Using Store Technology to Manage Queues and Reduce Lines

By Michi Sugawara, President and CEO, Fujitsu Frontech North America, Inc.

Technology has destroyed many inefficient processes, and its latest target is queuing. With the rise of instant gratification in the digital age, consumers are no longer willing to wait for an indeterminable amount of time in lines. Rather than sitting in queues at drive-thru lanes, people are ordering food through Postmates; getting a ride with Uber through the mobile app has

replaced waiting for cabs; even apps like Google Maps and Waze help users avoid congestion by providing real-time traffic updates.

According to research by University College London, people are willing to wait in queues an average of about six minutes before leaving in frustration.[1] If lines appear too long or wait times stretch longer than six minutes, many customers will decide to put their purchases back and leave the store. When polled by Timetrade, 75 percent of retailers reported wait-related issues as the number one reason for losing customers.[2] And when customers leave the store in frustration, they are unlikely to return in the future.

Therefore, it is extremely important for retailers to fight wait times by implementing effective queue management strategies. Today, that strategy involves store technology. Retail outlets are already integrating in-store technology to successfully manage queues and guarantee customer satisfaction.

It starts at the register. Traditional forms of check out have proven to be dated and inefficient when it comes to cash transactions, which are performed often at retail businesses. In fact, statistics indicate there is actually more cash in circulation today than ever before in the Americas.[3]

Manually counting and sorting currency is inaccurate and slow. Cash recycler machines, which accept deposits and withdrawals in a similar fashion to ATMs, can be placed under the counter for attendants or at self-checkout lines to eliminate manual cash transactions. According to research by Celent, cash recyclers can reduce

---

1. https://www.telegraph.co.uk/news/2017/02/16/rule-six-governs-long-queue-shop.
2. https://web.timetrade.com/files/content_resource/TT_Retail-Exec-Survey-Brief.pdf.
3. https://fred.stlouisfed.org.

the amount of time it takes to perform cash-in and cash-out transactions by 30-60 seconds and start- and end-of-day balancing times by 80 percent.[4] With cash recyclers, attendants are more efficient, queues move quicker, and customers are happier.

	Manual	With Recyclers
Cash drawer setup and settlement	+20 mins per station	2-5 mins per station
Cash in and cash out transactions	1.5-2 mins	1-1.5 mins
Vault buys and sells	~3 per station	0-1 per station
End-of-Day settlement and reporting	30-90 mins	15-30 mins
Note validation - Counterfeit detection	90%-95%	99.99%
Night deposit bag processing	3-4 mins	1-2 mins
Error handling	1-60 mins	.25-15 mins
Customer queuing	3-5 mins	+1 min less
Other (Theft, overtime, part-time, high withdrawal count, dual process)	varies	better managed

Reduce start and end of day balancing time by 80%

Source: Fujitsu with Celent data.

While online retailers rely heavily on data, many brick-and-mortar stores are not using statistics to their advantage. Queue management systems use performance indicators and real-time analytics to provide managers with actionable items, such as staffing additional checkout lanes, to prevent long lines.

The simplest way to combat long queues is to open up more lanes. We see this at grocery and general merchandise stores often—when lines grow, extra attendants are called upon to open more cash registers. However, operating additional lanes with attendants can be costly for businesses. A more cost-effective solution is to implement self-checkout devices, where one attendant can oversee up to 10 or more lanes.

While research shows that self-checkout lanes are not necessarily faster than manned lanes, consumers now tend to favor self service options. About 73 percent of shoppers say they prefer self-checkout services over engaging with attendants, according to a survey by SOTI. And with compact, space-saving designs, retailers can fit more self-checkout lanes into their stores without sacrificing merchandise and advertising space.

Traditional retailers must embrace the digital age to fight competition from online shopping and ecommerce. While research shows that shoppers still prefer brick-and-mortar stores over the internet, retailers must embrace in-store technology to deliver customers the best experience possible. By using store technology like self-checkout solutions and cash-handling products, retailers can reduce queues and increase sales.

---

4. https://www.bankersequipment.com/2015/10/08/eyeing-cash-recycler-machines-for-faster-more-efficient-service.

platt | retail | institute