Improved inventory and fulfillment accuracy through enhanced visibility and process optimization

A leading supermarket company aimed to maximize picking throughput in warehouses by enhancing employee-wide visibility and obtaining actionable insights on related KPIs. Incorrectly picked orders were increasing costs and negatively impacting customer satisfaction. After assessing the company's needs, Algo began to eliminate inefficiencies and establish a smooth, end-to-end flow of inventory from receiving to fulfillment. Along the way, Algo provided analytical support, including meaningful insights into inventory and order fulfillment challenges and their potential solutions.

Challenges to Solve:

✓ Lack of employee-wide visibility into order fulfillment inefficiency

✓ Inefficient order picking and packing processes

✓ Ineffective documentation and verification checks

Enhancing visibility through effective KPI monitoring

Algo enhanced warehouse visibility and improved efficiency by effectively monitoring data health and tracking related KPIs. Algo built its working model on several core KPIs: Order Picking Accuracy, Order Lead Time, Order Lines Picked per Hour, Pick-to-Ship Cycle Time, Cost of Picking per Order Line and Rate of Customer Return. These indicators enabled Algo to generate valuable insights into the company's inventory management system and its possible areas for improvement. Close evaluation of employee performance at each warehouse improved the transparency of fulfillment operations and made it easier to identify any throughput-related concerns.
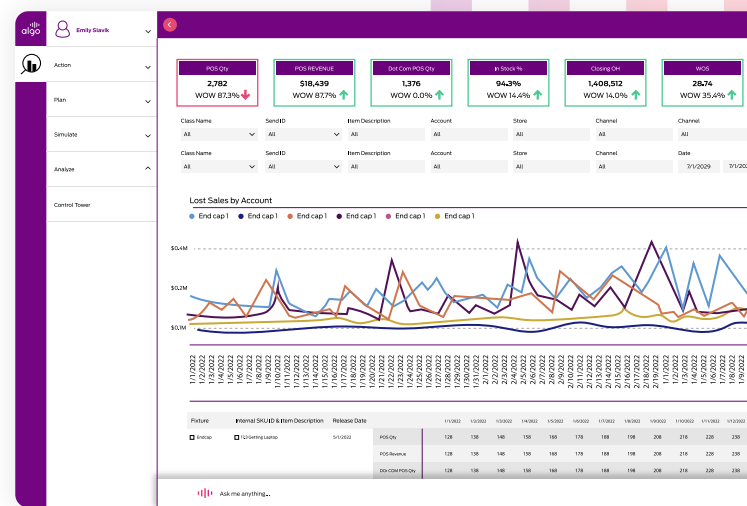
Improving inventory accuracy

Algo detected a large number of inaccurate orders making their way through to shipping, which signaled possible problems in the order picking and packing processes. Roughly 20% of these inaccurate orders went undetected during the final documentation and verification checks before being dispatched. A high Pick-to-Ship Cycle Time revealed time inconsistencies and employee inefficiencies in picking items and shipping orders.

Maximizing fulfillment through labor optimization

Next, Algo evaluated order fulfillment performance across employees and make recommendations around labor turnover. This involved reallocating better-performing employees in longer picking shifts. Algo also proposed employee training programs for underperforming employees.

Algo identified warehouses with higher Rates of Customer Returns and incorrect dispatch orders, and took steps to ensure that customers receive accurate orders.

Demand Planner									
All	All	10/8/2022	10/15/2022	10/22/2022	10/29/2022	11/5/2022	11/12/2022	11/19/2022	11/26/202
Algo Baseline Fcst		90,045	121,652	462,654	512,567	434,546	714,654	10/8/2022	
Algo Promo Units		48453	65468	11102	4045	31385	30570	2565631	
Algo Total Fcst		138,485	187,101	474,686	465,947	745,471	1,092,422	516,357	
Final Baseline Fcst		77,931	96,669	332,197	399,889	374,483	488,763	631,916	
Final Manual Fcst Adjustment		330	188	24,107	22,001	30,665	13,978	71	
Final Promo Fcst Adjustment %		0%	0%	0%	0%	0%	0%	0%	
Final Total Fcst		81,192	99,910	409,734	337,940	397,161	429,209	648,607	
Final Comments									
UDP Likely Total Fcst		188,547	233,242	497,694	419,268	4622,400	429,209	658,607	
Actual ST		0	0	0	0	0	0		
Account DP Unconstrained Sell in		631,366	951,574	84,859	103,575	38,377	300,801	579,318	
Account Target FWOS		5.0	5.0	5.0	5.0	5.0	5.0	5.0	

By providing detailed insights into warehouse fulfillment processes, Algo helped their client optimize the rate of picking and packing based on overall employee performance, resulting in a 20% increase in Order Picking Accuracy over a span of 6 weeks, a 12% decrease in Order Lead Time, and a 25% decline in the Rate of Customer Returns.

Looking to the future

Working hand in hand, Algo helped its client significantly improve supply chain visibility by centralizing data and increase inventory accuracy using their proprietary anomaly detection solution.

Through partnership with Algo, the company regained control over its supply chain by using improved visibility to make smarter business decisions. As this partnership matures, more value-add discoveries will continue to support years of sustained growth.

Results and Business Outcomes

6 Weeks

20% ⬆ Order Picking Accuracy

12% ⬇ Order Lead Time

25% ⬇ Rate of Customer Returns