

Improving the Retail Experience with Business Intelligence

Content is no longer king of customer engagement. These days, it's data running the retail show.



It's common knowledge these days that the retail landscape is becoming increasingly competitive, with brick-and-mortar operators facing challenges not only from the store down the street but an ever-growing number of online merchants as well.

In response, retailers are working to stay on top by delivering an "experience," going beyond simply stocking the shelves and waiting for the sales to roll in. Instead, those operators are working to reshape their locations into places where shoppers receive messages designed specifically for them. One of the most common catchphrases in the retail world today is "People do not buy things, they buy experiences."

One of the key ways retailers are working to create and refine those experiences is by leveraging information about their customers: Who's coming through the door? What are the demographics of those people? How long are they staying in the store? What products are they perusing, and what are they buying? How effective is the in-store messaging?

Typically, though, gathering that information has been a laborious process of combining customer feedback and point-of-sale data with a healthy dose of guesswork and spreadsheets. But that's changing.

Fine-tuning the message

One of the main ways retailers communicate with their customers today is via an in-store digital signage network.

Digital signage has long been recognized as a way to engage customers and increase sales. Even the installation of a basic digital signage network featuring relevant content has been demonstrated time and time again to provide a sales uplift of a few percent to 30 percent or more.

But while the saying "content is king" has long been the operative idea when it comes to the effectiveness of a digital signage network, a new saying is taking its place: Data is king. Technological tools now allow those in-store networks to sense when a customer walks by, and even glean some basic demographic information about those customers, enabling the delivery of more targeted content. Other triggers can prompt the display of content based on time of day or even the local weather. By comparing the timing of those triggers with point-of-sale information, retailers can gather information about the effectiveness of their messaging and how it drives (or fails to drive) sales.

Consider, for example, a digital display that incorporates a camera and analytical software that can identify basic information about the person viewing content on that display. Although such systems don't gather or store personally identifying information about that customer, they can make decisions about approximate age, gender and certain other factors. If the system identifies the viewer as a woman in her early 20s, it might then display content or product promotions geared for customers in that age range. Should the viewer be a man in his late 40s, the content might be geared for those types of customers.

If some types of content correlate to higher sales, a retailer could make on-the-fly decisions about expanding the use of that content, and vice-versa. Expanding on that, by comparing multiple types of content across multiple locations, that retailer now has the ability to gather data about all sorts of content and how it resonates with all sorts of customers.





Beyond the screen

Although the ability to trigger certain types of content for digital signage networks has been around for several years, its use as a business intelligence tool has been relatively unwieldy and under-utilized thanks to the work involved gathering and correlating the data necessary to drive content decisions. That's all changing.

NEC Display Solutions recently unveiled the NEC Analytics Learning Platform (ALP), a business intelligence platform focusing on delivering real-time content and data measurement needed for retailers to better understand what is happening within their stores. NEC ALP combines the company's advanced video analytics capabilities with its digital signage expertise to provide in-depth business tools to retailers while at the same

"With NEC ALP, we're giving retailers the ability to provide customers with an anonymous personalized experience through real-time, relevant content triggered by demographic data such as age and location," said Richard Ventura, vice president of strategy, NEC Display Solutions of America. "

This also provides retailers with valuable insights on the impact their content has, creating more opportunities for consumer engagement," Ventura said. "With NEC ALP, we're helping retailers deliver the right message at the right time to the right audience."

NEC developed a new back-end architecture for NEC ALP that uses both edge and cloud computing to deliver immediate actions while also driving realtime business insights. Using anonymous video analytics, the platform gathers nonidentifying demographic data such as age and gender and feeds that data into a locally-based computing appliance, which then triggers the appropriate content to be shown.

Data is then delivered into the cloud where retailers can use a Web-based dashboard to access insights such as impact on sales from content, demographics and audience traffic, overall engagement with customers and which content triggered the most positive customer experiences. Using this data, NEC ALP is able to draw a direct correlation between when content was played, the number of impressions and the conversion rates to actual sales.

But while the concept of deriving information about the behavior of its customers had its genesis in those in-store digital signage networks, with NEC ALP the screens themselves are no longer the only source of the intelligence-gathering process. The platform can draw analytics from all sorts of sources, including kiosks, in-store sensors, weather feeds, inventory, location based data, mobile devices, and cameras alone.

"NEC ALP is not a facial detection or even a digital signage solution," Ventura said. "It's delivering impactful content to customers."

"Those features are part of it, but the platform is much bigger than that," Ventura said. "NEC ALP can become the dashboard of the store where retailers can see how many people are coming to the store every hour, every day and every week, and how long they are staying, what the average spend and percentage of transactions are and compare that information against other locations. That information can then be used to create an experience that truly engages customers."



Recapping NEC ALP

The NEC Analytics Learning Platform system consists of hardware, software, cloud services, managed services and big data analytics. Locally in-store, the platform consists of an edge computing appliance, cameras and sensors. The system is designed with full API integration into key digital signage content management systems (CMS), allowing it to deliver and trigger immediate actionable content onto different media player platforms. The triggered content is then displayed on NEC Display large- or small-format displays.

As a complete platform, NEC ALP includes everything from consulting, software, hardware, cloud computing, customized software development, physical installation, software and hardware integration, integration into key content management platforms, and content creation capabilities. The platform also includes on-site, 24/7 service and maintenance, with hardware, software and managed services support.

NECALP integrates several partners to deliver a complete solution. Integration into the BrightSign platform, NAVORI and StratosMedia content management systems (CMS), and Microsoft Azure and Intel for infrastructure are key. In addition, the platform uses NEC EVA for video analytics and Data Call Technologies for weather and location-based content aggregation.

About NEC Display Solutions of America, Inc.

NEC Display Solutions of America, Inc., a leading designer and provider of innovative displays, offers the widest range of products on the market, such as commercial- and professional-grade large-screen LCD displays, desktop LCD monitors, direct view LED displays, a diverse line of multimedia and digital cinema projectors, and integrated display solutions. Benefitting from the technologies of NEC Corporation and its own Research and Development, NEC produces leading-edge visual technology and customer-focused solutions for a wide variety of markets, including education, retail, transportation, broadcast, enterprise, healthcare, houses of worship, and many more. NEC is orchestrating a brighter world with the quality and reliability of its products and outstanding customer service. For additional information about NEC Display Solutions of America products, call (866) NEC-MORE, or visit the website at www.necdisplay.com. Follow us on our social media channels: Facebook, YouTube, Google+, Twitter and LinkedIn.

