

Future of retail:
Profitable growth through
technology and AI

February 2024

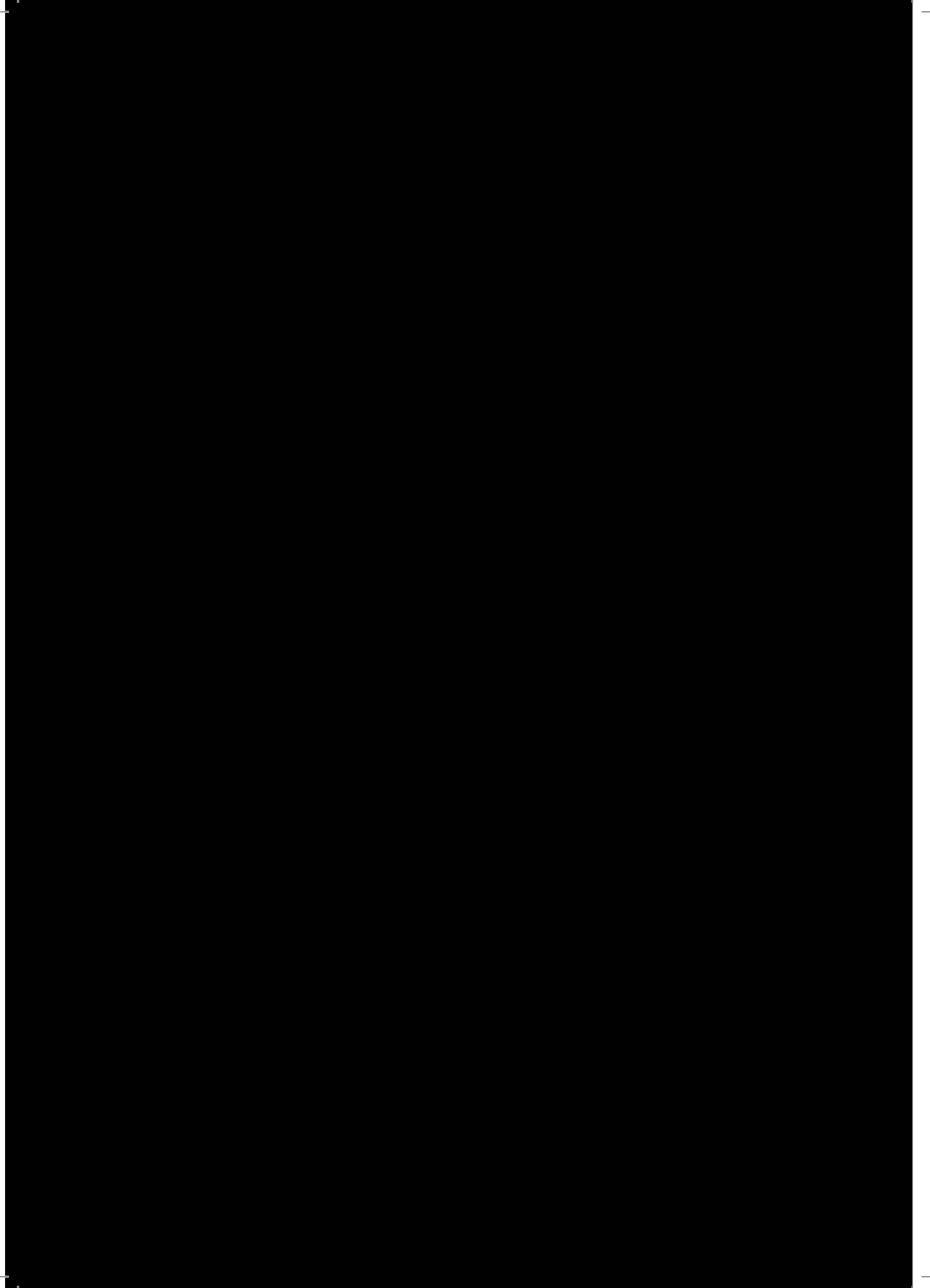


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Foreword by Deloitte



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The retail industry is currently at an inflection point. Shifts in the global macroeconomic landscape are profoundly altering consumer behaviour. Rising inflation, supply chain disruptions, and evolving priorities are pushing shoppers to demand greater value, transparency, and convenience. These factors, in turn, propel the rapid transformation of the retail industry.

Technology stands at the heart of this transformation. Rather than being just a tool, it is now the bedrock upon which retailers must build to meet the demands of modern consumers and ensure their investments pay off. This report delves into the ways emerging technologies are reshaping the industry. Artificial intelligence, the Internet of Things, mixed reality, and advanced analytics have the potential to streamline operations, personalise experiences, and even reshape our understanding of what shopping means.

Technology's true value lies not just in its existence but also in its strategic implementation with a clear path to achieve profitability and business outcomes. This report offers a thorough analysis of how disruptive forces can be used to achieve measurable success. This report also offers a practical framework to utilise technology and analytics to promote profitable retail growth. The report explores strategic alignment with business vision and goals, leadership sponsorship, collaboration with the larger ecosystem of change agents, and the formulation and measurement of Key Performance Indicators (KPIs) as key pillars to drive success.

This report will help you navigate this dynamic landscape. By understanding these forces and harnessing their potential, retailers can build organisations that are not only resilient but primed for sustained profitable growth.

Foreword by RAI



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In an era where India's retail sector undergoes transformative growth, driven by rising incomes, urbanisation, and digital expansion, the key to unlocking its immense potential lies in embracing technological disruption. Retailers recognise the pivotal role of Artificial Intelligence (AI), Internet of Things (IoT), Mixed Reality (MR), and advanced analytics in steering retail towards unprecedented innovation.

This report analyses these disruptive technologies, illustrating their profound impact across various retail functions—from personalised marketing strategies

to streamlined supply chains. It highlights how these innovations not only enhance customer journeys with tailored experiences and virtual interactions but also empower retailers to achieve operational excellence.

Today, it is imperative for retailers to integrate these technologies thoughtfully, focusing on strategic planning, change management, and sustainable ROI. This report is a comprehensive guide, offering actionable insights for retailers to harness these technologies effectively, ensuring resilience and success in India's dynamically evolving retail landscape.

Executive summary

India's retail sector is experiencing unprecedented growth, driven by urbanisation, increased disposable income, and digital integration. This evolution presents both vast opportunities and significant challenges for retailers. Businesses must adapt to the changing consumer landscape and effectively use technological advancements to ensure a substantial Return on Investment (ROI). To thrive, retailers must navigate these complexities by deploying a strategic and action-oriented approach that integrates advanced technologies, such as AI, IoT, smart robotics, MR, and advanced analytics, into their operations.

To capitalise on these emerging technologies, retailers should consider the following technology and analytics use cases:

- **Data platform:** Use a cloud-based platform that offers seamless integration across physical and digital storefronts, ensuring a consistent customer experience. This platform should support mobile-first strategies and provide 24/7 customer engagement capabilities.
- **AI and smart engine:** Deploy AI technologies for personalised customer experiences, including AI-driven recommendations and dynamic pricing models. Incorporate chatbots for customer service and smart shelves for inventory management, using machine learning algorithms to predict customer preferences and optimise stock levels.
- **Mixed reality and IoT solutions:** Implement mixed reality applications for virtual product trials and interactive marketing campaigns. Use IoT devices for real-time inventory tracking and smart robotics for automated checkouts, enhancing the physical shopping experience.
- **Data analytics and business intelligence suite:** Adopt advanced analytics tools to analyse customer data, gain insights into their buying behaviour, and tailor marketing strategies. Use predictive analytics for demand forecasting and inventory optimisation.

Retailers must explore innovative business models to stay relevant. These models capitalise on digital transformation opportunities and align with shifting consumer preferences.

Forward-thinking approaches redefine the retail experience, offering a roadmap for innovation, differentiation, and success in the digital era by meeting and exceeding modern consumer expectations. Retail business models include the following:

- **Subscription-based services:** Include personalised subscription boxes using AI algorithms to predict customer preferences. This fosters customer loyalty and generates steady revenue streams.¹
- **Retail-as-a-Service (RaaS):** Enable smaller brands to use your retail infrastructure, from physical space to e-commerce platforms, creating new revenue streams while providing customers a broader range of products.²
- **Experience and community-focused retail:** Transform retail spaces into experience hubs, offering workshops, product demonstrations, and community events, driven by customer data insights to enhance engagement and brand loyalty. Connect customers with shared interests and local vendors.³

Overcoming obstacles and embracing the future

The future of retail is bright, but realising its potential requires achieving tangible ROI from technology. Strategic alignment, flexibility, and planning are crucial, but the true test is harnessing technology to drive business goals.

Maximising ROI demands seamlessly integrating solutions with objectives to ensure progress towards defined success metrics. Adaptability and scalability become key allies, enabling retailers to adjust and maximise value. Thorough planning is a shield against pitfalls, allowing for anticipating and mitigating hurdles. Effective change management bridges technology and impact. Leadership, communication, and training foster buy-in and adoption. Continuous improvement evaluates the implications and adapts strategy, squeezing the most value from investments.

Retailers who strategically wield technology with an eye on value will transform the future of retail.

Introduction



The Indian retail industry plays a pivotal economic role, contributing 10 percent of GDP and 8 percent of employment.⁴ Recent years have seen remarkable growth fueled by urbanisation, rising incomes, improved logistics, expanded product offerings, and digital consumer accessibility. India is amongst the top five ~US\$1 trillion retail markets and could be the world's third-largest consumer

market by 2030,⁵ with a 10 percent CAGR growth to US\$1.9 trillion.⁶ This statistics demonstrates the sector's immense potential. As India continues to develop and embrace technology and enhance infrastructure, the retail sector is poised to solidify its role as a key economic driver.

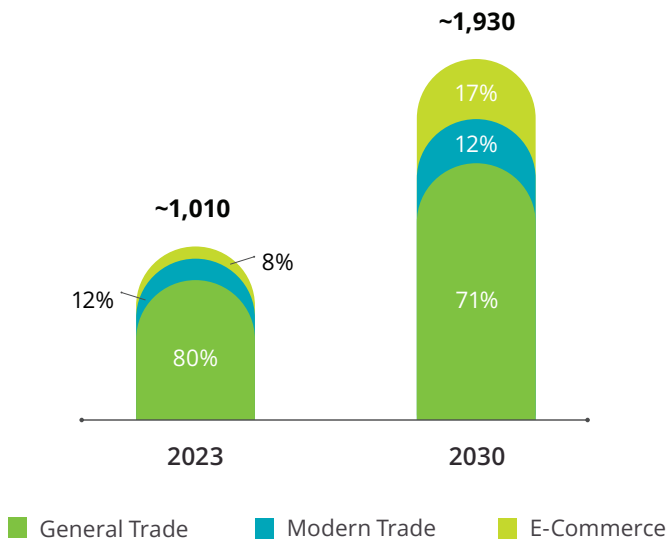
Retail landscape and changing consumer behaviour

Evolving channels in India

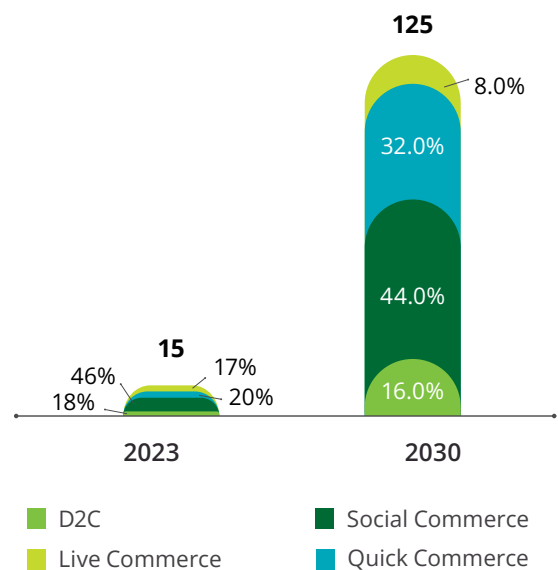
Diverse and complementary channels sustain the Indian retail sector's robust foundation. General trade, such as Kirana stores, forms an integral fabric. Modern trade, with regional and national chains, adds dynamism with broader options. Expanding online channels, including D2C platforms, marketplaces, and aggregators,

contribute to resilience and adaptability in the digital age. These distinct channels serve as harmonious touchpoints, offering tailored retail experiences that cater to diverse preferences and underscore the versatility and inclusivity of Indian retail.

Indian retail market by channel (in US\$ billion)⁷



Source: Deloitte analysis, Secondary research



Source: Deloitte analysis, Secondary research

India's retail landscape has significantly evolved from the dominance of general trade (Kirana, grocery, and mom-and-pop shops) to a diverse ecosystem. After liberalisation, FDI investments paved the way for big-box retailers, cash and carry players and e-commerce giants. However General Trade will continue to maintain a large share of 71%, and will need to shift towards evolved models.⁷ Modern trade is rising, especially in metros and tier 1 and 2 cities, contributing to the sector's transformation. New online players, such as ONDC, target to partner with local Kirana stores, as growing penetration of online commerce has made digital adoption imperative to these retailers. E-commerce is seeing more than 20 percent growth, projected to surpass modern trade by

2030. New commerce models, such as D2C, social, quick, and live commerce, will grow exponentially. Innovations such as demand forecasting algorithms and supply chain operations enhance efficiency for online sellers. This dynamic shift underscores India's evolving retail, blending traditional and modern channels to serve diverse consumer needs.

Channel exclusivity will further blur with the emergence of omnichannel and new-age models. As brands innovate, consumers shift towards more experiential outlook, going beyond transactions across consumer touchpoints.




Traditional retail

Emergence of pure-play modern retail in metro cities

Retail channels

- Neighbourhood kiranas
- Multi-brand outlets
- Supermarkets
- Showroom-format modern retail apparel




Organised retail

Emergence of hypermarkets, supermarkets, and cash & carry store formats coupled with geographical expansion from metros to Tier-1 cities

Retail channels

- Neighbourhood kiranas
- Multi-brand outlets
- Supermarkets
- Showroom-format modern retail (apparels and other categories)



Online retail

Emergence of technology-led transformation in retail

Retail channels

- Neighbourhood kiranas
- Multi-brand outlets
- Supermarkets
- Showroom-format modern retail (across categories)
- Product listing websites
- E-commerce
- Direct-to-consumer



New retail

Convergence of traditional and online channels

Retail channels

- Digitally enabled ecosystem
- Active interplay of tech solutions and digital savvy customers
- Growth of D2C as retailers bypass intermediaries to reach consumers faster

Purchase channel preferences

Customers show a marked brick-and-mortar preference for grocery, jewellery, and pharmacy categories, seeking physical experience and trusting stores for essential or high-value purchases. In these sectors, consumer preference for physical store is 2-4 times higher than digital channels.

Conversely, for consumer electronics and beauty/personal care, shoppers predominantly use online marketplaces for competitive pricing and broad selection. Beauty/personal care has the highest brand website preference across categories. For lifestyle accessories, luggage, and apparel categories, consumer have equal preference between online and offline channels.

In Grocery, high-income households have **2X** preference for quick commerce compared to mid-income households


In Apparel & Footwear, high-income households have **50 percent** higher preference for EBOs compared to mid-income households

Category	E-commerce marketplace	Offline large format store (LFR)	Offline mom-and-pop store (GT)	Quick commerce	Single brand store (EBO)	Key remarks
Grocery		2 (~25%)	1 (~35%)	3 (~20%)		
Consumer electronics	1 (~55%)					LFR, GT, and EBO each are preferred by 10-15% consumers
Apparel & footwear	1 (~40%)				2 (~25%)	
Beauty & personal care	1 (~45%)					LFR, GT, EBO and brand websites each are preferred by 10-15% consumers
Furniture & home furnishings		3 (~20%)	2 (~25%)		1 (~30%)	
Gems and jewellery/luxury			2 (20%)		1 (~60%)	
Pharmacy, health and wellness			1 (~50%)		2 (~25%)	
Consumer durables/white goods	2 (~25%)		1 (~30%)			LFR and EBO each are preferred by 15-20% consumers
Luggage	1 (~40%)					LFR, GT and EBO each are preferred by 15-20% consumers
Lifestyle accessories (watches, eyewear, etc.)	1 (~40%)				2 (~25%)	Each LFR and GT are preferred by ~15% consumers


Income group: Low: < INR 3 LPA | Middle: INR 3-30 LPA | High: > INR 30 LPA.⁸

Digitisation of consumer


Digital consumers broadly spend time on the following eight activities round the clock, though this digital usage has no “time slot” in the user’s life—it is omnipresent!




Feed
Scroll through the updated content list to read news, watch videos, listen to music, and other forms of media consumption. An algorithm controls these **feeds**.




Socialise
Enable interactions with individuals and communities through social media, platforms, and instant messaging.




Read
Switch to **reading** to access more information and research (home décor ideas, health tips, cooking recipes, etc.).




Shop
Purchase goods or services through e-commerce (and other emerging commerce models) after exploring several product catalogues.




Learn
Access various online learning courses and content offered by ed-tech platforms and publicly available material.



Finance
Help managing **finances** through online payment methods (UPI, net banking) and investments through various fintech apps.



Choose
Browse the options for immediate or long-term requirements, e.g., buying a house, switching jobs, and searching for a partner through online platforms.



Sell
Sell personal or professional goods and services online through peer-to-peer marketplaces.

As users today are always online, retailers must capture the digital landscape to improve brand awareness, drive engagement, and increase conversions. Brands must establish a robust online presence in marketing and exploring online fulfilment channels.

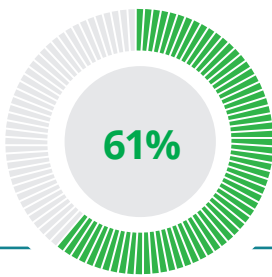
A brand needs to identify ways to engage digital users who expect 24/7 availability of services and support. Moreover, optimising for mobile platforms is imperative, allowing the brand to tailor strategies based on consumer’s online behaviour.

Technology in retail and its growing importance

The disruptive potential of future technologies is deeply intertwined with evolving consumer behaviour. Technological advancements can reshape how consumers interact with products, services, and information, influencing their preferences, expectations, and habits. India has emerged as a powerhouse in the digital realm, ranking second globally in internet users (830 million)⁸ and smartphone users (750 million).⁹ With 220 million online shoppers, India holds the third position globally.¹⁰ The Indian consumer market has a strong affinity for innovative technologies, and their widespread usage has catalysed increased investment, product development, and technological advancements in the retail sector.

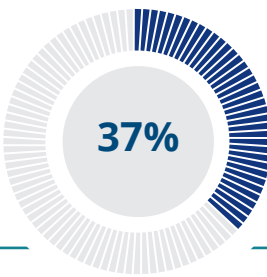
Top three areas to improve customer's shopping experience⁸

Easy product discovery



- Important across age groups.
- High income households have **50%** higher preference for automation compared to medium income HHS.

Prompt post-purchase support & service



- **~50%** more Millennials & Gen X prefer this compared to Gen Z.
- **~70%** of consumers prefer high human interaction during post-purchase support & service.

Customised offers & communications

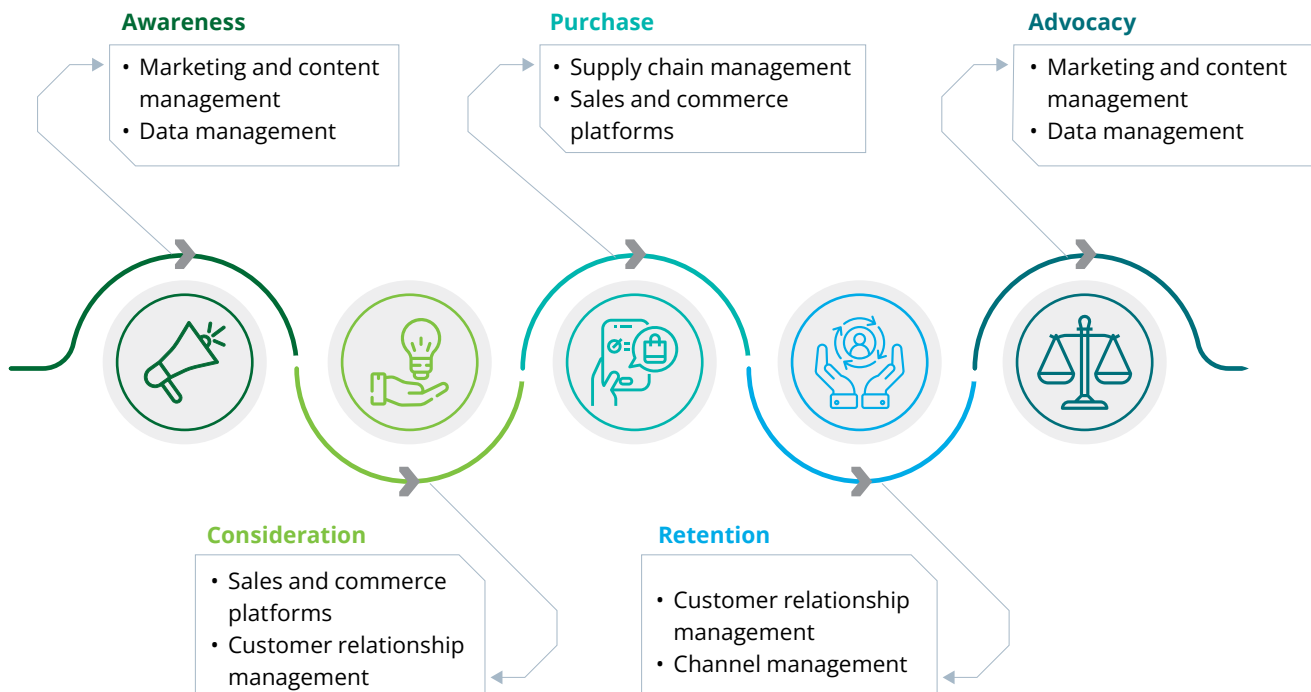


- **~60%** more Millennials & Gen Z prefer this compared to Gen X

The digital revolution has reshaped retail into phygital/omnichannel experiences integrating physical and digital. This has disrupted traditional and online models as brands use technology stacks to enhance customer journeys and meet evolving expectations, driving ROI.

Retailers have invested in CRM, clienteling, commerce and marketing platforms, POS, OMS, CDP, TRM, and analytics to deliver personalised, engaging, and convenient experiences. This ultimately empowers brands to thrive in India's dynamic market.

Consumer journey with current technology intervention





In ease of product discovery, high-income households have a **50 percent** higher preference for automation than medium-income households to elevate their shopping experience.⁸



In prompt post-purchase support, **70 percent** of consumers prefer high-to-moderate human interaction.⁸



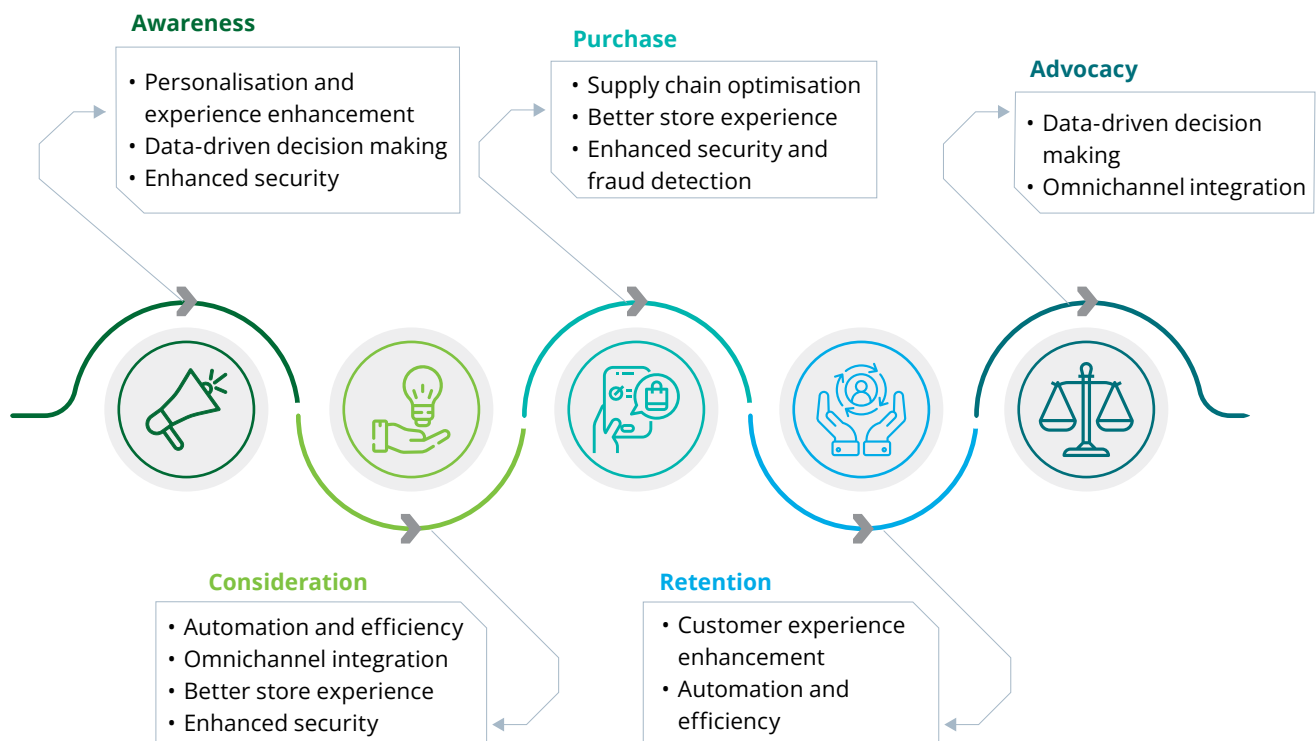
Emerging technology landscape



Key trends leading to emerging retail technologies

In the dynamic retail business landscape, several key trends are catalysing the adoption of emerging disruptive technologies, such as AI, IoT, smart robotics, MR, and advanced analytics. These trends are reshaping the industry, offering novel opportunities for businesses to enhance their operational efficiency and customer experience.

Consumer journey with emerging technology intervention



Personalisation and customer experience enhancement

Retailers use AI and advanced analytics to provide personalised shopping experiences. AI algorithms analyse customer data to tailor product recommendations, marketing messages, and even in-store experiences. This trend is driven by the growing consumer expectation for personalised and seamless shopping experiences both online and in physical stores.

Supply chain optimisation

The retail industry is adopting IoT and AI to optimise supply chains. IoT devices track inventory in real-time, providing valuable data for inventory management, while AI assists in predictive analytics for demand forecasting. This trend is fueled by the need for retailers to reduce costs, minimise waste, and respond swiftly to market changes.

Enhanced in-store experience

Mixed reality technologies, including Augmented Reality (AR) and Virtual Reality (VR), are used in retail to enhance the in-store and digital experience. These technologies allow customers to visualise products realistically, aiding in decision-making.

Automation and efficiency

Robotics technology is becoming more prevalent in both customer-facing and backend operations in retail. Smart robots are being used for inventory management, cleaning, and even as shopping assistants. This trend is driven by the need to enhance operational efficiency, reduce labour costs, and improve customer service.

Data-driven decision making

Advanced analytics and AI enable retailers to make more informed decisions. By analysing large volumes of data, retailers can gain insights into customer behaviour, market trends, and operational efficiency. This trend is essential in an increasingly competitive retail landscape where data-driven strategies can provide a significant advantage.

Omnichannel integration

Retailers integrate AI and IoT technologies to create seamless omnichannel experiences. By synchronising online and offline channels, retailers can offer a consistent and convenient shopping experience, which is increasingly important as consumers move fluidly between online and physical stores.

Enhanced security and fraud detection

AI and advanced analytics are employed for security and fraud detection. These technologies can identify suspicious transactions and prevent theft, both online and in physical stores, thereby protecting profits and enhancing customer trust.

In conclusion, these trends highlight the growing importance of disruptive technologies in the retail sector. Retailers can gain a competitive edge through improved operational efficiency, enhanced customer experiences, and more informed decision-making.

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Higher awareness of emerging technology and solutions amongst functional heads can create significant value for an organisation.

- Chief Marketing Officer of a leading apparel brand

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View on technology across the value chain

From the key trends in retail business to the adoption of disruptive technologies, exploring how these technologies are evolving across various segments of the retail value chain is crucial. From product development to post-sale services, each stage experiences significant transformations due to technological advancements.

The retail value chain



Product development and sourcing

In the initial stages of the retail value chain, AI and advanced analytics are being used to predict market trends and consumer preferences, thereby informing product development and sourcing decisions. IoT devices can also track and optimise the conditions under which products are manufactured and transported, ensuring quality and efficiency.



Supply chain and inventory management

Smart supply chains enabled by these technologies offer real-time tracking, predictive maintenance of equipment, and efficient inventory management. Robotics are also employed in warehouses for automated sorting, packing, and handling, reducing the time from manufacturing to market.



Marketing and customer acquisition

AI-driven analytics are crucial in developing targeted marketing strategies. Retailers can create personalised marketing campaigns by analysing customer data to enhance customer acquisition and retention. Social media platforms and digital marketing tools integrated with AI algorithms help reach the right audience with the right message.



Sales and distribution

In this stage, omnichannel strategies are key. AI and IoT ensure a seamless integration of various sales channels, providing a unified customer experience. For online sales, AI chatbots and virtual assistants enhance customer interaction, improving service quality and efficiency.



Customer experience and services

MR technologies in retail stores enhance the shopping experience in an interactive and informative way. AI and IoT provide personalised shopping experiences, both online and in-store, by understanding customer preferences and behaviour. Smart robotics, such as service robots, can assist in customer service and in-store navigation.



Post-sale services and customer relationship management

After the sale, AI and analytics continue to play a crucial role in customer relationship management. These technologies can help understand customer feedback, manage returns and exchanges efficiently, and provide personalised after-sales services. Predictive analytics can also be used to anticipate future customer needs and preferences, aiding in customer retention.



Feedback loop for continuous improvement

AI and advanced analytics can analyse data gathered throughout the retail value chain to improve products and services. This feedback loop is essential for retailers to adapt to changing market conditions and consumer preferences, thus maintaining a competitive edge.

The implemented technology across the retail value chain creates more efficient, customer-centric, and adaptable business models, strengthening consumers' experiences.

“ Building credibility within the organisation by delivering business benefits of tech implementation goes a long way in procuring approvals for future implementations.

- Chief sales and marketing officer of a leading lifestyle brand in India

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Emerging potential disruptions

Harnessing AI

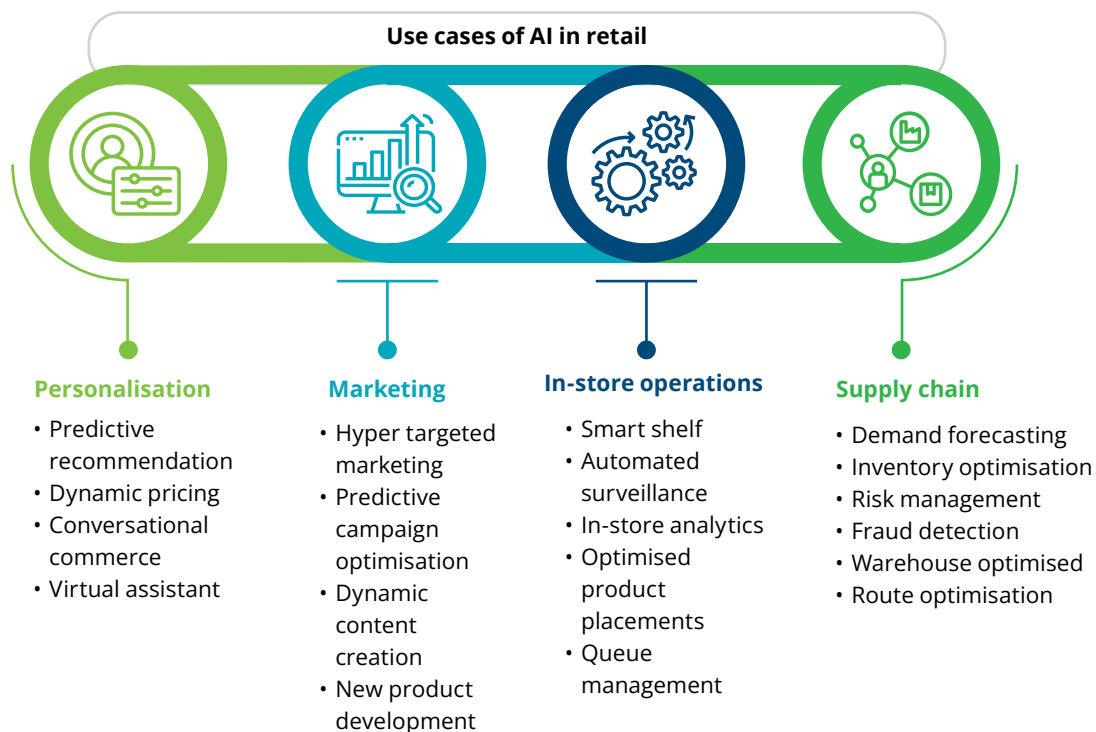
Unveiling AI's power: A brief introduction

Retail is on the brink of massive transformation propelled by AI, rapidly getting adopted, disrupting practices, and redefining customer experiences. By 2025, 20 percent of top global retailers will drive holistic results using distributed AI systems.¹¹ In a recent survey, 91 percent of executives voted AI to be the top game-changing retail technology in the next three years.¹² Retailers can benefit from AI across personalisation, marketing, supply chain, operations, etc. With personalisation, brands achieve benefits, 18 percent lower acquisition costs, 20 percent higher customer spend, 30 percent higher customer satisfaction, etc.¹³ From revolutionising

sales and marketing to optimising supply chains and operations, AI will reshape how people buy and sell.

Gen AI in retail integrates these capabilities to revolutionise aspects, such as marketing, sales, product development, and customer service. A valuable use case is market-aligned product development using generative AI's advanced algorithms to analyse market trends and consumer preferences. Leading CPG companies employ generative AI platforms that aid in validating new product ideas and market research report creation.¹⁴

AI's disruptive touch: Transforming retail experiences



Personalisation at its finest: AI enables tailored shopping experiences with personalised recommendations and enhanced customer solutions. Around 71 percent of consumers expect personalised experiences from their data.¹⁴ Customers benefit from more relevant content, increasing brand loyalty, while retailers see higher sales and revenue. The real-time adaptability ensures personalisation with changing preferences, displaying the positive impact of AI.

Predictive recommendations: AI analyses customer data to suggest relevant products and provide personalised evaluation and suggestions, boosting conversion rates and average order value. For example, a global beauty brand integrated a digital skin diagnostic tool and personalised beauty regimen technology into e-commerce experiences and virtual makeup sessions. Also, AI-powered search engines understand user intent and recommend relevant

products, improving buyer experience and conversion rates. An online fashion retailer has reported that personalised search recommendations increase average basket size value by 40 percent, ensuring customers find what they need effortlessly.

- **Dynamic pricing:** Dynamic pricing in retail, facilitated by AI algorithms, continuously analyses real-time data and market trends to adjust product prices. This approach optimises pricing strategies for enhanced profitability and ensures competitiveness by dynamically meeting the demand. For instance, a Sweden-based fashion retailer's AI-powered

pricing strategy optimises prices while remaining competitive and maximising profitability.

- **Conversational commerce:** AI-powered chatbots and virtual assistants offer 24/7 support, answer product questions, and facilitate purchases. Per a French beauty and personal care retailer's assistant, AI can provide seamless assistance and drive online sales. Picture browsing products and placing orders through voice commands will make online shopping even more accessible

About **67 percent** of consumers were excited to try smartphone/in-store assistant where you ask for an "outfit for my beach vacation in Goa" and have a conversation with the virtual assistant throughout the purchase journey.⁸

Marketing with precision

AI is transforming retail marketing through advanced analytics and personalised insights. Around 45 percent of marketing leaders plan to invest in GenAI in the next 12–24 months.¹⁵ Machine learning allows retailers to understand preferences, predict trends, and optimise pricing. Automated processes, such as dynamic pricing and personalised campaigns, improve efficiency by swiftly adapting to market changes and tailoring promotions to customers. AI can engage customers in real-time with aligned and consistent communication.

- **Hyper-targeted advertising:** This uses advanced data analytics and AI algorithms to analyse consumer preferences, behaviour, and demographics. Businesses can deliver highly personalised and relevant marketing messages, resulting in increased engagement, improved conversion rates, and a more effective allocation of advertising budgets. Picture an American athletics corporation's AI-powered ads on their community club app, tailoring offers based on users' training preferences and boosting click-through rates.
- **Predictive analytics:** AI forecasts future trends and customer behaviour, helping tailor marketing campaigns and optimise resource allocation. A global food & beverage company uses AI with end-to-end analytics to deepen customer collaboration, improve product assortment, and enhance promotion effectiveness. Similarly, a well-known British e-commerce company places AI-powered. Customer's interest-based, personalised marketing content on the right channel, reducing cost per lead by 31 percent.
- **Dynamic content creation:** AI generates personalised marketing, product descriptions, social media posts, and even new product design suggestions, saving time, increasing engagement, and ensuring product market fit. Imagine AI

crafting compelling product descriptions that resonate with individual customers, boosting conversion rates, or providing new product recommendations based on the macro scenarios, consumer trends, and market dynamics.

Revolutionising in-store operations

AI is revolutionising in-store retail operations by streamlining processes and enhancing customer experiences. AI optimises inventory management, improves product placement with smart shelving, and streamlines checkout through automation to drive efficiency. AI-powered robots assist with customer service, while surveillance systems enhance security. AI's predictive capabilities enable efficient queue management for a seamless in-store experience and improve operations efficiency and satisfaction for more successful retail environments.

- **Smart shelves:** These monitor inventory levels in real-time, triggering automatic reorders and preventing stockouts. A hypermarket chain's implementation of smart shelves ensures that shelves are always stocked, offering a hassle-free shopping experience.
- **Loss prevention:** AI cameras analyse customer behaviour and detect suspicious activity, deterring theft and improving store security. A German athletic apparel corporation has adopted anomaly detection in its stores, which helps decrease shoplifting.
- **In-store analytics:** AI tracks customer movement and analyses purchase patterns, optimising store layout and product placement. A large global furniture retailer's in-store analytics led to more than 10 percent rise in in-store traffic and high sales growth within a month.

Optimising the supply chain

AI supports retail supply chains, delivering significant benefits. Advanced analytics optimises demand forecast, minimises overstock, and automates logistics. AI streamlines inventory management through continuous monitoring and stock-level adjustments. Route optimisation reduces transportation costs and enhances delivery efficiency. It can ensure complete transparency and traceability in the supply chain.

- **Demand forecasting:** AI accurately predicts future demand, optimising inventory levels and reducing warehousing costs. A hypermarket chain gained a 14 percent reduction in store-level inventory with AI-powered demand forecasting, ensuring efficient use of storage space.
- **Inventory optimisation:** AI-based inventory optimisation uses advanced algorithms to analyse historical data and demand patterns, helping retailers maintain optimal stock levels. This approach minimises stockouts and overstock, boosting supply chain efficiency and streamlining inventory management cost-effectively. Global online commerce players' robotic warehouses exemplify how AI streamlines logistics, facilitating their fast and reliable delivery system.

- **Risk management:** Risk management with the power of AI in the retail supply chain employs advanced algorithms to assess and mitigate potential disruptions, such as geopolitical events or natural disasters. Retailers can enhance supply chain resilience by proactively identifying and addressing risks to ensure continuity and minimise the impact of unforeseen challenges. A global FMCG uses AI solutions for a risk-covered supply chain that quickly responds to real-time trends and market changes.

AI's disruptive potential in retail is evident through diverse and adaptable applications tailored to retailers' needs. From personalised customer experiences to optimised supply chains, AI is reshaping retail, offering innovative solutions to meet evolving consumer expectations and dynamic markets. As retail continues embracing AI, strategic integration of these technologies will redefine standards and drive unprecedented growth and efficiency. With rising use cases and acceptance, mainstream AI adoption in retail will take 5–10 years, delivering transformative benefits.¹⁶

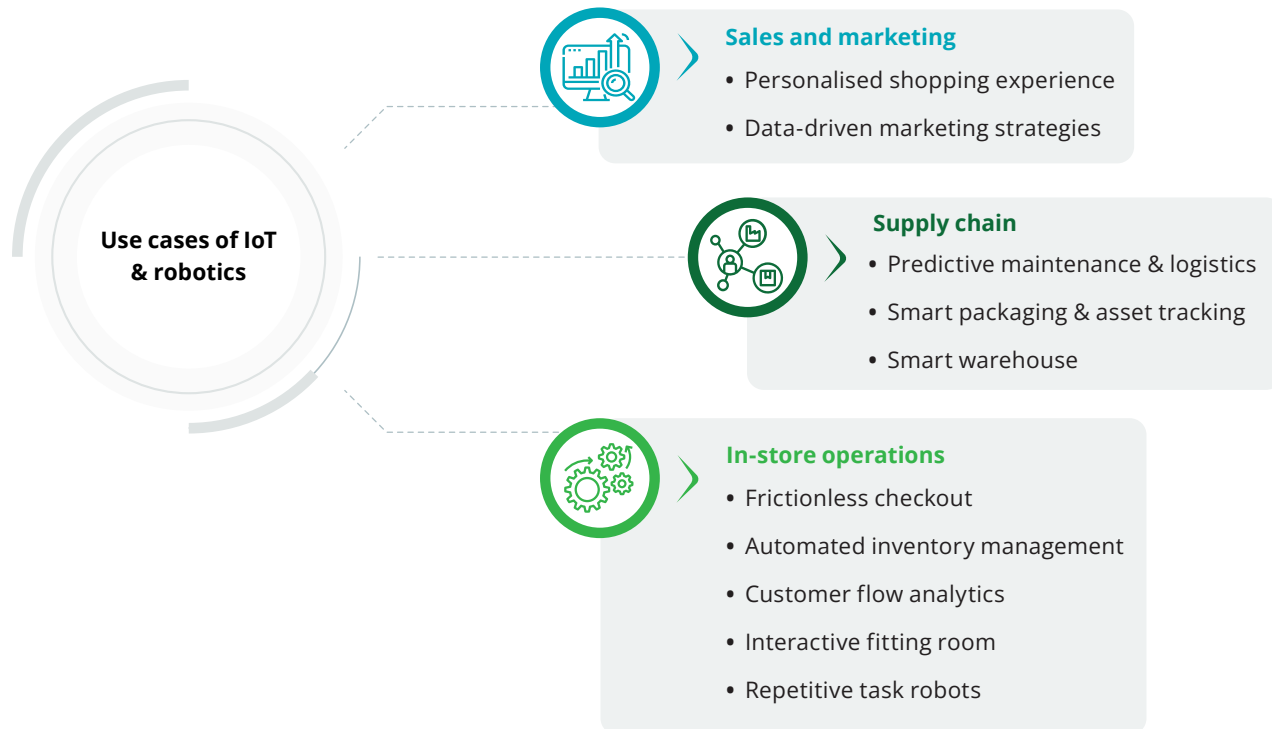
The retail revolution: IoT and smart robotics

A glimpse into the connected future

IoT and robotics in retail integrate smart devices and automated systems to enhance efficiency, optimise processes, and deliver personalised experiences through real-time data and advanced technologies. IoT sensors embedded in shelves provide inventory data. Robots restock and complete orders. Interactive displays personalise shopping with recommended products. This exemplifies the vision of IoT and robotics disrupting and redefining shopping. The IoT retail market will grow 28.2 percent from 2023 to 2032.¹⁷ These technologies are the second era of digital retail since 2020.¹⁸ We will explore the disruptive potential of IoT and robotics across retail functions, with real-world examples illuminating the path ahead.

Around **92 percent** of consumers were excited to try or have already tried an interactive display in the store which engages with them to provide style advice, product recommendations and key benefits.⁸

Disrupting across the retail landscape



Empowered sales and marketing

The convergence of IoT and smart robotics in retail revolutionises customer engagement. Smart sensors and beacons gather real-time data for highly personalised marketing, while automated checkout and smart robotics enhance the in-store experience, reducing wait times and offering tailored promotions. These use cases will greatly enhance the customer experience and support business growth.

- Personalised shopping experiences:** IoT sensors track customer movements and preferences, triggering targeted promotions and recommendations via digital signage or mobile apps. Such tech in retail will transform the shopping experience by using real-time data; it fosters a customer-centric retail environment. Imagine a global supermarket chain using IoT-based beacons to collect user data and send hyper-personalised content, providing recommendations corresponding to the department where customers shop inside the store.
- Data-driven marketing strategies:** Use real-time insights to enhance customer engagement. By analysing consumer behaviour through IoT devices and robotics, retailers can tailor campaigns, optimise targeting, and drive more effective personalised marketing efforts. A large pharmacy chain in the US displayed targeted advertisements to store-goers on the digital cooler doors based on the customer's segmentation by IoT solution.

Revolutionised supply chain

In retail supply chains, IoT and smart robotics bring revolutionary improvements, providing real-time asset tracking, predictive

maintenance, and automated sorting. IoT's role in demand sensing enhances inventory management, creating a more agile and responsive supply chain aligned with actual consumer needs.

- Predictive maintenance and logistics:** IoT and robotics enhance equipment maintenance and supply chain management by using real-time data to predict issues, strategically schedule maintenance, and optimise logistics. This leads to increased operational efficiency, reduced downtime, and improved supply chain performance. A large global retailer uses sensors and IoT applications to monitor the temperature of individual refrigerators and the equipment's condition to take proactive measures and prevent its breakdown.
- Smart packaging and tracking:** By integrating sensors and robotic tracking, retailers will achieve real-time inventory visibility, reduce losses, increase accuracy, and ensure smooth supply chain management, ultimately enhancing operational efficiency and customer satisfaction. A German supermarket chain uses IoT technology to get visibility on its goods and employees' movements, both within the warehouse and in transit.

Efficient in-store operations

IoT and smart robotics reshape in-store operations, creating a clean, sustainable, and efficient store. Smart lighting, beacons, and queue management systems enhance the shopping experience, while IoT-connected cameras with advanced analytics bolster security and loss prevention efforts.

- **Frictionless checkout:** Implementing self-checkout systems, powered by IoT and robotics, will enable faster, independent customer purchases, reducing wait times and automating transactions. This will enhance the operational efficiency and overall retail experience. The economic value of self-checkout as an IoT use case in retail is estimated to be the highest and to grow at the CAGR of ~40 percent through 2020-2025, followed by IoT-based personalised promotions.¹⁹ An Indian retailer launched a completely computerised retail store with a seamless customer experience using IoT-based smart checkout.
- **Automated inventory management:** Retailers can real-time monitor stock, minimise errors, and streamline restocking by using connected devices and robotics to reduce cost and optimise inventory management. An athletic apparel retailer uses RFID-based technology for customer-facing inventory managers so buyers can conduct a real-time check to ensure the desired product is available at the nearest store.
- **Customer flow analytics:** IoT sensors enable real-time tracking of customer movements, allowing retailers to

optimise store layouts, product placements, and navigation, ultimately increasing sales and improving shopping satisfaction. For example, a leading health and beauty retail group with over 15,000 stores across the globe, used a customer tracking system that improves customer experience, provides insights into the most popular sections of a store, monitors the number of customers at the checkout, and tracks areas where employees spend most of their time.

The road ahead

Retail's future is paved with innovation. IoT store monitoring and smart robotics have the capability and promising acceptance to deliver transformational benefits with mainstream adoption in 2-5 years.²⁰ We can expect further disruptions in personalised pricing, dynamic in-store experiences, and fully automated stores as these technologies evolve. While offering immense potential, challenges remain around data privacy, security, and workforce upskilling. By strategically harnessing these technologies, retailers can unlock new levels of customer engagement, operational efficiency, and a thriving future in evolving retail.

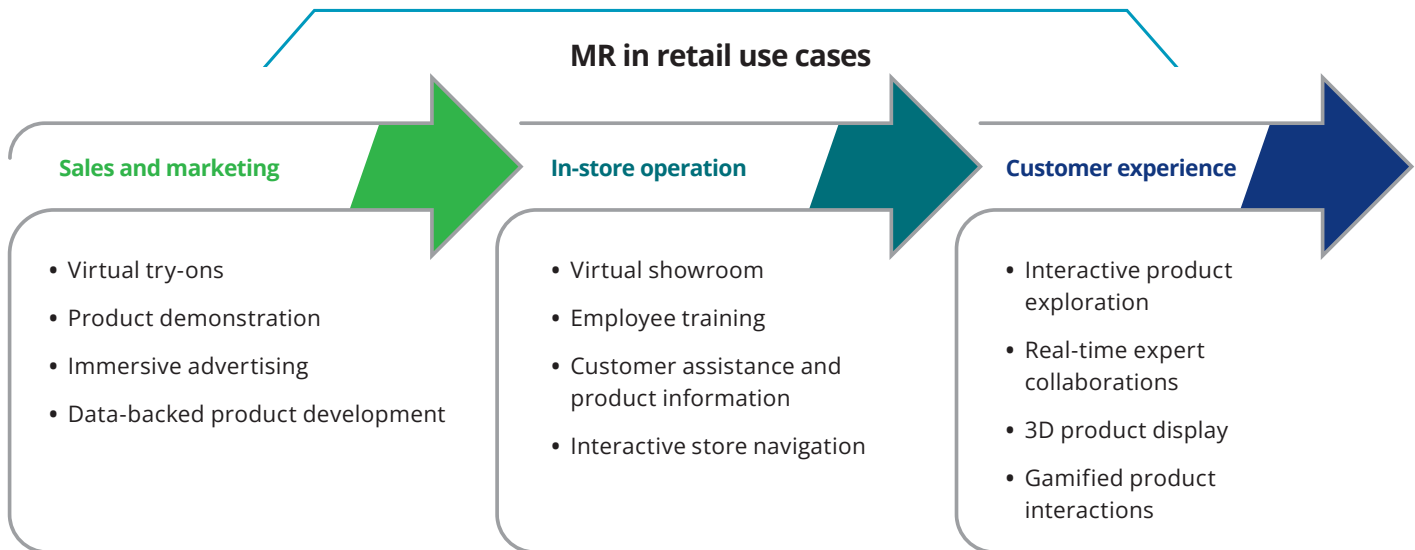
Mixed Reality (MR): Bringing a paradigm shift

Understanding mixed reality

In the ever-evolving retail industry, staying ahead of the curve is imperative for businesses to thrive. The advent of emerging technologies has ushered in a new era. Among them, MR stands out as a disruptive force set to redefine how retailers engage with customers. By 2027, immersive shopping technologies will expand to enable more than 7 percent of sales interactions in nonfood

segments from less than 1 percent in 2022.²¹ Let's explore how MR can transform the retail industry, including its applications, benefits, and potential impact. Customers expect a unified view of products, services, and processes, requiring retailers to strategically scale unified commerce execution by investing in technologies such as MR.²²

Transforming the retail landscape



Supporting sales and marketing

MR, with sales and marketing strategies, is reshaping customer interactions. MR's fusion of digital and physical experiences enables captivating product demos, virtual try-ons, and interactive campaigns. Retailers benefit through higher conversion rates, fewer returns, greater customer confidence, and more.²² This segment explores how MR revolutionises retail sales and marketing, creating transformative consumer engagements.

- **Virtual try-on experience:** Today, customers can only imagine stepping into a store and instantly seeing themselves adorned in any outfit they desire. However, with MR, they can experiment with styles, sizes and colours, finding their perfect fit without the hassle of changing rooms. For businesses, this will boost sales, reduce returns, and attract shoppers to browse products in a personalised shopping wonderland. An American multinational retailer collaborated with a technology player to gain expertise and has launched a virtual fitting room.
- **Virtual product demonstrations:** MR will enable interactive product demonstrations, allowing customers to visualise products in their environment, enhancing engagement and sales, and overcoming geographical limitations. A Swedish multinational furniture retailer introduced its MR-based app for product demonstration in lifelike virtual replicas of customer spaces. A large automotive manufacturer has adopted an MR solution to test drive for new car development, evaluating prototypes, designs, and safety technologies.

Upbeat in-store operations

In-store operations are undergoing a tech revolution, with MR as a driving force. From interactive navigation guiding customers through aisles to virtual showrooms breaking physical barriers, MR enhances efficiency and elevates experiences. Around 71 percent of retail CIOs plan to increase store technology spend, including MR, for more immersive experiences in unified commerce.²³ MR is innovating operations, offering retailers powerful tools to streamline processes and craft seamless retail experiences.

- **Virtual showrooms:** Transform in-store operations by creating virtual spaces for customers to explore and customise products. These showrooms surpass geographical barriers, deliver enhanced brand experience, and reduce physical space overheads. A few large global retail brands have already experimented with having no-inventory stores.
- **Employee training:** MR in employee training offers immersive simulations for practical learning, such as virtual machine repairs or simulated sales interactions. This approach accelerates skill development, cuts training costs, enhances safety with virtual risk practice, and improves confidence and knowledge retention. A global retailer chain embraced an immersive learning initiative that allows associates to engage in hyper-realistic practice scenarios and prepares them for potential issues in advance.

Seamless customer experience

Customer satisfaction dictates retail success, and MR redefines how customers engage with brands. MR's impact spans from

virtual try-on experiences boosting online confidence to real-time collaboration transcending geographical constraints. This section unravels the immersive journeys crafted by MR, shedding light on its profound influence on customer experience and brand loyalty in the ever-evolving retail landscape.

- **Interactive product exploration and storytelling:** MR transforms retail by enabling customers to interact with 3D models and discover product stories, enhancing understanding and brand connection. This leads to informed purchases and increased confidence. For businesses, it offers insights into effective narratives and interactions, shaping product and marketing strategies. MR shifts focus from selling products to crafting experiences, converting browsers into loyal customers by making stories and products more

engaging. A global automotive brand uses MR to present life-size products and embedded technologies.

- **Real-time collaboration with experts:** Real-time expert collaboration through digital overlays allows remote specialists to assist onsite, such as mechanics visualising repairs with AR glasses or surgeons providing holographic guidance. This enhances problem-solving, workflow efficiency, and reduces downtime, offering location-independent access to expertise. It fosters a collaborative future where distance is irrelevant and knowledge is shared seamlessly. For example, a US home security leader used MR-based real-time virtual assistants for customer service, gaining major cost savings and satisfaction.

About **65 percent** of consumers were excited to try a virtual assistant which guides you during do-it-yourself product assembly/installation or repairs through MR solutions⁸

As retail evolves, embracing MR is a strategic imperative. MR will see mainstream adoption in retail in 5–10 years, delivering major benefits.²⁴ Blending physical and digital realms opens unprecedented possibilities to enhance customer experiences, drive sales, and stay competitive. Retailers strategically adopting MR's transformative power will lead the charge into a future where real and virtual worlds converge seamlessly.

Advanced analytics: The backbone of retail transformation

In an age of hyper-connectivity and data flood, modern retail requires more than instinct and spreadsheets. Advanced analytics is a mix of algorithms, computing, and human ingenuity, which is rapidly transforming retail. Its impact goes beyond data crunching to reshape decisions, drive efficiency, and forge customer

connections. Around 87 percent of retail CIOs and tech leaders will increase analytics investments by 2024.²⁵ With such acceptance, the retail analytics market will see more than 21 percent CAGR growth over the next three years.²⁶

Advanced analytics is a game-changer in retail due to the following reasons:



Turning data into actionable insights:

Every click, swipe, purchase, and footfall generates a data point. Advanced analytics surpass traditional analysis by navigating this information, uncovering hidden patterns, predicting trends, and revealing actionable insights.



Precision targeting and ideal journeys:

Gone are the days of mass marketing. Advanced analytics empowers retailers to segment customers with laser focus, understand their needs and preferences, and tailor personalised experiences across every touchpoint—from targeted promotions to dynamic online recommendations.



Frictionless operations and optimised supply chains:

Inventory management, logistics, and store operations become streamlined through predictive forecasting, anomaly detection, and automated workflows. Advanced analytics optimises stock levels, identifies potential disruptions, and ensures product availability precisely where and when it matters most. actionable insights.



Customer-centric approach:

Data becomes the crucial element to customer behaviour. Understanding purchase motives, analysing sentiment, and predicting buying patterns allow retailers to create intuitive, frictionless, and ultimately delightful experiences that foster loyalty and drive recurring business.



Retailers always had transactional data for their offline customers. Nowadays, many actively seek to enrich customer data with behavioural (products browsed, products tried, reason to buy, etc.) and location intelligence, etc. similar to their e-commerce peers.

- Omnichannel head of a leading jewellery brand



Now, let's observe the application of advanced analytics through practical examples in various retail sectors:

Sales and marketing

Extensive datasets enable retailers to understand consumer behaviour, preferences, and buying trends. Retailers can anticipate market trends, tailor marketing efforts, and make informed decisions through market basket, geospatial, and predictive churn analytics. Advanced analytics enhance retail growth, customer satisfaction, and efficiency.

- **Market basket analytics:** This analysis offers insights into customer purchase behaviour, boosting cross-selling by analysing product combinations often bought together. This data helps retailers optimise product placement, sales, inventory management, and create targeted promotions and marketing strategies.
- **Geospatial analytics:** Retailers using geographic information can understand customer demographics, foot traffic, and market trends by location, aiding in site selection, inventory management, and targeted marketing. This enhances local market insight, enabling more effective customer engagement.

- **Predictive churn prevention:** Advanced analytics identify at-risk customers by analysing behaviour, purchase history, and engagement. Predictive churn insights enable tailored strategies such as personalised offers and loyalty programmes to retain customers. This approach reduces attrition, boosts loyalty, and enhances customer lifetime value by preempting potential issues.

In-store operations

By 2027, in-store operations, growing at a CAGR of over 20 percent, will dominate advanced analytics in retail, significantly boosting efficiency and customer service.²⁷ Retailers will optimise store layouts, resource allocation, and inventory management by analysing foot traffic and purchase history data. This leads to a streamlined shopping experience, enhancing sales and store performance.

- **Heatmap analysis:** Heatmap analysis is a transformative tool for retail in-store operations, offering a visual representation of data to identify patterns in customer behaviour within a physical store. By tracking movements and aggregating data of customers, retailers can discern high-traffic areas, popular products, and bottlenecks in-store layouts to create a more engaging shopping experience.
- **Stock sales analysis:** Analysing sales data helps retailers predict demand, identify trends, and manage inventory, preventing overstock and stockouts. This data also informs optimal pricing and promotional strategies for various products.
- **Checkout flow optimisation:** Analysing checkout data, including transaction times and queue lengths, helps retailers identify and address bottlenecks, optimising staffing, layout, and payment methods. This reduces wait times, enhances the checkout process, and improves customer experience, increasing loyalty and potentially higher sales.

Supply chain

Using data analytics, retailers can enhance supply chain efficiency and responsiveness by understanding demand forecasting, inventory, supplier performance, and logistics. This analytics-driven approach aligns the supply chain with consumer needs and market trends, reducing costs, improving customer satisfaction, and boosting business agility and competitiveness.

- **Fulfillment optimisation:** This predictive analysis ensures timely and cost-effective product delivery by optimising inventory distribution, order processing, and delivery routes to enhance order accuracy, customer satisfaction, and efficiency.
- **Warehouse space usage:** Advanced analytics helps optimise warehouse layout and storage strategies by analysing inventory data and order patterns. This includes identifying fast-moving products, seasonal storage adjustments, and efficient space usage, ultimately reducing storage costs and improving overall warehouse efficiency.

Customer experience

Advanced analytics improve customer experience by analysing behaviours, preferences, and needs from various touchpoints, such as in-store interactions and online purchases. This allows retailers to create detailed profiles and seamless journeys, leading to a responsive, customer-focused strategy that drives sales and boosts brand perception.

- **Customer journey analytics:** Retailers can use advanced analytics to analyse customer journeys across channels, identifying key decision moments and behaviour patterns. This insight indicates pain points and improves loyalty and wallet share.
- **Sentiment analysis on social media:** This technique uses analysis of customer opinions and reviews on social media to understand public sentiment towards a brand. Real-time insights enable retailers to address concerns, spot trends, and adjust strategies, thus enhancing brand reputation and loyalty.
- **Next-best-action recommendations:** By using predictive analytics and insights from past behaviours across channels, retailers can personalise actions or offers for each customer, enhancing engagement and satisfaction. This approach drives sales by delivering relevant experiences and increasing the conversion rate.

Advanced analytics offer transformative potential for retail, with endless opportunities as technology evolves. From personalised marketing to dynamic pricing and AI-driven customer service, the future favours retailers who adopt data analytics.

“ Given the long cycle of technology implementation—from use cases identification and partner selection to tech rollout and adoption. Organisations rely on internal business leaders or technology partners to own the business benefits associated with tech rollout.

- Chief sales and marketing officer with a leading lifestyle brand in India

Rebooting retail: Driving profitable growth



Overview

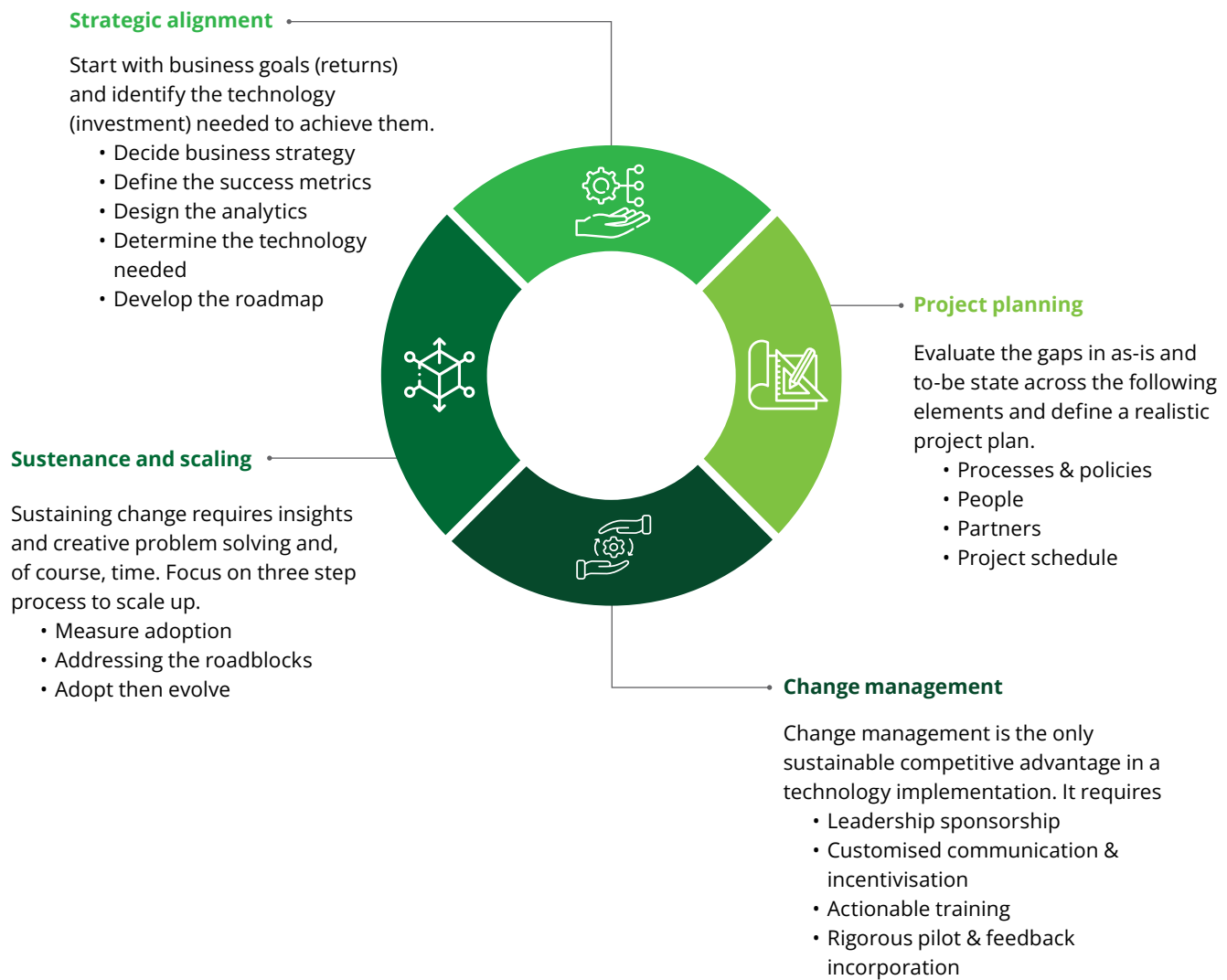
As retail leaders navigate the complex realm of technology integration with business, they must introspect on the potential challenges surrounding the realisation of ROI in technology projects. The landscape is rife with instances where initial enthusiasm and substantial financial commitments have failed to yield commensurate outcomes.

Let's examine the intricacies involved in these ventures.

- Are our technology implementations aligned with the core business objectives, or are they isolated endeavours?

- Does our project planning embody the foresight necessary for seamless integration and adaptability?
- How robust is our change management strategy in organisational transformation?
- How sustainable are the changes introduced?

Based on our experience of working with clients across sectors, we have identified the following approach to improve returns from technology investments.



Strategic alignment

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To drive a successful digital transformation, businesses must prioritise the impact of technology. A careful assessment of the best-in-class versus fit-for-purpose technology should be conducted, and the business impact should justify the choice of technology.

- Head of omnichannel business of a leading jewellery brand

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Perspective and insights

The core of achieving **long-term profitability and expected returns from technology** implementation lies in ensuring that technology implementation is closely tied with the overall business strategy and just like the long-term strategy of the company, technology implementation is broken down into self-contained, achievable, and measurable targets.



Decide the business strategy

Integrating digital transformation initiatives with overarching business strategies is crucial within the retail and consumer sectors to enhance competitiveness and operational excellence. This alignment ensures that technological investments are strategic and targeted towards amplifying core business values, such as customer engagement and process optimisation. Adopting a strategic lens for technology investment prioritises initiatives with the greatest potential to catalyse growth and profitability, reinforcing the organisation's strategic direction and enhancing stakeholder value.



Define the success metrics

Once the organisation has identified the initiatives to be implemented, articulating and quantifying the success measures becomes important. These measures of success need to be tied to the ROI. Success metrics act like a north star constantly guiding the firm in making decisions and prioritising actions at each step of the journey. The positive cashflows tied to this revenue over a couple of years need to generate the returns expected from technology. If the company finds that the revenue is not achieved in any year, the ROI will be impacted; therefore, course correction needs to be made.



Design analytics

While the leadership team monitors a limited set of success metrics for any strategically driven project, it's essential to further break down these high-level metrics into detailed Key Performance Indicators (KPIs). This breakdown allows the teams executing these initiatives to clearly understand and focus on their daily or monthly targets and KPIs, which should be beyond business outcomes and adoption. This is crucial for informed decision making, yet challenges like inadequate and unreliable data, underutilisation of available data or poor quality of legacy data can make the analytics project ineffective. Defining analytics ahead of technology implementation ensures sufficient consideration in the design phase of technology to handle unreliable data sources and enough time to clean the legacy data. Breaking down success metrics into sub-metrics and assigning them to the team also ensures that each team member has sufficient time to identify skill gaps and undergo training to deliver results once the technology is ready. Communicating KPIs to team members encourages their engagement and active involvement throughout the project.



Determine the technology required






Once the success metrics and the impact of technology on business have been established, companies know their requirements from technology and the upper limit to the cost of implementing new technology and architecture. This supports decision-making when companies want to onboard an OEM or a system integrator. In assessing technology solutions, prioritising flexibility and scalability is paramount. This consideration becomes crucial in adapting to swift transformations in technology. Despite potentially higher costs in the short term, adopting a strategy that prioritises long-term adaptability ensures that businesses avoid being frugal in the short term but incur significant costs in the long run.



Develop the roadmap

Sometimes, companies driven by the intention to catch up to technology trends try to fit in a lot of technological change quickly. This leads to either unrealistic delivery timelines or ineffective change management. On the other hand, if business leaders opt for an extended delivery period, say two years, then maintaining organisational interest and employee motivation becomes crucial, especially considering that most employees concentrate on meeting their annual targets. The middle path in such situations connects back to the business strategy and success metrics. Each digital transformation project should be phased out so that almost every year, some meaningful technological change gets rolled out and adopted, and success metrics are achieved. If the achievement of success metrics requires technology changes, they can be incorporated in the next phase, with necessary business case evaluation. Delivering value to business using this MVP-based approach and rewarding employees for each successful phase will keep the momentum going.

Strategic alignment pitfalls and mitigation strategy

	Pitfalls	Mitigation strategy
 <p>Deciding business strategy</p>	<ul style="list-style-type: none"> Investing in cutting-edge technology without a clear understanding of its strategic advantage Treating technology investments as an end in themselves, rather than a means to strategic ends 	<ul style="list-style-type: none"> Develop a clear framework for assessing the strategic value and potential operational efficiencies of new technologies Ensure that technology investments are explicitly linked to amplifying core
 <p>Defining success metrics</p>	<ul style="list-style-type: none"> Not defining clear success metrics for initiatives and overlooking the importance of aligning success metrics with financial returns Not adjusting strategy or execution when success metrics are not meeting expectations 	<ul style="list-style-type: none"> Define success metric linked to incremental revenue, profit expectations, and positive cashflows upfront Establish a process for timely adjustments and course corrections based on performance data
 <p>Designing analytics</p>	<ul style="list-style-type: none"> Delaying the definition of KPIs until after technology implementation Failing to measure KPIs related to adoption Inadequate, unreliable, or unterutilised data making analytics projects ineffective 	<ul style="list-style-type: none"> Define analytics and KPIs during the technology's design phase to allow time for addressing data issues Integrate adoption metrics into KPIs to track and encourage the use of new systems Prioritise the cleaning of legacy data and ensure the technology design accommodates reliable data sources
 <p>Determine technology required</p>	<ul style="list-style-type: none"> Lacking a clear understanding of the requirements from technology and the upper limit of implementation costs Choosing technology solutions without considering their adaptability to future changes Opting for cheaper, less adaptable solutions that may incur higher costs 	<ul style="list-style-type: none"> Establish business benefits and associated acceptable cost for technology implementation Evaluate technology solutions based on their flexibility and scalability to ensure long-term viability Recognise the value of investing more in the short term for solutions that offer long-term adaptability and cost savings
 <p>Develop the roadmap</p>	<ul style="list-style-type: none"> Setting unrealistic delivery timelines due to the rush in adopting technology trends Choosing long delivery periods that do not align with employees' annual targets, leading to waning motivation 	<ul style="list-style-type: none"> Break down the transformation into phases, each with realistic timelines and meaningful technological changes Align project milestones with annual targets and maintain a steady pace of implementation to keep engagement high

Project planning

“

Before technology implementation starts, if the business problem statement is not defined sharply and definitively to guide the decision making in later stages, it will lead to cost escalations and delay later due to change requests, leading to poorer than expected ROI on technology investments.

- Chief retail officer of a fast-growing apparel brand

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Perspective and insights

To ensure the seamless transition from the current state (as-is) to the desired future state (to-be) within any organisational transformation, a comprehensive evaluation of the existing gaps across key elements is imperative before beginning the technology implementation.

Following are the four key areas where gaps need to be evaluated and accounted for in project plan:



Processes and policies

The evaluation of processes and policies is the cornerstone of successful technology implementation. It begins with thoroughly scrutinising the existing processes and identifying inefficiencies and misalignments. Critical examination guides the development of technology to meet process requirements, reducing change requests and optimising ROI. Standard Operating Procedures (SOPs) play a crucial role, offering clarity on requirements and capabilities. However, it's essential to develop processes and policies with the broader capabilities of tools in mind to avoid redoing them with each technological advancement. Often, processes are created without tech consideration, resulting in processes that aren't compatible with the technology stack, which need revamping (either the process or technology, the former requiring further investment in change management and the latter demanding revised discovery and development). Thus, organisations should view the discovery period not just as the discovery of technology but also as the entire operational process and have a comprehensive SOP which entails clear guidelines on how technology would be crucial.



People

Once processes are finalised, clarity on roles and responsibilities emerges, highlighting skill and competency gaps that need to be filled within the project's timeline. An SOP could require a separate checkout counter at each level or section of the store, which would require additional hiring. SOP could require a change in the org structure. The assessment then extends to the people within the organisation, considering their competencies, willingness, and availability to work on the project. Very often, limited time availability can lead to the whole transformation journey becoming an after-school project for the team's key members, leading to delays. Instituting reward and recognition programmes can foster a culture of ownership and initiative.



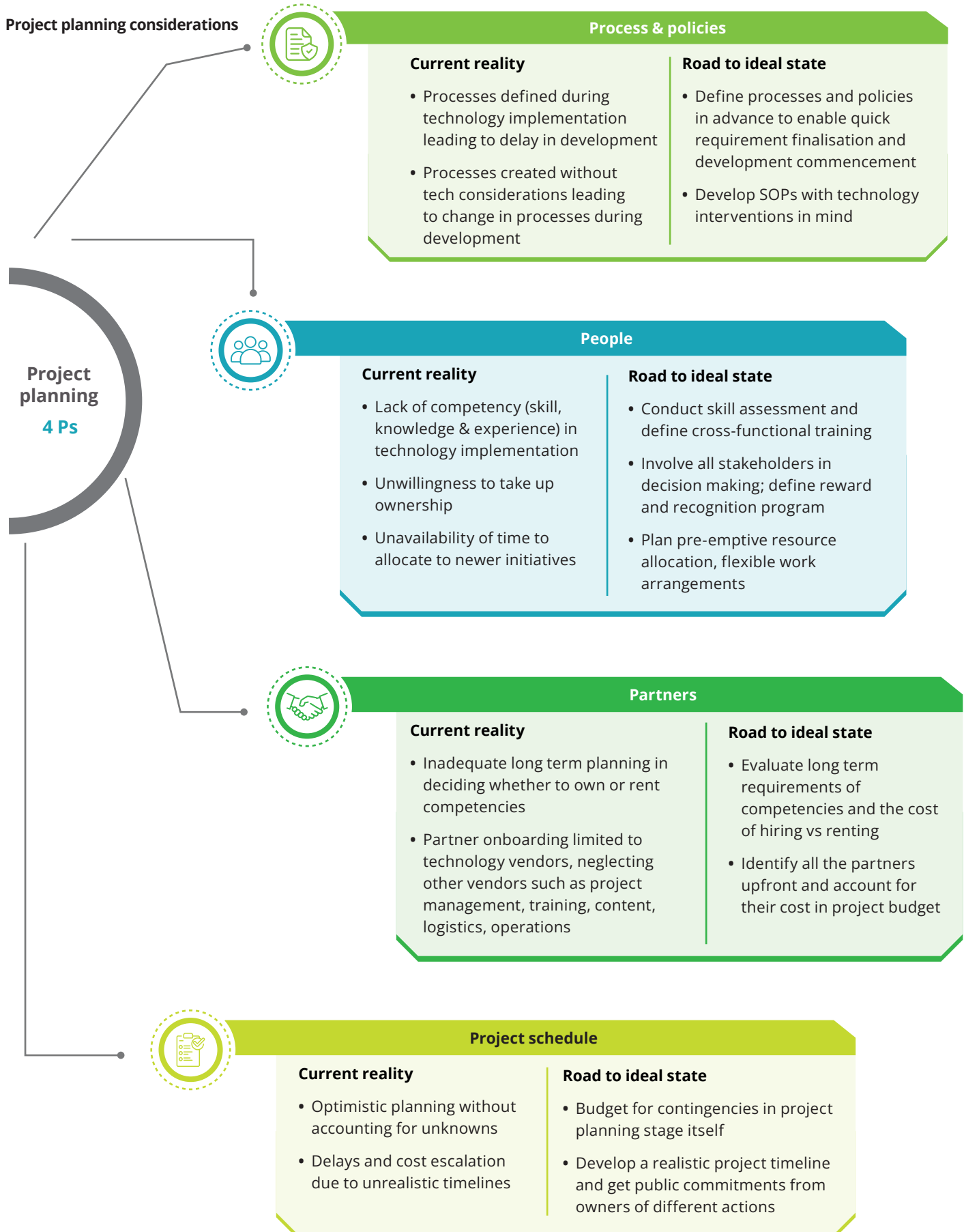
Partnerships

Partnerships should be strategically defined based on a thorough assessment of whether owning certain competencies in-house or renting through external collaborations is more financially advantageous. Additionally, partnerships should not be limited to technology vendors but should account for partners who will train the store staff to use the technology or the partners who will create the content for the marketing campaigns run through marketing automation application. Organisations should assess potential issues and bring in resources for the successful delivery of the project within the expected timelines or budget.



Programme schedule

A realistic project plan can be defined once these gaps have been meticulously evaluated. This plan outlines the actionable steps, timelines, and resources needed to bridge these gaps, facilitating a smooth transition from the as-is state to the to-be state and ensuring that the transformation is achievable and sustainable. An optimistic project planning that doesn't account for the unknown and assumes that only the known set of actions need to be completed on time to deliver the project is bound to face delays and cost escalation, leading to low ROI or an increase in negative cashflows.



Change management



If business heads do not understand the benefits of the technology to their line of business, they treat it as a technology project that the CTO owns. If they understand how technology can solve their problems, the ownership is higher, and the business heads themselves start driving the change.

- Head of retail of a leading home solutions company



Perspective and insights

Every company can buy technology and integrate it with the existing technology stack. Still, only some companies can integrate the technology with the people and make it a way of life to reap the full benefits. Since most companies compete with each other, they can buy the same technology. A real and long-term competitive advantage is changing company culture to integrate and co-live with technology. It takes the following four-pronged strategy to bring about change.



Visible leadership sponsorship

Effective change management starts with a clear message from the top. The importance of change is often measured by the attention senior leaders give to it. When leaders consistently discuss and champion change, its significance grows in employees' minds. Consider a leadership team that is enthusiastic about a new ERP system but limits their excitement to the boardroom. The response to ERP implementation on the shop floor may be lukewarm, as employees may perceive it as less important. Moreover, its impact is magnified when a celebrated and respected leader sponsors the change.



Customised communication and incentivisation

Resistance to change stems from the perception that the effort required to change outweighs the benefits. Recognising the diverse motivations and concerns of different groups within an organisation and customising communication becomes crucial. Communication should not be a one-size-fits-all approach but tailored to engage and resonate with employees. Aligning incentives with the goals of the change initiative is pivotal for success. For example, store employees adopting a new clientele application should understand how it simplifies their job and potentially leads to higher incentives. Similarly, technical support teams can find motivation in how resolving technical issues aligns with their Key Result Areas (KRAs) and provides exposure to new, in-demand skills.



Actionable training

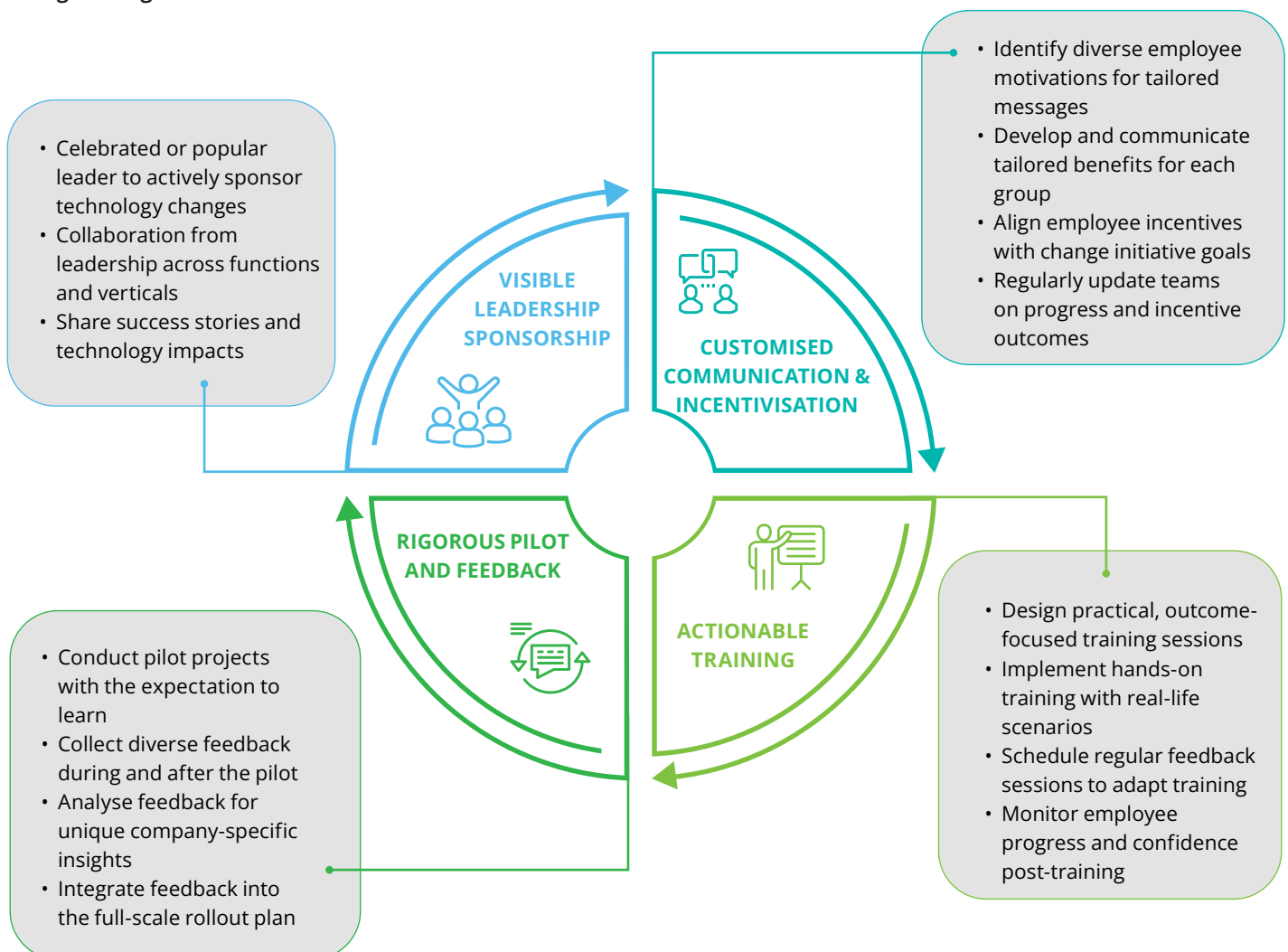
After cultivating the willingness to change, the focus shifts to providing employees with the capability to embrace change. Training should be practical, focused on tangible outcomes, and an ongoing process that adapts based on feedback and organisational needs. Hands-on training using real-life scenarios can be highly effective, allowing employees to practice and refine new skills in a controlled environment. This approach enhances both their confidence and competence.



Rigorous pilot and feedback incorporation

Pilots serve as critical testing grounds to identify potential issues before a full-scale rollout. Unlike proof of concepts that aim for success, pilots should be approached with the intent to fail, learn, adapt, and improve. Actively seeking diverse and honest feedback during this phase is invaluable. It helps uncover unique problems of the company and its culture. Incorporating this feedback into the implementation plan enhances the quality of the change and fosters a culture of continuous improvement and open communication within the organisation.

Change management To-Do list



Sustenance and scaling

Perspective and insights

In the initial stage of the project, aligning technology implementation with business strategy necessitated breaking it down into manageable chunks for the organisation. This approach guaranteed that the organisation could assimilate the changes without experiencing undue discomfort. To fully unlock the benefits of this gradual implementation, allocating sufficient time for the assimilation process is imperative. Too much change too quickly can overwhelm the organisation, and each organisation must find out the speed at which it can absorb change using one of the following methods:



Measure change

Effectively managing technological changes requires a meticulous focus on tracking and measuring the impact of these changes. Organisations must closely monitor success metrics and analytics established during the implementation phase. Continuous evaluation is essential to determine if the technology delivers the expected ROI. This involves assessing quantifiable metrics and considering qualitative feedback from users and stakeholders. This comprehensive evaluation assists informed decision-making, identifies areas requiring adjustment or enhancement, and ensures that the technology performs as intended and adds substantial value to the organisation and its stakeholders.



Address roadblocks

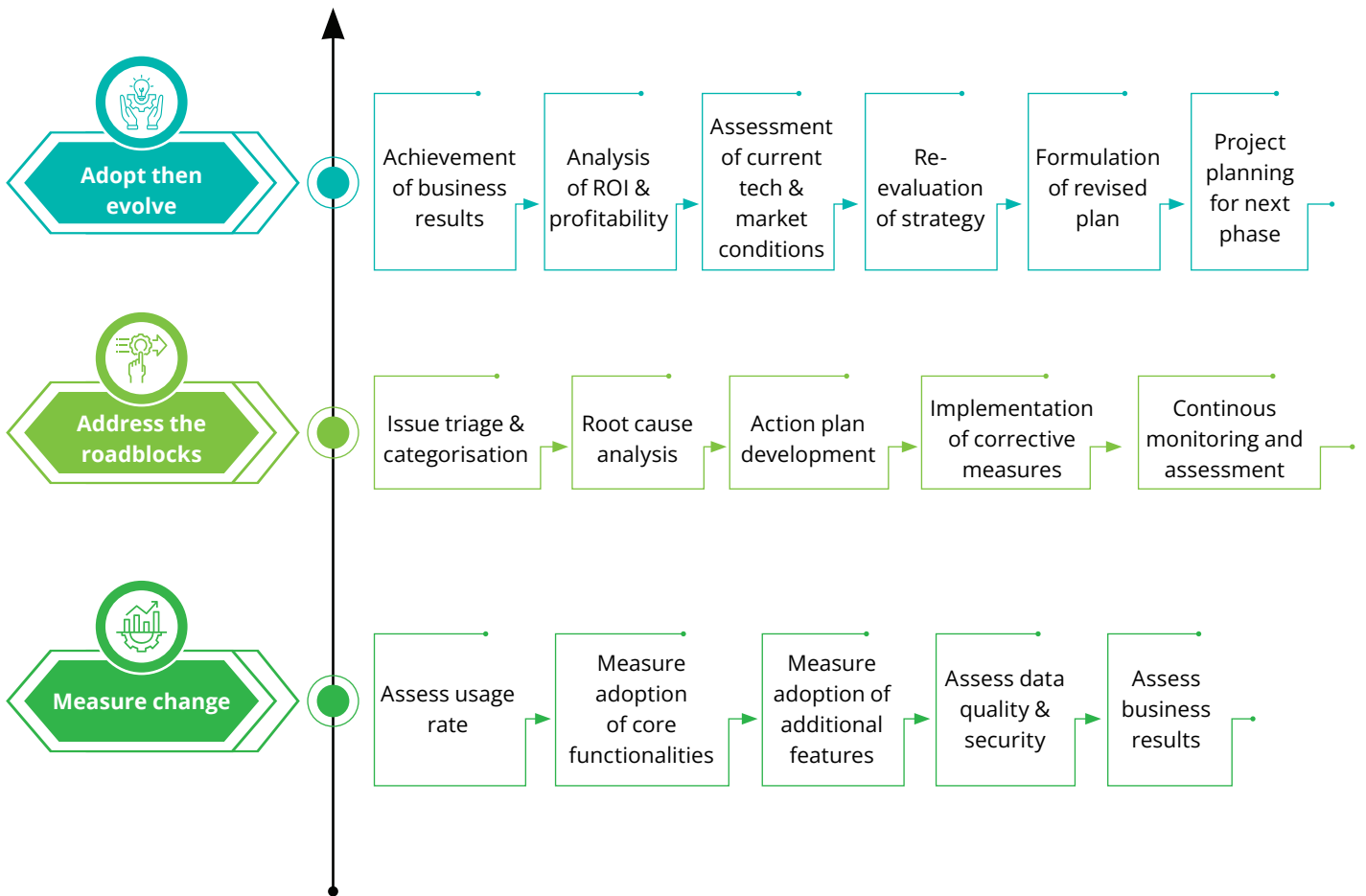
Analysing symptoms or issues highlighted by analytics is just the starting point; the real challenge lies in identifying and addressing the underlying causes. Addressing these root causes may involve revising incentive structures, enhancing training programmes, simplifying software interfaces, or adjusting workloads to accommodate the learning curve. Targeted interventions are crucial for overcoming barriers to change and ensuring the successful adoption of technology.



Adopt and then evolve

Adopting change by a substantial portion of the organisation must precede further scaling or technological advancement. This ensures a stable foundation for subsequent phases. Future rollouts should integrate insights from the initial implementation, adjusting strategies to evolving requirements and new technologies. Reassessing initial assumptions about ROI and profitability is vital, considering the dynamic nature of market conditions, organisational priorities, and technology landscapes. These iterative adoption, adaptation, and evolution processes keep the organisation agile and responsive, enabling the technology strategy to align with long-term goals and external changes.

Change sustenance milestones



Conclusion

The pivotal role of emerging technologies in reshaping the Indian retail landscape is indisputable. Integrating AI, IoT, smart robotics, MR, and advanced analytics is not merely an option but an essential strategy for retailers aiming to navigate the complexities of today's market dynamics. Adopting these technologies facilitates a deeper understanding of consumer preferences, enabling personalised experiences that significantly enhance customer satisfaction and loyalty.

A strategic and comprehensive approach to digital transformation is a timely remedy. This entails adopting new technologies and

re-evaluating business models to ensure they align with digital-age imperatives. Effective change management, investment in talent and infrastructure, and a focus on scalable solutions are key to realising the potential of digital initiatives.

The future of retail in India is intrinsically linked to technology. The journey towards digital transformation is complex and fraught with challenges, yet it offers unparalleled opportunities for growth, differentiation, and long-term success. Retailers embracing digital transformation must have a clear vision and a robust strategy to survive and thrive in the ever-evolving retail landscape.



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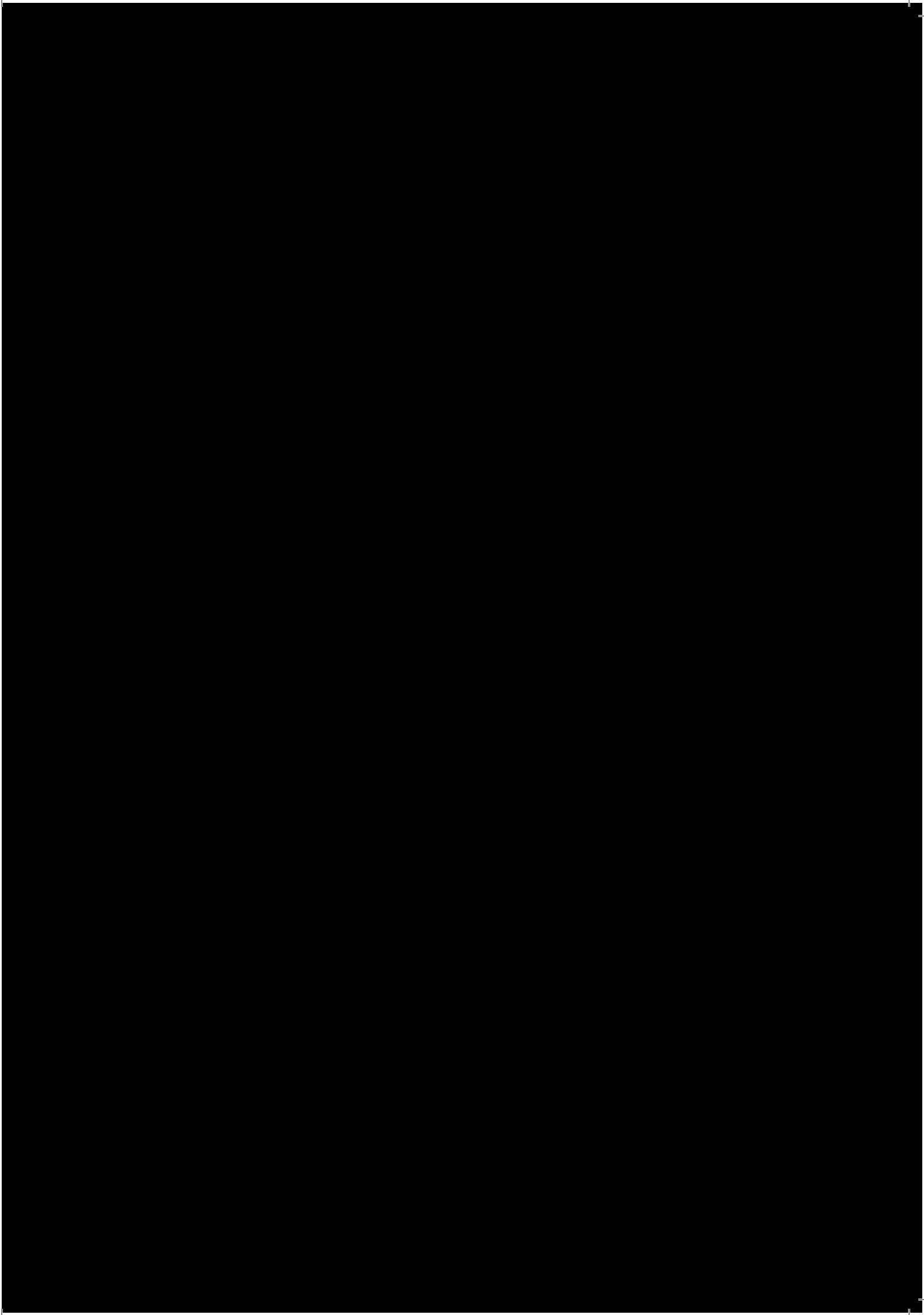
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