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Harnessing Data for Customer Experience in Retail

Data, analytics and AI use cases for retail decisions

FA-0626 · 1 day

Data & Analytics · AI for Leaders & Business

Explore customer and operational data, retail analytics and AI opportunities through dashboard discussion and illustrative scenarios.

Introduction

This one-day overview connects retail customer journeys with data sources, analytics, AI use cases and business measures. Participants examine segmentation, behaviour, inventory, marketing and customer-service questions without needing to build models or write code.

Snowflake is used as an example of a cloud data platform. Dashboard discussion and fictional retail scenarios help participants assess data requirements, privacy, decision usefulness and limitations. The course does not promise loyalty, revenue or efficiency improvements, or implementation of a retail data platform.

Learning outcomes

The course teaches participants to:

- Identify customer, transaction, loyalty, product and operational data sources.
- Explain customer-journey, segmentation, lifetime-value and churn concepts and their assumptions.
- Compare AI use cases in recommendations, forecasting, sentiment and retail operations.
- Describe the role of a shared data platform and its access/governance responsibilities.
- Interpret selected retail KPIs and dashboard views with attention to data quality.
- Evaluate a fictional retail use case and identify questions for a responsible pilot.

Prerequisites

- Basic understanding of retail business operations.
- General computer literacy.
- Familiarity with business reporting concepts is beneficial but not required.
- No prior programming or data science experience is necessary.

Training outline

1. 1. Retail Data and Customer Experience

- Evolution of data-driven retail
- Customer expectations in omnichannel retail
- Assess possible business value alongside data quality, cost and implementation constraints.
- Data-driven decision making

2. 2. Data Sources and Touchpoints

- Customer data sources
- Sales and transaction data
- Loyalty program data
- E-commerce and in-store interactions
- Product and inventory data
- External data sources

3. 3. Customer Analytics Concepts

- Customer 360 concepts: identity matching, integration limits and permissions.
- Customer journey analysis
- Customer segmentation
- Shopping behavior analysis
- Customer lifetime-value estimates, assumptions and uncertainty.
- Churn indicators and their validation; indicators are not certain predictions.

4. 4. AI Use Cases and Limits

- AI use cases in retail

- Recommendation examples, relevance checks and privacy implications.
- Predictive analytics
- Demand forecasting
- Inventory-decision support and the limits of optimisation claims.
- Sentiment analysis examples, including ambiguity and contextual error.
- Generative AI for illustrative retail drafting or knowledge tasks, with human review.

5. 5. Snowflake as a Data-Platform Example

- Modern retail data platforms
- High-level storage, compute and cloud-services architecture; no platform implementation is required.
- Unified customer data
- Controlled data sharing, permissions and appropriate data selection; the product feature does not establish confidentiality by itself.
- Data quality, metadata, access control and evaluation needs before using data for AI.
- Illustrative retail reporting and data-sharing workflows using Snowflake as the platform example.

6. 6. Retail Dashboards and Measures

- Sales performance metrics
- Customer engagement KPIs
- Inventory and merchandising analytics
- Marketing campaign performance
- Executive dashboards

7. 7. Illustrative Retail Scenarios

- Fictional personalisation proposal: evaluate useful inputs, customer choice and relevance.
- Loyalty-program scenario: select measures and distinguish correlation from evidence of improvement.
- Inventory scenario: compare demand estimates, stock constraints and business assumptions.
- Sentiment-analysis scenario using non-identifying sample feedback.
- Discuss a fictional retailer’s platform choices without asserting a real client relationship or success story.

8. 8. Governance and Further Development

- Evaluate proposed AI-assisted customer experiences against evidence and customer needs.
- Real-time versus periodic analytics: freshness, latency, costs and use-case requirements.

- Responsible AI and data governance
- Further development and learning options; no unsupported adoption forecast.

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