



shopify



Building a Data Advantage Through AI and Analytics

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2006

Founded

SaaS

E-commerce Service

10%

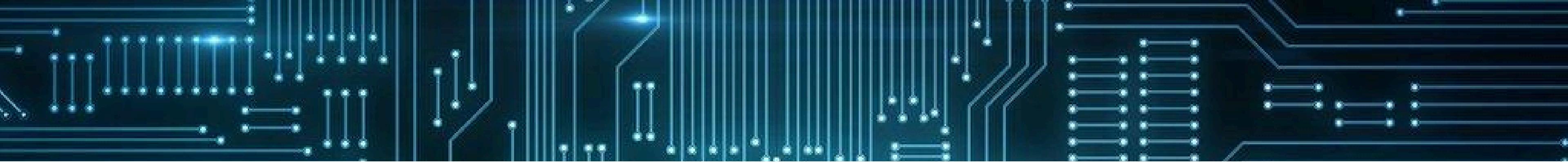
Annual total US sales

Subscription Services

- Website Creation
- Payment Process
- Inventory Management
- Marketing Channel

Business Model

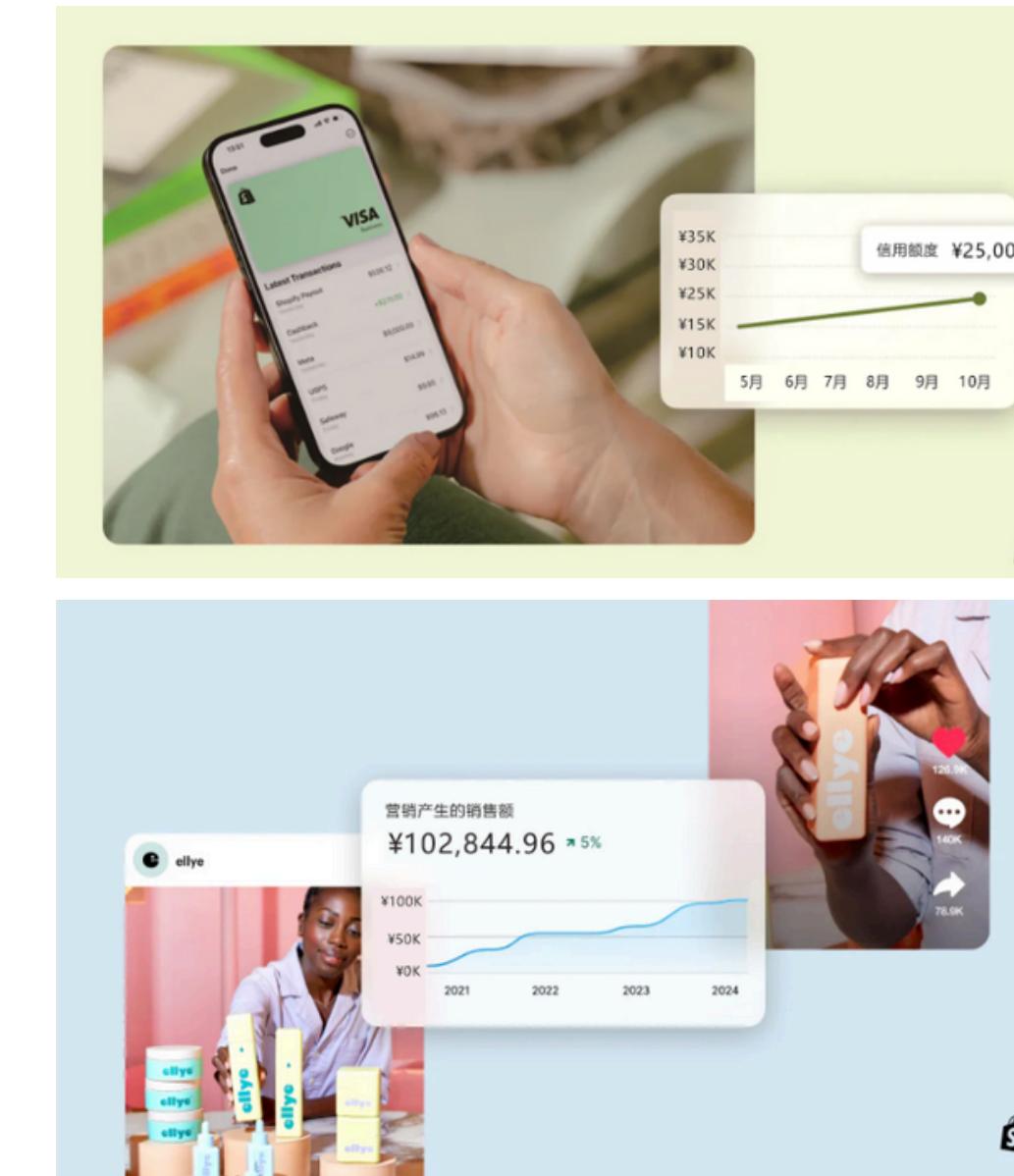
- Subscription Fee
- Add-on feature



Shopify's Business Model heavily relies on **data**



How **Shopify** Uses Data



Product Service

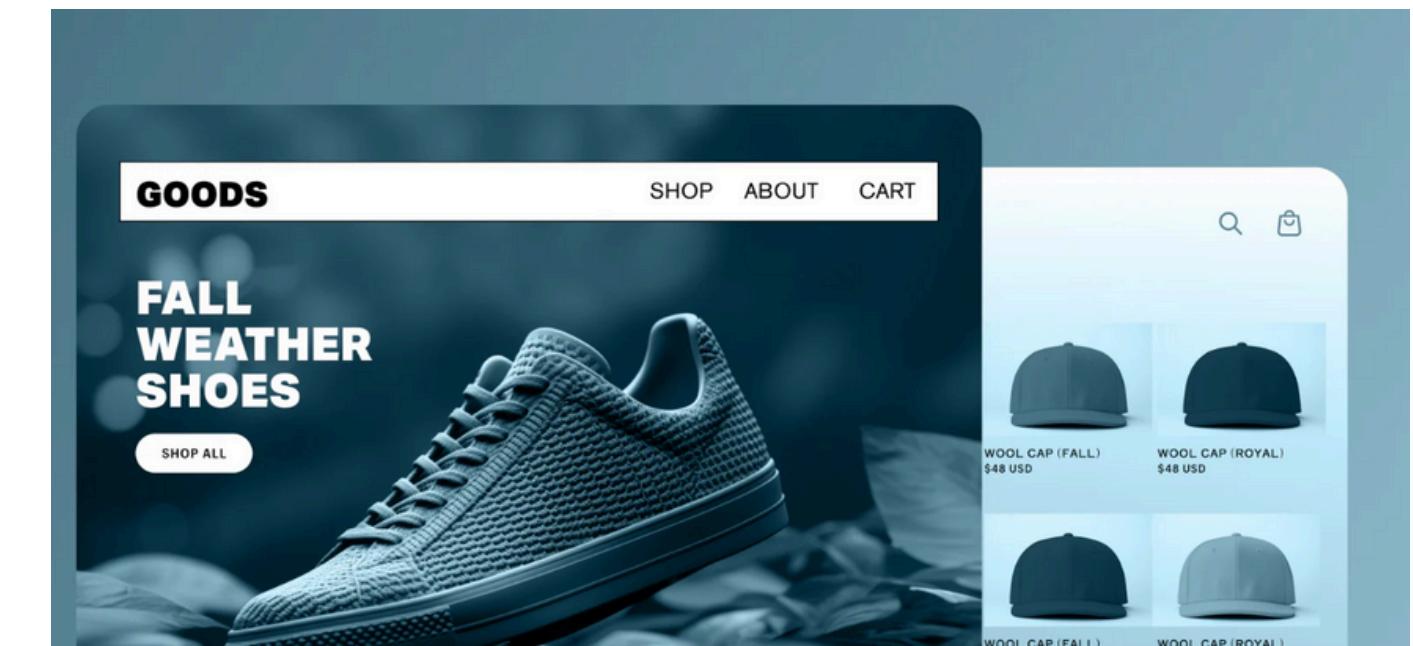
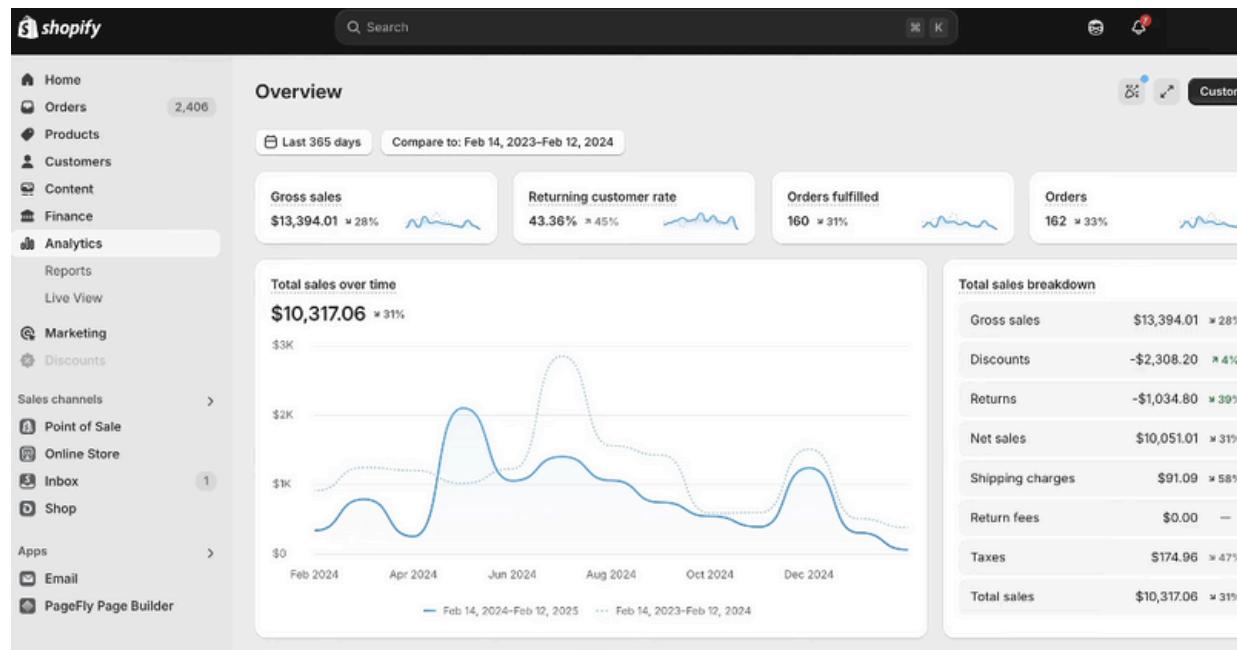
- Merchant Insights and Decision Support
- Personalized User Experience
- Product and Service Innovation

Marketing

- Marketing and Advertising Optimization
- Risk Management and Security
- Ecosystem Integration



High-speed and large amount of data power Shopify
AI adaption enable excellence for the platform

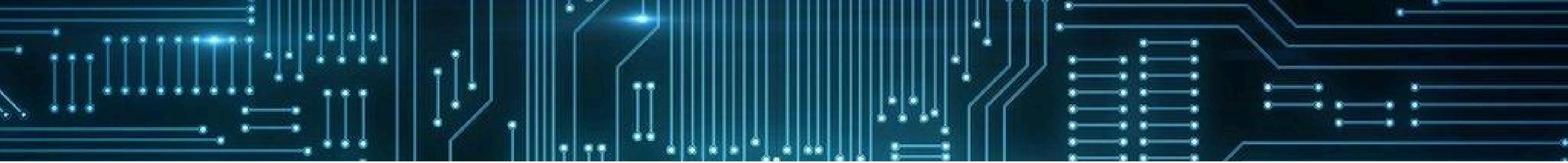


Analytics Product Service

Large amount of real time data enable customer for analytics

AI Empowered (Shopify Magic)

AI feature enabled website design, marketing optimization



Leveraging **AI and Analytics** to boost engagement and drive business growth



- **Descriptive Analytics:** Understand current customer behaviors and sales trends.
- **Diagnostic Analytics:** Identify reasons behind cart abandonment or reduced customer engagement.
- **Predictive Analytics:** Forecast customer preferences, future demand, and potential churn.
- **AI Applications:** Personalize user experiences, optimize marketing strategies, and automate customer support for enhanced satisfaction.

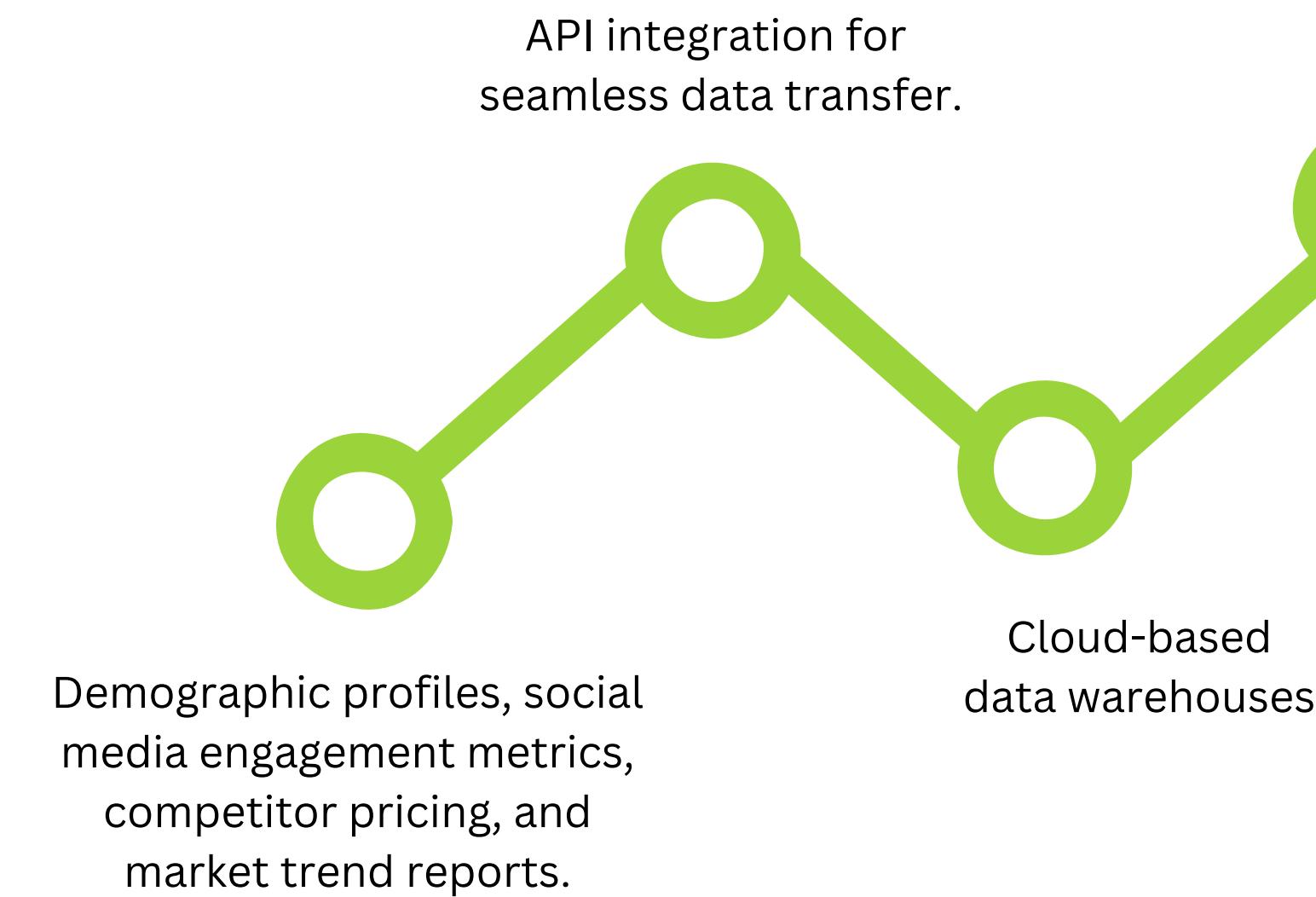


Using **external data** to understand e-commerce trends and user behavior

External Data Sources



Google Trends,
social media platforms
Nielsen market insights



Data governance frameworks for quality and security.

Design Governance that ensures **accuracy, security, and compliance** and creates **trust and scaling** the platform



Hybrid Model
Scale global, be agile local

Centralized: trust, integrity, consistency

Decentralized: modularity, fast moving, merchant first (data as product)

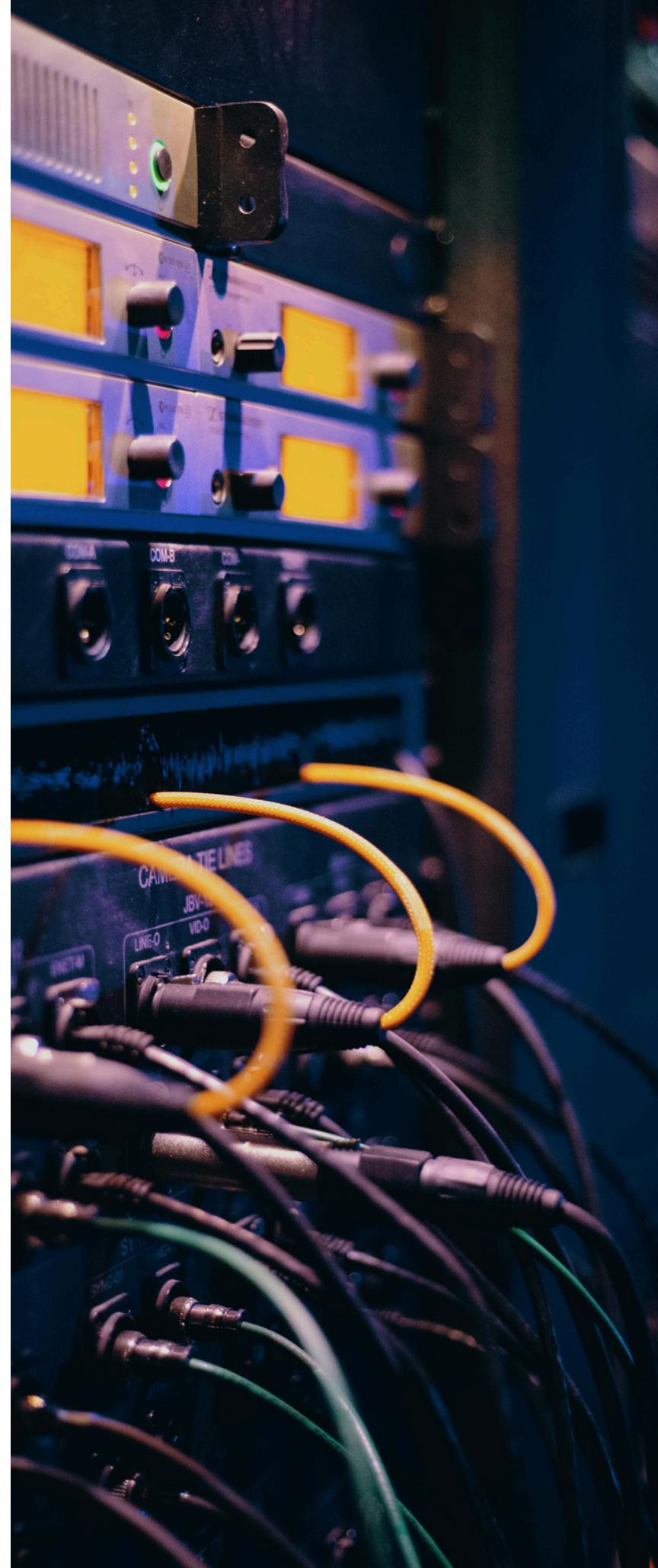
4 Pillars of Governance

Quality

Privacy
Security

Compliance
(Legality)

Metadata
Management



Having clear data roles and descriptions will facilitate interaction across multidisciplinary departments

Data Roles

Owners = alignment to increase conversion and reduce churn

Stewards = KPIs to align strategy and engineering

Custodians = Pipelines for dashboards, billings, logistics

CDO = strategy, priorities, privacy, enforcement





Building Shopify's **tech stack** and **AI foundation** to supports **real-time intelligence at global scale**

Unified Data Platform



Snowflake

- Cloud-based data lake
- Batch = finance, billing
- Real time = cart activity, store alerts

Processing/Integration



kafka Streaming



Apache **Airflow** ETL

- Consistency and real time data across Shopify products

AI and Analytics

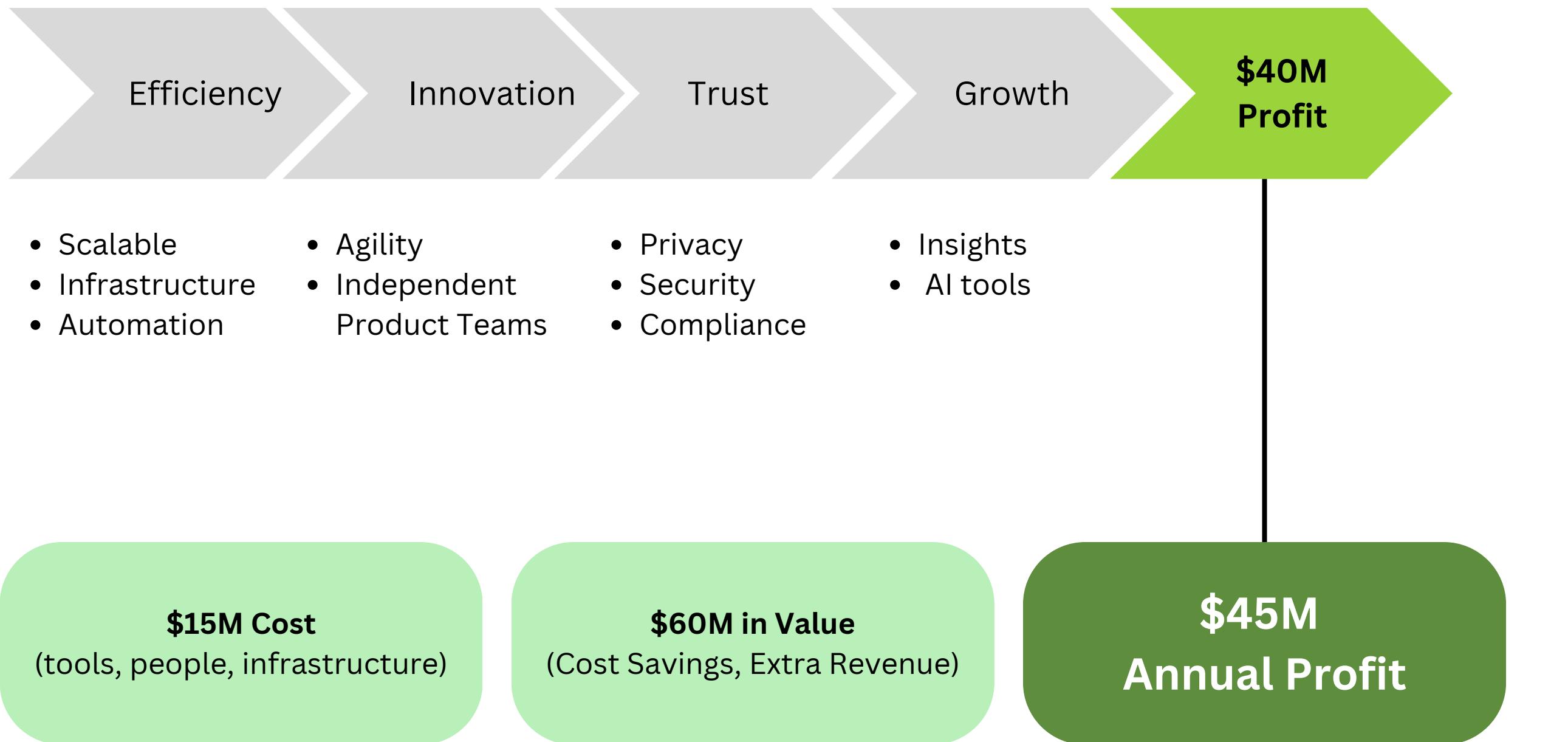


databricks



- Advanced ML analysis and training
- Dash-boarding and actionable Inisights

Shopify's data & AI foundation's strategy will create \$45M in net annual value



Q&A

Appendix

Appendix: Net Gain Calculations

	Value Created
Revenue Uplift	+\$36M from AI-driven GMV growth +\$7.5M from improved merchant retention
Cost Savings	\$10.4M from automation + pipeline efficiency \$500K from reduced support tickets
Total Value	~\$55M-\$60M annually
Estimated Cost	~\$15M/year (infra, tools, data team)
Net Gain	~\$40M+ in annual ROI

