Demand Forecasting & Planning

Introduction to Asper

Significant value unlocks interconnected autonomous AI

+10% Revenue Growth and Financial Performance

+40% Increased Productivity

3X Fas ter time to Value

Break functional silos and interconnect demand and supply

AI first process transformation in enterprise decision making

Seamless integration of AI on top of current infrastructure and data

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Who we are

Asper is the World's only **purpose-built AI** enabling **interconnected autonomous decisions** for CPG, Retail and Manufacturing Enterprises

Built at Fractal, world's largest AI company

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INTELLIGENCE FOR IMAGINATION

P&G Mondelez Campbell's MERCK PEPSICO MATTEL Unilever

gsk SANOFI reckitt Altermani ABInBev SCJohnson PHILIPS

MARS COLGATE-PALMOLIVE Pfizer Nestlé Heineken KraftHeinz

- World's **largest AI company** with 20**+ years** of powering decisions in **100+ Fortune 500 companies** with AI, engineering, and design

- Client first philosophy resulted in **NPS of 75**, on road to deliver **$1B value** for multiple strategic partners

- Deep expertise in **CPG, Retail and Manufacturing**

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- Agile scenario planning to manage macro and industry headwinds

  + Interconnected Autonomous decisions

- Committed 5-15% accuracy improvement

  + AI first business process transformation

- 100+ leading external indicators curated by domain SMEs

  + Cloud based SAAS platform, seamless integration

Interconnected modules focused on revenue growth

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Improve SFA
5%-10%

Reduce forecast bias
20%-50%

Dynamic Demand AI

Pricing & Promotions AI

Improve sales
2% - 2.5%

Improve promo ROI
10% - 25%

Improve margins
3% - 5%

Improve sales by
4% - 5%

Sales & Distribution AI

Inventory AI

Improve Fill rates
2% - 4%

Reduce OOS
20% - 30%

Reduce lost sales
30% - 50%

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Dynamic Demand AI

Demand Forecasting at Asper

Demand Forecasting challenges in categories amplified by external headwinds

COVID driven consumer mobility changes

Innovation and Niche alternatives

Channel shifting – On vs Off premise

Commodity price inflation

Changing Consumption Occasions

Extreme weather events

Global supply chain disruptions

Bigger baskets, fewer trips

Disposable income, Consumer Confidence

Purpose built to solve 8 key pain points in demand planning

8 Major Pain points in demand planning

- **Reactive response** due to lack of anticipation
- **Low accuracy** of forecast at granular levels
- **Human bias** in planning and collaboration
- **Manual effort** in managing long-tail
- Inability to **decompose drivers** of demand forecast
- **Slow response time** for changing demand patterns
- Inconsistency in **multi level reconciliation**
- Poor **new product forecasting**

Purpose built AI platform to solve for these pain points

Anticipate
Early warning of risks and opportunities
Focus to drive value and impact

Quantify & Attribute
Isolate drivers of demand and impact
Simulate potential scenarios

Recommend & Collaborate
Prescriptive recommendation from AI
Track and learn from interventions

Automate & Integrate
Automation and collaborative workflow
Connects w inputs and output systems

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Our Solution approach is based on category domain and best-in-class forecasting approach

Dedicated Modules for Seasonal Forecast and Innovation products based on product/category features

Leverage the historical trends on Inventory and orders to improve accuracy

Separate models for Short-Term and Long-Term forecast with different driver features
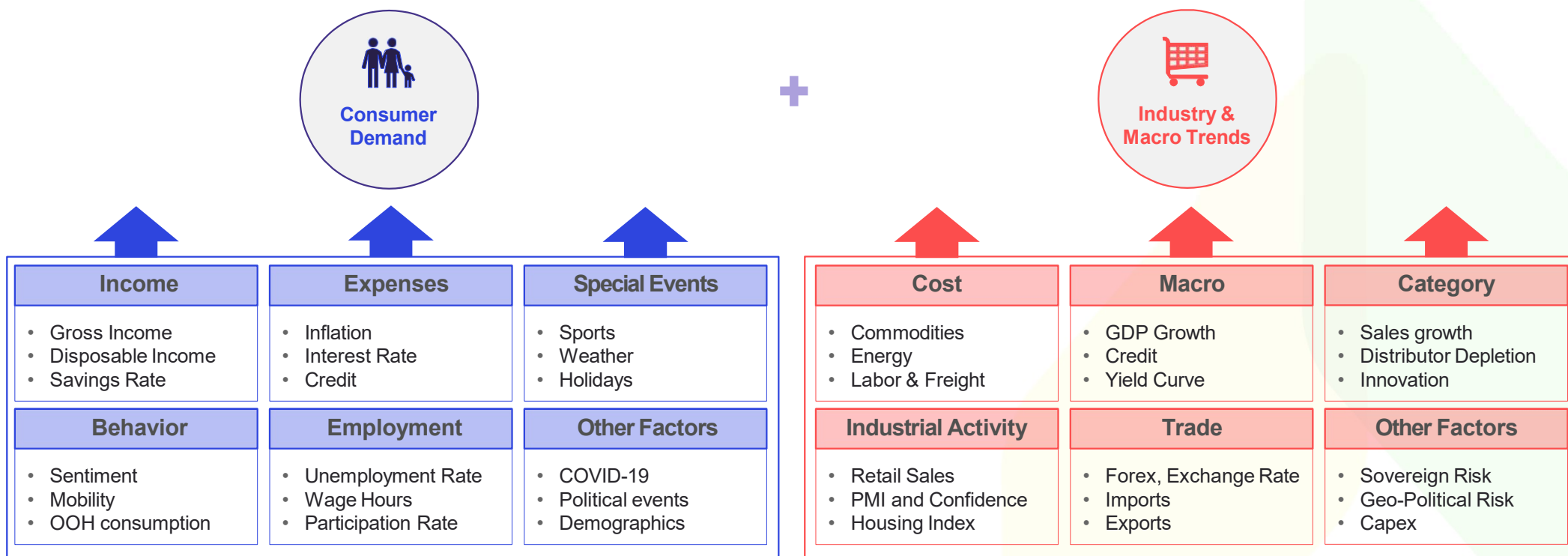
Category-specific consumer trends, that could influence behaviour and purchasing habits, alcohol consumptions, etc..

Internal and external data and drivers – retail sales, weather, macroeconomic, sporting events, commodity prices etc.
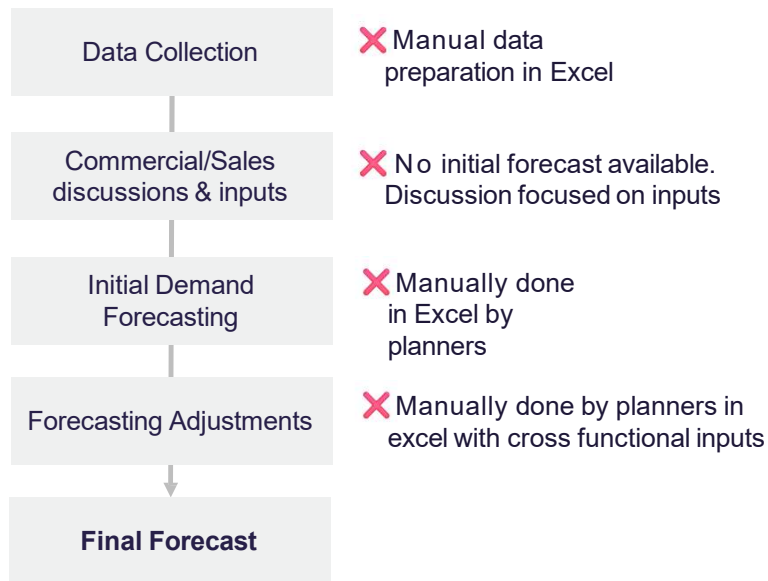
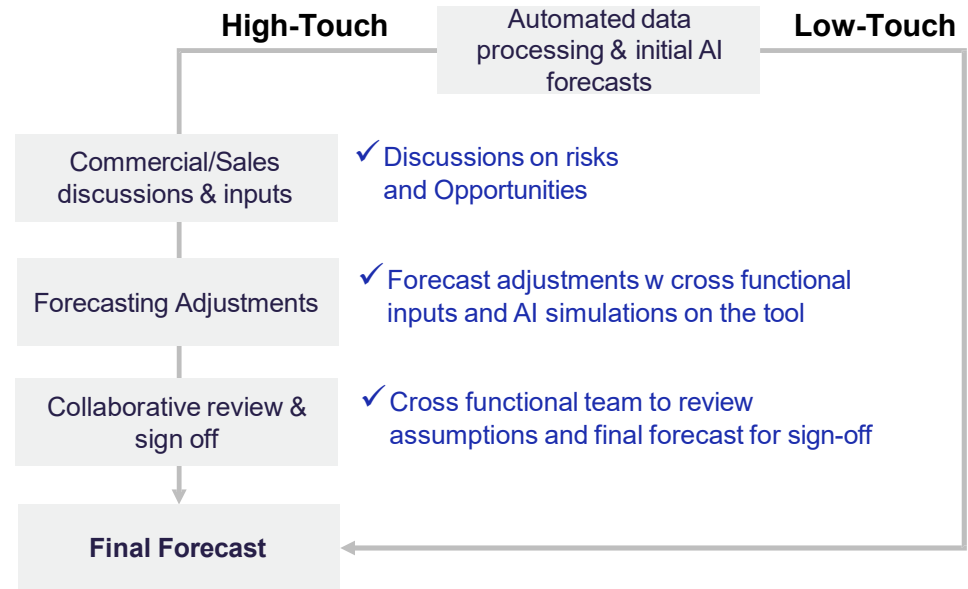# We use 100+ external indicators to model leading indicators of demand

Consumer Demand

+

Industry & Macro Trends

Income	Expenses	Special Events
• Gross Income • Disposable Income • Savings Rate	• Inflation • Interest Rate • Credit	• Sports • Weather • Holidays

Behavior	Employment	Other Factors
• Sentiment • Mobility • OOH consumption	• Unemployment Rate • Wage Hours • Participation Rate	• COVID-19 • Political events • Demographics

Cost	Macro	Category
• Commodities • Energy • Labor & Freight	• GDP Growth • Credit • Yield Curve	• Sales growth • Distributor Depletion • Innovation

Industrial Activity	Trade	Other Factors
• Retail Sales • PMI and Confidence • Housing Index	• Forex, Exchange Rate • Imports • Exports	• Sovereign Risk • Geo-Political Risk • Capex

Building future ready capabilities and process transformation for demand planning

Illustrative

Today

Data Collection	✖ Manual data preparation in Excel
Commercial/Sales discussions & inputs	✖ No initial forecast available. Discussion focused on inputs
Initial Demand Forecasting	✖ Manually done in Excel by planners
Forecasting Adjustments	✖ Manually done by planners in excel with cross functional inputs
Final Forecast	

Tomorrow

High-Touch — Automated data processing & initial AI forecasts — **Low-Touch**

Commercial/Sales discussions & inputs	✓ Discussions on risks and Opportunities
Forecasting Adjustments	✓ Forecast adjustments w cross functional inputs and AI simulations on the tool
Collaborative review & sign off	✓ Cross functional team to review assumptions and final forecast for sign-off
Final Forecast	

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Faster realization of value unlocks

$50-100MM

ACCURACY   **PRODUCTIVITY**   **AGILITY**   **SPEED**

Capture Lost Sales Due to Lower Forecasts
(2-4% of Topline)

Improved Inventory Positioning
(1-2% of Topline)

Lower Inventory Levels and Warehousing Cost
(7-10% Lower Inventory)

Optimized Markdowns based on Inventory
(15-20% Less Investment)

Success Stories

Consistently exceeding existing accuracy by 5-10%

Multinational B2B food processing company

6.8%

Accuracy Improvement on Shipments forecast

F100 Personal Care Company

10-16%

Accuracy Improvement on 3 month and 5 month forecast

F100 Multi-Category Consumer Goods Company

5-22%

Accuracy Improvement on High volume and long tail for primary sales forecasts

F100 Consumer Electronics Company

12%

Device activation accuracy improvement

F100 Snacks Manufacturer

6%

Accuracy Improvement on quantity sold

Digitized demand planning process for a $5B food processing company

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Leading Snacking, Beverage, Meal Preparation Customer

$4.5B
Revenue

11K SKUs
32 Categories

Key business challenges

- Low Forecast Accuracy
- Heavy manual adjustments
- Lack of bandwidth to review entire portfolio
- Incomplete understanding of drivers

Year 2
- 10+ppt improvement in Forecast accuracy
- 25-40% No touch forecast automation

Year 1
- Consistently improved 5-7ppt Forecast accuracy

12 Week Full implementation
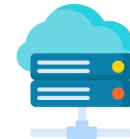- Scaled to all 32 Categories and 11K SKUs

8 Week POV on select categories
- Beat existing accuracy by 5+ ppt

Business Impact

$39.4M value unlock

+1% Annual revenue growth
+8% Savings on inventory holding cost
+8% Less working capital on inventory

$150k less infra cost

Storage and Computing on Cloud etc.

25% Freed up people time

Repurpose freed up bandwidth to focus on high value opportunities

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Thank you

Reach out to us at contact@asper.ai