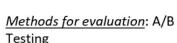
MACHINE LEARNING CANVAS

PREDICTION TASK



<u>Unsupervised machine</u> <u>learning task</u> that aims to find associations between items.

IMPACT SIMULATION



<u>Metrics for evaluation</u>: Support, Lift, Confidence

DECISIONS



- Product Placement
- · Cross-Selling and Upselling
- · Marketing Campaigns
- Inventory Management

MAKING PREDICTIONS



Update models with new training data based on trigger events. Featurization time can range from minutes to hours

VALUE PROPOSITION



Enhance the shopping experience, improve customer satisfaction, and increase cross-selling opportunities for the business by providing personalized product recommendations to the end-users based on their

DATA COLLECTION



Update models with new training data based on trigger events, data volume, stability,

DATA SOURCES



Internal Data Sources (Transactional Data, Product Catalog, etc.) and External Data Sources (Market Data, Social Media Data, etc.)

BUILDING MODELS

and business needs.



Have one main production model that captures the underlying patterns. Updating the model less frequently might be sufficient

FEATURES



Customer ID, Product ID, Transaction Date/Time, Transaction Quantity, Transaction Amount, Customer Demographics, Product Descriptions, Historical Purchase Patterns

LIVE EVALUATION AND MONITORING

previous purchase history.



- A/B Testing: Compare performance of deployed system against baseline
- Conversion Rate: Measure rate at which recommendations lead to actual purchase
- Return on Investment (ROI): Calculate financial return on the investment