

## RETAIL AND HOSPITALITY



LATTE E DERIVATI  
MILK AND DAIRY PRODUCTS



TRACY ISSEL: MICROSOFT

As customers become more demanding, retailers are having to adapt – and fast. Understanding this, Italy’s largest supermarket chain, Coop Group, has teamed with Accenture, Avanade, Microsoft and Intel to create a remarkable new concept store which leverages some of the most innovative technologies available today. You can find out more about this in the following pages.

Also in this issue, find out how retailers across the globe are making the digital leap. Get to grips with the potential of 3D technologies. And find out what to expect from the upcoming RBTE and NRF events.

# Supermarket of the Future

The future of shopping has been made a reality thanks to an innovative partnership between Accenture, Avanade, Microsoft, Intel and Italy's largest supermarket chain, Coop Group

BY JACQUI GRIFFITHS

Imagine walking into a grocery store that combines the friendly, open atmosphere of a traditional market with digital technologies that enable the products to tell you their story. As you walk around the product displays you can interact with other shoppers, without racks of shelving getting in the way. Yet sophisticated screens are ready to give you all the information you want about the products that interest you, as well as suggestions based on your food preferences and dietary needs.

This is the Supermarket of the Future. It's a reality that thousands of visitors have already experienced during its six-month tenure within the Future Food District at Expo Milano 2015 – and which is set to inspire many more at the National Retail Federation show in January 2016. The concept was designed by Carlo Ratti Associati in partnership with Coop Italia, is being brought to life through a collaboration between Accenture, Avanade, Intel and Microsoft.

While the Supermarket of the Future is clearly a forward-looking concept, it was inspired by the traditional, social shopping experiences that have existed for generations. It has adapted these traditional experiences using the Internet of Things (IoT) and cutting-edge technologies to create an open arena for interaction between consumers, shelves and products.

“The Coop Supermarket of the Future is a pioneering example of the shopping experience we'll probably experience in three-to-five years' time when entering the grocery store,” says Alberto



Pozzi, managing director at Accenture. “Taking the innovative concept of the supermarket theorised by Carlo Ratti, Accenture has designed a user experience and leveraged the most appropriate digital solutions to satisfy – in a simple, natural and immediate way – the customer demand for information, socialisation and functionality.

“The Supermarket of the Future is a real-world example of how Accenture and our partners help our clients change the way we work and live through IoT and digital technologies. Accenture offers complete, integrated digital business, industry and technology services to deliver tangible results for both the digital consumer and digital enterprise.”

In order to achieve a natural experience, it was crucial to make sure shelving and digital screens didn't get in the way of interaction between people. “The Supermarket of the Future merges the experience of a small local market where people used to have friendly, social exchanges, with that of the modern store, making for a much more personal experience,” says Fabio Chiodini, senior director of consumer products and retail at Avanade.

The project integrated Coop's legacy infrastructure with a Microsoft Azure cloud content management



system and a range of customer touchpoints using Windows 8 and Microsoft Kinect. Interactive tables enabled a rethinking of the traditional supermarket shelf, with new product displays to enable touch-free interaction – customers could simply hover their hand over a product to get real-time information about it.

“Every product has a story to tell, such as where and how it was produced, its carbon footprint, the chemical treatment it has received, information about allergens, and the journey that brought it to the shelf,” says Chiodini. “Shoppers can bring all that information to life simply by moving their hands and pointing at products. It enables a new, totally natural kind of buying experience in which data helps customers to be aware of what they are buying as soon as they consider the product.”

Some of the supermarket’s products were displayed on vertical shelves with touch technology, so customers could interact to receive more detailed information about the products displayed on a specific monitor. Second-screen technology enabled shoppers to interact with touch-based tablets on the meat and fish tables to access product information displayed on monitors. In addition, a mobile app created a personalised

experience for customers, with content presented based on their lifestyle choices and real-time interaction with dedicated ranges of products, information and in-store locations.

Striking the balance between a high-tech vision and a more natural experience was one of the team’s greatest challenges – and the source of some of the project’s greatest innovations. “The main challenge was to create the most natural buying experience we could,” says Chiodini. “This was where AvanaDe was able to express its innovative soul, envisioning the use of a gaming device like Microsoft Kinect as a sensor for interactive shelves. Where additional capabilities were required, the AvanaDe team worked on designing and implementing a specific algorithm that captures where people are looking and projects their hand-movement towards the product indicated.”

Real-time data visualisation was also used to display information like customer interactions and purchases, and environmental key performance indicator analytics on a wall monitor about the store. The result was a supermarket that connected retailers, shoppers and products to ensure an exceptionally responsive environment.

Interactive shelves and displays in the Supermarket of the Future



## FEATURE

“Using these technologies, the supermarket becomes connected,” says Chiodini. “The way that consumers interact with products provides data that can be transformed into tangible insights that help the grocer to optimise their offering and pricing, based on the items people interact with, what they put back on the shelf and what they buy. At the same time, it enables the business to capture product stock levels and ensure extremely timely replenishment. This helps the store to use smaller shelves, giving shoppers a sense of fresher, smaller batches of products and optimising supply management.”

Expo Milano 2015 has now ended, but the Coop Supermarket of the Future remains a very real example of what can be achieved. “New technologies are rapidly changing retail store operations, customer experiences, and defining new business models,” says Rachel Mushahwar, Global IOT Director – Retail Enabling, Intel Internet of Things. “This proliferation of devices and technology increases how customers engage with both brands and retailers, making shopping more informative and more enjoyable.”

“Intel technology available today is already helping to transform stores into the digital retail environments of the future. Retailers can unlock the power of insights from in-store sensors that monitor temperature, light and inventory quantities; smart signs that anonymously track shopper activity; remote management tools that allow seamless control over displays in thousands of stores; and gateways that aggregate in-store data for long-term analysis and push real-time alerts back to the store to improve decision-making. Customers benefit from visual displays that inform shopping decisions and engage using touch

and voice as well as tailored real-time coupons and promotions. With consumer expectations rapidly increasing, retailers have to leverage digital technology to create new shopping experiences for customers. But no matter what the connected store brings, one thing will never change – consumers and retailers need technology that is fast, simple, and just works.”

A modular, cloud-enabled architecture enables the concept to be applied across different sized stores to fit a range of retail formats from DIY to fashion. “Thanks to Accenture and Microsoft Azure, Avanade was able to implement the whole store infrastructure in the cloud in an incredibly short time, ensuring that it was easily manageable with a low total cost of ownership,” says Chiodini.

**“Every product has a story to tell, and shoppers can bring that information to life simply by moving their hands and pointing at products”**

“Over 1.7 million visitors to the Coop Supermarket of the Future exhibit experienced how digital and IoT are game changers in enhancing the store shopping experience,” says Tracy Issel, general manager, worldwide retail industry at Microsoft. “The solution is the latest example of what Microsoft technology – in combination with the industry and IoT expertise, digital and cloud services, and specialised hardware of our partners Accenture, Avanade and Intel – can accomplish for our retail clients and their customers.” ©

Today's technology is helping transform stores into digital retail environments

# Equipping the store of the future

We find out how Microsoft and its partners are leveraging new technologies to help retailers create modern shopping experiences and empower employees to deliver a new level of customer service

BY REBECCA GIBSON



In Pennsylvania, US, Gerrity's Supermarkets has deployed a mobile app that enables customers to scan and bag groceries as they shop, and pay at an express checkout. Elsewhere, global snacks manufacturer Mondelez International has developed a Diji-touch vending machine powered by Microsoft Kinect, Windows 10 and Azure IoT to allow customers to interact with products in 3D.

These are just two of the retailers worldwide that are harnessing the power of newly affordable technologies – such as customer relationship management (CRM) systems, the cloud, analytics, beacons and touch-screen devices – to transform how they engage with individual consumers both in store and online.

“Retailers are switching from an omnichannel business model to a unified commerce approach where the online and physical stores are merging and mobile is playing an increasing the integral role,” says Marty Ramos, Microsoft's chief technology officer of retail, consumer products and services. “Today's consumers want

to be able to start their shopping trip on their laptop at home, continue on their mobile and then pick up where they left off when completing their purchase in store.”

To facilitate this, notes Susan Olivier, vice president of consumer goods and retail industry at Dassault Systèmes, retailers must provide customers with the same information and quality of service at all touch points.

“It's essential that retailers replicate the same efficient and interactive experience they provide online in their high-street outlets,” she says. “In future, physical stores will feature self-serve

**“From an IT perspective, the concept of separate digital and physical stores is obsolete”**

JUAN GUITIERREZ BOTELLA,  
AVANADE RETAIL CENTER OF EXCELLENCE



## PROFILED

## Building the supermarket of the future



kiosks, digital shelves and interactive touch screen displays where consumers can access detailed product information, view extended product assortments, or even order products.”

Juan Guitierrez Botella, director of the Avanaide Retail Center of Excellence, adds that retailers must also merge previously separate e-commerce and in-store systems, and use the same customer and product data to support both online and in-store customer interactions. “Although physical stores will continue to play a vital role in the shopping journey, from an IT perspective, the concept of separate digital and physical stores is obsolete,” he comments.

It’s also imperative that retailers equip store associates with the tools they need to know everything about individual customers the moment they walk into a store.

“The simple trick to improving conversion rates is to use data about customers’ preferences to personalise their shopping experience,” advises Ramos, adding that CRM

Last year, Avanaide joined with Accenture, Intel, Microsoft and Italy’s largest supermarket chain, COOP Italia, to bring a Supermarket of the Future concept to Expo Milan. The concept, which was also exhibited at the National Retail Federation show this January, uses internet of things technologies, augmented reality capabilities, Microsoft Azure, Kinect and motion- and touch-sensitive devices and shelves to give customers additional information about products. This includes everything from where it was sourced, to allergen information.

“Customers were impressed by the possibility of exploring all the possible details of the products with a simple hand gesture,” enthuses Juan Guitierrez Botella, director of the Avanaide Retail Center of Excellence. “We’ll use this experience to help other retailers explore how digital interactivity can create a more informative and convenient in-store shopping experience.”

## FEATURE

platforms, in-store sensors and analytics tools are vital for capturing data from all customer touch points. “For example, if a store associate can see that I’ve looked at a particular shirt online, they can take me straight to it and then analyse my purchase history to recommend related products. Meanwhile, in-store sensors can help retailers to track customers as they pass through the store, identifying prime opportunities to drive sales by delivering additional product information or tailored discounts directly to their smartphones.”

Ramos adds that store associates should also be able to complete all tasks – from collaborating with colleagues, to checking inventory and serving customers – via one device and one operational system.

Avanade’s Botella agrees: “Physical stores will expand to become customer service hubs that offer online order fulfilment and post-sales support, so retailers must invest in technologies that empower store associates to become customer service representatives, fulfilment experts and product researchers that are adept at solving any customer issue.”

To help its clients explore how Microsoft technology can be deployed to transform in-store business processes and customer experience, Avanade has recently founded a Retail Center of Excellence.

“We’ve used Microsoft Kinect to develop interactive displays and Microsoft SharePoint to build Digital Pinboard solutions that deliver information and training directly to store associates,” explains Botella. “We’ve also adopted Microsoft Modern POS to help retailers explore the next generation of in-store POS.”

Similarly, Dassault Systèmes is helping retailers to use 3D visualisation technologies and touch-screen devices that could power digital fitting rooms, interactive product information displays and self-serve kiosks. In addition, the company has developed ‘My Store’, a visual merchandising and assortment planning solution to enable retailers to simulate retail displays 3D product images and create flexible store planograms that are informed by real-time business analytics.

“Often, retailers need to display a lot of products in a limited space, so it’s vital that they can quickly trial different store layouts in a virtual environment and make more informed decisions about everything from where to place products to maximise in-store sales, to the location of changing rooms,” says Olivier.

Certainly, technology will enable retailers to transform both their physical outlets and store associates into intelligent entities that work cohesively with their online and mobile channels to offer customers a personalised and seamless shopping journey across all touch points.

“Whether we’re installing on-premise edge servers, providing in-store beacons and analytics technology, or simply equipping store associates with personal devices, Microsoft and our partners are creating the homogenous technology ecosystem that will support the store of the future,” says Ramos. “Together, we’ll help retailers to offer customers memorable, immersive experiences that build loyalty and engagement, and drive new revenue opportunities.” ©

### SOLUTION SPOTLIGHT

## Personalising products

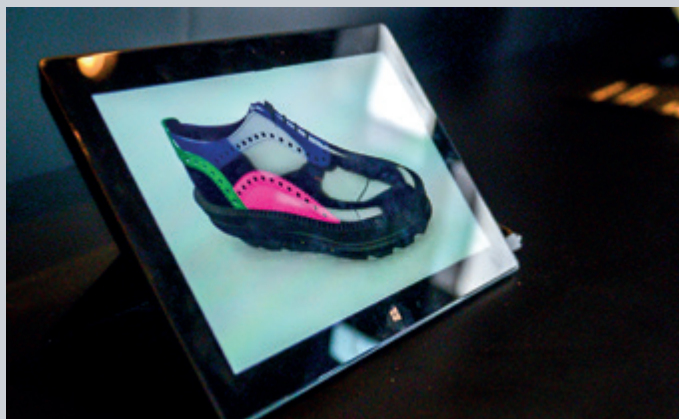


Image: © Julien Fournié

Dassault Systèmes has recently launched ‘My Retail Theatre’, a solution for retailers to provide consumers with the chance to customise their products via a 3DEXCITE configurator. Built on the 3DEXPERIENCE platform, it creates photo-realistic 3D models of products to enable customers to personalise products by changing colours, materials and textures via touch screen devices in a physical store or online.

“Replacing physical stock with 3D digital photo-realistic images allows retailers to offer consumers an extended product assortment without increasing inventory or compromising on the quality of store displays,” explains Olivier. “In addition, retailers can gain insight into consumers’ tastes and trends and maximise their online engagement.”

Last year, FashionLab by Dassault Systèmes joined with Julien Fournié, founder of France-based Couture House, to use the technology to design and customise a footwear collection using Microsoft Surface Pro devices.