The Age of Continuous Connection

by Nicolaj Siggelkow and Christian Terwiesch

A SEISMIC SHIFT IS UNDER WAY. Thanks to new technologies that enable frequent, low-friction, customized digital interactions, companies today are building much deeper ties with customers than ever before. Instead of waiting for customers to come to them, firms are addressing customers' needs the moment they arise—and sometimes even earlier. It's a win-win: Through what we call *connected strategies*, customers get a dramatically improved experience, and companies boost operational efficiencies and lower costs.

Consider the MagicBands that Disney World issues all its guests. These small wristbands, which incorporate radio-frequency-identification technology, allow visitors to enter the park, get priority access to rides, pay for food and merchandise, and unlock their hotel rooms. But the bands also help Disney locate guests anywhere in the park and then create customized experiences for them. Actors playing Disney characters, for example, can personally greet guests passing by ("Hey, Sophia! Happy seventh birthday!"). Disney can encourage people to visit attractions with idle capacity ("Short lines at Space Mountain right now!"). Cameras on various rides can automatically take photographs of guests, which Disney can use to create personalized memory books for them, without their ever having to pose for a picture.

Similarly, instead of just selling textbooks, McGraw-Hill Education now offers customized learning experiences. As students use the company's electronic texts to read and do assignments, digital technologies track their progress and feed data to their teachers and to the company. If someone is struggling with an assignment, her teacher will find out right away, and McGraw-Hill will direct the student to a chapter or video offering helpful explanations. Nike, too, has gotten into the game. It can now connect with customers daily, through a wellness system that includes chips embedded in shoes, software that analyzes workouts, and a social network that provides advice and support. That new model has allowed the company to transform itself from a maker of athletic gear into a purveyor of health, fitness, and coaching services.

It's easy to see how Disney, McGraw-Hill, and Nike have used approaches like these to stay ahead of the competition. Many other companies are taking steps to develop their own connected strategies by investing substantially in data gathering and analytics. That's great, but a lot of them are now awash in so much data that they're overwhelmed and struggling to cope. How can managers think clearly and systematically about what to do next? What are the best ways to use all this new information to better connect with customers?

In our research we've identified four effective connected strategies, each of which moves beyond traditional modes of customer interaction and represents a fundamentally new business model. We call them *respond to desire*, *curated offering*, *coach behavior*, and *automatic execution.* What's innovative here is not the technologies these strategies incorporate but the ways that companies deploy those technologies to develop continuous relationships with customers.

Below, we'll define these new connected strategies and explore how you can make the most of the ones you choose to adopt. But first let's take stock of the old model they're leaving behind.

Buy What We Have

Most companies still interact with customers only episodically, after customers identify their needs and seek out products or services to meet them. You might call this model *buy what we have.* In it companies work hard to provide high-quality offerings at a competitive price and base their marketing and operations on the assumption that they'll engage only fleetingly with their customers.

Idea in Brief

The Old Approach

Companies used to interact with customers only episodically, when customers came to them.

The New Approach

Today, thanks to new technologies, companies can address customers' needs the moment they arise—and sometimes even earlier. With connected strategies, firms can build deeper ties with customers and dramatically improve their experiences.

The Upshot

Companies need to make continuous connection a fundamental part of their business models. They can do so with four strategies: respond to desire, curated offering, coach behavior, and automatic execution.

Here's a typical buy-what-we-have experience: One Tuesday, working from home, David is halfway through printing a batch of urgent letters when his toner cartridge runs out. It's maddening. He *really* doesn't have time for this. Grumbling, he hunts around for his keys, gets into his car, and drives 15 minutes to the nearest office supply store. There he wanders the aisles looking for the toner section, which turns out to be an entire wall of identical-looking cartridges. After scanning the options and hoping that he recalls his printer model correctly, he finds the cartridge he needs, but only in a multipack, which is expensive. He sets off in search of a staff member who might know if the store has any single cartridges, and eventually he locates a manager, who disappears into the back of the store to check.

Much time passes. When the manager at last returns, it's to report regretfully that the store is sold out of single cartridges. Because he has to get his letters done, David decides to buy the multipack. He grabs one and heads to the checkout counter to pay, only to find himself waiting in a long line. When he finally gets home, an hour or two later, he's not a happy guy.

We find it helpful to break the traditional customer journey into three distinct stages: *recognize,* when the customer becomes aware of a need; *request,* when he or she identifies a product or service that would satisfy this need and turns to a company to meet it; and *respond,* when the customer experiences how the company delivers the product or service. At each of these stages, David suffered a lot of discomfort, but at no point along the way did the toner company have any way of learning about his discomfort or alleviating it. Company and customer were poorly connected throughout, and both parties suffered.

It doesn't have to play out that way. Each of our four connected strategies could have helped improve David's customer experience at one or more of the stages and helped the company strengthen its business.

Let's explore specifically what each strategy entails.

Respond to Desire

This strategy involves providing customers with services and products they've requested—and doing so as quickly and seamlessly as possible. The essential capabilities here are operational: fast delivery, minimal friction, flexibility, and precise execution. Customers who enjoy being in the driver's seat tend to like this strategy.

To provide a good respond-to-desire experience, companies need to listen carefully to what customers want and make the buying process easy. In many cases, what matters most to customers is the amount of energy they have to expend—the less, the better!

That's certainly what David wanted in his search for a toner cartridge. So let's imagine a respond-to-desire strategy that might serve him well in the future.

Say that upon realizing that he needs a replacement, David goes online to his favorite retailer, types in his printer model, and with just a click or two makes a same-day order for the correct cartridge. His credit card number and address are already stored in the system, so the whole process takes just a minute or two. A few hours later his doorbell rings, and he has exactly what he needs.

Speed is critical in a lot of respond-to-desire situations. Users of Lyft and Uber want cars to arrive promptly. Health care patients want the ability to connect at any time of day or night with their providers. Retail customers want the products they order online to arrive as quickly as possible—a desire that Amazon has famously focused on satisfying, in the process redefining how it interacts with customers. Years ago it set up a "one click" process for ordering and payment, and more recently it has gone even further than that. Today you can give Alexa a command to order a particular product, and she'll take care of the rest of the customer journey for you. That's responding to desire.

Curated Offering

With this strategy, companies get actively involved in helping customers at an earlier stage of the customer journey: after the customers have figured out what they need but before they've decided how to fill that need. Executed properly, a curated-offering strategy not only delights customers but also generates efficiency benefits for companies, by steering customers toward products and services that firms can easily provide at the time. The key capability here is a personalized recommendation process. Customers who value advice—but still want to make the final decision—like this approach.

How might a curated-offering strategy serve David? Consider this scenario: He goes online to order his toner cartridge, and the site automatically suggests the correct one on the basis of what he has bought before. That spares him the hassle of finding the model number of his printer and figuring out which cartridge he needs. So now he just orders what the site suggests, and a few hours later, when his doorbell rings, he's had his needs smoothly and easily met.

Blue Apron and similar meal-kit providers have very effectively adopted the curated-offering strategy. This differentiates them from Instacart and many of the other grocery delivery services that have emerged in recent years, all of which are guided by a "you order, we deliver" principle—in other words, a respond-to-desire strategy. The Instacart approach might suit you better than spending time in a supermarket checkout line, but it doesn't relieve you of the burden of hunting for recipes and creating shopping lists of ingredients. Nor does it prevent you from overbuying when you do your shopping. Blue Apron helps on all those fronts, by presenting you with personally tailored offerings, creating an experience that many people find is more convenient, fun, and healthful than what they would choose on their own.

Coach Behavior

Both of the previous two strategies require customers to identify their needs in a timely manner, which (being human) we're not always good at. Coach-behavior strategies help with this challenge, by proactively reminding customers of their needs and encouraging them to take steps to achieve their goals.

Coaching behavior works best with customers who know they need nudging. Some people want to get in shape but can't stick to a workout regimen. Others need to take medications but are forgetful. In these situations a company can watch over customers and help them. Knowledge of a customer's needs might come from information that the person has previously shared with the firm or from observing the behavior of many customers. The essential capabilities involved are a deep understanding of customer needs ("What does the customer really want to achieve?") and the ability to gather and interpret rich contextual data ("What has the customer done or not done up to this point? Can she now enact behaviors that will get her closer to her goal?").

Here's what a coach-behavior strategy for David might look like: Perhaps the printer itself tracks the number of pages it has generated since David last changed the toner and sends that information back to the manufacturer, which knows that he will soon need a new cartridge. So it might email him a reminder to reorder. At the same time, it might encourage him to run the cleaning function on his printer—a suggestion that will help him avoid later inconveniences. Coached in this way, David will have his new printer cartridge before the old one runs out; he'll lose almost no time in replacing it; and he'll have a clean printer that performs at its best.

To implement coach-behavior approaches well, a company needs to receive information constantly from its customers so that it doesn't miss the right moment to suggest action. The technical challenge in this sort of relationship lies in enabling cheap and reliable two-way communication with customers. Traditionally, this had been difficult, but it's getting easier all the time. The advent of wearable devices, for example, allows health care companies to hover digitally over customers around the clock, constantly monitoring how they're doing.

Nike's new business model incorporates coach-behavior strategies. By making its customers part of virtual running clubs and tracking their runs, the company knows when it's time for their next workout, and through its app it can offer them audio training guides and plans. This kind of timely and personal connection builds trust and encourages customers to think of Nike as a health-and-fitness coach rather than just a shoe manufacturer, which in turn means that when the company's app nudges them to run, they're more likely to do it. This serves customers well, because it keeps them motivated and in shape. And it serves Nike well, of course, because customers who run more buy more shoes.

Automatic Execution

All the strategies we've discussed so far require customer involvement. But this last strategy allows companies to meet the needs of customers even before they've become aware of those needs.

In an automatic-execution strategy, customers authorize a company to take care of something, and from that point on the company handles everything. The essential elements here are strong trust, a rich flow of information from the customers, and the ability to use it to flawlessly anticipate what they want. The customers most open to automatic execution are comfortable having data stream constantly from their devices to companies they buy from and have faith that those companies will use their data to fulfill their needs at a reasonable price and without compromising their privacy.

Here's how automatic execution might work for David. When he buys his printer, he authorizes the manufacturer to remotely monitor his ink level and send him new toner cartridges whenever it gets low. From then on, the onus is on the company to manage his needs, and David is spared several hassles: recognizing that he's low on toner, figuring out how to get more, and buying it. Instead, he just goes about his business. When the time is right, his doorbell will ring, and he'll have exactly what he needs.

The growing internet of things is making all sorts of automatic execution possible. David's printer cartridge scenario isn't just hypothetical: Both HP and Brother already have programs that ship replacement toner to customers whenever their printers send out a "low ink" signal. Soon our refrigerators, sensing that we're almost out of milk, will be able to order more for delivery by tomorrow morning—but naturally only after checking our calendar to make sure we're not going on a vacation and wouldn't need milk after all.

Automatic execution will make people's lives easier and in some cases will even save lives. Consider fall-detection sensors, the small medical devices worn by many seniors. Initially, the companies who made them did so using the respond-to-desire model. If an elderly person who was wearing one fell and needed help, she could press a button that activated a distress call. That was good, but it didn't work if someone was too incapacitated to press the button. Now, though, internet-connected wearable technologies allow health care companies to monitor patients constantly in real time, which means people don't need to actively request assistance if and when they're in distress. Imagine a bracelet that monitors vital signs and uses an accelerometer to detect falls. If a person wearing the bracelet slips, tumbles down the basement stairs, and is knocked unconscious, the bracelet's sensor will immediately detect the emergency and summon help. That's automatic execution.

We're excited about automatic execution, but we want to stress that we don't see it as the best solution to all problems—or for all customers. People differ in the degree to which they feel comfortable sharing data and in having the companies serving them act on that data. One family might be delighted to receive an automatically generated personal memory book after a visit to Disney World, but another might think it's creepy and invasive. If companies want customers to make a lot of personal data available on an automated and continuous basis, they will need to prove themselves worthy of their customers' trust. They'll need to show customers that they'll safeguard the privacy and security of personal information and that they'll only recommend products and services in good faith. Breaking a customer's trust at this level could mean losing that customer—and possibly many other customers—forever.

A final important point: Given that companies are likely to have customers with different preferences, most firms will have to create a portfolio of connected strategies, which will require them to build a whole new set of capabilities. (See the table "Which connected strategies should you use?") One-size-fits-all usually won't work.

Which connected strategies should you use?

Connected strategy	Description	Key capability	Works best when	Works best for
Respond to desire	Customer expresses what she wants and when	Fast and efficient response to orders	Customers are knowledgeable	Customers who don't want to share too much data and who like to be in control
Curated offering	Firm offers tailored menu of options to customer	Making good personalized recommendations	The uncurated set of options is large and potentially overwhelming	Customers who don't mind sharing some data but want a final say
Coach behavior	Firm nudges customer to act to obtain a goal	Understanding customer needs and ability to gather and interpret rich data	Inertia and biases keep customers from achieving what's best for them	Customers who don't mind sharing personal data and getting suggestions
Automatic execution	Firm fills customer's need without being asked	Monitoring customers and translating incoming data into action	Customer behavior is very predictable and costs of mistakes are small	Customers who don't mind sharing personal data and having firms make decisions for them

Repeat

Earlier, we mentioned that we like to think of the individual customer journey as having three stages: *recognize, request,* and *respond*. But there's actually a fourth stage—*repeat*—which is fundamental to any connected strategy, because it transforms stand-alone experiences into long-lasting, valuable relationships. It is in this stage that companies learn from existing interactions and shape future ones—and discover how to create a sustainable competitive advantage.

The repeat dimension of a connected strategy helps companies with two forms of learning.

First, it allows a company to get better at matching the needs of an individual customer with the company's existing products and services. Over time and through multiple interactions, Disney sees that a customer seems to like ice cream more than fries, and theater performances more than fast rides—information that then allows the company to create a more enjoyable itinerary for him. McGraw-Hill sees that a student struggles with compound-interest calculations, which lets it direct her attention to material that covers exactly that weakness. Netflix sees that a customer likes political satire, which allows it to make pertinent movie suggestions to her.

Second, in the repeat stage companies can learn at the population level, which helps them make smart adjustments to their portfolios of products and services. If Disney sees that the general demand for frozen yogurt is rising, it can increase the number of stands in its parks that serve frozen yogurt. If McGraw-Hill sees that many students are struggling with compound-interest calculations, it can refine its online module on that topic. If Netflix observes that many viewers like political dramas, it can license or produce new series in that genre.

Both of these loops have positive feedback effects. The better the company understands a customer, the more it can customize its offerings to her. The more delighted she is by this, the more likely she is to return to the company again, thus providing it with even more data. The more data the company has, the better it can customize its offerings. Likewise, the more new customers a company attracts through its superior customization, the better its population-level data is. The better its population data, the more it can create desirable products. The more desirable its products, the more it can attract new customers. And so on. Both learning loops build on themselves, allowing companies to keep expanding their competitive advantage.

Over time these two loops have another very important effect: They allow companies to address more-fundamental customer needs and desires. McGraw-Hill might find out that a customer wants not just to understand financial accounting but also to have a career on Wall Street. Nike might find out that a particular runner is interested not just in keeping fit but also in training to run a first marathon. That knowledge offers opportunities for companies to create an even wider range of services and to develop trusted relationships with customers that become very hard for competitors to disrupt.

We can't tell you where all this is headed, of course. But here's what we know: The age of "buy what we have" is over. If you want to achieve sustainable competitive advantage in the years ahead, connected strategies need to be a fundamental part of your business.

This holds true whether you're a start-up trying to break into an existing industry or an incumbent firm trying to defend your market, and whether you deal directly with consumers or operate in a business-to-business setting. The time to think about connected strategies is now, before others in your industry beat you to it.

Originally published in May–June 2019. Reprint R1903C