LEAN SUPPLIER INTEGRATION
BACKGROUND

Getting products to the market faster has never been so important. Receiving accurate information from the suppliers faster is the first step to achieving that objective. Supplier integration is a model for improving the link of the supply chain between manufacturers and their tier of suppliers of materials for their products. Cooperating together, both parties sharing information are able to exercise judgment on costs, quantities and timing of deliveries in order to rationalise the product flow and to move to a collaborative relationship.

CHALLENGES

Establishing an integrated supplier relationship can be complex with many factors to consider. The supplier must adhere to agreed lead times and costs, otherwise it will have a negative effect on lead times, profit margins and ultimately the relationship. The quality of materials supplied will have to be near to perfection when stock levels and safety buffers are minimised. Supplier flexibility has to increase to quickly be able to amend order quantities to suit the manufacturing plan as end-customer demand fluctuates. The relationship has to be more open and transparent than before with both parties willing to share unexpected issues and other important information.

The main challenge in supplier integration is changing the mindset of both the manufacturer and the supplier from the “us versus them” to a mindset where both parties see themselves as part of the same process, with the aim of serving the end-customer in the best way possible.
FOCUS AREAS

Waste associated with an inefficient supplier relationship can be identified, classified and minimised as well as creating tremendous savings potential. Lean principles, Kaizen methods, and re-engineering approaches can be applied when taking a holistic approach with all suppliers focusing on eliminating waste. Working together and involving all suppliers with a joint goal of reducing waste can produce and sustain long-term improvements.

AREAS OF WASTE OFTEN IDENTIFIED IN SUPPLIER INTEGRATION:

TRANSPORTATION & HANDLING
The unnecessary movement of stock between customer and supplier (e.g. because of rules about minimum order quantities, focus lies on optimising transportation costs instead of total cost...), extra handling because of emergency order excess packaging, responsibility of tasks between supplier and customer not clear (e.g. goods unloading).

INVENTORY
Storing or holding unnecessary amounts of stock (e.g. due to the lack of quality and/or delivery reliability of your supplier, holding safety stock both at the customer and at the supplier, not sharing information about volume forecasts...), more trucks in the fleet than required.

MOVEMENT
Unnecessary motion at both the customer and the supplier (e.g. due to double work such as inspection on deliveries).

WAITING
Waiting for stock to arrive or waiting for information (e.g. due to poor communication between customer and supplier, no agreed or followed delivery schedule, no extra capacity at supplier to handle emergency orders or demand spikes...).

OVER-PRODUCTION
Having unbalanced “minimum order quantities” between customer and supplier, customer orders more than required because of supplier’s previous delivery and/or quality performance.

OVER-PROCESSING
Unnecessary processing (e.g. inspection, validation of information, extra non-needed product packaging, duplication of paperwork, excessive sampling...), complicated goods receiving process because customer and supplier don’t use the same systems.

DEFECTS
Receiving defected or wrong material from a supplier (e.g. supplier doesn’t have the capability, product specification misunderstood, forecasts not communicated between customer and supplier...).
LEAN SOLUTIONS

Customers collaborating with their suppliers, sharing information to integrate their businesses, can gain a competitive advantage. Moving away from functional or silo mentality to improve material and information flow can reduce lead-times and stock levels, resulting in reduced working capital for both parties.

We implement Lean Solutions to supplier integration in a similar way to other functions. The solutions must fit the challenges.

**PULL**
- Enable FIFO at the batch level
- Reduce inventory levels throughout processes
- Avoid over-production
- Increase visibility of bottlenecks in the process

**ONE PIECE FLOW**
- Enable FIFO to a single product / service level
- Create transparency of the real process lead time
- Reduce lead time
- Reduce inventory levels throughout process
- Increase quality
- Reorganise the processes in the right sequence

**TAKT**
- Process transparency
- Balanced distribution of the workload across resources
- Process flexibility
- Ability to plan resource capacity and / or improve forecasting
- Optimal efficiency in resource utilisation

**ZERO DEFECTS**
- Enables problem root cause analysis and solving
- Prevents problems snowballing through the process
- Increases quality
- Enables an open culture of problem solving vs. finger pointing
TANGIBLE IMPROVEMENTS

LEAD TIME
• Lean supplier integration project between food manufacturer and packaging company resulted in packaging order delivery lead time reduction by 60%
• Joint Lean workshop between equipment supplier and capital goods manufacturer improved supplier response time to equipment breakdown by 48%
• Joint Lean supplier programme resulted in FMCG order replenishment to modern grocery lead time optimisation by 29% and additional sales of 34%

QUALITY
• Raw material supplier integration into capital goods manufacturer resulted in over 70% reduction in goods receiving rejections
• On-time deliveries increased by 76% between design agencies to printing & packaging plant

COST
• Lean solution between supplier and medical equipment manufacturer reduced inventory on stock by 30% worth ~ USD 1,250,000
• Linking car accessory supplier processes to automotive distributor’s forecasting and ordering processes resulted in out-of-stock rates reduction by 900%
• Lean supplier integration between retailer and suppliers reduced retailer’s internal logistics costs reduced by 80%
Should you be interested to know more about our Lean services regarding this topic, then please contact us:

**Tel**
+971 4 368 2124

**Email**
info@fourprinciples.com

**Dubai, UAE Office Address**
Dubai Media City
Building 8
Office 212
P.O. Box 502621
Dubai, UAE