

## Warming Up to the Future of Retail: Customer Centric, Technology First

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Retail & Business

### Warming Up to the Future of Retail: Customer Centric, Technology First



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The retail landscape is undergoing a seismic shift, largely propelled by technological advancements. The global pandemic and the ascent of eCommerce have only intensified the influence of technology. Retailers have leveraged technology innovations to enhance efficiency while remaining steadfast in their commitment to customer centricity. The result? Total experiences that delight both customers and employees.

However, the retail journey doesn't stop here. The evolution of customer behavior and technology continues unabated. Retailers are mandated to stay attuned to this evolution to stay ahead of the curve in terms of sales and customer satisfaction.

The future of retail is poised to ride the technology wave, further bridging the physical and digital realms. Retailers are looking beyond mere product sales on shelves, aspiring to build comprehensive ecosystems that encompass services spanning health, finance, entertainment, and more capitalizing on digitization and technology's ability to offer enhanced accessibility to consumers. In this era of technological transformation, barriers between industries are blurring, enabling retailers and other operators to seize opportunities rapidly by engaging directly with consumers.

Some of the technologies that are scripting this transformation and will continue to do so in the future are Artificial Intelligence (AI), Augmented Reality (AR), Virtual Reality (VR), Blockchain, Internet of Things (IoT), and others. These multifaceted technologies promise to revolutionize both physical and virtual operations and reshape customer relations. Let's take a closer look at these modern-day technologies that will undoubtedly shape the future of retail, catering to a digital-first, digital-only consumer base.

#### Generative AI will Drive Customer Benevolence

The ability of Generative AI to work with Large Language Models applying in-context learning to learn from analogy and generate responses based on enhanced understanding of context, improved reasoning, inference skills, and tailored problem-solving capabilities has come out as a potent force for businesses.

Generative AI is a powerful technology that leverages vast datasets to create personalized experiences and optimize various aspects of retail operations. It's not limited to one area but offers multiple benefits across different functions. In content creation and optimization, Gen AI autonomously generates and improves product descriptions and copy, reducing the need for extensive human involvement. It also excels at providing personalized discounts by analyzing purchase history.

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Gen AI extends its capabilities to customer interactions through the development of intelligent bots. These bots go beyond traditional AI bots by generating relevant responses in various formats, such as text and visuals, based on real-time data. They are efficient in handling customer inquiries and can identify upselling and cross-selling opportunities.

In the context of inventory management, Gen AI analyzes multiple data sources, including consumer sentiment and competitor data, to predict demand accurately. This helps retailers drive sustainability by optimizing supply and delivery, preventing inventory deficits, and avoiding wastage.

In the instance of supply chain management, Gen AI can assist with product configuration in transport, ensuring the best possible use of space and safe handling of goods, apart from suggesting the most viable transport routes. This ability to optimize the operational aspect of logistics not just saves costs but also augurs well for sustainability reducing carbon footprints, and ensuring minimum wastage of perishable and high-value goods.

Gen AI's real-time capabilities also extend to pricing optimization, where it can adjust prices based on competitor pricing, demand trends, and market conditions.

Gen AI can also play a crucial role in fraud detection by identifying counterfeit products, unauthorized sellers, and fraudulent activities, helping retailers save valuable resources and drive sustainability. Similarly, the technology can be utilized for product and packaging design optimization, reducing material use, and encouraging recyclable materials.

The versatility of the technology is already a talking point among retailers around the globe with 92% planning to ramp up their investments in Generative AI as per a GlobalNewswire release.

## Immersive Reality will No Longer be a Novelty

Retailers bet big on experience as a major differentiator and try using technology to drive experience as a differentiator. The evolution of Augmented Reality (AR), Virtual Reality (VR), and Mixed Reality has thrown open a new paradigm in experience that seamlessly marries the physical with the virtual. The ability to experience furniture, fashion, and more from the comfort of the drawing room is a relatively new experience, one that customers are eagerly absorbing and consuming. According to a survey by PWC, India, China, and Qatar are most keen on VR. The survey states that 32% of users buy products after checking them out on VR platforms. A similar report on AR from NielsenIQ highlights that 56% of customers feel more confident about the product using AR, while 61% said they prefer to shop with retailers offering AR experiences.

### AR/VR and MR empower retailers to:

- **Entertain** - Walmart collaborated with DC Comics and Marvel to bring superhero-themed AR experiences to selected outlets
- **Educate** - Vanity Planet's skin reporter app scans users faces to educate them about their skin types and possible skin conditions, aligning it with complementing makeup recommendations
- **Evaluate product fit** - IKEA uses AR to help users gauge the fit of furniture within a given surrounding enabling consumers to validate their purchase against their exact requirements
- **Enhance the post-purchase experience** - McDonald's used AR to help users discover the origins of ingredients used in their products to ensure customers know the source of their produce and enjoy consuming the products without hesitation

The evolving wave of spatial computing that utilizes a range of technologies, including AI, ML, AR, and IoT, to establish an awareness of the three-dimensional (3D) environment surrounding an object, enable it to interact seamlessly with its surroundings is a fast-developing technology poised to take the experience quotient to another level and promise an immersive, engaging future for retail consumers and better returns for retailers. The growing influence of immersive technologies is charting the way for retailers into the evolutionary world of the Metaverse. Retail giants like Nike, Gucci, and Adidas among others have already made a foray into the virtual world by buying real estate, building digital stores, conducting fashion shows, and hosting concerts. The future state of this space holds a lot of promise for retailers as it is expected to create a digital connection between the customer and the brand, like never before. Retail brands are excited about the opportunity as it provides them with direct access to zero-party data of customers, enabling retailers and service providers to establish a hyper-personalized connection with the customers. The customer is enthusiastic and buoyed by the surreal experience that is being rendered across these new digital platforms, which promises to better all previous experiences from the past.

## Expanding the Expanse with Omnichannel Integration

Powering the futuristic omnichannel retail ecosystem at the front end will be a headless commerce architecture that delivers a distinctive, consistent customer experience across channels and supports all touchpoints with shared functionalities, such as wish lists, appointment booking, and payments. This architecture is also expected to be more scalable and flexible than a traditional monolithic architecture as it is decoupled from the backend giving retailers the ability to drive changes faster. The world is steadfastly embracing IoT in the shape of wearables, home automation, and more. The headless architecture will help retailers deliver content across each device type without reinventing the wheel, keeping the experience consistent. Talking of the backend, the move towards a microservices-based architecture at the backend can also be a game changer for retailers. This decoupling of the monolithic architecture at the backend will help retailers to upgrade or revamp a specific

function module. For example, determining how to integrate the shop-in-shop or in-store pop-up marketing campaign for

function quickly, for example integrating biometrics into the sign-in function or integrating gesture recognition for payment. These new-age capabilities can be separately developed and deployed in a modular fashion. This is unlike how it is done in the traditional monolithic architecture where the complete system would need a revamp for the addition of any functionality.

## Blockchain Safeguarding Digital Assets across the Virtual Terrain

Blockchain technology is a decentralized ledger system that provides robust security and transparency for safeguarding digital assets in the retail sector across the digital landscape. Through its immutable and distributed nature, blockchain ensures the integrity of transactions and data, reducing fraud and enhancing trust. For example, in supply chain management, blockchain can trace the origin and journey of products, allowing customers to verify the authenticity and quality of goods. It also acts as a powerful tool for driving sustainability within the retail sector by providing retailers insight into their supply chains, promoting responsible sourcing and reducing waste. By verifying product authenticity, blockchain helps combat counterfeiting, ensuring that consumers receive genuine, quality products discouraging the production of environmentally damaging fakes.

In e-commerce, blockchain-based payment systems like Bitcoin offer secure and borderless transactions, eliminating the need for intermediaries. Blockchain can also be a game changer in driving loyalty programs enabling retailers to offer customers rewards securely, while smart contracts, an agreement based on blockchain technology that kicks in automatically once certain conditions are met, can enforce credible, transparent agreements on product authenticity, warranties, or refund policies, ensuring a seamless and trust-driven retail experience. Blockchain holds significant value in a rapidly digitizing world that is embracing Non-Fungible Tokens, or unique digital identifiers recorded on a blockchain ledger as an identification of ownership and authenticity for digital assets such as art, music, fashion, or any other collectible owned by an entity. One of the main advantages of NFTs is that they allow people to own and intellectual property. NFT cannot be replicated, a strong reason why fashion labels, and multinational retail conglomerates, are exploring the use of NFTs to secure ownership of digital assets and thwart counterfeiting.

## Embracing the Future of Retail Technology Today

As inflation and fears of an economic slowdown weigh heavy on the minds of consumers, curtailing their spending, retailers will need to embrace the advances in technology to attract, convince, and drive sales to build an all-encompassing retail ecosystem. Retailers will need to deploy new-age strategies powered by contemporary technologies such as artificial intelligence, blockchain, augmented and virtual reality, and more to get up close and personal with their customers building long-lasting trust and value. Retailers will have to look at technology not just for delivering convenience and experience but also as a medium to drive sustainability and security. The time is ripe for retailers to embrace the future of technology to catapult from digital transformation to digital ascendance.



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