

POS Streaming Analytics

Leverage Streaming and Lakehouse for Retail

By Ronie Arauco

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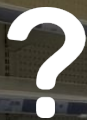
14% online purchases in
retailers (1)



71% of retailers with “lack of
real-time inventory visibility” (2)

(1) How Covid-19 Changed Retail - Probably Forever. Forbes. July, 2021.

(2) \$1 Trillion Problem: Managing Out-of-Stocks and Omnichannel Fulfillment During COVID-19. Retail Info Systems. March, 2021.



Inconsistent
customer
recognition



Mistargeted
messaging



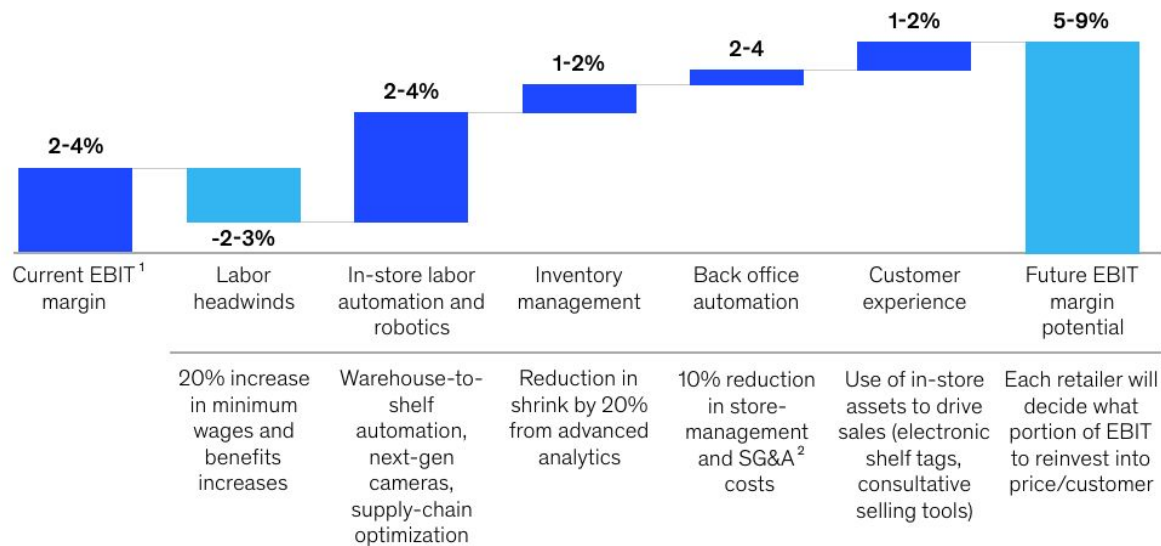
Substitutions,
cancellation &
errors



Inadequate
problem
resolution

Technology will likely double store profitability (1)

- The “store of the future” can:
 - Double retailers’ EBIT margins
 - Provide a better customer experience
 - Have a positive ROI
- The technology needed to achieve this transformed P&L is already available



(1) The Future of Shopping: Technology Everywhere. McKinsey & Company. April, 2022.

Inventory Management

- Key metrics spanned in POS analytics

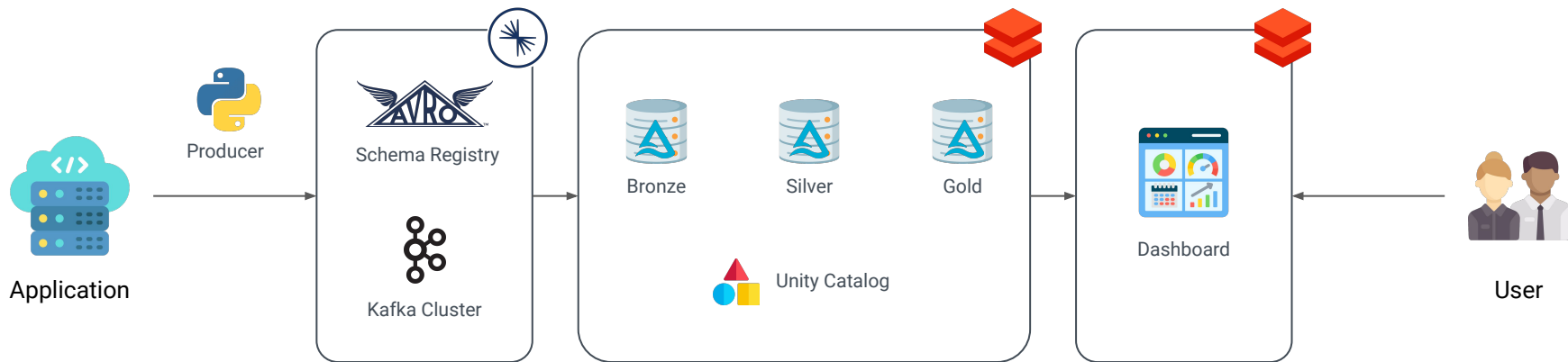
**Last transaction
information**

**Current inventory
quantities**

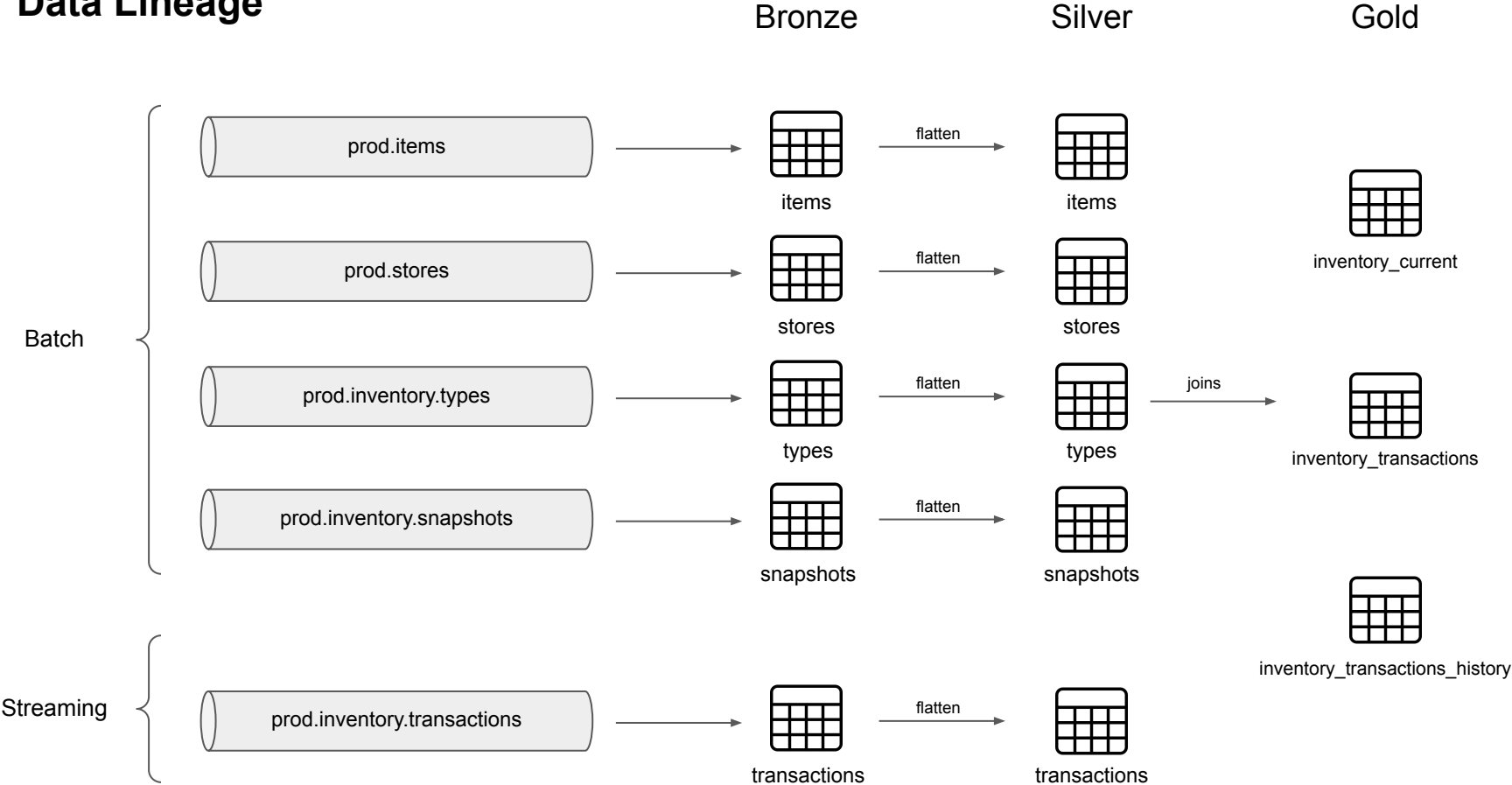
**Growth of items
quantity over time**

Architecture

- Streaming
 - Topics support avro schema evolution with Schema Registry
- Lakehouse
 - Tables are managed using Unity Catalog
 - Structured Streaming support the streaming flow



Data Lineage



POS Analytics Dashboard

- Dashboard link [here](#)
- Repository [here](#)

