

cts

Retail Perspective



The pressure on Retail is relentless...

Trend towards digital is accelerating

- Global online sales hit over \$4T in 2020, chasing close to a 22% penetration of total sales by 2024.
- Ubiquitous shopping and convenience are standard
- Continued granular segmentation and personalisation is required
- Retailers that haven't adapted have suffered the consequences

New trends with increased expectations

- Greater requirement for differentiation of products and experiences
- Magnification of in-store experiences
- The challenge of hiring and maintaining skilled staff increases
- Ecommerce fulfillment through stores is common to provide faster delivery to customers at a lower cost to retailers

Agility and speed are competitive musts

- Unpredictable demand remains
- Volatility in supply chains continues amid slowdown in global trade
- Customers want to engage with retailers and brands that align with their values and interests such as sustainability
- Margin pressure increases, forcing retailers to focus on ways to improve profitability

Retail goals remain unchanged...



Increase traffic

Create a better customer journey starting from a variety of Google entry points, and optimizing marketing from journey insights



Improve conversion rates

Give shoppers a personalized eCommerce experience with AI-driven search, recommendations, and conversational interfaces



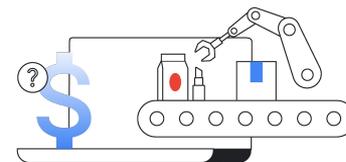
Increase basket size

Support ordering and fulfillment, improve store agent efficiency and critical curbside pickup capabilities



Decrease costs through operational efficiency

Leverage technology to improve associate processes and provide better customer experiences



Data-driven digital transformations yield significant benefits

54%

Increase in revenue performance

44%

faster time to market

62%

Improvement in customer satisfaction

54%

Increased profit results

Orchestrating data for competitive differentiation

Not individual use cases

Customer value management
360 view of customer,
cross-sell
and up-sell

Optimized experience
Connected and
frictionless across
all channels

Real-time personalization
Real-Time, contextual
personalization



Connected supply chain
Supply linked to demand

Relevant price &
promotions Customer
centric pricing
and promotions

Hyper localized range
Individual range for each
location



Scale



Speed



Complexity



Concurrency



Connected



Scope

Problems with Traditional Approaches



Cost



Complexity



Proprietary Logic

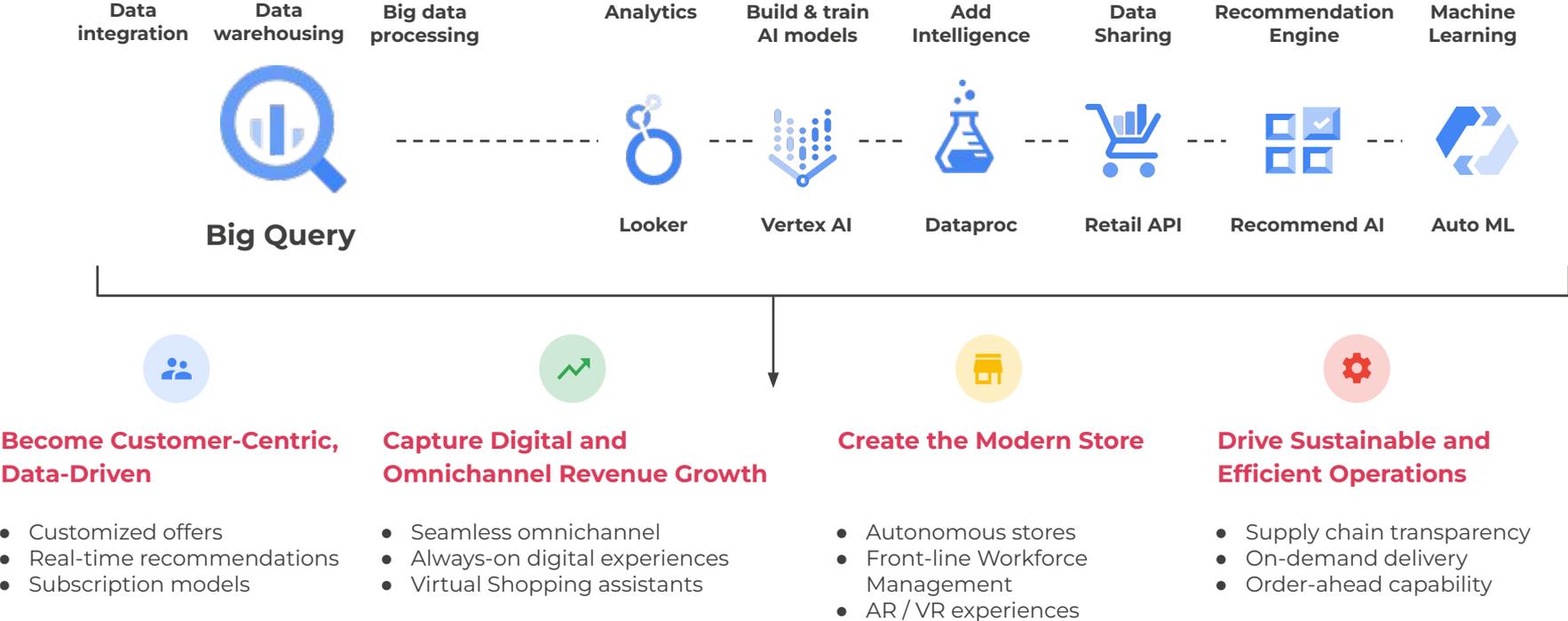


Expensive to Scale



Siloed data

Create an engine for business-changing insights with seamless ecosystem integration



Focus on ROI



Week 1-2 Align

- Document use case detail
- Confirm Data Set availability
- Assign resources
- Identify customer SME

Deliverable

- Scope document
- Project plan

Week 2-5 Create

- Load & prep data
- Develop analytics & models
- Develop early insights
- Iterate with customer
- Finalise insights

Deliverable

- Analysis, Models & Code
- Insight Report & Findings

Week 6 Evaluate

- Final recommendations
- Document ROI
- Adoption plan
- Executive Presentation

Deliverable

- Report & Presentation
- Business case for adoption



Use Cases



Demand Forecasting

- Improved Forecasting
- Data Modernisation
- Sustainability



Unified Analytics

- Faster actions, better performance
- Profitable partnerships
- Unified analytics



Dynamic Pricing Model

- Democratisation of data
- Pricing agility
- Unified analytics



Infrastructure Modernization

- Cost Savings
- Scalability
- Improved Customer Experience



Supply Chain Optimization

- Democratisation of data
- Improved Forecasting
- Improved Data Governance

Improving Marketing ROI

The opportunity

To help a leading outdoor brands owner understand the impact that marketing spend was having across their resellers, with a view to **improving the return** they make on their marketing spend, as well as making their **reseller relationships more profitable**.

Outcomes

1. **Faster actions, better performance.** Access to customer insight data from resellers allows for quicker optimisation of marketing channel performance at a brand level.
2. **Profitable partnerships.** Improved understanding of the profitability of resellers, allowing for better application of marketing funding towards them.
3. **Unified analytics.** Have a 360 view of different customers across resellers.
4. **Robust and manageable.** A platform resilient to errors and capable of handling multiple data sources and formats.

Solution

Technology

- Landing zone
- Data warehouse
- Automated data ingestion

Data Sources

- Reseller sales data
- Customer demographic
- Product data

Processes

- Single version of the truth across multiple brands
- Decision governance and process controls
- Clear documentation of the buying workflow



Data Consolidation & Sustainability



The opportunity

To consolidate various disparate data sources within a leading British online fashion retailer
Phase 1: Sales Data. Phase 2: XFN data (Marketing analytics, finance, sales)

Existing data platform raised sustainability issues amongst their data scientists, and the company was seeking a more sustainable option

Outcomes

1. **Democratisation of data:** One single source of truth for data which can be easily accessed by non technical teams via Looker. Data can have a broader impact across the business.
2. **Reduced Query time:** Increasing efficiency and productivity across the business.
3. **Improved Data Governance:** CTS implemented best practices for governance, and solutions to avoid mis-usage and allow for predictability.
4. **New business Opportunity:** We have since run a pilot with a subsidiary of the business, connecting their data sources into BigQuery.

Solutions

Technology

- Landing Zone
- Data Warehouse
- Automated Data ingestion
- BigQuery

Data Sources

- Sales Data
- ERP Data Systems

Processes

-

Customer demand and sales forecasting

The opportunity

To improve demand reporting for a leading CPG brand's supply chain, helping them to **reduce cost and identify new growth opportunities**.

All data was handled and stored manually in Excel sheets. The data was not available in real-time, often outdated, and the company was being reactive. This limited their ability to forecast demand and supply accurately.



Outcomes

- 1. Democratisation of data:** One single source of truth for data which can be easily accessed by non technical teams via Looker. Data can have a broader impact across the business.
- 2. Improved Forecasting:** Consolidation and standardisation of data means teams can make data driven decisions faster, and in real-time increasing the accuracy of forecasting and reducing wastage
- 3. Improved Data Governance:** Data stored in a centralised location which can not be manipulated on a more secure platform than previously.

Solutions

Technology

- Landing Zone
- Data Warehouse
- Automated Data ingestion
- Looker
- Matillion

Data Sources

- Sales Data
- Order Data
- Reseller Sales Data via ERP Demand Reporting Systems

Processes:

- Aggregated SKU Summaries

“BigQuery and Looker will be the foundation for us in our decision making / what we do.”

— Head of IT, CPG Brand

Appendix

Example use cases



PRETTYLITTLETHING

boohoo



Retailers are now adjusting to the “new normal” of shopping



Digital capabilities are “table stakes”

- Global online sales hit over \$4T in 2020, chasing close to a 22% penetration of total sales by 2024.
- Ubiquitous shopping and convenience are standard
- Continued sub-segmentation and personalization are needed
- Retailers that haven’t adapted have suffered the consequences



Stores reemerge with increased expectations

- Prioritized health and safety measures are needed
- In-store experiences need to be with the time and potential risk for customers
- The challenge of hiring and maintaining skilled staff increases
- Ecommerce fulfillment through stores is common to provide faster delivery to customers at a lower cost to retailers



Agility and nimbleness are competitive musts

- Unpredictable demand remains
- Volatility in supply chains continues
- Shifts in global trade are expected
- Customers want to engage with retailers and brands that align with their values and interests such as sustainability
- Margin pressure increases, forcing retailers to seek opportunities to improve profitability

COVID-19 has pushed the retail industry into a new reality

Acceleration of current trends

Rapid growth of **ecommerce**

Ubiquitous shopping and convenience are standard

Extreme sub-segmentation and **personalization**

Expedited **rise of insurgents**, direct to consumer, private labels

New trends and paradigm shifts

Prioritized **health and safety**

Decreased globalization, **increased regionalism**

Home as the center of consumption

Value-based purchasing

Magnified **in-store experiences**

Continued uncertainty

Unpredictable demand

Volatility in supply chains

Long-term **financial impact**

Slowing global trade

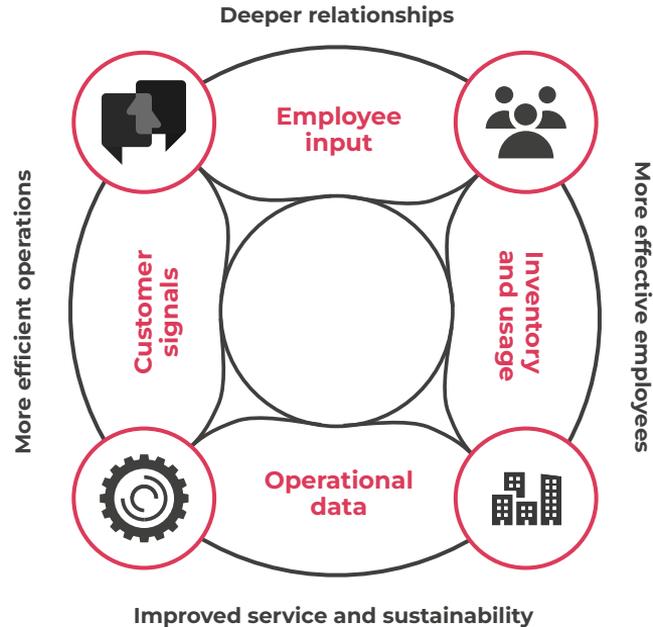
Digital feedback loops power innovation in hospitality

Customers

1. Engage your guests in a personal and relevant way across all touchpoints
 - Predict what guest want
 - Bridge physical and digital experiences
 - Engage through path to purchase
 - Profit from optimized interactions

Operations

3. Optimise your operations to become an agile, insights driven organisation
 - Predict demand and optimise supply
 - Streamline business processes and customer engagement
 - Build in the flexibility and agility needed to manage a rapidly evolving value chain
 - Anticipate maintenance events before they impact customer experience



Employees

2. Empower your employees to deliver differentiated, personalised service and maximize revenue growth
 - Equip your teams to handle daily activities
 - Optimise staff productivity
 - Share insights and foster collaboration
 - Delight with customer experience

Products

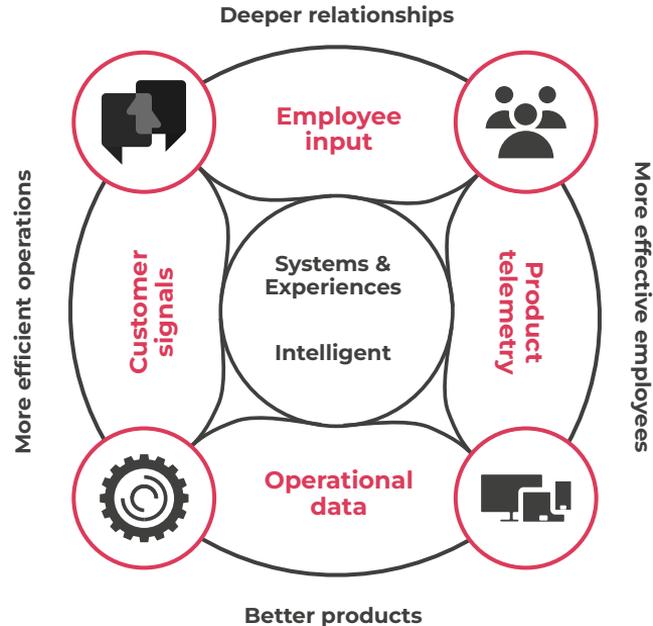
4. Create an experience that is welcoming, sustainable and customer centric
 - Minimise the environmental impact of all property and merchandise
 - Ensure guests feel safe and secure
 - Direct investments to the most profitable locations & products
 - Enhance investment decisions backed by accurate, comprehensive data sets

Customers

1. Improve customer experience & build long term relationships
 - Customer Service Data & Feedback
 - Customer Demand

Operations

4. Increase operational efficiency & enable intelligent supply chain management
 - Trending Issues & Resolution
 - Inventory Tracking
 - Predictive Maintenance data
 - Sustainability Assessment & Tracking



Employees

3. Provide proactive customer support with optimized scheduling & agent management
 - Field Service Dispatch Data
 - Technician Efficiency & Feedback

Products

2. Accelerate product innovation & establish continuous product improvement
 - Product Telemetry & Feedback
 - Product R&D