Commerce Personalization Pipeline â CDP â Recommendations

Fast, low-latency personalization pipeline that converts CDP events into high-precision offers, driving measurable CTR and conversion lifts.

Problem

Retail teams struggle to deliver relevant, low-latency personalized offers without huge engineering lift. Broad segmentation produces noise; real-time personalization often increases page latency and engineering complexity.

Solution

A production-ready pipeline: CDP event capture â validated event mesh â BTP/CPI preprocessing â feature assembly â Joule inference endpoint â Commerce delivery with short caching. Design prioritizes simple ranking models, clear data contracts, and fast rollouts via feature flags.

5-step Implementation Checklist

1. Define event contract and register schemas in schema registry
2. Implement event streaming from CDP to ingestion service
3. Build light ranking model and expose inference endpoint with 250ms SLA
4. Integrate inference into Commerce UI with 60s caching layer
5. Run 2-week A/B pilot on two targeted segments

Key KPIs

â¢ CTR uplift: target 25â40% in pilot
â¢ Conversion lift: 15â25% on targeted segments
â¢ Service latency increase: under +200ms (95th percentile)
â¢ Recommendation precision (top-3): over 60%

Contact

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