

Retail Robotics and AI Conference: Five Retail Technology Trends to Watch

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The opportunity for conversation in small groups between presentations is a valuable part of attending the RAC Retail Robotics & AI Conference.

The second annual Retail Analytics Council Retail Robotics and AI Conference brought together more than 125 senior-level retailers and academics for a unique educational event addressing current and future robot and AI trends.

Topics addressed included: U.S.-China Retailers, Consumer Trends, and AI; Observations on the State of Retail Technology and AI; How to Implement a Retail Analytics Function; Advanced Analytics in Customer-Centric Strategies; AI Use Cases; How Bayesian Network Learning is Applied in Marketing; Data Privacy; Current Retail Robot Applications and Benefits; Robots in Retail Competition; Robust Perception for Robotics Systems; Intelligent Automation; and Future Retail Robot Applications.

Retail technology is constantly evolving, and innovations may remain in development for a very long time. Many of the hottest retail technologies are iterations of earlier technology that finally is reaching an adoption tipping point.

Here are five key retail technology trends conference panelists identified.

1. Growing mobile shopping

The future of retail relies on creating frictionless shopping experiences, and mobile continues to be of key importance for retailers to make the shopping experiences smooth and convenient.

U.S. consumers are becoming more active in mobile activities, such as messaging and video watching, and there is a growing adoption of mobile payment, according to Dr. Martin Block, Executive Director of the Retail Analytics Council and Professor, Northwestern University. Retailer apps continue to be popular among consumers, especially millennials and Gen Z, and the apps are not only designed to allow online

shopping but also to deliver appealing content and drive loyalty through community marketing. Retailers are also integrating social media platforms, such as WhatsApp and YouTube, as additional purchasing channels.

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2. New in-store experience with AR/VR

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3. Customization enabled by AI and Big Data

Smart retailers now consumers better than consumers now themselves, and Artificial Intelligence allows retailers to provide personalized recommendations drawn from previous purchases, shopping behaviors, or preferences. Big data can help retailers understand consumer trends in great detail and identify new preferences much quicker. The data can be used to predict the top selling products in a specific category accurately, and retailers can expand their assortment based on the prediction.

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4. Smart warehouses with robots

Using robots in warehouses to reduce cost and speed up processing times is not new for many retailers. D.com is one of the leaders in using robots to enable same-

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5. Expanding visual and voice search

Visual and voice search is becoming the new normal. Consumers can find and buy a product by snapping a picture with a smartphone, and visual search technology can help them identify the product across multiple sites and retailers in just a click. When used via mobile, it can be an omnichannel enabler, driving in-app purchasing and bringing consumers to stores to find products in nearby stores.

With the growth of smart speakers in homes, voice search is also on the rise. Currently, consumers use the technology to find items in store and get instant product feedback. It might not be enough to save a dying store because it can't offer a full range of content consumers can get from other search forms, but as the technology gets better, it is expected to be used by more retailers.

The Bottom Line

Knowing “what is trending” is only part of the equation. Understanding how to apply these technologies strategically to align with a retailer’s mission and business objectives creates ultimate success. The five trends summarized from the RAC conference panelists present five directions for the future of retail, which represent only a small fraction of the innovations currently shaping the consumer landscape. These trends also offer tremendous opportunities for retailers to create the next retail product or experience and stay ahead of the competition.