



When No One Is Watching

Combating the potential of theft at the self-checkout

by CRAIG GUILLOT

Demand for self-checkout is growing from both retailers and consumers. As retailers adopt new payment and scanning technologies, though, the systems may be further opening the door to theft.

According to a report by Global Market Insights, self-checkout and mobile pay commerce will top \$4 billion by 2024. A survey by SOTI revealed that 66 percent of shoppers prefer self-checkout, and 77 percent said they would be “somewhat comfortable” in a retail setting where self-checkout was the only technology offered.

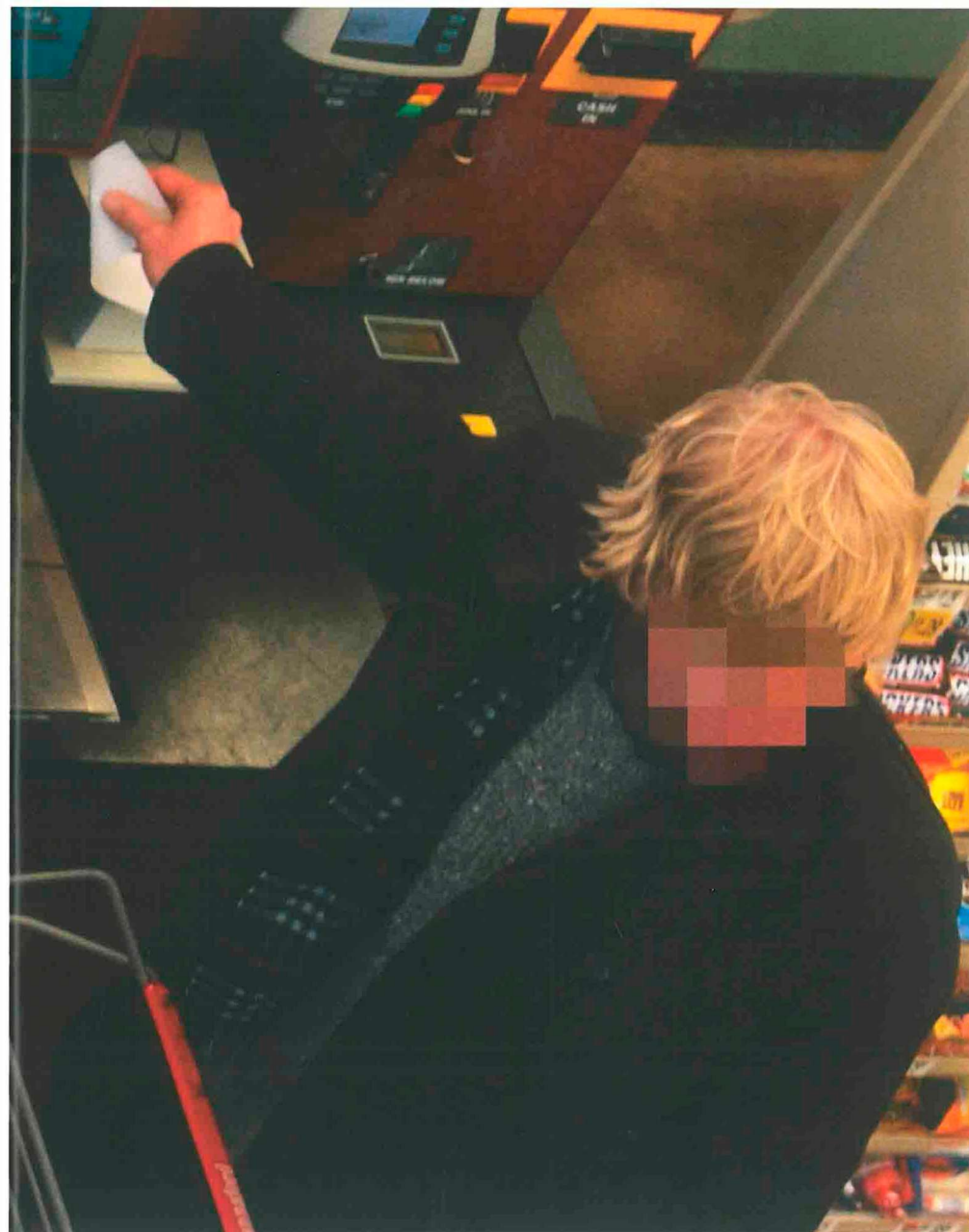
Nevertheless, allowing shoppers to scan their own items can also create more headaches for loss prevention departments. In Europe, where self-checkout is more common, there’s some evidence of higher rates of theft. Coupon company Voucher Codes Pro surveyed more than 2,600 people and found nearly 20 percent admitted to stealing from self-checkout in the past; half said they did so because they didn’t think they would get caught.

A 2016 study by the University of Leicester in the United Kingdom found retailers that use self-checkouts had a

loss rate of 4 percent, double the industry average. In an audit of 1 million shopping trips, researchers discovered 850,000 of 6 million items purchased were not scanned.

CRIMES OF OPPORTUNITY

Self-checkout could have higher loss rates because there’s a perception that it’s easier to steal. Outside of organized crime rings, most shoplifters are “simple opportunists,” says Barbara Staib, director of communications for the National Association for Shoplifting Prevention.



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**Read Hayes, research scientist at the University of Florida
and director of the Loss Prevention Research Council.**

“Self-checkouts have definitely come up on the places that are risky for offenders because of the opportunities,” Staib says. “If they’re left to their own devices to check out their own merchandise, there are going to be problems.”

Shoppers that may otherwise not steal can find it easier to rationalize taking things at the self-checkout, she says. Many of these offenders don’t view it as theft and more as a deserved discount for standing in line too long or spending a lot of money at the store.

“These are people that normally aren’t shoplifters or inherently criminal,” Staib says. “But for whatever reasons, they decided they’re doing to dip their toe in the waters, or they feel entitled to something.”

Self-checkout offers a “built-in excuse” if an associate catches perpetrators in the act, says Malay Kundu, founder and CEO of checkout software platform StopLift. In a grocery store where a customer has dozens of items in a basket, it’s easy to unintentionally mis-scan or forget

an item or two. And unless there is compelling video evidence of an evasive maneuver, it would be hard to prove the customer had intent.

“If something doesn’t scan, in many cases they can legitimately blame the self-checkout saying they tried to scan but it didn’t or locked up,” Kundu says. “A lot of people have legitimate frustrations in using it.”

IMPROVING SECURITY

A greater risk of theft at self-checkout isn’t deterring many retailers. Members of the Loss Prevention Research Council are overwhelmingly moving toward greater use of do-it-yourself checkout technologies, says Read Hayes, research scientist at the University of Florida and director of the Loss Prevention Research Council. Self-checkout can easily solve one of the biggest complaints about retail — lines.

Consumers also enjoy the added control that self-checkout affords, such as going at their own pace, being able to verify prices and being able to communicate in their native language.

“The predominance among our retailers is that they’re going to be trialing or even just full-on going to some sort of self-serve checkout procedure,” Hayes says. “It seems more inevitable.”

Walmart, Target and The Home Depot have all been expanding self-checkout deployments. Macy’s began piloting self-checkout in some locations last year, and Sam’s Club is piloting a system in some stores that enables shoppers to scan their own merchandise, pay via the app and show their phone receipt to an associate at the door.

Dusty Lutz, vice president of store transformation solutions at NCR Corporation, disagrees with the idea that self-checkout has higher loss rates and says developers are constantly improving and refining systems. Retailers use several methods to attempt to reduce theft at self-checkout, including cameras and stationing associates to oversee machines and intervene with assistance when necessary. While such stations can often appear to be “unmanned,” the best deployments have a high level of oversight by staff and cameras, says Lutz.

Even with human oversight, self-checkout can still have vulnerabilities. It can be challenging for one associate to monitor multiple checkout stations in a busy store, and other shoppers can often obscure the line of sight from the camera.

While basic security may deter some opportunists, professional thieves still view self-checkout as a prime target. Authorities arrested a woman in Sacramento last November after she paid \$3.70 for \$1,800 worth of merchandise in a Walmart self-checkout lane by using stolen clearance stickers. In March, a theft ring partly used self-checkout to steal more than \$100,000 in merchandise from home improvement retailers.

New tools may offer ways to improve security and reduce theft. StopLift’s ScanItAll Self-Checkout Loss Detection uses artificial intelligence to analyze and compare point-of-sale video and data to clearly identify each retail transaction and spot fraudulent activity. When the system senses an error or suspicious event, it notifies an attendant via mobile device and instantly replays a video clip. StopLift has already spotted more than 2.6 million scan avoidance incidents and found as much as five times higher scan avoidance at self-checkout versus manned checkout.

“This type of theft previously didn’t leave a data trail,” Kundu says. “With advances in artificial intelligence and computer vision, we’re now able to automate that.”

REDUCING ERRORS

Perhaps an even bigger issue is reducing inaccuracies and problems with self-checkout. A system that better identifies



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items can also help as retailers move to more mobile-based checkout solutions.

The same technologies designed to prevent theft can also identify legitimate behavior and help retailers learn how to reduce such errors in their systems. NCR’s PickList Assist system uses cameras and machine learning to quickly analyze a product, then offer recommendations that match the item.

As technology becomes less intrusive, it is playing an important role in improving security, Lutz says. Another key is training staff in assisting customers through transactions. “By using the built-in security technology and implementing the proper operational oversight by the store staff, there is no reason to believe that adding the self-checkout option in a store raises the risk of theft,” Lutz says.

Standard Cognition is also refining an artificial intelligence-powered checkout system that enables consumers to simply grab items and walk out of the store. Co-founder and Chief Operating Officer Michael Suswal says AI will continually improve processes that enable shoppers to seamlessly transact and leave the store as easily as possible.

“Our approach is to take away that responsibility from the human so they don’t have to know what it is or even how much it costs,” Suswal says. “They can just leave with it. Machine scan be pretty good, and even better than humans in identifying items.” **STORES**

Craig Guillot is based in New Orleans and writes about retail, real estate, business and personal finance. Read more of his work at www.craigguillot.com.