and satellite navigation. "We're known as a company that provides great tractors or great lawn mowers. What many don't know is that we have a great focus on innovations in information technology," said Larry Brewer, John Deere's global infrastructure services manager.[27]

As John Deere moved into value-added services such as predictive maintenance, analytics, and crop optimization, it had to build significant internal capabilities around data science and analytics. In 2015, Charles Schleusner, who worked in John Deere's Intelligent Solutions Group, shared that fewer than 40 percent of farmers in North America documented their harvests and even fewer captured their planting of crops or field applications of fertilizers and pesticides.[28] John Deere saw an increasingly important role for the company to help harness data for farmers to use in making better decisions, and was willing to invest in building new capabilities in pursuit of that goal.

How Far Should You Extend Your Business?

At this point, some of you may be wondering if broadening the scope of the company would lead to a lack of focus. Isn't the success of Apple due to its laser-sharp focus on a handful of products that can fit on a table? Can a company do everything and be good at all of them? Didn't the strategy books teach us to focus on our core competencies lest we spread ourselves too thin?

The tension between focus and broad scope is reasonable and healthy. It's best to think about your consumers' point of view and how your core competencies can help serve those consumer needs. Apple is hiring hundreds of automobile engineers, and there is a lot of speculation that Apple may build its own car. Is Apple losing focus? If we think a little broadly, an automobile is the ultimate mobile device, and the core skill of Apple—creating superb user interface—is becoming increasingly important in cars, where consumers want a seamless integration of their mobile devices. If automobiles become software on wheels, Apple may have a strong role to play in this industry. And the company's strategy of tightly integrating its hardware and software would suggest that it better invest in the hardware: the automobile.

Industry leaders are beginning to recognize this new reality. Speaking at the Consumer Electronics Show in Las Vegas in January 2016, Mark Fields, then the CEO of Ford Motor Co., said, "[Y]ou are going to see us change pretty dramatically, becoming an auto and mobility company. You will see us focus more attention on the transportation-services sector, even as we maintain our emphasis on our core automotive business."[29] In May 2017, Jim Hackett, chairman of Ford Smart Mobility, replaced Mark Fields as CEO, signaling a major shift in Ford's strategy.