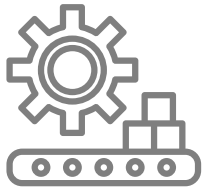


Inventory optimization

Food contract manufacturer

Analyzed the client’s supply chain to optimize inventory holding and developed a comprehensive roadmap to realize and scale the working capital optimization opportunity across 30,000+ SKUs

Food contract manufacturer needs to re-stock its working capital

INVENTORY OPTIMIZATION

Picture this…

You're looking to optimize the inventory holding and develop a comprehensive roadmap to realize and scale the working capital optimization opportunity across 30,000+ SKUs. Due to high-growth period driven by acquisitions, the current inventory management process is resulting in ~$230M+ of working capital tied in inventory.

You turn to Accordion.

We partner with your team to analyze the supply chain to optimize inventory holding and develop a comprehensive roadmap to realize and scale the working capital optimization opportunity, including:

1) Sizing the working capital optimization opportunity to identify the plants, product categories and nature of inventory to maximize ROI
2) Developing an optimized order cycle model to streamline purchase patterns based on historical demand patterns/volatility, lead time by SKU and vendor and current inventory holding
3) Estimating safety stock and re-order points bucketing SKUs based on volume-volatility matrix and building customized models to optimize inventory levels
4) Defining and operationalizing the updated inventory management process after accounting for operational challenges (data gaps, process bottlenecks etc.) by setting up the client's ERP system (SAP ECC) to adhere to the new process and monitoring the improvement in inventory levels and calculate ROI

Your value is enhanced.

You have Identified opportunity to reduce inventory by $20M through order cycle optimization by defining the key target and focus areas. You have implemented the optimized process for 400+ pilot SKUs to drive a $12M run-rate opportunity and provided roadmap to realize the ~$20M opportunity. You have also developed a playbook which defined sustainable process improvements and a refreshable SKU-level parameters optimization model to scale the pilot process across all SKUs and manufacturing plants.

KEY RESULT

- ~$7M working capital gains
- ~20M of inventory reduction
- $12M run-rate

VALUE LEVERS PULLED

- Networking Capital Analysis (Inventory)
- Reorder point and safety stock analysis

Inventory optimization for snack food contract manufacturer

Inventory Optimization

Situation

- Client had a high-growth period driven by acquisitions but had not developed an efficient inventory management process which resulted in ~$230M+ of working capital tied in inventory across raw materials, work in process, and finished goods
- Partnered to assess the client's supply chain with a primary goal to optimize inventory holding and develop a comprehensive roadmap to realize and scale the working capital optimization opportunity across 30,000+ SKUs

Accordion Value Add

- Sized the working capital optimization opportunity to identify the plants, product categories and nature of inventory to maximize ROI
- Developed an optimized order cycle model to streamline purchase patterns based on historical demand patterns/volatility, lead time by SKU and vendor and current inventory holding
- Estimated safety stock and re-order points bucketing SKUs based on volume-volatility matrix and building customized models to optimize inventory levels
- Defined and operationalized the updated inventory management process after accounting for operational challenges (data gaps, process bottlenecks etc.) by setting up the client's ERP system (SAP ECC) to adhere to the new process and monitored the improvement in inventory levels and calculate ROI

Impact

- Identified opportunity to reduce inventory by $20M through order cycle optimization by defining the key target and focus areas
- Implemented the optimized process for 400+ pilot SKUs to drive a $12M run-rate opportunity and provided roadmap to realize the ~$20M opportunity
- Developed a playbook which defined sustainable process improvements and a refreshable SKU-level parameters optimization model to scale the pilot process across all SKUs and manufacturing plants

Methodology/ Approach

Size the Opportunity

- Sized the total opportunity that could be realized by streamlining order cycle management, assessing quality holds, reimagining the planning process, and optimizing the distribution network
  - Developed a model to estimate appropriate safety stock and reorder points to transform to a weekly order cycle process
  - Identified gaps in the values associated with Quality Holds/Processing time in the client's ERP system in comparison to the actual process
  - Assessed the current planning process to identify opportunities to streamline the reorder points and reorder quantity
  - Sized opportunity to reduce usage of third-party logistics warehouses by reducing inventory holding through optimal inventory management process

Build the inventory optimization model

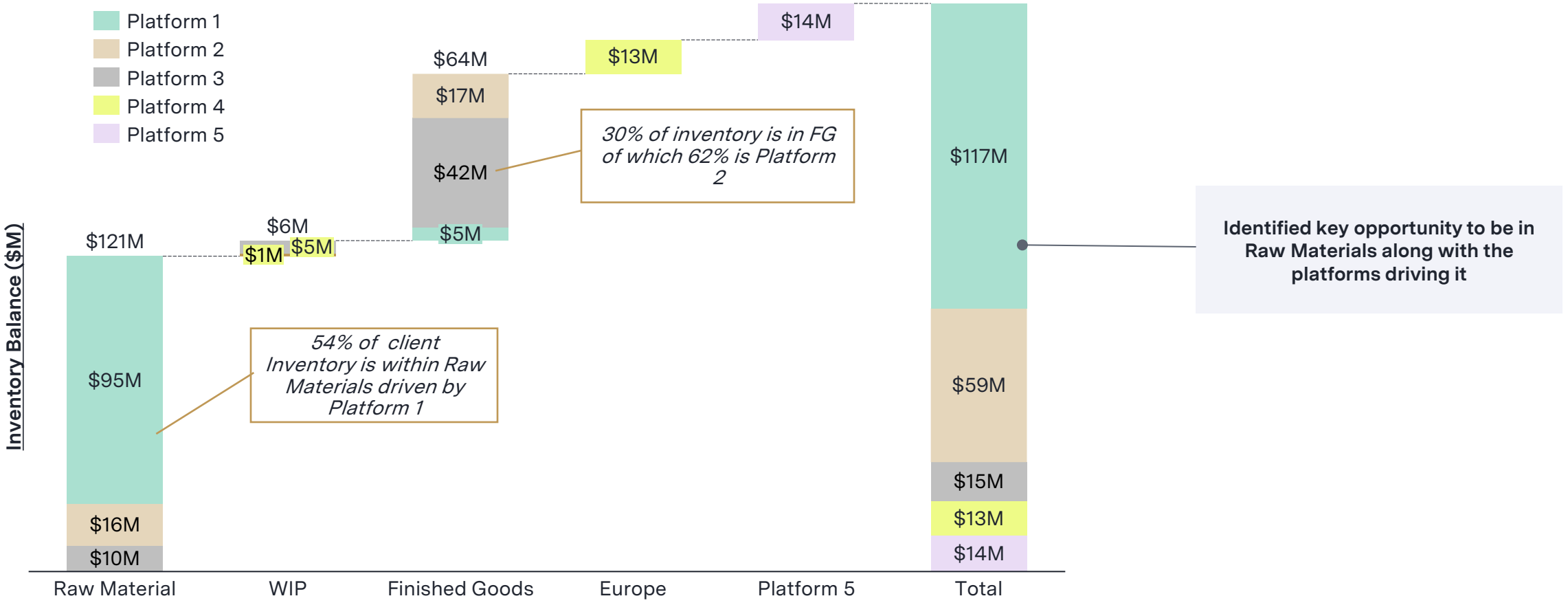
- Created a volume-volatility matrix and divided SKUs based high/low demand (based on average consumption/average inv.) and high/low volatility (based on standard deviation of MoM consumption)
- Optimized High demand SKUs for truck-load (MOQs) and high volatility items for higher safety stock
- Identified opportunity to club vendors or switch vendors for low demand SKUs to avoid less than truck load shipments
- Designed customized logics to define safety stock and reorder points across 400+ SKUs segmented into 4 SKU profiles

Scale the process

- Evaluate the current order cycle process by conducting interviews with the IT and procurement teams
- Identified opportunity to improve accuracy of their ERP system's purchase requisition enabling the client to cut down on manual intervention from the buyers
- Enabled the client to validate critical parameters at a SKU-level (such as MOQ, Safety stock, lot size, processing time, and 'rounding value') by designing a model that captures the parameters in the ERP system and flags parameters with potential issues based on customized business logics

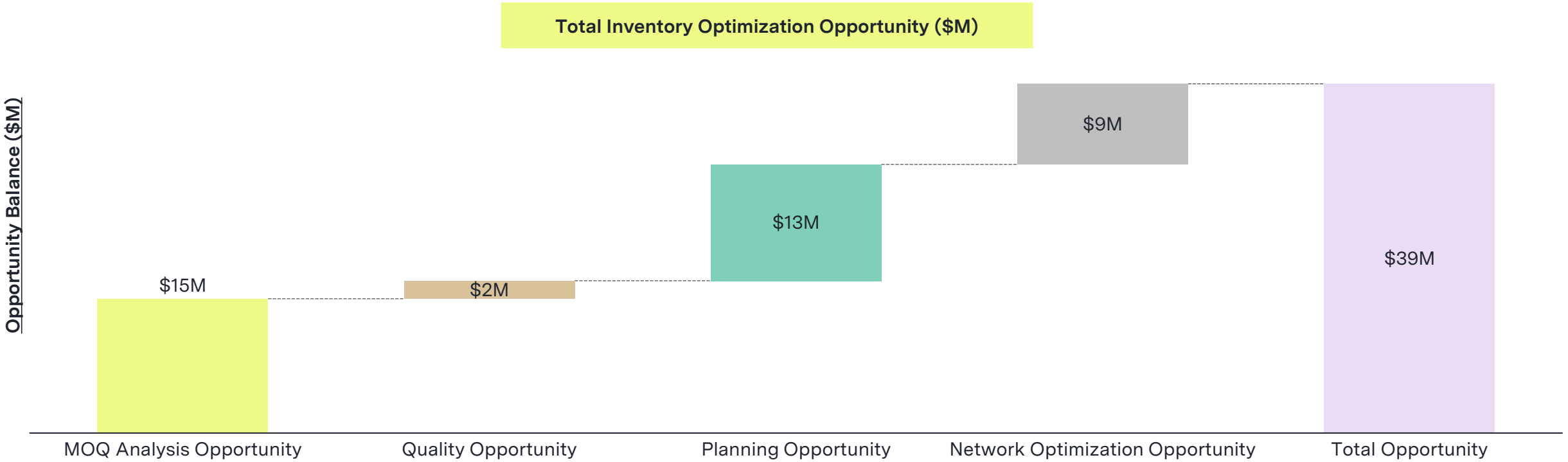
Inventory overview

Average inventory over LTM (April Yr1' – Mar Yr2')



ILLUSTRATIVE

Opportunity sizing



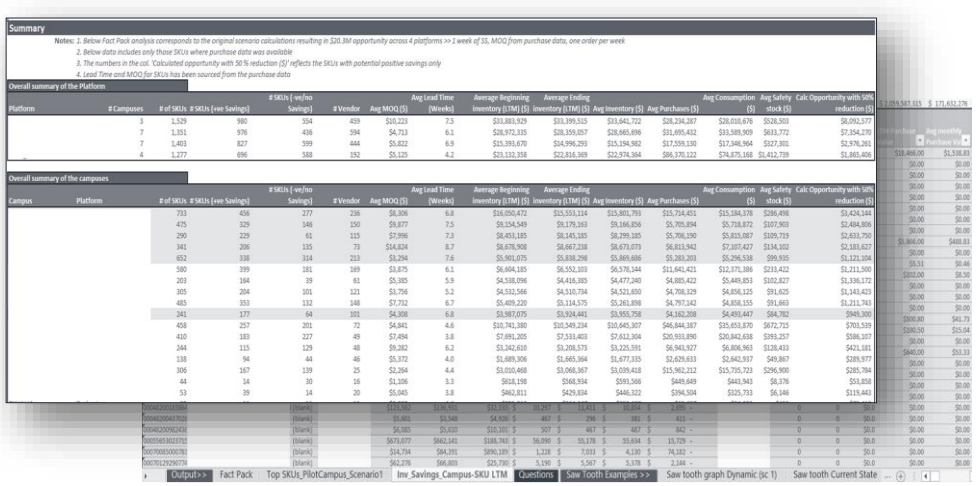
Negotiate MOQs based on current drivers of EOQ for supply chain
Optimize ordering cycle based on MOQ and lead times (Excel Model)
Eliminate no-demand buys for annual commitment

Eliminate non-value-added time for quality testing and hold periods
Automate key receiving requirements with vendor

Evaluate forecasting accuracy and provide enhanced visibility enabling reduction of over-stocking

Identify 3PL/ overflow warehouses
Develop an optimized footprint of manufacturing and warehousing facilities

Inventory optimization model



Excel model for Order cycle optimization considering the LTM inventory, consumption, purchase, LT and MOQ data

Visualization of the LTM purchase and consumption pattern of a SKU, along with the 'what-if' optimized purchase patter – opportunity to reduce ~$195k worth of inventory