Segmented Touch Digital Technology Aims for Niche

By Steve Arel
Contributing writer,
DigitalSignageToday.com

Smaller, divided touchscreens are putting high-tech — and typically high-priced — displays within the financial reach of many businesses and companies strapped for cash.

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N umbers, when it comes to marketing, don't lie.

The numbers show that static displays are better than no display. Displays incorporating moving images and sound are superior to those constantly sitting lifeless. And those spurring interaction through touchscreen technology offer an even greater edge.

So it's no wonder more and more companies want to participate in the touchscreen market. The corporate world feels touchscreen digital signage is the future of effective in-store campaigning.

Price, however, continues to be a hurdle for many businesses wanting to invest. With hardware costs that can run several thousand dollars per screen and thousands more a year for content, many companies — particularly smaller ones — are hesitant to invest heavily.

To make high-end digital signage more affordable, a handful of companies have scaled down the touchscreen technology to put it within financial reach for many businesses, even in the face of worldwide fiscal volatility. Segmented touchscreens only have been on the market for a little more

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than a year, but the products seem poised to make an impact.

At a small size, and smaller price to match, some industry analysts say the technology couldn't come at a better time economically for businesses wanting to capitalize on digital innovation.

"It's pivotal," Adrian Weidmann, principal consultant for Retail Media Consulting, said of the effort to drive down the cost. "People like video motion and sound. If you can start by bringing that to the table in a scaled way, you can afford to communicate in a more sophisticated way. A picture is worth a thousand words."

Segmented technology at a glance

Segmented touchscreen makers admit their products aren't a completely new technology. Instead, they're an innovative idea that combines the concepts of com-

mon touchscreens with that of monitors featuring external push buttons.

"This is just a shortcut to get the interaction and perceived value of resistive touchscreens at an affordable price point," said Ken Menchio, director of business development for Industrial Image, a Cumming, Ga.-based company producing segmented screens.

On the surface, segmented touchscreens mirror their traditional counterparts. The difference comes in functionality.

Segmented touchscreens allow the consumer to interact with digital signage without lowering the deployer's bottom line.

The key component of segmented displays, which for now come in 7- and 10-inch models, is the thin, clear membrane that covers the LCD screen, with as few as two or as many as eight touchpoints placed in different symmetrical parts, or segments. These segments effectively replace mechanical push buttons, allowing the same interaction.

If one thinks of the screen itself as a tree trunk, the segments are branches that lead consumers to varied types of information, offers and instructional media. The nodes detect a person's touch on any part of its respective segment, signaling the unit's firmware to display material programmed to appear in connection with certain zones of the screen.

Much of what allows for the unit's small size is the absence of an on-board computer, coupled with technology built into the player's firmware. The content is pre-loaded onto flash memory cards, so the ad player just plays videos as instructed by

touch segments. Updating the content is completed by replacing the memory card.

Screen capabilities

Segmented screens are far from digital frames, particularly when it comes to their capabilities and durability. The units consist of industrial-grade material and are designed to run around the clock, for up to 50,000 hours.

Screens can be divvied up into the number of segments a purchaser wants to display to customers. This usually corresponds to the number of products on the shelf by the display. When a customer pushes a segment, he is guided through a decision tree until he reaches a video for the specific product he wanted. These navigation menus, along with product and company logos and images, are programmed into the unit's firmware. The videos are stored on a flash memory card and can be easily updated.

The displays run content automaticall[...] when plugged into a power source. If t[...] store or venue loses power for any rea[...] the displays will automatically restart [...] without any intervention, guaranteein[...] the message will play as soon as the p[...] returns. Adjustments to the screen, su[...] brightness, contrast, color and timers, [...] be made through an on-screen menu.

The units also can be equipped with a [...] motion sensor, allowing it to shut off [...] certain point of inactivity from passer[...] and kick on when someone comes wit[...] certain distance. This feature benefits [...] the advertiser and store clerks. Clerks don't have to listen to continuous commercials when they are at work, so they won't be tempted to disable the ad player. Allowing the screen to "sleep" and cool down extends the life cycle of the unit, adding to the advertiser's return on investment.

Screen size offers considerable flexibility for positioning. The units can be anchored along aisles, touting specific products or making certain offers. They also can be set at points of purchase to help induce last-second buys.

Customizable casings are available through point-of-purchase display companies.

Ease of use

Anyone who knows how to use the memory card in a digital camera can easily set up the content for a segmented screen. No special software or equipment is needed. Just drag and drop images and videos from a desktop computer onto a memory card.

The units function off SD or compact flash cards that can hold everything from lists of information, to photos and video, to testi-

Segmented touchscreens run content automatically when plugged into a power source, allowing a deployer to display digital signage without needing to employ extra staff.

monials and music. Firmware runs the content automatically, pulling it from folders on an inserted SD card that corresponds by number to the number associated with the portion of the screen. For example, when segment 1 is chosen, content from folder 1 runs. If that folder contains 20 still images, the system runs the images and then returns to the root menu, where users can make other selections.

The units hold up to a 64 GB card, which is "an insane amount of content," Menchio said.

Typically, no more than 1 GB of information will be needed. Studies show a digital sign has only a few seconds to grab someone's attention. And when the audience is paying attention, the time until they walk away or pick up the promoted product is limited, too.

"You typically have 6 to 10 seconds to get a customer's attention and interest them in interacting," Menchio said. "When they

touch the screen to get more information, nobody is going to generally stand there more than 30 to 45 seconds. Think about a commercial on TV or radio. You have a short window for them to take the next step of making a purchase."

Replacing content with updates is as simple as having a field representative change out a card when he or she visits a store to handle other business.

Potential markets

The scaled-down size of segmented screens has winnowed pricing to just a few hundred dollars per unit. With that, producers and distributors are targeting smaller businesses that, until now, have largely not been able to make digital signage part of their marketing strategy.

The screens are targeted to companies that "want to move more product and their static displays have plateaued," Menchio said. "For 15 percent more, they say if they can get a lift from that, they willing to spend it."

Some businesses already have found success with segmented screens. One restaurant is using them to promote weekly specials and allow diners to thumb through the menu. A carpet manufacturer uses them to allow prospective carpet buyers to view various styles and brands.

"You've got (smaller) companies looking for displays to put into stores," Menchio said. "It might be seasonal or something special they're running, and they are already spending lots of money for a point-of-purchase display. A video will add more traction to move products. Furthermore, when seasonal campaigns are finished, the advertisers can recycle the ad players, us-

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— Ken Menchio, director of business development, Industrial Image

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Many analysts, meanwhile, pan media players in the digital signage market, suggesting they don't do enough to woo consumers. Such units, they say, are an investment with little value and are nothing more than glorified digital frames.

But market experts like Weidmann see segmented screens as a potential revolutionary concept. While the technology is that of a media player platform, it pushes the capability of such equipment far beyond what many might expect.

"I've seen some of these devices, and it's a good idea," Weidmann said. "It's another dimension of digital signage. It offers a viable way for interaction to happen."

That interaction is what companies hope will drive additional business. And what manufacturers of the segmented screens hope will drive companies to the technology is the combination of product capabilities, ease of use, flexibility and, perhaps most importantly, price.

Businesses investing can expect to spend "hundreds of dollars for a stand-alone segmented touchscreen, compared to thousands for network touchscreens or panel PCs," Menchio said.

About the sponsor: *Industrial Image Inc., based in Cumming, Ga., provides high-quality stand-alone digital signage products and accessories*