

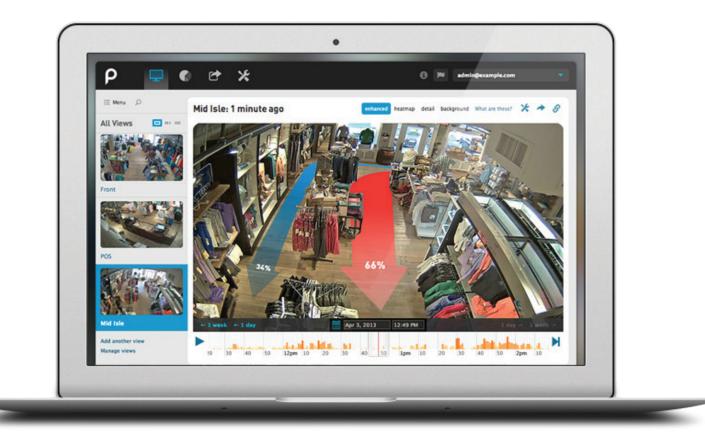
To Catch Up With E-tail, Tools to Track Shoppers in the Store

by Brad Stone

f the many advantages online retailers enjoy over their brick-and-mortar counterparts, the preponderance of data might be the most significant. While physical stores know how many customers visit and what they buy, e-commerce sites know which section customers head to first, how long they look at each product, and who browses but doesn't make a purchase. Venture capitalist Marc Andreessen suggested in a Jan. 29 interview with startup news site PandoDaily that, in part because of this data gap, all of traditional retail will go the way of Circuit City and Borders. "The retail guys are going to go out of business, and e-commerce will become the place everyone buys," he said.

U.S. Census data show physical stores still account for 95 percent of retail sales. Still, they're growing at barely one-quarter the rate of online retailers, and so several technology startups are trying to find ways to provide them with e-commerce-level data. Prism Skylabs uploads and analyzes video from in-store surveillance cameras to track customer movement and the effectiveness of promotions. "All of retail is in a knife fight," says Steve Russell, co-founder and chief executive officer of the two-year-old San Francisco startup. "There is a lot of pressure from the online world on physical retailers to change, and we are trying to facilitate that."

Russell has a history of deriving creative applications from the proliferation of cameras. A decade ago he founded 3VR, a video-feed search tool for banks and law enforcement agencies. He left 3VR in 2011 to launch Prism, which he says allows retailers to exploit similar technology. Prism's software processes hours of video that streams into a store's computers from overhead cameras, condenses that footage, and uploads it to the cloud. From there, Prism's software develops heat maps of



customer activity while stripping out images of actual shoppers to protect their privacy. "We can look at which products are hot, which are being moved around and touched, and all kinds of data that allow merchandise teams to understand what is going on across a wide range of stores," Russell says. "That is essentially a level of understanding that is much more consistent with what they might get in the online world."

Prism says its software is being used by about 30 retailers, including T-Mobile (DTE) and Famous Footwear (BWS), and 70 others are testing it. Lolli & Pops, a yearold confectioner with stores in Tulsa and Oklahoma City, uses Prism to compare sales from different product displays and to track customers through its old-English-style boutiques, which include separate rooms devoted to premium licorice, chocolate, and gummy candies. Prism's heat maps recently persuaded the company to give premium display space to its poor-selling seasonal candies instead of nostalgic favorites, which customers are more likely to seek out. "I was surprised that so much of retail is run by gut," says Sid Gupta, a former private equity investor who launched Lolli & Pops in the summer of 2011. "One of the most interesting things about Prism is that it has been able to quantify how we do things."

Other companies selling data upgrades to physical retailers include Silicon Valley darling Square, whose white credit-card reader plugs into the iPhone. Last year the company unveiled Square Register, which lets retailers manage their stores from iPads and provides them a dashboard with detailed sales trends, such as which products sell best during particular hours of the day. Stores like Target (TGT), Best Buy (BBY), and Macy's (M) are using a coupon and loyalty app from Shopkick, a startup funded by Kleiner Perkins Caufield & Byers. Shopkick personalizes deals for customers as they walk through a store, informed by their past purchases—just like the Web guys do.

Swipely, a four-year-old startup based in Providence, has yet another approach. It acts as a traditional credit-card processor for retailers and restaurants but adds a layer of analysis. Merchants who use the company's software can generate sales reports to see what percentage of sales comes from repeat customers. They can also create automated loyalty programs and regularly blast promotions to customers who opt in and provide an e-mail address.

Angus Davis, Swipely's CEO, agrees with Marc Andreessen that software is irrevocably changing the retail landscape. The "e-commerce players have lapped the offline guys," he says. But like other entrepreneurs who are making a go at helping old-line players, Davis says they have a chance in the next few years to finally close the gap.

The bottom line: Startup Prism Skylabs is closely tracking shoppers via video surveillance to try to match the detail of data gleaned by e-tailers. **P**