Introduction

Stage Zero Deck
The battle for customers has intensified, with accelerated market shifts and the blurring of industry boundaries

The changing retail landscape requires new Data & AI capabilities

THE RETAIL INDUSTRY HAS LONG BEEN AT THE FOREFRONT OF DIGITAL DISRUPTION AND CHANGE. PRE-EXISTING MARKET TRENDS HAVE BEEN ACCELERATED BY THE PANDEMIC.

- Digital commerce has increased significantly across all sectors
- Populations have acclimatized to online shopping
- Curbside pickup became a priority when face-to-face transactions represented a health risk
- Fashion and food purchases shifted as work and socialization patterns changed
- Communities sought to support small local businesses as they suffered to keep their doors open

THE PARADIGM SHIFT IN CONSUMER BEHAVIOR AND MARKET DYNAMICS HAS ACCELERATED PRIORITISATION AND ADOPTION OF DATA AND AI CAPABILITIES TO TRANSFORM AT SCALE.

- Clear data & AI strategy with focus on business outcomes
- Real-time personalization across online and offline channels
- Data management and governance to improve access and quality
- Democratization of insights through intuitive user experiences
- Data monetization to unlock new revenue streams and growth
- ESG performance and impact embedded in key decisions

Source: Accenture - The Retail Experience Reimagined, 2020
During times of change, data is the lifeblood that can transform any retailer.
However, the value being realized from data is far below its potential.

Most retailers are finding it challenging to convert their data into value, leaving a large gap between access to data and the ability to derive meaningful insights from it.
Digital transformation is no longer enough

It’s important to extract value from Data & AI by applying it in a real business context

80% of the effort is put into cloud infrastructure, data management and applying intelligence.

Retailers have primarily focused on developing their core technology capabilities, which has incrementally improved their operations, but hasn’t enabled them to transform into nimble, data-native organizations.

But 80% of the value comes from transforming business functions, processes and culture.

To maximize business value, retailers need to align their digital transformation efforts with changes to their core business functions, culture, processes, and the way data fuels innovation, new business models and partnerships in our post-digital world.
Retail leaders are focused on delivering business outcomes from their data to drive growth and profit.

**Data-driven reinvention**
How do I transform my business to be data driven to achieve my growth objectives while mitigating against potential risks?

**Tailored assortments**
What product ranges should I carry across which channels? What products are driving unique sales for my highest value customers?

**Business-led journey to cloud**
How do I maximise the business value and impact from migrating core systems to the cloud? How can I generate more value from our data?

**Customer-centric supply chain**
How can I create tailored supply chain strategies to maximize sales and profitability while enhancing the customer experience?

**Personalised experiences**
How do I create a personalised experience for my customers to increase customer acquisition, improve brand engagement and unlock profitable growth?

**New revenue streams**
How do I effectively allocate spend to maximise profit, revenue, and ROI? How can I leverage data to unlock new revenue streams?
Rapidly validating and scaling AI-powered solutions unlocks value across the entire retail enterprise and has resulted in 2–3% EBITDA margin expansion at major retailers over a ~2-year period.
There are four key steps to successfully generating actionable insights from data

1. **Data Platform Foundation**
   - Integrate data sets across the business with a cloud-enabled data platform to create a single source of truth that drives insights and real-time decisions.

2. **Data Management & Governance**
   - Identify, control and manage critical data elements at scale in the cloud to transform them into an enterprise-wide strategic asset.

3. **Data Tribe**
   - Build a multi-disciplinary team of retail experts, data scientists and technologist that develop Data & AI solutions with a ‘product’ mindset.

4. **Actionable Insights**
   - Identify, prioritise and build cross-functional AI-powered use cases with an intuitive user experience to turn data into business outcomes.
ai.RETAIL provides the AI-powered insights required to transform marketing, merchandising and supply chain

**Marketing**
Customer experience
Better understand customer needs and behavior with data for every customer interaction and personalize the customer experience in real-time.

**Merchandising**
Localized assortments
Use AI to analyze category and product performance, optimize product ranges, maximize space and spot opportunities for new offerings.

**Supply Chain**
Operational excellence
Improve transparency, agility and resilience across operations and make better, faster decisions while becoming more efficient and reducing cost.

**Innovation**
New business models
Utilize data to drive continuous innovation through the entire organization to outpace the competition and generate new revenue streams (e.g., data monetization and retail media).

- **3-15%** Revenue uplift across core business
- **2-5%** EBITDA uplift over ~2-years
- **30%** MROI Increase using targeted campaigns
- **50%** Conversion increase through next best offer
- **4-6%** Reduction in supply chain operating costs
- **15%** Churn reduction through better loyalty
- **2-5%** Revenue lift from new business models
What is ai.RETAIL?

ai.RETAIL is an AI-powered insights solution, purpose built for retail, that brings together data management with proven use cases to accelerate speed to value.
Deliver profitable growth using leading AI, purpose built for retail, to gain a deep understanding of your customers, scale personalization, tailor your product offerings, optimize your supply chain, and manage risk and sustainability across your business.
Create a granular Customer 360 view to better understand customer profitability, loyalty and buying behaviours for every customer interaction. Enhance marketing, product and channel strategies and enable real-time personalization to create a unique customer experience.

**CPR**

**Primary users**
- Marketing
- Merchandising
- Supply chain

**Connectors**
- Customer Profit & Revenue (CPR)
- Microsoft Dynamics 365
- relevancé
- BlueYonder
- Adobe
- SAP HANA
- Oracle

**Data platform**
- Ingest
- Model
- Serve

**Data** → **Insights** → **Action & Optimize**

**Platform-as-a-Service**

**Microsoft Azure**

**Main Features**
- Customer Segmentation & Lifetime Value
- Customer Acquisition, Engagement & Churn
- Basket Missions & Product Recommendations
- Intelligent Pricing & Promotions
- Intelligent Marketing & Personalization
- Multi-Touch Attribution
- Marketing Mix Optimization
- Data Monetization & Retail Media
DMA

Take a customer-centric approach to optimize assortments, channels and space to more effectively meet customer expectations while driving sales growth, increasing margins and reducing working capital requirements.

Primary users
- Marketing
- Merchandising
- Supply chain

Dynamic Merchandising & Assortment (DMA)
- Category Performance Analysis
- Product List Optimization
- Macro Space Optimization
- Micro Space Optimization
- New Product Introduction
- Vendor Negotiation Analytics
- Demand Forecasting & Sensing

Connectors
- Microsoft Dynamics 365
- relevancé
- BlueYonder
- Adobe
- SAP HANA
- Oracle

Data platform
- Ingest
- Model
- Serve

Data → Insights → Action & Optimize

Platform-as-a-Service

Microsoft Azure
SNAP

Combine internal and external data sources to gain end-to-end visibility across the supply chain. Create a digital twin of the supply network to run ‘What-If’ scenario simulations to optimize performance taking into account cost, lead times and risk factors.

Primary users
- Marketing
- Merchandising
- Supply chain

Supply Network Analytics & Profitability (SNAP)
- Supply Chain Control Tower
- Supply Chain Segmentation
- Inventory Allocation & Replenishment
- Product Flow
- Optimal Source
- Supply Planning
- Shape of Chain/Real-Estate Analytics
- Predicting Returns

Connectors
- Microsoft Dynamics 365
- relevanc
- BlueYonder
- Adobe
- SAP HANA
- ORACLE

Data platform
Ingest → Model → Serve
Data → Insights → Action & Optimize

Platform-as-a-Service
Microsoft Azure

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ai.RETAIL Architecture

Client Source Systems
- CRM
- Marketing Automation
- POS
- ERP
- Merchandising
- Warehouse Mgt (WMS)
- Transportation Mgt (TMS)
- Data Lake

External sources
- Weather
- Competitive
- Purchase Intent
- Customer Traffic
- Macro/Socioeconomic

Data ingestion
- Production Data Streams (Push or Pull Supported)
  - File (.csv) SFTP
  - JSON HTTPS
  - XML, Java Object JDBC

ai.RETAIL Adapters
(e.g. SAP, Adobe, Dynamics)

Data & analytics processing
- Azure Databricks
  - Data and AI/ML Processing
  - Data Hygiene
  - User Defined Functions
  - AI/ML Models

Model Results
Supply Chain Data & Aggregations
Customer Data & Aggregations
Workﬂow & Collaboration

User interface
- Azure App Service
- ai.RETAIL UX Framework & Visualizations
  - Angular
  - Bootstrap
  - HTML

Dev & test areas on Azure
- Sandbox Area for Model Dev
  - 2–3 Years Data
  - Azure ML
  - mflow

Application Mgmt.
- Azure

Action Requests or AI/ML Results Back to
Source Systems (as required)

Workflow & Collaboration
- Logic Apps
- Microsoft Teams

User Persona
- Executives
- Operations teams

ai.RETAIL Administrator User Persona
- User group mgmt
- Data management
- Settings & logging
- Notifications mgmt

ai.RETAIL Business User Personas
- Executives
- Operations teams

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Selected use case accelerators

Selected assets

Customer 360 & Segmentation

Intelligent Marketing & Personalization

Intelligent Pricing & Promotions

Assortment & Space Optimization

Supply Chain Control Tower

Description

Create an integrated view of the customer by combining 1P, 2P and 3P data sources to create value-based micro-segments, analyze customer migration, predict CLTV and reduce churn.

AI-powered marketing solutions that including next best experience, real-time personalization engines and multi-touch attribution to provide targeted content, offers and product recommendations to improve MROI.

Identify how promotions are utilized with the business and their effect on sales and customer profitability. Optimize promotions and pricing using simulations and advanced customer insights.

Take a localized approach to optimize assortments, channels and space to more effectively meet customer expectations while driving sales growth, increasing margins and reducing working capital requirements.

Combine internal and external data sources to gain end-to-end visibility across the supply chain. Create a digital twin of the supply network to run ‘What-If’ scenario simulations to optimize performance taking into account cost, lead times and risk factors.

Value Drivers

✓ Increase Customer Profitability
✓ Optimize Campaign Targeting
✓ Reduce Churn
✓ Enhance Customer Experience
✓ Increase Sales & Basket Size
✓ Improve CTR & Conversion
✓ Enhance Brand Experience
✓ Optimize Marketing Spend & ROI
✓ Increase Full Price Sales
✓ Expand Gross Margins
✓ Improve Customer Experience
✓ Reduce Stock-Outs
✓ Increase Traffic & Sales
✓ Improve Product Margins
✓ Increase Stock Turnover
✓ Improve Customer Experience
✓ Reduce Network Costs
✓ Improve Inventory Productivity
✓ Improve Speed & Service Levels
✓ Mitigate Key Risks
Getting started: Our use case approach

Use case workshop
- Agree priority questions.
- Scope use case for initial pilot.
- Confirm data requirements.

Find the Value
- Demonstrate Insights for the Selected Use Case.
- Deliver Impactful Business Value.
- Experiment & Test for Optimal Approach.
- Focus on Visibility & Optimization.

Prove the value
- Harden the POC to run a more robust pilot.
- Incorporate Predictive Modeling.
- Deploy for a region, function or category.
- Demonstrate business case and payback.

Scale the value
- Scale the use case firmwide.
- Incorporate AI & Advanced Deep Learning including Feedback Loops.
Our Innovation Services team brings together the right people with diverse skill-sets and innovation mindsets across retail strategy, Data & AI and technology to identify and co-create tailored use cases

- Identify key business questions and pain points.
- Ideate relevant use cases for tackling priority business challenges.
- Co-create use case to define priority functional, data and technology requirements.
- Define business objectives and value case for each use case.
- Prioritise use case backlog based on value and required effort.
- Identify ai.RETAIL accelerators to fast-track pilot and delivery.

Imagine The Future

We co-create new and shape proven use cases together to differentiate your business in-market.

Unlock Growth

We dig deep to unearth hidden opportunities for data-driven growth and shared success.

Build New Realities

We bring ideas to life and make them real—through experimentation and rapid iteration.

Embed Innovation

We infuse an enterprise-wide innovation mindset and culture to drive long-term growth.
Prioritise critical data elements (CDES)

ai.RETAIL identifies and prioritizes the Critical Data Elements (CDEs) that are the crucial link to defining the KPIs that will power a retailer’s data-driven transformation. Focusing on CDEs greatly accelerates time to business outcomes.

Benefits

Faster Journey
Reduce the time to identify, curate, and remediate your data landscape by 75%

Reduced Scope, Time & Effort
...by defining and investing in the 10-20% data elements that are critical...

Transformational
...which will unlock 80-90% of business value

The Bottom Line

From Years to Months
From Curating 2,000-5,000 to 100 Data Elements
From Marginal (20-30%) to Transformational (80-90%)

Block out the noise to maximize your data’s potential, 5-10% of data typically drives 90% of the business value
Selected assets to improve data quality

Intelligent profiling
Examines source data to assess how data values differ from expected/approved values. Utilises ML/AI engine to suggest industry specific business rules to cleanse data using internal master data sets and external retail data sources.

Retail data veracity engine
Data Veracity engine uses approved rules to check and cleanse the source data to support the business objectives. It uses ML/AI to suggest correct values for identified issues based on data patterns.

Retail data Model
ai.RETAIL Data Model including CAR, SAR and PAR tables. Retail Data Dictionary and Industry Business Rules to accelerate verification, cleansing, standardisation and enrichment of the source data.

Data veracity dashboards
Data Quality Dashboards provide summary and detailed quality reports, along with capability to support root cause analysis. Enables analysis of failed rules and monitors impact of remediation efforts, and degree of cleansing applied.
Enrich data with 3rd Party ecosystem

50 Partners

3B+ Data Records

1036 Benchmarks

336 Countries

Learn more from Data Marketplace
ai.RETAIL focus area within Customer, Supply Chain & Merchandising

Insight APIs that allow for brains to be bolted-on top of retail systems.

Pre-built adaptors & integrations

Pre-Built Integrations

API level integration for customer activation & personalization

ODATA API level integration for CPR & SNAP

CDM level integration for Customer Insights

Exploring integrations with Facebook Audience, Instagram, RELEX

Next Best Action
Personalization

Assortments
Product Flow

Demand Forecast
Supply Chain Control Tower

Price/Promo
Inventory Optimization
Network Visibility

Reporting/BI
Customer Insights

Core Merch
ERP, Finance
Order Management
Warehouse Mgmt

Marketing
Price/Promotions Loyalty

ECommerce
POS
Mobile Social

Connectors

Prescribe
Rationalize
Predict
Optimize
Describe
Manage
Execute
Interact
ai.RETAIL enables a business-led journey to cloud

To maximise return on investment, retailers must combine the cloud with data-driven insights to unlock new opportunities for profitable growth in parallel to migrating their existing core systems to the cloud.

**IT-Led Journey to Cloud**

The predominant Journey to Cloud approach is IT-led. It focuses on migrating enterprise systems and accelerating automation in Horizon I and II, prior to unlocking new growth in Horizon III.

**Business-led Journey to Cloud**

In addition to cost reduction, the ai.RETAIL platform enables retailers to drive business outcomes in Horizon I and II using AI-powered analytics to identify new growth opportunities and optimize core operations.

**Horizon I**

Legacy Modernization & Cloud Enablement

Plan and execute rapid migration of workloads to the cloud reducing cost and optimizing performance.

**Value:**
- 10%-30% Savings
- >Resilience

**Horizon II**

Transformation & Automation

Leverage the cloud to grow the business by improving capabilities, increasing automation and enhancing agility.

**Value:**
- +10%-20% Savings
- >Agility

**Horizon III**

New Cloud-Enabled Business Models

Unleash innovation and new business models using data-driven insights to unlock profitable growth.

**Value:**
- >Growth
- >Innovation

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**ai.RETAIL**

**Realise H1 Value**
- 10%-30% Savings
- >Resilience

**Horizon I**

**Accelerate Speed to Value**

**Horizon II**

+ Business Outcomes
- >Growth
- >Innovation
- >Agility

**Horizon III**
Intermarché data factory as a service

The ai.RETAIL Data Factory at Intermarché is developing data use cases to generate business value and accelerate data transformation putting in place both human and technology capabilities.

Business goal

**Enterprise-Wide Value Creation**
The data factory is identifying and developing business use cases to support the Intermarché strategy: “better production, better consumption, eating better” and enhance customer experience, while also increasing productivity and growth.

**Continuous Innovation**
The data factory is developed in partnership with Microsoft to integrate their latest technologies. We are working in an open ecosystem to accelerate the development of the business use cases.

**Grow People and Culture**
We believe the data challenge is human before being technological. Therefore the data factory is supporting the transformation of individual and collective behaviors towards data, and integrating data at the heart of the decision making processes. We are supporting the client to adopt each use case to embed a data-driven culture across the enterprise.

Projects and results

Data Factory, structured into 3 teams:
- **Cockpit**: The cockpit defines the data vision, supports value creation and diffuses data culture and behavioral transformation.
- **Feature team**: This team helps to drive the transformation by exploring and delivering high value data solutions and services.
- **Platform**: This team builds the technological foundations to sustain long-term value creation.

Two business metrics will be monitored during the project
- Business value generated by the use cases.
- Adoption of the data mindset across the enterprise.
Market leading auto parts store promotion effectiveness

$8B Retailer – Promotion effectiveness POC to improve customer profitability

Challenges
Client engaged with Accenture to identify the most and least profitable customers and improve promotion effectiveness.
Most of the client’s targeted campaigns/promotions are not driven by the purchase behavior of the customers and are not attributed to the most loyal and profitable segment.
The client is plagued with unorganized and inconsistent data.

Approach
Ingested 3 years worth of customer transactions (approximately 1 billion rows of data) to enable insights into profitable customers’ spending habits
Organized messy customer data into a clean, structured and usable data set, with the help of Microsoft and their Customer Insights technology.
Enabled insights into more targeted customer acquisition, as well as to align and activate customer relevant promotions.

Insights & Values

<table>
<thead>
<tr>
<th>Insight</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.7%</td>
<td>Analysis revealed that 8.7% of customers contribute to 40% of profit.</td>
</tr>
<tr>
<td>$75M</td>
<td>Identified $30M-$75M promotion optimization opportunity.</td>
</tr>
<tr>
<td>74%</td>
<td>Identified a 74% customer churn translating to $15M in lost profit.</td>
</tr>
<tr>
<td>-41%</td>
<td>Revealed a 41% decline in the highest profitable customers along with a 4% increase in low profit customers.</td>
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Global fashion retailer personalization

AI-Powered personalized customer journeys

Challenges
A global fashion retailer wanted to use AI-powered marketing capabilities to deliver a personalized customer experience across all channels. The client’s goal was to increase brand engagement, conversion and sales by providing customers with a tailored end-to-end experience.

Approach
Delivered a real-time, AI-Powered Personalization Engine to tailor the customer engagements for millions of omnichannel customers. Utilized machine learning, reinforcement learning, NLP, image recognition and deep learning to power the real-time personalization engine.

Insights & Values
+35% CTR and +18% CR uplift across email marketing campaigns.
+29% increase in eCommerce Average Basket Revenue and +25% CR uplift.
AI-algorithms re-trained twice per day to optimize performance.
Minimizing inventory while maintaining service

Leading apparel retailer Multi-Echelon Inventory Optimization (MEIO)

Challenges
Client was undergoing supply chain transformation and wanted to reduce inventory by centralizing their planning capability while maintaining current high service levels.
They wanted to apply advanced analytics and visualization techniques to rapidly identify and act on opportunities to optimize inventory across a complex multi-echelon network.
A key client challenge was safety stock calculations. They currently used independent tools to calculate safety stock at each node of the network without considering overall supply chain costs resulting in higher inventory levels.

Approach
Accenture provided an analytics as a service capability to run a complete multi-echelon inventory optimization (MEIO) on a monthly basis.
As part of the MEIO service, Accenture determined and optimized where inventory should be held within the supply chain and in what quantity to achieve the required availability at end node.
On a monthly basis we performed sensitivity analysis to suggest alternative inventory scenarios for consideration.

Insights & Values
The client was able to reduce their carrying costs a 8% while simultaneously increase service levels from 90% to 95%.
Continuous improvement processes were set-up to minimize excess inventory by identifying slow movers across the network.
Meet the ai.RETAIL team

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