

Operation Harvest for a Tractor Manufacturer



Reliability and Agility are the key differentiators

The tractor industry in India is highly fragmented and comprises of 14 players. Including 3 MNCs. The Industry Supply Chain faces significant implied uncertainty of demand since it is influenced by monsoons and govt. policies.

In the past the tractor industry had addressed this challenge by advance selling of tractors. The tractors were given away at zero percent down payments by dealers after taking a token amount from farmers. This resulted in delay of payment from dealers to manufacturers, thereby blocking the working capital.

The volatile nature of demand and working capital efficiency necessitate that the organizations operate on lean and agile supply chains.

CEO's dilemma

- How can we develop a lean & agile supply chain to cater to the fluctuating supply & demand scenario?
- How do we improve the saleable output of tractors/day

Improving Supply Chain Reliability

ECS recently helped a leading tractor manufacturer to improve the reliability of its supply chain and made it leaner and more agile.

A diagnostics process revealed significant opportunities:

- Frequent MRP based re-planning was creating nervousness in the supply chain
- Scheduling onto the supplier was similar across A,B,C class of components leading to increased work load
- Challenges existed with respect to Vendor capacity and Vendor priorities leading to poor schedule adherence

Results Achieved

- Over 10% increase in saleable output
- Over 30% reduction in Mfg lead times
- Over 50% reduction in line stoppages

The solutions framework

Planning & Scheduling:

- The planning horizon and times fences were recast
- De-couplers were arrived for products in terms of inventory and capacity.
- Small lot manufacturing for new products with intermittent demand
- The optimal number of MRP runs and the structure of running MRP and processes
- Rules for allocation on Share of Business
- Reconfiguring the planning parameters which includes EBQs, Safety stocks, Ordering rules

Expediting:

- Follow up based on planned receipts rather than what is urgent for the day

- Improving stock accuracy through cycle counting and back-flushing
- Shifting the inbound configuration from Vendor to Warehouse to Plant to Plant-direct

Vendor Priority

- Demand aggregations along common components to assist a longer horizon commit.
- The turnaround time for payment processing was compressed
- A single channel for communicating schedules was reinforced, this helped in improving the schedule credibility.

Organizational structure & management issues

- Setting up agenda for responsibility, accountability and actionability for the MRP planner
- Distinction of roles between Source Development teams and Source follow up teams

Benefits

Tangible benefits achieved:

1. Improved throughput leading to better asset utilization and reduced fixed costs/tractor
2. Reduced manufacturing lead times leading to reduction in WIP inventory
3. Reduction in plant operation costs owing lesser overtime and unplanned work days.

The initiative also yielded several intangible, yet significant, benefits:

- Fact-based process management in place of "thumb rules" and "gut feels"
- An end-to-end process focus amongst all the functions
- A culture of continuous improvement

Contact for details

S. V. Sukumar is Vice President (Based at Mumbai)
Email : s_v_sukumar@ecs-limited.com

ECS is a premier business management-consulting firm in India. Its consulting practice covers **Services, Strategy, Operations, Human Resources & Change Management, Supply Chain Management and Full Value Spend.**

We partner all our clients from concept to implementation. Typical results of implementation have been a significant reduction in turnaround time and cost along with increased productivity and reliability of business processes.

We have delivered value to more than 200 Indian corporates. Some of our leading partners include **HLL, ITC, Philips, Aditya Birla Group, L&T.**

Offices:

Mumbai Office

2A, Wing A, 8th Floor, Prism Towers
Mindspace, Goregaon [West], Mumbai – 400 062
Tel : 022 - 40033400-01, 40074600
Fax : 022 - 40074700

Delhi Office

804, Signature Towers
Tower A, South City
Gurgaon, Haryana – 122001
Tel: 0124-2383301/02, 2383297
Fax: 0124-2383295

Bangalore Office

Tel: 080 - 40794128

Chennai Office

1st Floor, Mootha Centre
23 Kodambakkam High Road
Nungambakkam, Chennai – 600 034
Tel: 044-42123471 /81
Fax: 044-42122190

Web site: www.ecs-limited.com