flooid
a GLORY company



Where does digital go next?

Today's breakthrough technology will be deployed in the store and beyond

Digital – a decade of change

What is in store for the future of retail?
As customers increasingly demand frictionless, personalized and efficient retail experiences, the past decade has already seen the in-store blueprint change drastically. Rather than online shopping being a discrete add-on to physical retail, hybridity has emerged with omnichannel retail seamlessly blending both worlds through personalized offers, browsing or buying online and picking up in-store, and adoption of new types of contactless payments. AI-powered data insights have also allowed retailers to better understand the presence and preference of their customers, while self-checkout kiosks are fast becoming a staple of every physical location.



> ***Innovation leaders spend an average of 13% of their annual revenue on innovation to yield a 21% ROI. Retailers who invest only 3% in innovation have a 9% ROI.***

Source: Boston Consulting Group

As we continue to explore new innovations, the store of 2030 and beyond will continue to disrupt and surprise. Emerging (and re-emerging) tech like RFID tagging, computer vision, AI insights and biometric payments could evolve to transform operations, while experimental bleeding-edge tech including robotics, hyper-personalization and adaptive store formats could equally deliver exciting changes. From solving labor shortages to reducing shrink, and keeping customers satisfied and profits growing, further digital adoption will revolutionize retail.

A cautionary thought

Retailers may be reminded that new capabilities can have unfortunate consequences. The advent of greater digitization at the point-of-sale, for instance, has led criminal activity at self-checkouts, contributing to shop thefts more than doubling over the past six years in the UK, costing retailers £7.9bn in 2023 alone. Other developments like Amazon's Just Walk Out, which utilizes computer vision and sensors to remove the checkout altogether, have recently been scaled back; the cost of implementation and user discomfort at contactless payments cited as possible reasons for the technology failing to deliver.



Here we explore some of the present-day developments that could prove pioneering in retail, as well as the ways that trusted partnerships can ease the transition to a more digital, and more efficient future.

Loss prevention, personalization and speed: today's technology for tomorrow

Intelligent tagging: RFID

RFID tagging has become a transformative technology in recent years and following widespread implementation could prove to be a key feature of future retail. Small, hidden tags placed in garments or on items produce a unique code that is read by remote sensors and self-checkout kiosks, eliminating the need to manually scan items, reducing shopper frustrations at long queues, as well as providing accurate inventory information for retailers.

Brands such as Decathlon and Uniqlo have already implemented RFID tags throughout their stores, while H&M recently showcased RFID transformations in its New York and London flagships. RFID sensors placed throughout the stores map how shoppers navigate layouts and provide browsing data that the retailer can correlate with online engagement and social media trends to better determine what to have on display in store, rather than blindly stocking. RFID also tracks which items are brought into fitting rooms, can aid displays on smart mirrors and notification of associates to bring other items from a single touch.



RFID can also be invaluable when it comes to reducing store thefts and shrink. Since RFID tags are disabled upon payment, if a customer walks out of the store without finishing their transaction, security mechanisms are alerted and retailers can later build a detailed picture of their vulnerabilities. As the costs of RFID tagging and equipment consistently fall, it is increasingly likely that the technology will be present in more facets of retail in the decade to come.

The global RFID market is projected to grow from $15.49bn in 2024 to $47.63bn by 2030, exhibiting a CAGR of 15.1%.

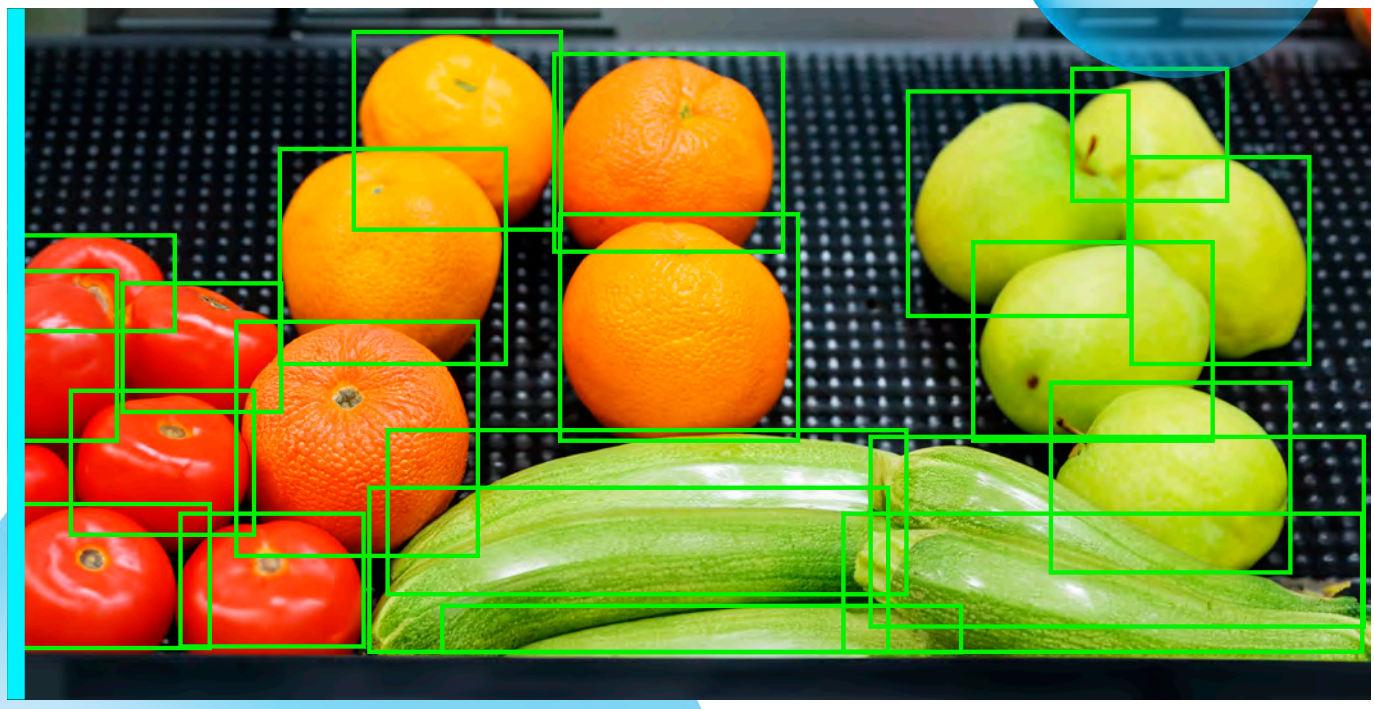
Source: Grand View Research

Smart sight: Computer vision

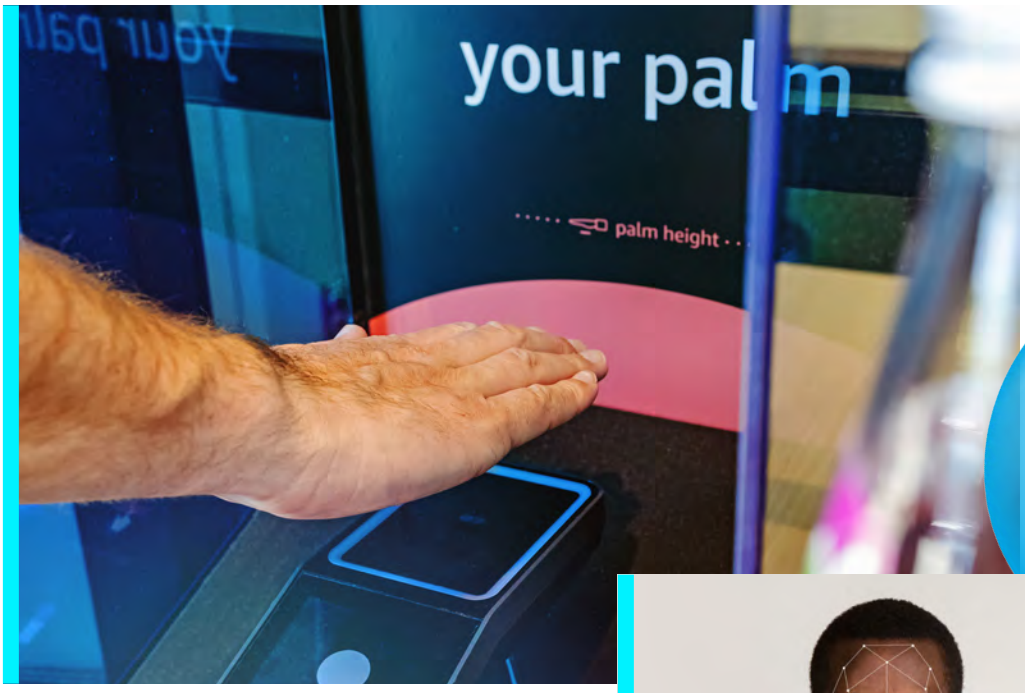
AI-powered computer vision similarly helps shoppers speed up their purchases thanks to its advanced recognition capabilities. Rather than spending time manually inputting the identity of certain items, such as loose groceries, computer vision cameras can identify fruit and vegetables automatically, leaving customers to choose from a set of options with the highest probability of accuracy. Since customers are slower at scanning than cashiers, averaging 85 seconds per basket at best, computer vision can ultimately accelerate touchless transaction flows. Coupled with RFID technology, computer vision can also be used to track inventory and provide a live picture of accurate stock levels, strengthening loss prevention and freeing up associates to optimize labor and better provide service to in-store customers.

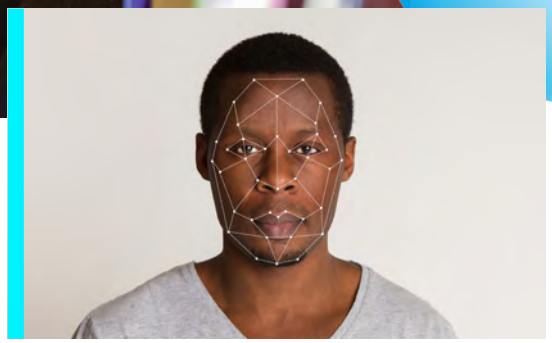
> ***77% of customers will avoid going to a store where they have previously had a long wait at the checkout***

Source: Retail Customer Experience



Additionally, computer vision can provide dwell time data for retailers, and help keep shelves stocked and optimally laid out, supporting targeted promotions and product information. The technology is already being used in US retailer Hudson's contactless stores, Nonstop, as well as on Walmart's Scan & Go app and in Coles Australia.





Seamless transactions: Biometric payments

Where RFID and Computer Vision technology can help reduce shrink and cut down on waiting times, biometric payments technology like FacePay and PalmPay can equally integrate to produce seamless and secure transaction flows. Utilizing either face-scanning or palm-reading sensors, biometric payments do away with cards or cash and instead use a shopper's unique physical features to conduct their payment, helping businesses speed up their identification and payment processes, as well as enabling customers to easily link to and access their loyalty programs and verify age.

> ***33% of UK consumers were victims of payments fraud in 2023, increasing from 23% in 2022***

Source: The Independent

Palm recognition is currently used in over 200 Whole Foods Market locations across the US, while face scanning payments are being trialled by Mastercard and used throughout stores in China. Since payments fraud is increasing online and in-store, with the global retail sector losing $429bn to counterfeit payments and chargeback scams in 2023, biometric solutions add a valuable additional layer of security as transactions quicken, ensuring that no matter the pace of your retail experience, it is reliable and assured.

Automation, insights and immersion: retail 2030 and beyond

Technology is in a constant process of evolution, being trialled, iterated and implemented to help keep retail agile and profitable as customer needs change. While existing tech such as RFID, computer vision and biometric payments are already laying the foundations for the future store, further experiments are occurring on the bleeding edge of research and development, producing innovative ways to shop for the next decade and beyond.

Fast-paced automation

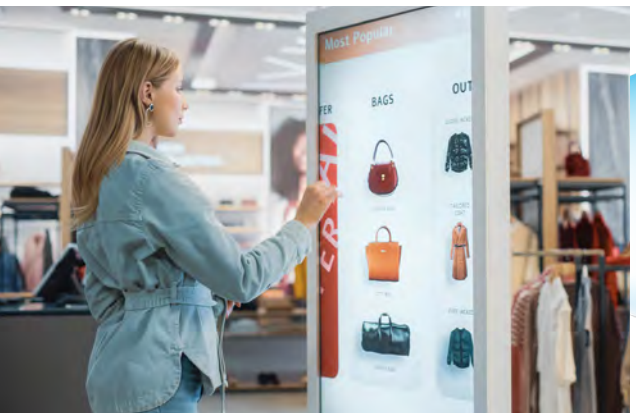
Labor is the backbone of retail operations, yet recent years have seen a huge rise in staffing shortages. 13.3% of businesses in the UK recently reported that they experienced a shortage of workers, while the US is forecast to face a shortage of 4.6 million workers by 2030. Reasons for this lack of staff are multi-faceted, including increased stress for frontline workers faced with hybrid roles, as well as limits on migrant labor forces. The effect on businesses can be severe, compromising their levels of service and risking growth and profitability.



38% of businesses haven't been able to grow due to labor shortages in the last year, while 12% have shrunk due to shortages

Source: CBI's Employment Trends Survey

One future solution to this labor shortage could lie in robotics. Increased in-store automation via smart shelves that restock automatically and AI interactive displays that provide customer information could free up associates to better focus on other tasks and reduce the possibility of burnout. Aisle-scanning robots are already being trialled to allow staff to remotely monitor inventory, while the global smart retail display market size was valued at $7.88 billion in 2020 and is already projected to reach $20.61 billion by 2028. According to Gartner research, by 2028 there will be more smart robots than frontline workers in manufacturing, retail and logistics due to labor shortages.



Immersive personalization

Curating a comfortable and efficient customer experience is key for ensuring future growth and loyalty, with 68% of customers stating they will likely not return to a store that fails to provide a positive customer experience. The next decade of retail could see bricks and mortar locations becoming far more flexible, immersive and data-driven to create a unique experience for each customer's needs. While AI-powered data insights could provide targeted recommendations and biometric payments can speed up the checkout process, the movement towards experiential retail might additionally include immersive experiences that blend the physical and online further through interactive displays, pop-up instore events and customizable products via 3D printing.

> ***71% of shoppers feel frustrated when the shopping experience is impersonal***
>
> ***68% of shoppers are unlikely to return to a store or site that provides a negative customer experience***

Source: Adobe

Circular sustainability and well-being

The climate crisis is not only a current consideration but a reality that will continue to become an ingrained feature of retail operations. Waste is one of the largest contributors to a business's environmental impact, with the garment industry producing 10% of the world's carbon footprint alone. The future store will therefore embed upcycling and circular economics into its operations, incentivizing customers to trade in or restore products rather than discard them. The implementation of the EU's Direct Product Passport, requiring retailers to produce a transparent record of an item's supply chain, will also encourage businesses in the future to employ data analytics to streamline their operations and provide greater transparency for consumers.

> ***80% of consumers say they are willing to pay more for sustainable produced or sourced goods***

Source: PWC



As well as sustainability, health and well-being will be an increasing feature of future retail operations, potentially utilizing in-store AI assistants to offer health-related advice or even perform basic health checks. This will integrate shopping with personal well-being, making it a targeted and holistic retail experience.

Future-proof partnerships



Producing memorable customer experiences and integrating the right technology to encourage future growth can seem an overwhelming task. Retailers must understand the latest advancements, act on their concerns without hesitation and choose the best technology for them if they are to stay ahead of their competition. Since a seamless and attentive customer journey is always the priority, retailers must also avoid faulty integrations of new tech that produce disruptions in service and sacrifice customer loyalty for the sake of chasing what is new.

One solution for retailers is to work with a trusted partner that has a longstanding history of helping the world's biggest brands tackle the latest developments in the fast-moving world of retail. At Flooid, we have more than four decades of experience as a trusted advisor and technological expert, helping retailers make the right choice for future growth.

When it comes to future-proofing retail locations and enabling businesses to adapt to new technology at pace, our range of services make change easy. Flooid's cloud, platform and endpoint management services all utilize innovative data monitoring and alerting solutions through interactive dashboards. Our Insights Data Platform puts the retailer in the driving seat, providing easily accessible data on stores and empowering associates to stay on top of tasks while flexing to the changing demands of their customer base.

Flooid's long standing experience with global retailers has already produced pilots in RFID and computer vision implementations, as well as the ability to facilitate FacePay and PalmPay. Our composable infrastructure and A/B testing also allows retailers to test new technology without producing major disruption, meaning businesses can focus on what they sell and who to, while Flooid takes care of the 'how'.

The future is arriving fast and with the help of Flooid, retailers can harness the exciting power of today's evolving digital technologies to prepare their businesses for whatever the decades ahead might hold.

If you are interested in learning how Flooid's solutions can help make your retail locations more agile, innovative and future-ready, please speak to a member of our team.

About Flooid

Flooid, a GLORY company, is a market-leading unified commerce platform provider that enables retail and hospitality brands to sell to customers flexibly and consistently, wherever they are and however they choose to shop. Our scalable cloud-native composable solution and services portfolio includes assisted and self-service experiences, an open API services platform and operational business analytics as well as cloud, platform and endpoint managed services that enable retailers to select the right mix of overall services and technology partners to facilitate the selling journey that's right for every customer. One composable, unified commerce platform.
Unlimited possibilities.

flooid.com

About Glory

As a global leader in cash technology solutions, we provide the financial, retail, QSR, cash center and gaming industries with confidence that their cash is protected and always working to help build a stronger business.

Our cash automation technologies and process engineering services help businesses in more than 100 countries optimize the handling, movement, and management of cash. While we span the globe, we personally engage with each customer to address their unique challenges and goals — enhancing staff efficiency, reducing operating costs and enabling a more rewarding customer experience.

Employing over 11,000 professionals worldwide with dedicated R&D and manufacturing facilities across the world, Glory is built on a rich customer-focused, technology-driven heritage spanning almost a hundred years.

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