

Six Simple Rules for Successful Self-Service

You can save money, increase revenues and generate loyalty when you let customers help themselves. But only if you do it right.

BY ALICE DRAGOON



Rocky Wiggins, CIO of AirTran Airways, makes sure the airline's self-service kiosks are simple to use and offer clear benefits for customers.

Reader ROI

- Why many self-service projects fail
- Examples of successful systems
- Rules for getting self-service right

Chances are it's been about 20 years since you've stood in line at your bank to get cash from a teller. ATMs offer such convenience—and are so much more efficient for banks—that no one can fathom going back to the old days. Ever since then, companies have been eager to tap into the free labor pool of customers who can be convinced to help themselves. Through self-service, organizations have been able to reduce labor costs, increase revenue from orders of out-of-stock items or increase the loyalty of customers who appreciate speedier service.

But as surely as you love using ATMs, you've walked away from a kiosk that's confusing or abandoned an unscannable item at the self-checkout line—and some company lost a sale. The reality is that although some self-service projects pay off handsomely, the ROI from such projects can be elusive. Francie Mendelsohn, president of Summit Research Associates, estimates that 15 percent to 20 percent of all self-service kiosk projects ultimately fail. Success with kiosks and self-checkout systems is often tricky to achieve because so many things can go wrong. Such systems won't work if customers have no incentive to use them. If kiosks are too complex, customers get confused and give up in frustration. Sometimes, self-service fails for the simple reason that customers don't know it's an option or are wary of trying it on their own.

American Greetings once spent millions on kiosks that enabled people to design their own cards, only to find that customers weren't willing to pay a premium for their own creativity. Grocery chain

Hannaford Bros. fared better, but its first attempt at self-service fizzled. In the late '90s, Hannaford piloted handheld self-checkout scanners in its Scarborough, Maine, store. The few customers who used the scanners loved them, says Hannaford CIO Bill Homa, and tended to spend more. But no more than 11 percent of customers used the tool, so Homa couldn't justify a full rollout. Homa suspected that customers, who were required to sign out a scanner but still had to pay a cashier, found the scanners too much of a bother. So Hannaford turned to the more convenient self-checkout lanes. Today, as much as 28 percent of customers use the service and the ROI is slightly ahead of breakeven.

Companies such as Hannaford that have done well with self-service succeed by following six simple rules, which they derived from their own and others' mistakes. Learn from them, and you can fix what ails your own self-service systems—or even get them right the first time.

Rule #1

Provide a Benefit to Customers

Self-service has to make something faster, cheaper or better for customers, says Sam Israelit, a Bain & Co. partner and retail IT strategy expert. “If it doesn’t do one of those three,” he says, “you’re wasting your money.”

For instance, kiosks that the Mayo Clinic once installed in Target stores in Arizona offered consumers little to no value. The kiosks were intended to sell books, newsletters and a CD for kids about anatomy. Yet instead of setting up the kiosk to demonstrate the CD or let consumers swipe their cards to order one, Mayo just displayed the CDs and books on a rack. Meanwhile, the clinic squandered the kiosk screen: Set up to provide health information to customers, it spewed out too much data. The “coughs and colds” entry, for instance, included a 12-page, single-spaced list of over-the-counter and prescription medications. After four months, Mayo Clinic pulled the plug.

On the other hand, airline passengers are willing to use kiosks to avoid long lines. Although a check-in agent will beat a kiosk user in a time trial, kiosks make it possible for multiple simultaneous check-ins, which make for shorter lines. “The time the customer has invested from the time they arrive at the counter to the time they go to the gate is shorter, even though individual transactions can be longer,” says Rocky Wiggins, CIO of AirTran Airways. In some cases, even the perception that self-service technology saves time is enough to get customers happily using it. Homa says that customers think Hannaford’s self-checkout is speedier, even though cashiers generally scan more than four times as many items a minute as the average customer. “Customers are busy scanning and not waiting,” he says, “so it just seems faster.”

Rule #2

Make Transactions Intuitive

The simpler the transaction, the easier it’s translated into an intuitive self-service process. “The secret of self-service is four words: Don’t make me think,” Mendelsohn says. “If the interface is confusing, people are not going to stand there and figure it out. They’re just gone.”

Under pressure to reduce costs, airlines have succeeded at shifting a large chunk of their routine check-in transactions to kiosks. After all, if a passenger just needs a boarding pass, having an agent confirm the flight information and print it adds cost but no value (the average cost of printing boarding passes drops from \$3.68 to just 16 cents when customers do it themselves). When US Airways introduced self check-in kiosks in 1999, the goal was to make them so intuitive that they’d be “dead simple,” even for people who were not technically savvy, says Mark Kuhns, managing director of marketing and e-commerce. After extensive testing in focus groups, the airline created a process that is still largely in use: Passengers swipe a credit card or loyalty card to identify themselves, confirm their flight information, then choose a seat or confirm a previous seat

Customer-Friendly Kiosks

A well-designed kiosk is easy to use. Francie Mendelsohn, president of Summit Research Associates, has seen enough kiosks to know which features are essential to usability. Here’s her list:

- » **Big buttons.** Small touch-screen buttons will foil large fingers.
- » **Feedback.** When you touch a button onscreen, it should “depress” and change color.
- » **Readability.** Dark text on a light background is the most legible.
- » **Consistency.** Give every touch screen the same look and feel. Even slight deviations can confuse users.
- » **Speed.** Have enough bandwidth so that users don’t have to wait for transactions to be processed.
- » **Cleanliness.** Choose dark-colored kiosk cabinets to hide finger smudges, or use enclosures made of fingerprint-resistant materials.
- » **Short screens.** Customers prefer not to scroll.
- » **Clear directions and unambiguous choices.** Remember that people are standing up. If it’s confusing, they’ll walk away.
- » **Minimal animation.** Fancy flashing lights and movement will slow down transactions and annoy customers.
- » **No annoying sounds.** Employees will pull the plug. —A.D.

assignment. Then they’re asked if they have any bags to check; if yes, they enter how many. A final screen offers them the option of printing an itinerary. The kiosk then prints a boarding pass and an itinerary. The airline claims that customers without bags to check can complete the entire process in as little as 30 seconds.

To further simplify the process for passengers who don’t carry loyalty cards—or who just don’t want to pull out their wallets—the airline added a cardless access feature in early 2004. Once customers were allowed to identify themselves by entering their name or flight number on the touch screen, kiosk usage went up 25 percent. Today, kiosks handle 50 percent to 55 percent of all check-ins at US Airways, in line with the industry average.

When companies add complexity to their transactions, they run the risk of confusing—or worse, losing—customers. Complexity increases the time customers need to spend at the kiosk, as well as the likelihood that they’ll get stuck and need to ask for help. At AirTran, check-in kiosks from Kinetics are programmed to refer nonroutine transactions to agents. For instance, if two passengers with the same last name and first initial are leaving from the same airport, the kiosk will ask for the destination city. If that tiebreaker doesn’t identify the person, the kiosk will prompt for the travel confirmation number. But if the passenger doesn’t have it, she will be instructed to see an agent, who can determine her identity more quickly and free up the kiosk for the next customer.

“We don’t try to handle all the minute, complex scenarios that may come about,” says Wiggins. “If [your] target is to handle 100 percent



Robert Machen, Hilton's vice president of corporate and brand solutions, assigns staff to help customers with kiosks when needed.

of them, you will be in development forever and will overcomplicate the process for most of your customers.”

Hilton had unsuccessfully piloted a self check-in kiosk in its hotels in 1997. Before trying again in 2004, Robert Machen, vice president of corporate and brand solutions, and Chuck Scoggins, vice president of OnQ Customer Solutions (OnQ is Hilton's integrated technology platform), made simplicity their guiding principle. “The fewer things on the screen, the better,” says Machen. Hilton's kiosk replicates the steps of the familiar hotel check-in process so that the self-service version seems logical to guests.

The new kiosks have proven to be effective line-busters. One day in March 2004, the 1,544-room Chicago Hilton & Towers was expecting 1,100 arrivals. Although that many arrivals would normally lead to significant lines at peak check-in times, says Machen, the kiosks processed 33 percent of the day's check-ins, and there was no line at the front desk all day. He adds that kiosks have also prevented lines in similar situations at Hilton's other large hotels.

Rule #3

Show Customers What to Do

Ideally kiosks should be so intuitive that customers can figure out how to use them on their own. But just because you're offering self-service doesn't mean you should leave customers to fend entirely for themselves, especially when you launch a new system. Machen and Scoggins say that one of the main reasons Hilton's first kiosks

didn't take off was that the hotelier didn't do enough to educate guests or help them when they ran into trouble. “Our original approach with kiosks in 1997 was, ‘This is self-service. It should be like an ATM, where you set it out and it works 100 percent of the time,’” recalls Machen.

This time around, Hilton is going with an assisted self-service model, making sure there's always a service agent available to teach guests how to use the kiosks and help if they run into problems. Some agents are equipped with handheld devices that give them full access to front-desk systems. If they can't resolve an issue, they'll make sure the guest gets expedited service there. In addition, the agents also serve as greeters and are accessible to guests who need directions or have questions.

Stores using self-checkouts typically have one person manning four self-service lanes. At the Pittsburgh-based Giant Eagle grocery chain, a paystation attendant monitors the self-checkout, helps customers with problems and watches for fraud. In some cases, a bagger is also assigned, according to CIO Russ Ross. With such assistance, as much as 25 percent of customers use self-checkouts, accounting for 20 percent of sales. Even when staff are available to assist customers with self-checkout, the savings on checkout labor can still run from 40 percent to 60 percent, says Israelit.

Because employees play such a critical role in training customers to use self-service technology, it's essential to get their buy-in up front. “If they see it as a threat, the kiosk is going to fail,” says Mendelsohn. Instead, they need to see self-service as a way to help them do their jobs more effectively. At AirTran, Wiggins says, the airline convinced employees to get behind the technology by giving them self-service targets to shoot for.

At the same time, don't force self-service on customers. Self-service can shortchange—and alienate—those who genuinely need personal attention. Israelit advises that high-value clients and customers with complex problems should never be foisted off onto a kiosk. “Self-checkout at Tiffany's is not going to work.”

Rule #4

Choose the Right Locations

The location of a kiosk can have a lot to do with its success. Hilton has found that from 20 percent to 30 percent of guests use self check-in at hotels near airports compared with 10 to 12 percent of guests overall. The company concludes that people who fly are accustomed to using kiosks and like to have that option at their hotel.

Following this logic, Hilton has installed a kiosk in the Honolulu airport so that guests can check themselves in while they wait for their baggage. Hilton's IT department monitors and supports that kiosk remotely over the Web, as it would any other kiosk. (Remote monitoring software that pings kiosks to make sure they're up and running is essential, notes Israelit: You can't count on someone like the cashier in a convenience store to tell you your kiosk is broken.)

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Someone from Hilton also makes sure the Honolulu airport kiosk is stocked with paper and room key cards.

Where a kiosk is located inside a hotel, airport or shop also matters. You have to put kiosks where people are most likely to want to use them. "If you've got 400 people in a conference room," says Machen, "you know they all need to check out and head to the airport, so you can put a kiosk right in front of the conference area." But because customer needs or business needs may change, kiosks must be easy to move. Hilton's 1997 kiosks were so large and cumbersome that once installed, they couldn't be moved, and this fact may have contributed to their poor usage.

Kiosks are more streamlined now, but it's still expensive to pull cables for a new location. So this time, Hilton went wireless. Likewise, AirTran's Wiggins prefers secure, wireless kiosks because they are cheaper and provide greater flexibility. "Airports are notorious for saying, 'Move from this ticket counter location to that one,'" he says. Sometimes AirTran doesn't even have to move a wireless access point to set up kiosks at the new location. And if volume justifies installing extra kiosks, it's just a matter of getting them delivered and assembled.

Wherever you locate a kiosk, make sure customers can find it easily. When the U.S. Postal Service rolled out its Automated Postal Center (APC) kiosks last year, it needed to inform customers that they could use it to buy stamps and post packages. The USPS drew attention to the kiosks with bright yellow footprints on the floor, as well as large yellow circles with red arrows that point to the APCs and say things like, "New. Buy Stamps. Automated Postal Center."

Rule #5

Beware of Legacy Systems

Investing in self-service technology can be a bad idea if your technology is outdated or if the data needed for self-service transactions isn't integrated. "If you work largely off legacy systems, [integration] can be a significant challenge," says Israelit. "It may require you to upgrade overall systems, and if so, the economics may not make sense."

Hilton's first attempt to introduce kiosks failed in part because of integration problems. The kiosks were connected to Hilton's proprietary property management system, which stores information on reservations and occupancy, through what Machen calls "archaic" serial interfaces. As a result, the kiosks sometimes had trouble communicating with the property system and had limited ability to resolve reservation or room selection issues. Because of this, more than 30 percent of the time customers were forced back to the check-in line. Hilton shut down the pilot within a year. Since then, Scoggins and his team have deployed a Web services layer on top of the

property system, making it possible to create a reliable interface to the kiosks using Web-based transactions. They also upgraded the property system to separate business rules from the user interface so that kiosks can access the business rules from the property system and IT is spared the work of recreating them.

To make integration easier, Israelit advises, also use the same content management, logistics or product information systems you use for conventional transactions rather than create extra systems to manage kiosk content.

Rule #6

Take a Test-Drive

U.S. Postal Service (USPS) CTO Robert Otto recalls when customers first began using the postal service's APC kiosks, and it was possible for them to get their fingers caught in the heavy door to the package drop. This problem was identified during the pilot phase and the USPS modified the door before rolling out to its first 2,500 locations.

Having pilots in several locations also gave the USPS a chance to test its processes for supporting the system. Staff learned, for instance, that they needed to rethink the process of pushing virus protection to the kiosks. Because the kiosks are located in post office lobbies that are open around the clock, Otto's team could potentially cause delays for users whenever they installed patches or updates. Piloting allowed the team to figure out the best way to manage that process in order to minimize its impact on customers. The pilots also helped the USPS fine-tune the services the APCs offered. "Initially we let customers buy one stamp," says George Wright, manager of finance and administration systems. "But we found out that the cost of the transaction was greater than the cost of the stamp." Today, APCs sell stamps only in multiples.

The time spent fine-tuning the kiosks paid off. A month after the first ones were deployed, a survey found that 98 percent of customers who used them felt that the APC was easy to use, 100 percent said they'd use it again and 98 percent indicated they'd use it after normal office hours. To date, the USPS has generated more than \$200 million in revenue from the APCs and has reduced staffing at post office counters enough to save \$12 million during FY04.

Ultimately, success with self-service comes down to understanding your customers and designing systems that meet their needs as well as yours. If they value such benefits as shorter lines or more

control over their transactions, letting customers serve themselves could benefit your company as well. [CIO](#)

Why Retailers Like Self-Service

A REPORT FROM SUMMIT RESEARCH ASSOCIATES outlines trends in retail kiosk use. Find it online at www.cio.com/101505.

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