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A human factors architect with Fujitsu Transaction Solutions discusses the role of touch screen technology in improving customer service and reducing employee training time.

Grocery Headquarters: There has been a great deal of research done by Fujitsu and others regarding the human factors involved in touch screen technology. Can you summarize a few of the main points that are relevant to supermarkets?

Carla Merrill: We know that the touch screen in general is faster and more accurate than using the keyboard. A lot of the research in this area has been done by the military. Human eye-hand coordination is very refined in the area of pointing. With touch screen, users control the surface they interact with, so target acquisition is quick and accurate.

GH: In the highly competitive supermarket environment, grocers are focused on improving the customer experience as a point of differentiation. How can touch screen technology have an impact at the point of sale?

Merrill: For supermarkets, touch screen technology can mean greater speed and accuracy at the checkout, and we know that is important to our customers' customers—the supermarket shopper.

The point-of-sale system facing the cashier certainly has an impact on speed and accuracy, but we're also thinking of other ways to use touch screen technology to enhance the customer experience as well.

For example, a touch screen could benefit shoppers as they wait for a large order to be processed. If they had a touch screen available to them, they could use it to access information such as the number of loyalty points they have accumulated or the items in the order that have received a loyalty discount.

While touch screens can engage customers as they wait in line, they can also improve speed and accuracy. For example, the cus-

tomers can see the discounts as the items are being rung up, rather than having to stop the cashier to ask if a specific discount had been applied to a particular item.

We're talking to the supermarkets we work with to find out what types of information would be suitable for this kind of application. One of the things we want to do is find out from store personnel what are some of the basic ques-

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tions customers ask that can slow the process and look for ways to translate that information to the screen that is visible to the shopper.

GH: Training is another issue that is top of mind for grocers. How can touch screen technology help reduce the time it takes to get new employees up to speed?

Merrill: If you have to read the screen and process that information and then look at the keyboard, it slows the learning process. With the touch screen, we have the ability to keep the user's focus on the screen.

The processing of a WIC purchase is a great example of how touch screen technology can shorten the training time. These types of transactions can be complex and even seasoned cashiers can be unsure if they have processed them properly. At the upcoming FMI show,

we'll be showing how we've used touch screen technology to help operators move through this type of transaction quickly and accurately.

Touch screen is also great for produce look ups. Cashiers don't have to turn away from the screen to look at a cheat sheet or guess what type of produce is in front of them, as they can look at the pictures on the screen.

GH: While touch screen technology is currently available, it is going to take some time for grocers to switch over as they replace their POS systems. What is being done to help grocers transition?

Merrill: Providing a smooth transition is very important when it comes to technology, as you can't expect people to take a leap from one paradigm to another. We've been very careful about making our GlobalSTORE POS fully functional with keyboard, touch screen or a combination.

When grocers do roll out touch screens at the point of sale, they can still have a foot in both worlds. This allows operators to get comfortable and they can gradually self teach. When you throw humans into a total technology change, you experience some loss in terms of performance. This way, if cashiers are finding it difficult to perform a certain task with the touch screen and the store is busy, they can switch back if necessary until they are comfortable.

GH: How will grocers adopt touch screen technology going forward?

Merrill: Supermarkets are exploring the idea of putting kiosks throughout the store in areas like the deli and bakery to give customers control of the ordering process. But what if customers could also use this technology to get their grocery lists by touching a screen? We see a number of ways grocers can use touch screens to engage shoppers beyond the checkout lane. □