Telemetry-First CX Architecture

Design pattern and checklist for telemetry-first customer experience platforms, enabling real-time analytics and ML-ready data streams.

Problem

Many CX programs are blind to rich event data emitted across channels and systems. Data fragmentation prevents rapid detection of experience degradation and hinders ML experiments.

Solution

A telemetry-first architecture standardizes events, enforces schemas, and creates reliable pipelines for analytics and inference.

6-step Implementation

1. Define event taxonomy and schema registry
2. Instrument producers to publish validated events
3. Implement ingestion and enrichment via Event Mesh
4. Feature store integration for ML experimentation
5. Analytic surfaces and real-time alerts
6. Governance and retention policies

Key KPIs

â¢ Schema validation failure: under 1%
â¢ Event end-to-end latency: under 1s
â¢ Event coverage: over 90% for targeted flows

Contact

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