Peripherals and Updates

To Enhance In-Store Technology of Fast Casual Restaurants

An Article by Worldlink Integration Group

When it comes to adding components to point of sale systems, kiosks, digital signage, sensors, and networks, fast casual restaurants will benefit from certain enhancements and upgrades that may not be useful in other industries and/or restaurant establishments. So, what are the potential peripherals and updates that can further enhance your already integrated technology? The following article will highlight some of these changes and how restaurateurs in the quick service sector can use them to their advantage.

Point of Sale System Peripherals and Updates

From transaction terminals with mobile integration to touchscreen tabletops, adding new hardware and/or updating software can help you get the most out of your current system by streamlining the customer process, enhancing the experience, and creating more efficient operations.

Peripherals

There are many potential components to a basic point of sale system. As a restaurant that handles many customer transactions, it is almost guaranteed that you will need a receipt printer and some sort of payment terminal. Of course, there are also options for enhanced mobile and/or transportable payments. If your POS terminal has a card reader built in, but the transaction is being run as a debit rather than credit, you will need a pin pad so the customer can input their security code. Also, with the upcoming mandate to provide chip and pin payments, you will need a terminal that is capable of processing this more secure type of payment. Payment terminals that are customer-facing give the patrons complete control over their transaction, which can be beneficial if your diners are hesitant to hand over their card. Options range from tablets mounted on tables to customers' smartphones that can connect to touchscreen tabletops or to your POS terminal through Bluetooth or Near Field Communication, as well as customer-facing displays and payment terminals at the counter where orders are placed. These mobile and/or customer-facing options can decrease the amount of time to complete a transaction and thus provide satisfaction to customers who are in need of a fast and easy dining experience.

As for receipt printers, you will likely need at least one at your checkout counter if your receipts are not sent digitally to customers and/or if an individual requests a paper copy despite having the option for digital receipt.

Many fast casual restaurants will find the need for mobile terminals –be it tablets or smartphones. Ultimately, mobile point of sale options allow for more efficient transaction times and happier customers overall. For internal use, tablets and mobile phones can be used by management to process inventory, modify digital menu boards, and monitor sales reports without being stuck in a back office.

Additional components include customer-facing screens for display of purchase total, promotions, and advertisements, as well as keyboards for employee training and interaction. Customer-facing displays can keep the customer engaged while items are being rung up and can even help to boost your profits by displaying advertisements for brands that pay to promote their products. There is also potential to create customer loyalty by informing diners about upcoming in-store promotions or events that will bring them back to your restaurant in the future.

Updates

Updating software and hardware is a necessary part of any modern technology. With point of sale system peripherals, there is an even greater need to stay up to date on software and additional components to maintain compliance with payment regulations, protect customer data, and speed up the checkout process.

The new EMV chip and pin standard places greater liability on merchants who have not adopted chip and pin payments by October of 2015. So, if restaurants want to increase security and avoid potential losses from liability payments, an updated terminal and software will need to be installed to accept this new form of payment. In addition to new hardware that can read the chip-embedded cards, it is necessary for Fast Casual Restaurants to update their security software

on a regular basis to withstand new tactics used by hackers and defend against vicious malware that outdated software may not recognize as harmful.

The addition of peripherals that were not previously part of your point of sale system and upgrades for greater efficiency will often require new or updated software to successfully integrate the technology with your hardware and/or network. It is important to make sure that tablets or other mobile point of sale devices are properly and securely connected to your main point of sale management system so that no information on inventory or sales is lost when integrating additional POS components.

Other additions or upgrades may need to occur if you want to accept mobile payments through NFC or BLE, incorporate touch screen table tops for customers to look up meal options and/or pay their bill, or implement more efficient inventory and order management systems.

Digital Signage
<u>Peripherals</u>

While digital signage technology is generally purchased as a package deal with necessary peripherals embedded in the system, there are some additions that can enhance your signage. If you left out speakers, cameras, motion sensors, and NFC-enabled interaction when first implementing the technology, it's not too late to adopt these features.

Speakers can be in addition to embedded speakers in your signage or a completely new component for your system. These peripherals are a great way to draw attention from customers, provide video or musical entertainment to go along with your content, and even create a way for the seeing-impaired to engage with digital menus, advertisements, or games.

If sound isn't a necessary component for the content displayed on your digital signs, consider integrating cameras. Cameras can be used to track the number of customers who engage or at least glance at your digital signage and monitor the time they spend looking at certain content to determine the effectiveness of your display. With facial recognition technology integrated in cameras you may even be able to gauge the reaction to different content and capture demographic information.

Motion sensors can be integrated with signage to trigger audio or video in the dining area as customers approach. By limiting playback to times when patrons are present, you can reduce energy consumption and increase the likelihood that customers will actually interact with your signage. This is also a great way to limit audio from playing at times when

no one is near the signage, which could irritate uninterested diners or interrupt interactions between nearby customers and employees. Motion sensors are also a great way for patrons to engage with signage without using their hands, since touchscreens or keyboards are not ideal while eating.

<u>Updates</u>

If you choose to integrate cameras, sensors, or speaker systems, software will be needed to integrate the additions with your current setup and manage their functions. As with any technology, there will also be the need for occasional updates as new software versions become available to provide greater efficiency and enhanced features.

Kiosk

<u>Peripherals</u>

Self-service kiosks in Fast Casual Restaurants can limit customer frustration and help reduce lines with quicker order placement. For kiosks that handle transactions, peripheral needs will be similar to those of point of sale systems. Installing receipt printers and payment terminals (if not already integrated into the kiosk) will create a seamless self-order and checkout process for your customers. Payment terminals at self-service kiosks should also be updated to handle the shift to chip and pin technology. Since diners using a self-service kiosk may want to make a purchase with cash, it is also important to install bill/coin acceptors with the ability to provide change. Granted, these are generally integrated internally when purchasing a self-service kiosk, but if the kiosk was not originally equipped with cash dispensing and receiving equipment, external hardware can be integrated with your current system.

Similarly to digital signage, kiosks in restaurants can utilize motion sensors, speakers, and cameras to create a unique, personalized experience for customers interacting with your front of house kiosks. Cameras and sensors can be used in kiosks to determine when a customer is approaching and turn on the screen's display with a greeting. Beacons can even be integrated into the kiosks with the ability to connect to loyalty programs stored on a consumer's phone that may frequent the restaurant often. By accessing the customer's information, the kiosk can then display a personalized greeting, show preferred meals, and make recommendations based on past purchases. As for speakers, the digital menus can provide greater detail on food and/or drinks. A customer can select an item via touchscreen or hands-free control and the speakers can relay information on ingredients, preparation, and nutritional facts.

Keyboards and a mouse can be used when a touchscreen is not available to allow customer interaction with kiosks for meal customization, browsing the menu, and any other search or ordering functions.

Almost every kiosk has a digital screen for displaying information or images, but there are also potential profits to be made from adding additional digital signage to your kiosks. These displays can be used for advertisements that brands can pay to have displayed at your kiosks or to promote your own events and in-store promotions.

Updates

Additional signage, speakers, keyboards, payment systems, and any other added components will require the installation of new software and the possible need to remove or update current platforms. The software can be used to integrate the hardware, manage your content, provide analytics on the success rates of the additional technology, and monitor equipment malfunctions. Since many people will interact with the kiosks, software will also need to be continually updated to ensure the system is secure and limit the functions of the technology for its intended purpose by preventing your system from being tampered with or displaying unwanted content.
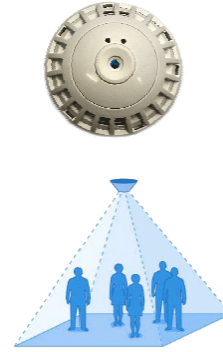
Sensors

Peripherals

Many restaurants use people-counting sensors and beacons to create more efficient and personalized experiences. While there are not many peripherals that can be added to the technology, increasing the number of sensors and/or wireless access points to handle communication between devices can help management use the technology to its full potential.

As the technology advances, new ways of marketing based on proximity are becoming available. There are also digital tabletops that have sensors embedded in them to connect to mobile phones for payment and/or loyalty program information. Varying the types of sensors used and potentially increasing the number of in-store beacons can help keep customers happy with quicker service, encourage additional purchases, and create loyal customers.

As for people-counting sensors, there are continually more advanced options such as the use of lasers, infrared, motion, pressure, and even video. The sensors can track the number of customers coming and going at any time of day as well as the customer flow from entering to ordering, filling drinks, and choosing a table to eat at or exiting with their food to go. This can give management an idea of the number of people dining in versus taking food out of the restaurant to dine elsewhere. Tracking the flow can also help determine the need for more or less tables as well as the potential to promote certain items by placing advertisements in higher traffic parts of the dining area. Increasing the number of sensors installed throughout the store can give a more accurate representation of activity in specific areas, as well as throughout the entire restaurant.

Updates

Adding more sensors or changing the type of sensor that your system currently uses will require software updates to handle new capabilities. The software can compile data and analyze your newly desired process, such as product or location dwell times and provide more accurate mapping of customer flow. Over time, it is wise to update software purely for the level of efficiency that more modern versions can provide.

As for hardware, people-counting sensors or beacons may need to be replaced or upgraded as more advanced technology becomes available. For instance, the newly designed sticker beacons can replace or serve as additional upgrades to your current technology, and sensors that track customer flow may become better at filtering out non-essential data.
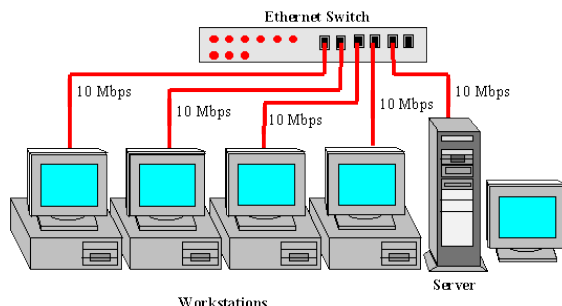
Network

Peripherals

Once network hardware is installed, it is unlikely that there will be a need to add more equipment or supplement the system with new technology. However, there may be a need to add more wireless access points to handle increased input from your front-of-house point of sale system, sensors, or kiosks. There is also the potential need for more access points to expand the overall area that your network covers. Every other benefit can be handled through software or hardware upgrades.
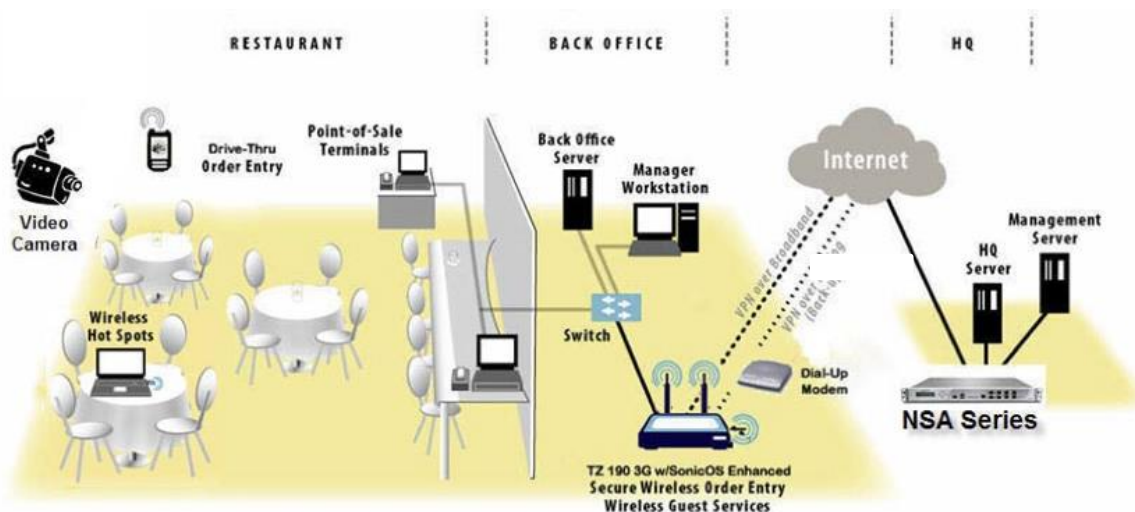
Upgrades

Adding more technology, digital content, and data-capturing software will require greater bandwidth to meet the demands. This can be accomplished by upgrading accounts with your network provider and/or adding routers, switches, and memory storage. For greater wireless coverage, there will be a need for more access points as previously mentioned and potential additions of switches, servers, and patch panels. The standard Ethernet cable for networks is Cat5e, which will be more than enough for most QSRs, but if you find your speeds lagging, it may be beneficial to consider upgrading to Cat6, though this may be a large-scale project as cabling is often run through walls and ceilings.

Cat5e VS Cat6		
Product Name	Cat5e UTP Cable	Cat6 UTP Cable
Speed	10BASE-T, 100BASE-TX(Fast Ethernet), 1000BASE-T (Gigabit Ethernet)	10BASE-T, 100BASE-TX(Fast Ethernet), 1000BASE-T (Gigabit Ethernet), 10G BASE-T (10-Gigabit Ethernet)
Frequency	100 MHz	250 MHz
Performance	Good	Better

Final Thoughts

Not all peripherals or updates may be right for your business, but considering additional technology can help create a customer-centric dining experience that benefits your behind-the-scenes operations. Of course, before implementing these components, it is wise to consider short-term and long-term costs as well as the probability that the added technology will benefit your bottom line. It is also ideal to find a trusted, knowledgeable deployment partner to ensure that your current additions and future updates will be implemented efficiently. However, it is important to remember that even the most high-tech gadgets and devices will only be as successful as the planned usage and relevancy to your goals.

For more information and to find out how Worldlink Integration Group can help with your technology deployment needs, visit our <u>website</u>.

Or, find us on <u>Twitter</u>, <u>Facebook</u>, <u>LinkedIn</u>, and <u>Google+</u> to stay up-to-date with news and future content.