

WHITE PAPER

ARTIFICIAL INTELLIGENCE IN GCC RETAIL

APRIL 2025



THE FUTURE OF AI IN RETAIL

In 2025, retailers in the GCC find themselves at an interesting juncture. On one hand, there is the opportunity to transform their entire value chains by integrating emerging digital technologies into their ecosystems. With solutions such as Artificial Intelligence (AI), there is incredible potential to disrupt the way products, services and experiences are brought to customers, with the expected outcome of reduced costs and higher customer and talent retention. It is expected that by 2028, AI services in the retail sector will increase to \$31 billion, up from \$5 billion today.

However, on the other hand, this dynamic landscape warrants a change in the fundamental way that these retailers operate. From their mindsets around digitalisation, to their internal skills and capital investments – there is a need for an overhaul in the way digital solutions are considered, planned and implemented. This is easier said than done, with challenges including limited data expertise, organisational inertia and data privacy impacting the pace of change.

At AI-Futtaim, our vision is for an AI-powered future where technology seamlessly enhances every aspect of the retail journey, creating unparalleled value for our customers. To leverage this potential today, we must prioritise customer experiences and satisfaction above all else, ensuring that AI serves to personalise interactions, anticipate needs, and create lasting connections. The future of retail is about building relationships, not just completing transactions.

The GCC region is uniquely positioned to lead this transformation. With our digitally savvy population, supportive government policies, and a dynamic business environment, we have the potential to become a global hub for AI innovation. To realise this ambition, we must foster a collaborative ecosystem, embracing ethical AI practices and investing in the talent of tomorrow.

In March 2025, representatives from across the GCC's thriving retail sector, including technology providers, retailers, academia and startups, gathered to discuss how AI is transforming customer experiences, enabling hyper-personalisation and improving operational efficiency. This white paper explores the opportunities and challenges that lie ahead, offering insights and recommendations for the industry to utilise AI in a way that benefits the end-user, i.e, the customer. It is my hope that it serves as a catalyst for action, inspiring us all to embrace the power of AI and create a future where the customer is at the heart of everything that we do.

Moza Al Futtaim

Chief AI Officer

AI-Futtaim

LEADING AI EDUCATION

We are entering an era where AI is no longer a futuristic concept but a tangible force reshaping industries and economies.

To thrive in this new era, we must prioritise building a workforce that is proficient in AI technologies and equipped with the critical thinking, problem-solving, and ethical reasoning skills needed to navigate the complexities of this rapidly evolving field. This requires a commitment to lifelong learning, with opportunities for individuals at all stages of their careers to upskill and reskill.

The challenge before us is to ensure that our education systems are keeping pace with the rapid advancements in AI. This means fostering a culture of innovation in education, embracing new pedagogical approaches and AI thinking, and developing curricula that are relevant to the needs of the AI-driven economy. It also means forging stronger partnerships between academia and industry, creating opportunities for students and professionals to gain practical experience and contribute to real-world AI projects.

At Mohamed bin Zayed University of Artificial Intelligence, we are leading this educational transformation. Our curriculum across higher education is designed to equip students with technical excellence and hands-on experience, ensuring that they are not just entering the workforce – they are building and leading the future. Through our deep and reciprocal industry ties, our students gain invaluable experience

from industry placements, while our partners gain insights from our research and development work across all disciplines of AI.

We hope this paper inspires a renewed focus on AI education and skills development, empowering individuals and organisations to unlock the full potential of this transformative technology and build a more prosperous and equitable future. By focusing on both technical expertise and ethical considerations, we can ensure that AI is used responsibly and for the benefit of all.

Steve Liu, Ph.D.

Associate VP for Research

**Mohamed bin Zayed University of
Artificial Intelligence (MBZUAI)**



CONTENTS

STATE OF AI IN GCC RETAIL	5
CASE STUDIES	9
INVESTING IN SKILLS OF THE FUTURE	11
WINNING AND RETAINING TRUST	14
PERSONALISATION AS THE DRIVING FORCE	16
THE WAY FORWARD	17
INDUSTRY RECOMMENDATIONS	19
ACKNOWLEDGEMENTS	21



STATE OF AI IN GCC RETAIL

Retail in the GCC is more than just mega-malls and transactions. Beyond its direct economic impact, retail plays a vital role in shaping consumer experiences, driving tourism, and reflecting the region's dynamic cultural landscape.

In recent decades, the sector has undergone a remarkable transformation, evolving from traditional marketplaces to sophisticated, world-class shopping destinations. This evolution has been driven by the vision of creating retail hubs that cater to both residents and tourists, offering a diverse range of products and experiences that keep you coming back for more.

The integration of digital technologies, particularly artificial intelligence (AI), is now shaping the next chapter of this sector, with the promise of further enhancing customer experiences and solidifying the GCC's position as a global retail

leader. Attendees at *Artificial Intelligence & the Personalised Future of Retail in the GCC*, the inaugural industry roundtable hosted by AI-Futtaim, concurred that the GCC, particularly the UAE and Saudi Arabia, are well-positioned to lead in digital technology adoption.

However, this rapid evolution presents challenges. Retailers must adapt to evolving consumer expectations, navigate a complex technological landscape, and address ethical considerations. The pace of technological change demands decisive action. Retailers who fail to adapt, risk being left behind in an increasingly competitive market.

Central to this adaptation is understanding and responding to the growing demand for hyper-personalisation. Customers now expect retailers to know their preferences, anticipate their needs, and offer tailored experiences across all touchpoints.

A positive outlook for change

Amid this dynamic shift, the outlook for growth for the GCC retail sector is robust. Advisory firm Alpen Capital forecasts a 4.6% CAGR between 2023 and 2028, underpinned by factors including a growing population, increasing disposable incomes, and ongoing infrastructure development. The UAE retail market, valued at \$44.38 billion in 2024, is projected to reach \$61.89 billion by 2030, growing at a CAGR of 5.70%.

This presents a strong foundation for retailers to expand on digital transformation strategies both within their organisations and on the customer front.

AI, in particular, is emerging as a front-runner as retail businesses look for ways to increase profits and optimise processes, all while ensuring customer service remains impeccable. From automated inventory management and demand forecasting to customer assistance and personalised recommendations – retailers are turning to AI to transform their entire value chain. It is predicted that by 2028, AI services in the retail sector will increase to \$31 billion, from nearly \$5 billion today.

In a global study by NVIDIA surveying retailers and consumer packaged goods (CPG) firms, nearly 90% of respondents stated that they either actively use AI in their operations or are assessing AI projects. 87% say AI has had a positive impact on revenue and 94% have seen it reduce operating costs. Perhaps unsurprisingly, nearly 97% of retailers surveyed by NVIDIA said they plan to increase their AI spend in the next year.

These findings are corroborated in the survey conducted by AI-Futtaim during its AI roundtable. When asked to characterise their company's



outlook on AI investment in the coming year, nearly all attendees stated they plan to “expand investment significantly.”

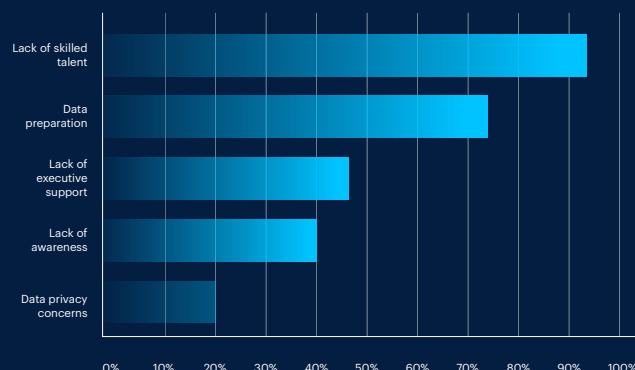
Several key drivers are accelerating this change. The region boasts high internet and smartphone penetration, fostering a digitally savvy consumer base. Roundtable attendees highlighted the region’s youth, particularly in Saudi Arabia, as being highly receptive to new technologies and demanding differentiated experiences.

Furthermore, AI can automate many aspects of the personalisation process for retailers, from generating personalised email campaigns to optimising website content and product displays, freeing up human staff to focus on higher-value tasks.

Can analyse vast amounts of data from diverse sources – including purchase history, browsing behaviour, social media activity, and even in-store interactions – to build a granular understanding of individual customer preferences.

The push for digital transformation and substantial investments by GCC governments is another driving force. The UAE’s National AI Strategy 2031 and Saudi Arabia’s National Strategy for Data & AI provide clear roadmaps for AI development and adoption across sectors, including retail. Saudi Arabia’s \$100 billion investment in Project Transcendence further underscores the region’s commitment to becoming a global AI powerhouse. These initiatives provide fertile ground for AI adoption by providing funding, infrastructure, and a regulatory framework. They also recognise the critical role of higher education in developing the AI talent needed to drive innovation, with initiatives focused on expanding AI-related curricula and empowering younger generations through academic institutions such as the Mohamed bin Zayed University of Artificial Intelligence (MBZUAI).

What is the single biggest barrier to widespread AI adoption in the retail sector?

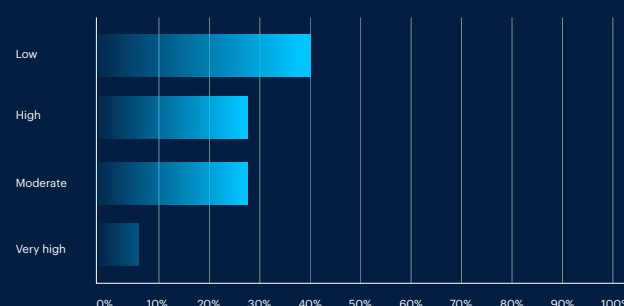


Source: AI-Futtaim AI in GCC Retail Roundtable Survey

Closing the gaps

Despite the promising outlook, there remains room to grow. When asked about the current state of AI adoption in the GCC retail sector during a survey conducted at the AI-Futtaim roundtable, 40% of the attendees answered ‘low,’ while only 7% said ‘very high.’ Lack of skilled talent was highlighted as the biggest barrier to wider AI adoption, with 93% citing this as a major challenge. Building a workforce capable of developing, implementing, and managing AI solutions is crucial for successful AI integration. This requires investment in training and development programmes, as well as attracting and retaining AI specialists. As one roundtable participant noted, “No organisation can leverage AI if its workforce cannot leverage AI.”

How would you rate the current state of AI adoption in the GCC retail sector?



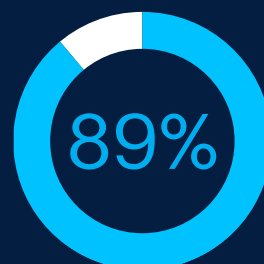
Source: AI-Futtaim AI in GCC Retail Roundtable Survey

Another participant recommended a stronger emphasis on AI education at the university level, equipping the younger generations with the skills and knowledge needed to thrive in an AI-first knowledge economy.

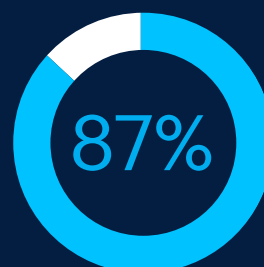
AI algorithms also rely on high-quality data; however, many retailers struggle with data silos, inconsistent data formats, and a lack of a “single source of truth. Attendees at the roundtable emphasised the importance of investing in data infrastructure and creating a centralised data platform to enable effective AI implementation. “AI without data is hallucination,” one participant aptly stated.

Roundtable attendees also emphasised the need for a cultural shift within organisations across the retail value chain, to help improve the way AI systems are managed. Employees need to be encouraged to “think AI first,” viewing AI not as a threat but as a tool to enhance their work and solve business challenges. This requires a top-down approach, with leadership championing AI adoption and fostering a data-driven culture, supported by executive training and upskilling programmes to drive understanding and buy-in at all levels.

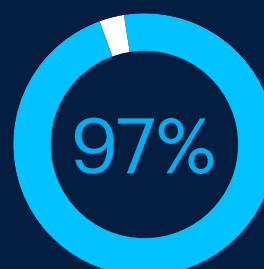
Finally, the cost of implementing AI solutions can be a significant barrier for smaller retailers with limited resources. However, full-scale implementation isn’t the only path to leveraging AI. A phased approach, starting with smaller, targeted AI projects, can allow smaller retailers to experience the benefits of AI without a massive upfront investment. Collaborating with other retailers or exploring shared AI resources could also help distribute the costs and accelerate adoption. While mature digital and AI capabilities ultimately lead to higher revenue and market share, a strategic, incremental approach can allow smaller players to begin their AI journey and progressively build towards greater maturity.



retailers that are either actively using AI in their operations or assessing AI projects in trials and pilots (up from 82% in 2023)



retailers that have seen AI have a positive impact on their annual revenue



retailers that plan to increase their AI spend in 2025

Source: NVIDIA State of AI in Retail and CPG

CASE STUDIES FROM THE SECTOR



Etisalat, UAE

In September 2024, e& UAE unveiled the grand opening of its second AI-powered autonomous store, EASE (e& Autonomous Store Experience), in Dubai Mall. EASE provides an unparalleled shopping experience characterised by complete absence of wait times. Powered by advanced AI capabilities, machine learning, smart shelves, robotics, and innovative smart dispensing and trade-in machines, the store offers a truly unique and seamless shopping experience.

- **Line activation:** This cutting-edge retail space is equipped with enhanced features such as FastPass and visitor line activation via biometrics or the e& UAE app.
- **Multiple touchpoints:** It provides customers with the ability to effortlessly access the store, explore products, pre-authorise payments, and make purchases directly through the app.
- **Smooth checkout:** It offers intuitive self-service check-out, allowing customers to complete their transactions and exit the store at their convenience.
- **Personalised experiences:** The facial recognition feature is integrated with the visitor line purchase journey, ensuring a smooth and personalised customer experience.



Blue Rewards, UAE

Blue Rewards, AI-Futtaim's customer engagement lifestyle platform, is designed to create a personalised and rewarding experience for millions of users globally. The mobile app is underpinned by a strong focus on data insights and personalisation, while rewarding customers. In January 2025, AI-Futtaim introduced the Blue AI feature, which offers seamless guidance and tailored insights across the Blue ecosystem, ranging from automated product recommendations, one-click multi-brand checkouts and even booking car test drives.

- **Personalisation:** Blue AI enables customers to tap into tailored recommendations, enhancing the overall shopping experience.
- **Streamlined experiences:** Blue Rewards brings together the entire Blue ecosystem, allowing members to avail offers and services from several brands through a single platform.



Tally, Saudi Arabia

Saudi Arabia's Universal Cold Store (Prime Markets), a leading grocery retail chain, has introduced an innovative autonomous robot named Tally to revolutionise inventory management, enhance pricing accuracy, and elevate the customer experience across select Prime Markets locations. Tally operates autonomously, navigating store aisles and scanning shelves multiple times each day. Leveraging AI and advanced computer vision technology, Tally efficiently identifies out-of-stock items, pricing discrepancies, and misplaced products.

- **Data processing:** Tally collects and analyses product data, to help ensure consistent availability and accurate pricing of desired items for customers.
- **Boosts efficiency:** By integrating Tally's technology, Prime Markets stores achieve faster fulfilment of online orders, boosting overall efficiency and customer satisfaction.
- **Inventory management:** Tally's AI automation saves store teams 30 hours weekly by autonomously scanning shelves for inventory, pricing discrepancies, and misplaced products.



TAFFI, Saudi Arabia

An AI-powered, fashion-focused shopping platform is revolutionising the retail experience in Saudi Arabia. TAFFI employs cutting-edge technologies like machine-learning, and GenAI to deliver personalised styling recommendations based on users' preferences, dress occasions, and budgets. Through its latest AI feature Amira, TAFFI aims to revolutionise the online shopping experience by efficiently offering recommendations that match customers' styles and budgets. Launched in June 2023, Amira is connected to the retailer's online inventory database, providing real-time stock updates. It is already integrated into 15 online stores in KSA and Dubai, with plans to expand to major retailers across the MENA region. Amira gathers data from over 20,000 stylist-created looks and analyses personal details such as physical attributes, lifestyle, profession, and fashion style, delivering highly tailored recommendations for customers.

- **Personalisation:** TAFFI empowers its businesses to provide AI-powered styling recommendations, enhancing the shopping experience for customers.
- **Localised:** TAFFI's Amira feature draws insights from over 180 Middle Eastern stylists to reflect regional preferences. Amira is able to provide support in real-time both Arabic and English.

INVESTING IN SKILLS OF THE FUTURE

AI is anticipated to be the most powerful disruptor of the century across markets. By the end of this decade, it is estimated that the impact of AI on the global economy will reach a staggering \$15.7 trillion, including \$6.6 trillion from increased productivity and \$9.1 trillion from consumer benefits. The Middle East is expected to accrue 2% of the total global benefits of AI in 2030, equivalent to \$320 billion.

Amidst this transformative pace of change, several burning questions emerge. Is the region ready to capitalise on this momentum? Are businesses equipped to embrace AI in the short and medium term? What do they require to truly benefit from this opportunity?

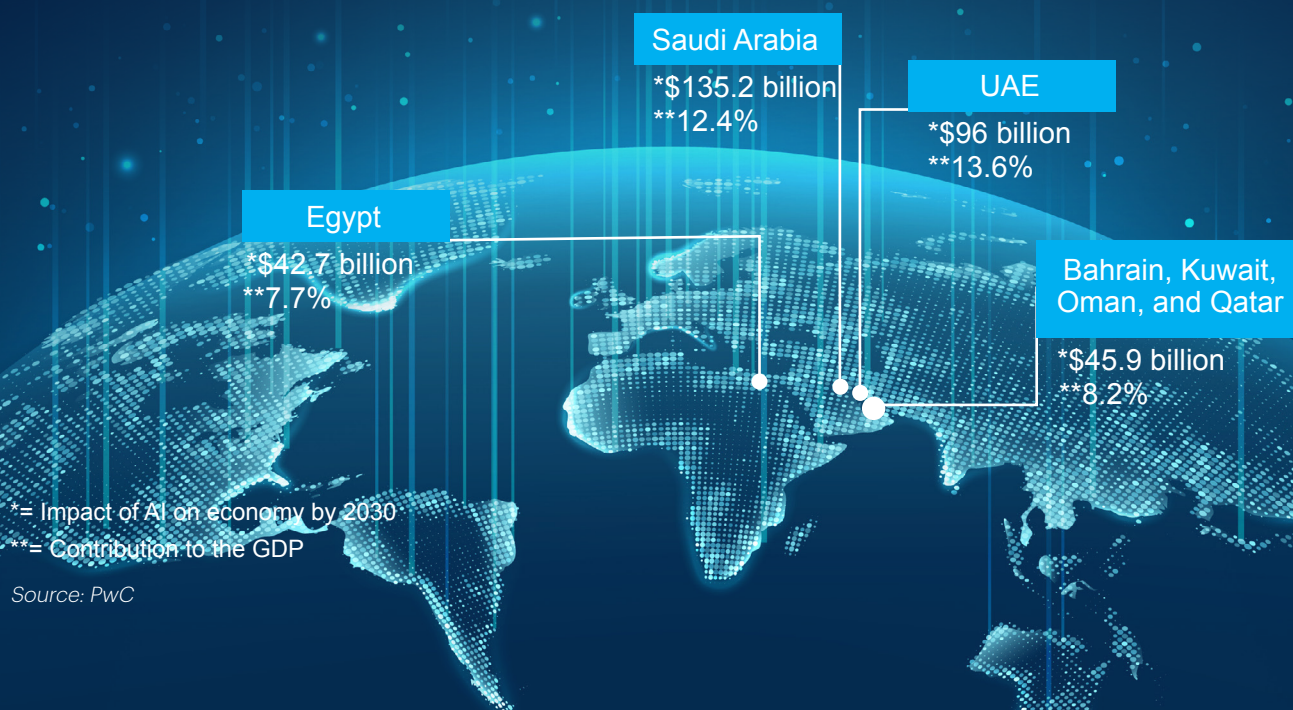
Participants at the AI roundtable were united in

their opinion that the lack of skilled talent is one of the biggest barriers holding back AI adoption in the retail sector. Traditional retailers are struggling to keep pace, and skilling and talent attraction is required to fill the roles of technologists and strategic users.

The consensus is in line with a global study from McKinsey, which found retailers face challenges in implementing AI, and more specifically Generative AI (GenAI), including the need to revamp technical capabilities and talent within their organisations.

What's interesting is that globally, AI continues to be a leading priority for business leaders, with an emphasis on achieving tangible outcomes from their AI initiatives. This year, one in three companies worldwide plans to invest over

Impact of AI in the Middle East



\$25 million in AI. Yet, companies in the region are discovering challenges in AI adoption. A survey by IBM revealed that while 60% of Middle East CEOs believe their teams have the necessary knowledge and skills to integrate GenAI and 63% are confident in their recruiting efforts to meet business objectives, 42% report difficulties in filling key technology roles.

According to Boston Consulting Group (BCG), there is increased demand for both business roles with AI skills, who set the strategic direction and define relevant use cases, as well as AI technology specialists, such as machine learning engineers, data scientists, AI researchers, and platform experts. Both talent groups are in short supply globally and regionally, with a limited number of qualified candidates and depth of expertise, as demand is widespread across sectors and markets.

Thought starters: Human Capital

- **AI-first approach:** AI differs from traditional education, necessitating a focus on AI-first and AI-native learning. Industry collaborations are essential to prepare future generations effectively.
- **Focus on management:** While the focus should be on employees, companies also need to concentrate on middle management, as they will be responsible for overseeing AI employees and AI agents in the future.
- **Willingness to adapt:** Most employees use AI, but willingness remains a challenge that may shift in 3-4 years. For now, businesses must ensure AI serves their needs, keeping it practical and reassure employees about job security.
- **Slow to change:** Executives are willing to use AI but lack understanding. Across many organisations, there remains a mindset of not fixing what isn't broken. Younger individuals seek shortcuts, while older ones struggle.



AI-Focused Education

The rise of AI is fundamentally changing the nature of work, demanding a new set of skills and competencies. Traditional education systems must adapt to meet these evolving requirements, equipping future generations with the knowledge and abilities needed to thrive in an AI-driven world.

The rapid pace of technological change requires a commitment to lifelong learning, with opportunities for upskilling and reskilling throughout one's career. Research from MBZUAI and Deloitte shows that while organisations across the Middle East are rapidly increasing AI investments, many lack the foundational elements needed to realise AI's full value. More than 80% of organisations feel pressured to adopt AI, yet almost half say they lack the talent and technology capabilities for successful scaling. Despite these challenges, 69% of organisations plan to increase investment in AI technologies in the coming year.

MBZUAI is at the forefront of this effort, offering a range of master's, PhD, and executive programmes designed to equip students and professionals with the skills needed to lead in the AI era. In January 2025, MBZUAI opened applications for the sixth edition of the MBZUAI Executive Programme (MEP), a 16-week programme that empowers senior leaders to drive AI transformation. MEP has more than 200 distinguished alumni who have become leaders of AI innovation in the UAE and beyond.



Last August, MBZUAI welcomed its largest and most diverse intake for its Fall cohort, with a highly competitive admission rate of 5%. And the university's newly launched undergraduate programme, welcoming its first cohort in 2025, represents a significant step towards building a pipeline of AI talent for the future.

By fostering a culture of innovation and collaboration, MBZUAI is shaping the future of AI education and empowering the next generation of AI leaders. MBZUAI also actively collaborates with industry partners to ensure its curriculum is aligned with real-world needs and that its graduates are prepared to tackle the challenges facing the retail sector. These collaborations can help bridge the gap between theoretical knowledge and practical application, ensuring graduates are well-equipped to excel in an AI-first world.

WINNING AND RETAINING TRUST

As the global adoption of AI accelerates, governments, companies, and businesses are increasingly grappling with crucial issues related to data privacy, ethics, and governance. The integration of AI into various industries worldwide is sparking significant debate on how to balance innovation with data privacy, and customer satisfaction with regulatory compliance.

The European Union (EU), for instance, is implementing a comprehensive regulatory framework for responsible use of AI. Under its Digital Agenda, the EU is creating consistent rules for data and AI usage, building on the GDPR established in May 2018. Focus has now shifted to two key initiatives: the EU AI Act and the EU Data Act. However, this framework has triggered debates and reports said the EU is contemplating making some provisions of the AI Act optional instead of obligatory. EU lawmakers have strongly resisted these potential changes, cautioning that they could allow major US tech companies, such as OpenAI and Google, to bypass critical compliance requirements.

In the GCC, businesses must adhere to stringent regulations around data management, privacy, and governance, with specific laws in place in Saudi Arabia and the UAE. These regulations cover electronic processing of personal data both domestically and internationally and enforce strict controls and obligations for securing data.

Consent is required for data processing, except for public interest or legal needs. Saudi laws grant individuals the rights to be informed about data collection, access their data, obtain their data in a readable format, and request corrections or updates to their personal data.

Last year, the UAE further announced an international AI policy to prevent misuse, focused on six principles: advancement, cooperation, community, ethics, sustainability, and security. The UAE said it would engage globally to promote transparency, ethical standards, and AI governance, aiding in regulation enforcement and encouraging responsible AI use.



Centralising data

According to some estimates, each day, 402.74 million terabytes of data are generated globally. The big challenge, therefore, for businesses is how to manage customer data and ensure compliance with local and international regulations.

Several participants at the AI roundtable debated developing a centralised data platform to improve data management. Centralising data mitigates inefficiencies from silos, enhances collaboration with comprehensive, validated information, and simplifies governance. This ensures data quality, and compliance with legal and privacy standards.

At the same time, the data utilised to inform AI systems must be comprehensive, equitable, and representative of all communities. Catering to a diverse population in the GCC, retail businesses must establish clear objectives to ensure varied perspectives are captured comprehensively. Gather data from a wide range of demographics, using inclusive language in all surveys. Gain insights into user needs through focus groups, interviews, and usability tests and deploy diverse methods to capture data from various touchpoints.

Thought starters: Ethics and governance

- **Collaboration:** Proactive collaboration with regulators is vital for industry success. Rigid regulations can limit pace of progress. By working with policymakers and regulators, retailers can ensure that policies around data gathering incorporate their perspectives and are beneficial for all.
- **Consumer trust:** To gain and retain customers' trust, retailers must learn to ask for consent. Be transparent about how the data will be utilised.
- **Inclusivity:** Inclusiveness is indispensable, especially within our region where retailers act as pivotal touchpoints. Retailers must ensure diverse representation in all facets of consumer interaction, to improve the richness of personalised solutions.
- **Internal regulator:** Ensure that AI strategy prioritises ethics and governance. A dedicated internal regulator or ethics committee can help with the design and execution of transparent and ethical policies, incorporating legal, audit, and HR perspectives.
- **Mitigating bias:** Avoiding algorithmic bias is important, however the controls governing bias must be flexible and regularly revisited and integrated with security perspective, especially as policies change.

PERSONALISATION AS THE DRIVING FORCE

AI is transforming the world and has rapidly begun to impact economic sectors and industries, including e-commerce. Consumers of today expect a high degree of sophistication in their retail experiences and companies are striving to gain their time, attention, and loyalty. Companies globally and within the region are increasingly recognising the importance of hyper-personalised retail experiences, which extend beyond the initial purchase stage. These tailored interactions are crucial for enhancing customer loyalty and bolstering a company's competitive advantage in the marketplace, ensuring sustained engagement and long-term customer satisfaction.

Hyper-personalisation utilises specific data points, such as browsing behaviour, location, preferences, and contextual factors like weather or time of day, to deliver highly relevant and personalised experiences. By employing this detailed information, businesses can create uniquely tailored interactions that significantly boost user engagement. This strategy cultivates a strong sense of connection and trust, ultimately enhancing customer loyalty and satisfaction.

Collaborating to advance

Research by customer engagement platform Twilio reveals that 62% of consumers now expect personalisation, warning that brands failing to deliver risk losing their loyalty. Additionally, 49% of consumers indicate they are more likely to become repeat buyers or users when personalisation is effectively implemented. These statistics underscore the critical importance of personalised experiences in fostering consumer loyalty and driving long-term engagement.

To foster hyper-personalisation, industry-wide

collaborations have the potential to drive profound AI innovation in the retail sector. The GCC demonstrates significant willingness, with diverse expertise and perspectives contributing to this effort. Partnering with universities and forming a retail industry consortium can facilitate mutual learning and knowledge exchange, enabling stakeholders to leverage collective insights and foster groundbreaking advancements, including around personalisation.

Collaboration can also enable the creation of unified customer profiles that span multiple retailers and channels. Meanwhile, collaboration can facilitate the development of ethical guidelines and data governance frameworks for AI in retail.

By working together, retailers can establish best practices for data privacy, transparency, and responsible AI development, ensuring that personalisation efforts are conducted ethically and with customer consent.



Thought starters: Collaboration

- **Industry consortium:** Retailers can collaborate with other retailers, government entities, industry stakeholders and academia to facilitate knowledge-exchange and best practices when it comes to data handling and personalisation.
- **From online to offline:** Physical stores represent an opportunity for advanced personalisation. Retailers can integrate AI to link online and offline experience, creating a truly omnichannel journey.

THE WAY FORWARD

The future of retail is not just about technology; it's about building a world where technology empowers us to connect with customers on a deeper, more meaningful level.

Roundtable participants offered a glimpse into this future, where the customer holds unprecedented power. They spoke of frictionless experiences, personalised recommendations delivered by AI agents, and the seamless integration of virtual and augmented reality. One participant envisioned a future where "every shopper will have their own AI agent that does the shopping for them," freeing up time for leisure and enjoyment. Another highlighted the potential of Mixed Reality (MR), with AI agents embedded within smart glasses, guiding customers through personalised shopping journeys. It's a future that, while once confined to the realm of science fiction, is now rapidly becoming a tangible reality.

From online to offline

For years, online retailers have been pioneers in leveraging AI to deliver hyper-personalised experiences, focused primarily on product recommendations and loyalty experiences. By analysing customer data, online retailers have been able to anticipate needs and enhance customer satisfaction – something consumers around the globe have grown attuned to.

Now, brick-and-mortar stores are embracing AI to bridge the gap, utilising it for everything from inventory management and automated checkouts to in-store customer behaviour analysis through computer vision. It is estimated that 10,000 global retailers have installed self-checkout systems since 2024, aligned with the growing demand for seamless and faster shopping experiences.

As AI algorithms become more sophisticated, we can expect even more intuitive and personalised shopping journeys, with AI anticipating needs before the customer even expresses them. The future of retail is about creating experiences that are not only efficient but also deeply personal and engaging.

Agents, immersive experiences, and the human touch

Looking further ahead, two exciting areas of AI development are poised to redefine the retail experience: agentic AI and immersive technologies. Agentic AI, where AI agents act on behalf of customers, has the potential to revolutionise how we shop. Imagine personalised shopping assistants that manage shopping lists, compare prices, and even making purchase decisions, on our behalf. These agents could seamlessly integrate with emerging technologies like the metaverse, guiding customers through virtual shopping experiences and offering tailored recommendations in real-time.

Immersive technologies like virtual and mixed reality, and the metaverse offer exciting possibilities, blurring the lines between the physical and digital. Participants envisioned virtual shopping spaces where customers can "beam" themselves into stores, interact with products in 3D, and even customise products in real-time. Imagine trying on clothes virtually, exploring a store from the comfort of your home, or co-shopping with friends in a virtual mall.

However, even in this technologically advanced future, human touch will remain crucial. A Qualtrics study reported that in most cases, consumers

engage in a digital interaction across various tasks in their everyday lives. Maintaining the emotional connection and brand loyalty that creates memorable experiences will be essential for success. Ensuring accessibility and addressing potential ethical concerns related to virtual environments will also be crucial for widespread adoption. The key lies in finding the right balance between AI-driven efficiency and the human element that makes shopping a truly enjoyable and fulfilling experience.

The journey towards an AI-powered future of retail is not a passive one; it demands bold action. The GCC has the potential to not just participate in this revolution, but to lead it. We have the vision, the resources, and the ambition to create a retail landscape that sets a new global standard.

Retailers, technology providers, governments, and academic institutions must work together to develop industry standards, address ethical considerations, and foster a skilled workforce. Retailers can benefit from the cutting-edge research and fresh perspectives of academic institutions, while universities gain valuable insights into real-world industry challenges. Startups, with their agility and focus on innovation, can bring disruptive solutions to the market, often addressing niche needs and pushing the boundaries of what's possible with AI.

Ultimately, the future of retail is about creating seamless, personalised experiences that cater to the evolving needs of the customer.

By embracing a customer-centric approach and leveraging the power of AI responsibly, the GCC retail sector can solidify its position as a global leader in innovation and customer experience.



INDUSTRY RECOMMENDATIONS

The following recommendations, distilled from the insights of leading experts at AI-Futtaim's AI in Retail Roundtable, provide a roadmap for GCC retailers to successfully leverage AI and unlock its potential.



Customer Engagement and Personalisation

- **Localise the experience:** Embrace the GCC's diverse cultural nuances by tailoring AI-powered solutions to blend traditional values with modern consumer behaviours and requirements.
- **Humanise the digital:** Ensure AI enhances, not replaces, the emotional connection and brand loyalty that create memorable experiences.
- **Personalise across channels:** Break down silos and create a truly omnichannel journey by seamlessly linking online and offline experiences through AI-driven personalisation.
- **Ask for consent, earn trust:** Be transparent about data use and empower customers with control over their data. Earn their trust by communicating the benefits of sharing information.



Talent Development and Skills

- **Embrace AI-first learning:** Recognise that AI education requires a distinct approach. Focus on AI-first and AI-native learning to equip your workforce with the skills needed to thrive.
- **Identify and bridge the skills gap:** Conduct a thorough assessment of your organisation's AI

skills and develop targeted training programmes to address specific needs, from data scientists to AI-savvy managers.

- **Champion continuous learning:** Foster a culture of continuous learning and experimentation, encouraging employees to embrace new technologies and develop their AI skills.
- **Partner for talent:** Collaborate with universities and training providers to access cutting-edge AI expertise and develop a pipeline of skilled talent. Pursue opportunities such as the MBZUAI Executive Programme to upskill your executives in driving AI research and real-world applications within your organisation.



Technology Foundations

- **Centralise your data:** Establish a centralised data platform to break down data silos, improve data quality, and enable more effective AI implementation.
- **Invest in data infrastructure:** Recognise that AI is only as good as the data it uses. Invest in robust data infrastructure, including data storage, processing, and security.
- **Train your team on data handling:** Provide comprehensive training to employees on how to handle and prepare data for input into AI systems, ensuring data quality and accuracy.
- **Explore cloud-based solutions:** Leverage cloud-based AI platforms to reduce costs, improve scalability, and access the latest AI technologies.



Ecosystem Collaboration

- **Engage with policymakers:** Proactively collaborate with regulators to shape policies that foster innovation while protecting consumer interests.
- **Forge strategic partnerships:** Collaborate with other retailers, government entities, industry stakeholders, and academia to facilitate knowledge exchange and develop best practices for data handling and personalisation.
- **Support start-ups:** Foster a vibrant ecosystem by supporting AI start-ups and encouraging the development of innovative solutions tailored to the GCC market.



Ethics and Governance

- **Prioritise ethics from the start:** Embed ethical considerations into your AI strategy from the outset, ensuring that AI is used responsibly and in a way that benefits both your business and your customers.
- **Establish an ethics committee:** Create a dedicated internal regulator or ethics committee to oversee the design and execution of transparent and ethical AI policies, incorporating legal, audit, and HR perspectives.
- **Mitigate algorithmic bias:** Implement adaptive controls to mitigate algorithmic bias, ensuring fairness and inclusivity in AI-driven decision-making.
- **Integrate security and ethics:** Recognise that security and ethics are intertwined. Collaborate with security teams to protect consumer data and prevent the misuse of AI.



ACKNOWLEDGEMENTS

We gratefully acknowledge the contributions of the participants at the Artificial Intelligence & the Personalised Future of Retail in the GCC roundtable, whose diverse perspectives and expertise have shaped the findings and recommendations presented in this white paper. We would like to thank everyone who participated, including the following individuals for their invaluable insights:

- Alexandre Bres, Managing Director, Products Client Group Lead, Accenture Middle East
- Harshdeep Jolly, Executive Director of Technology & AI Strategy, AI-Futtaim
- Himanshu Shrivastava, Chief Technology Officer, AI-Futtaim
- Iman Al Omrani, Chief Digital Advisor, Amazon Web Services (AWS)
- Kevin Annund, Data & AI Service Line Leader MEA, IBM Consulting
- Lucas Zhao, Senior Solution Architect MENA, Alibaba Cloud Intelligence
- Marwan Zeineddine, Managing Director, SAP - UAE
- Mazen Nahawi, Founder & CEO, CARMA and SOCIALEYEZ
- Moza Al Futtaim, Chief AI Officer, AI-Futtaim
- Naim Yazbeck, General Manager, Microsoft UAE
- Rima Semaan, Data & AI Lead, Microsoft UAE
- Shahad Geoffrey, Founder & CEO, TAFFI
- Dr. Steve Liu, Associate Vice President of Research and Professor of Computer Science and Machine Learning, Mohamed bin Zayed University of Artificial Intelligence (MBZUAI)



REFERENCES

- <https://alpencapital.com/research/2024/Alpen-Capital-GCC-Retail-Industry-2024-Consolidated-Version.pdf>
- <https://www.researchandmarkets.com/reports/5135991/uae-retail-market-by-region-competition#:~:text=The%20UAE%20Retail%20Market%20was,at%20a%20CAGR%20of%205.70%25.>
- <https://www.fortunebusinessinsights.com/artificial-intelligence-ai-in-retail-market-101968>
- <https://resources.nvidia.com/en-us-retail-survey-2025>
- <https://www.telecomreview.com/articles/reports-and-coverage/8565-project-transcendence-saudi-arabia-s-upcoming-multi-billion-investment>
- <https://gulfnnews.com/business/markets/etisalat-by-e-rolls-out-ai-powered-self-service-store-in-dubai--and-with-trade-in-option-too-1.1697451818825>
- <https://retailtechinnovationhub.com/home/2025/3/24/prime-markets-becomes-first-retailer-in-saudi-arabia-to-bring-tally-inventory-robot-to-stores>
- <https://medium.com/@bosctechlabs/how-careems-super-app-dominated-the-middle-east-market-e451fd9000>
- <https://www.arabnews.com/node/2586731/saudi-arabia>
- <https://www.pwc.com/m1/en/publications/potential-impact-artificial-intelligence-middle-east.html#1>
- <https://www.mckinsey.com/industries/retail/our-insights/llm-to-roi-how-to-scale-gen-ai-in-retail>
- <https://www.bcg.com/press/15january2025-ai-optimism-autonomous-agents>
- <https://mea.newsroom.ibm.com/CEO-Study-2024#:~:text=The%20survey%20shows%20that%2060,difficulty%20filling%20key%20technology%20roles.>
- <https://www.deloitte.com/middle-east/en/services/consulting/perspectives/state-of-ai-in-the-middle-east.html>
- <https://artificialintelligenceact.eu/>
- <https://www.pymnts.com/cpi-posts/eu-lawmakers-warn-against-weakening-ai-regulations/>
- <https://sdaia.gov.sa/en/SDAIA/about/Documents/Personal%20Data%20English%20V2-23April2023-%20Reviewed-.pdf>
- <https://u.ae/en/about-the-uae/digital-uae/data/data-protection-laws>
- <https://uaelegislation.gov.ae/en/policy/details/uae-s-international-stance-on-artificial-intelligence-policy>
- <https://explodingtopics.com/blog/data-generated-per-day>
- <https://thepaymentsassociation.org/article/the-rise-of-self-checkouts-and-how-theyve-changed-retail/>
- <https://www.marketingcharts.com/customer-centric/customer-service-231623>

