Principles and Solutions for Lean and Agile Supply Chains

John Anderson
Agenda

1. Why Lean and Agile?

2. Business Strategy → Supply Chain Strategy → Capability + Tech

3. Build the Supply Chain & Logistics Capability

4. Technology to ensure Lean and Agile
   - Visibility & Business Intelligence
   - Forecasting & IBP
   - Digital Twins / Scenario Modelling
   - Transport Management Systems & Using the Market
Why Lean and Agile?

- The Great Supply Chain Disruption → Learnings from COVID-19, Ukraine War, semi-conductor shortage, etc. Outcome → Supply chains need to adjust to Macro-external events
- Continuous increase in the cost of Fuel and staggering economy
- ESG → Major focus on the sustainability & value of organisation. With Lean focus – ESG follows
- Lean expansion of organisations – No time/cash to fatten up
- Lean allows for agile – being able to adapt to change. Lean is easier to manage & react
- Major impact of Supply Chains on all organisations bottom lines.
- Planning over making a plan
Alignment = Lean, Agile & Sustainable

Business Strategy
- Business & product life cycle
- Expansion/Growth Objectives (product / region)
- Mergers & Acquisitions
- Customer Service Strategy
- ESG
- P&L Targets, Balance sheet targets

Supply Chain Strategy
- Diversification of Suppliers
- Lead time vs Logistics cost per SKU
- Outsourced vs insourced vs hybrid of Supply Chain
- Supply Chain Network Design
- Inventory Strategy (Inventory policies)
- Transport Strategy (dedicated vs adhoc fleet, NDDs, etc.)

Capability + Technology
- Supply Chain Visibility & Business Intelligence
- IBP and Forecasting
- Transport Management Systems
- Warehouse Management Systems
- SCM Digital Twin and Scenario Planning
- Process & Tech ensuring People are aligned to strategy
- Plan for upskilling your Supply Chain Team
- BI → CI

Lean, Agile & Sustainable Supply Chain
Building the SCM & Logistics Capability

- Cost of Supply Chains is increasing. Continuous outsourcing will result in you being left behind the competition and with less control of your Network.

- Embrace Supply Chain Management & Logistics as a core function of your business → Link it to your organisational objectives and strategy.

- Capability and incentive to optimise (Cost savings + improved customer service).

- Use the partnership approach to build your capability over complete outsourcing of service. Bring in skills and Tech – transfer both to your people.

- Capability includes:
  - People
  - Process
  - Technology
Technology – Visibility & Business Intelligence

- Using Big Data to drive Data Driven Decision Making. Custom designed BI to drive your SCM Strategy and Objectives. Custom designed for your business
- One source of the truth
- Department and Individual performance management → Continuous through use of BI and one source of the truth
- BI designed to drive accountability, handshake points, aligned KPIs
- Focused Improvement and exception management
- Use BI to drive CI
- Can develop Integrated Business Planning using multiple sources – based on visibility
Technology – Visibility & Business Intelligence

Businesses are comprised of numerous solutions, outputting data in various forms. All this data holds critical information of opportunities, gaps and trends within an organisations.

Pulling of this data, from various sources, into one Data Lake, allows for one view of the truth, from where Business Intelligence views can be developed to:

- Align all Businesses Units to Group Objectives
- Drive Continuous Improvement from One Source of the Truth
- Focus on Quick Wins
- Compare BU’s and leverage best in the group

**How**

**Data Gathering**
- Multiple Data Sources
  - Data from different systems and/or sources
  - Different types of data: transactional, master data, financial, operational etc.
  - Develop 1 source of the truth

**Data Transformation**
- Data Lake
  - Clean, format, transform and enhance data
  - Build customised data views
  - Store current & historical data
  - Single source of “true” information

**Data Visualisation**
- Business Intelligence Views
  - Data dashboards and custom designed reporting
  - Data driven decision making
    - Making the right decisions based on data
    - Clear record of recommended decisions
  - Business Intelligence leading to continuous improvement
Technology – Forecasting & IBP

- Do not necessarily need an IBP software to run IBP in your business. Focus on People and Process and data flow first. Use Supply Chain Visibility & BI

- IBP driving Lean & Agile:
  - IBP designed for your Strategy (Ordering/Inventory Policies, Suppliers, Freight-Forwarders, Carriers, Inventory, Outbound, Sales)
  - Accountability (linked to process)
  - Handshake points clear
  - Aligned KPIs → linked to business strategy
  - Process & People to drive workflow → Moves to tech driving workflow
  - Data flow (still 1-source of the truth)
  - Look back at performance to optimise your Supply Chain

- Using MRP technology for forecasting – AI powerful in this space. People, Process and Tech for forecasting

Inventory Optimisation

Right product... in the right place... at the right time

Inventory Holding
Optimal Inventory
Increase Product Availability

Technology: MRP
AI Forecasting, Powerful Simplicity, Custom designed inventory policies

People

Ensuring MRP users and sponsors are appropriately skilled and positioned to maximise MRP / Forecasting potential

Process

Integrating MRP into your business processes, while optimizing your ways of work
Technology – Digital Twins and Scenario Modelling

- There will be external factors that impact your business – especially Supply Chain
  - Economic fluctuations
  - Wars
  - Trade Wars & policy changes
  - Electricity Supply
  - Raw Materials constraints
- Results in increased raw materials cost, increased lead time, increased logistics spend – all impacting bottom line
- IBP, visibility, capability and lean will allow you to react quickly. But we need more than this
  - From reactive → predictive
  - Need Supply Chain risk and mitigation plan
  - Supply Chain Digital Twin to:
    - Scenario Plan for external changes
    - Prepare for high-likelihood external changes
    - Act with significantly more insights
    - Optimise your supply chain through simulation
    - Optimise against various metrics (Revenue, Cost, Service availability, costs, etc.)
Technology – Transport Management Systems & Use the Market

- Transport Management Systems – designed to your transport strategy → Use Tech to drive lean + creating data for continuous improvement

- Governance and process adherence of entire Transport process

- Entire market of carriers – all with various strengths and weaknesses. Work with carriers, for mutual benefit
  - Lane strengths (Regional focus)
  - Backhaul synergies
  - Load Building (full trucks)
  - Capacity during peaks
  - Dedicated vs adhoc fleet
  - Efficient planning inline with strategy

- Live visibility of product movement – acting as soon as there are delays – driving customer service

- Ability to easily scale your Network → Agility and Lean

**TMS Solutions Driving Lean & Agile**

- How will we build loads?
- How will we award loads to carriers?
- How will we manage the site?
- How will we track load execution?
- How will we get the POD back?
- How will we pay the carriers?
- How/what will we report to the Business?
- What analytics will we need?
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Lean, Agile & Sustainable Supply Chain
Q&A and Thank you for your Time

John Anderson