

# 011 Coursework Guidelines- 2023-24 Tri 2



# Requirements for Coursework

# Aim

- Develop a written consultancy report that provides:
  1. an analysis of the issue that organisation faces,
  2. to establish a global supply chain strategy for RevEnerAuto
- The Report includes:
  1. Scenario Analysis (30%)
  2. Supply Chain Strategies (30%)
  3. Conclusion and Recommendations (30%)
  4. Academic Rigour (10%)

# Scenario Analysis

- Describe the **current situation** with the given case study, what is their **current capabilities** within supply chain management and detail the **opportunities** for future growth of the company

# Supply Chain Strategies

Define how the case study organisation could establish a global supply chain, making reference to one supply chain theory such as Porter's value chain, SCOR model, etc. and the impact on the company structure. The strategies could include references to the following

# Address these items in your Report:

- Consider the case study global supply chain operations i.e. manufacturing, suppliers, engineering center
- The advantages and disadvantages to outsourcing key sections of supply chain
- Identify key supply chain risks and how these risks can be managed
- Benefits and disadvantages Agile Vs lean Vs Hybrid supply chain strategy
- Impact of future technologies in sharing information throughout the supply chain.
- Impact on future eWaste regulations and reverse supply chains

# Conclusion and recommendations

- Provide a clear set of recommendations defining your ideas how to establish a supply chain, based off your academic research

# Report Structure and Content

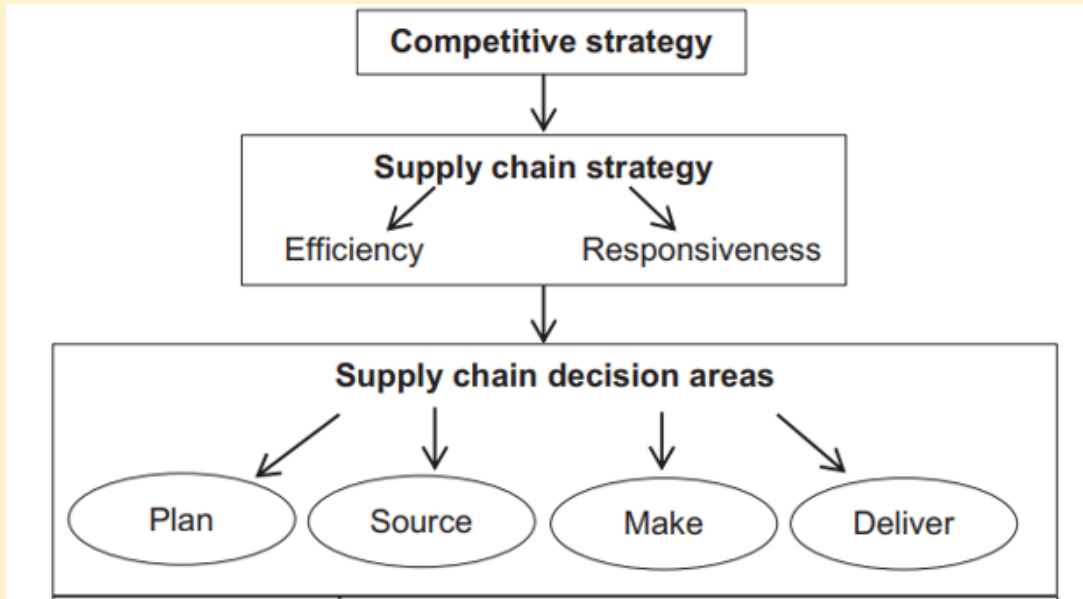


# Report Format

- Title Page
- Table of Contents
- Body- section 1.0 to 6.0 (see below)
- Reference List
- Appendices (at your discretion)

# 1.0 Introduction

- Discuss the importance of Supply Chain Management
  - Define supply chain
- Give an overview of RevEner Value Chain
  - who are suppliers
  - What are their operations- manufacturing, engineering
  - Who are their customers
- Give purpose of the report i.e.
  - Analyse current scenario, capabilities and opportunities
  - Develop a global supply chain strategy
- Introduce the key model that will be used to develop the SC strategy (see next slide)



- Also identify the analytical tools and models that will be used throughout the paper e.g. Porter's Competitive Strategies, SCOR model, Competitor analysis, capability analysis, SWOT

## Strategic SC Framework

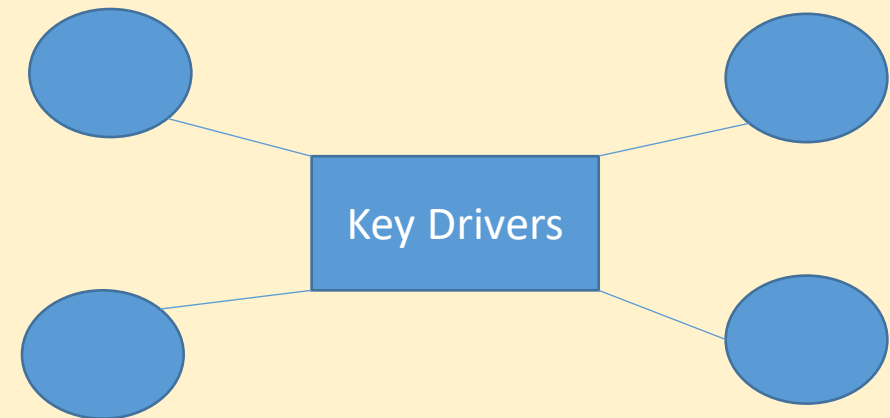
[Adapted from Santos et al \(2021\)](#)

## 2.0 Scenario Analysis

- Discuss the purpose of the section i.e.
  - To identify current capabilities of RevNer Auto,
  - To analyse the opportunities and threats

## 2.1 Opportunities and Threats

- Conduct the research into the PESTLE factors
- But do not present a PESTLE analysis!!!
- **But, discuss the key findings from your research**
- Summarize main opportunities and threats using a diagram of Key drivers
  - +ve Opportunities
  - -ve Threats



# Key Sources for Research

- Introspective Market Research
- MarketWide Research
- IBISWorld
  - Automobile Electronics
  - Hybrid & Electric Vehicle Manufacturing
- Mintel
  - Electric and Hybrid Cars

## 2.2 Competitor Analysis

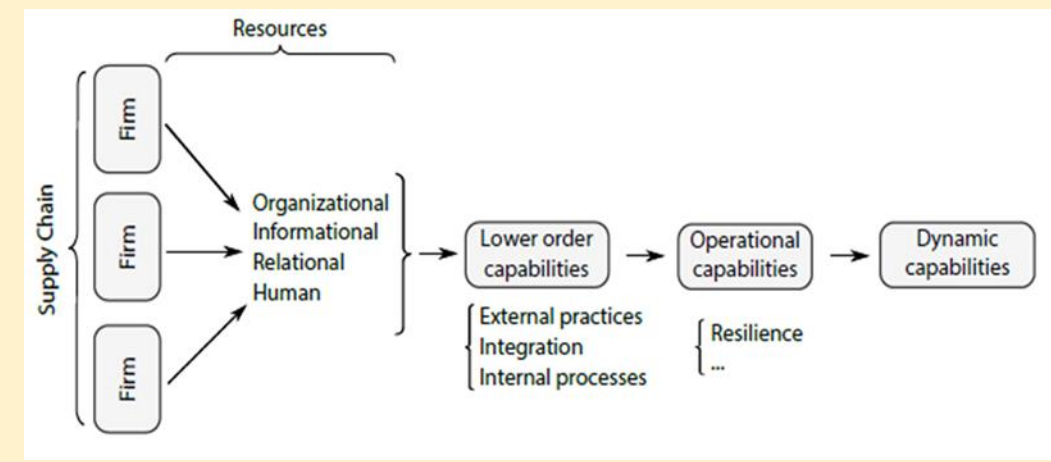
- Identify major competitors (research)
- Conduct some research on Top 3 Competitors
- Use a table to document key findings.
- Adapt table!!
- Short discussion of findings

	Enter my company	Enter competitor	Enter competitor	Enter competitor	Enter competitor
Products / Services	• Enter data from my company to describe this dimension	• Enter data from competitor to describe this dimension	• Enter data from competitor to describe this dimension	• Enter data from competitor to describe this dimension	• Enter data from competitor to describe this dimension
Financial Resources	•	•	•	•	•
Market Share / Growth	•	•	•	•	•
Strategies	•	•	•	•	•
Business Model	•	•	•	•	•
Strengths	•	•	•	•	•
Weaknesses	•	•	•	•	•

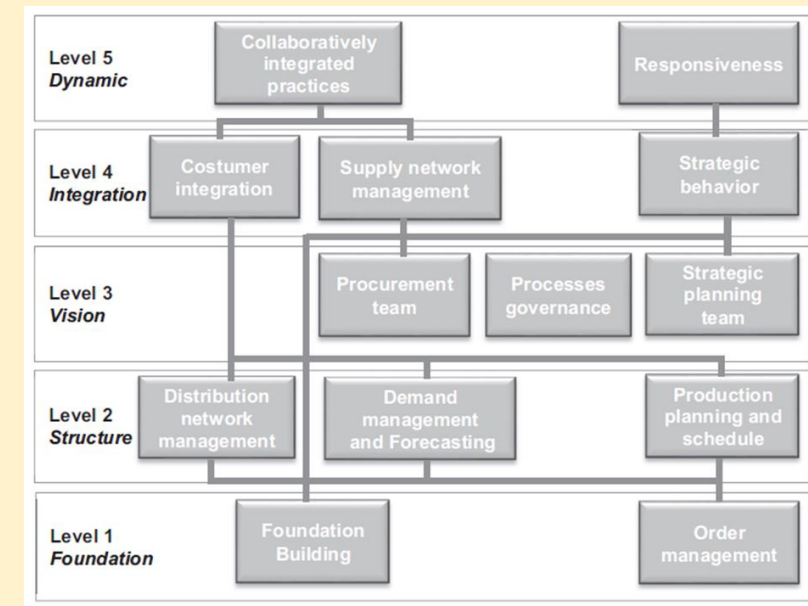
Tip  
Use Lecture 2

## 2.3 RevEner's Capabilities

- Brief review literature on Supply Chain Capabilities
  - Include relevant models to support review
- Based on the literature develop a table/list of SC Capabilities required by RevEner to implement its SC Strategy
  - Could use SC Maturity Models e.g. SCPM3 (Oliveira et al. 2011) to identify capability processes



Source: Brusset, Xavier & Teller, Christoph 2016



SCPM3 (Oliveira et al. 2011)



- Identifying RevEner's Capability Gaps

- Use the table from 2.3 and modify
- Based on the SW from case study, rate the capabilities using score 1-5
- Evaluate Current State
- Identify Gap

- Therefore, assess overall SC Maturity Level

- Use Lockamy and McCormack 2004 Maturity Stages.

- Example

Capability	Current State (Score 1-5) 1- Low, 5- High Capability	Gaps

# 2.4 Summary of Scenario Analysis

- Present SWOT Analysis/Matrix
- **2.4.1 RevEner Strengths and Weakness**
  - Discuss their strengths and core competencies
  - Discuss their weaknesses and supply chain issues
- **2.4.2 RevEner Opportunities and Threats**
  - Use findings from PESTLE, Competitor Analysis
  - Based on further Market Research and Industry trends
  - Discuss potential opportunities
  - Discuss potential threats



# 3.0 Business Strategy

Tip

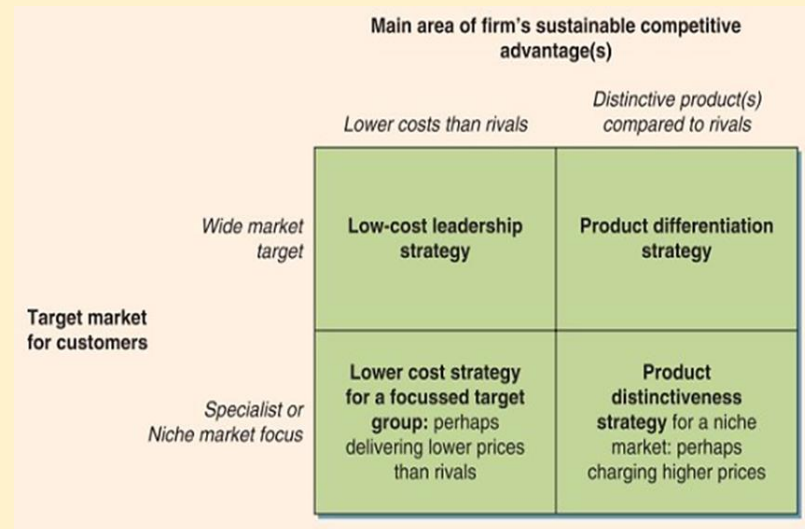
> Use Lecture 2 and Session 2 Handout

> Christopher (2016) Chp 1

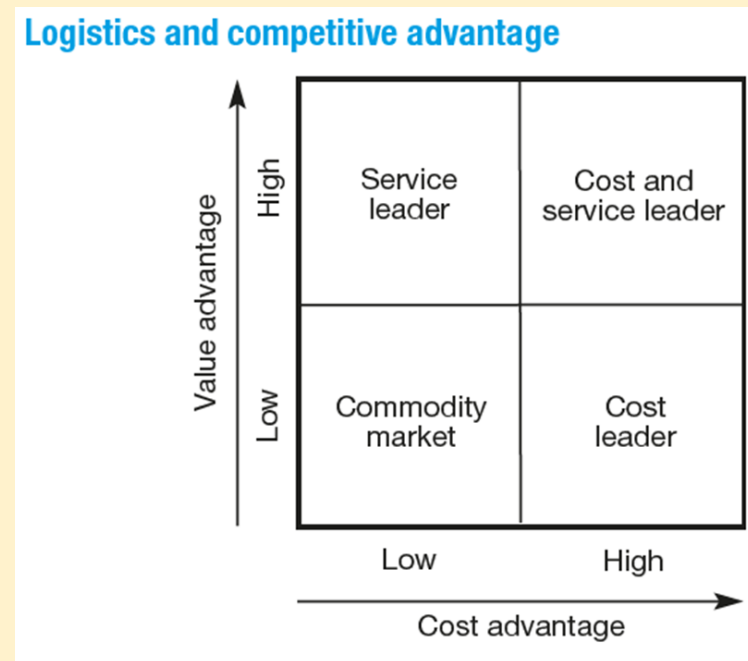
> Harrison et al (2008) Chp 1

- Identify RevEner’s key strategic goals
- Discuss what should RevEner’s major source/s of competitive advantage should be
- Use Porter’s model

- Or could also use Christopher (2016) model

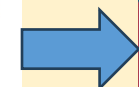
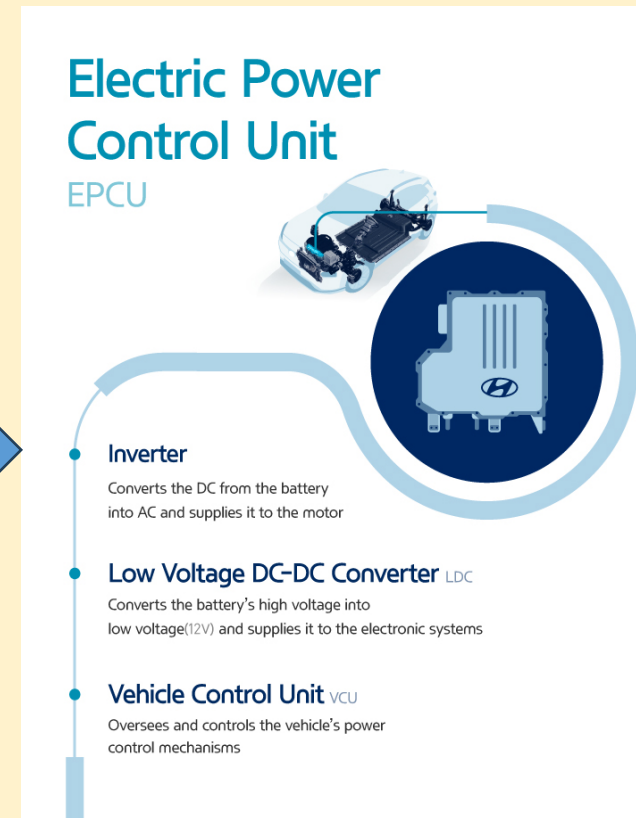
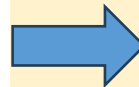
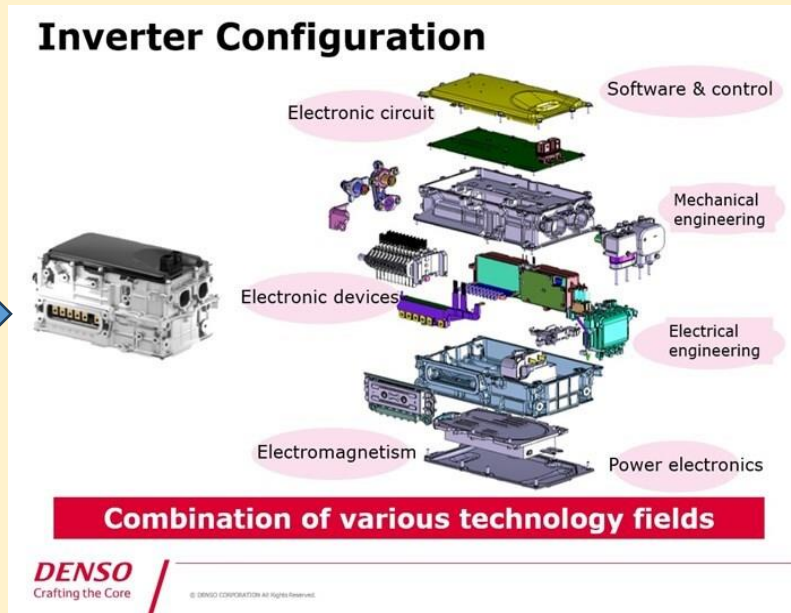
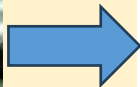
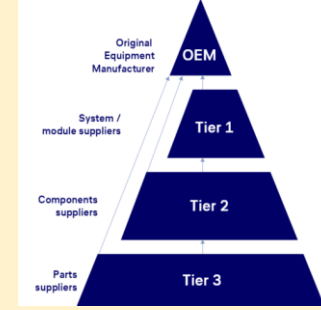


Source: Lynch (2018)



Source: Christopher (2016)

# Understanding The Automotive Industry Supply Chain (do not write about this)



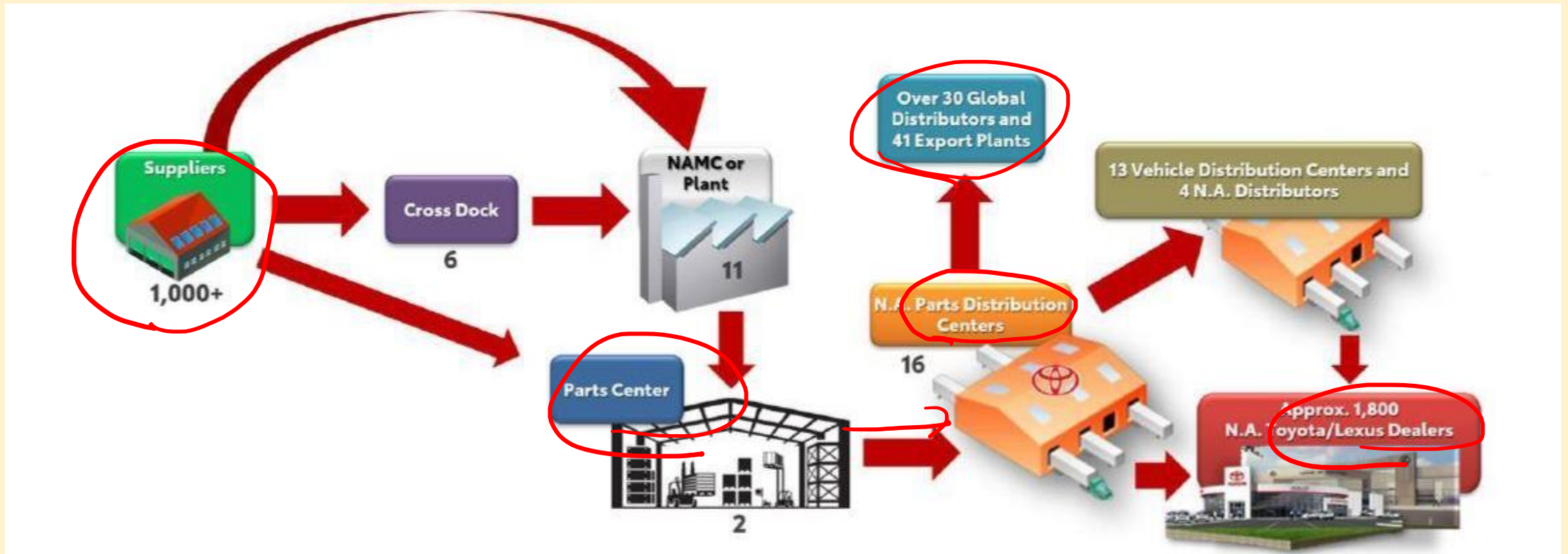
Tier 3 Supplier- Parts

Tier 2 Supplier- Components

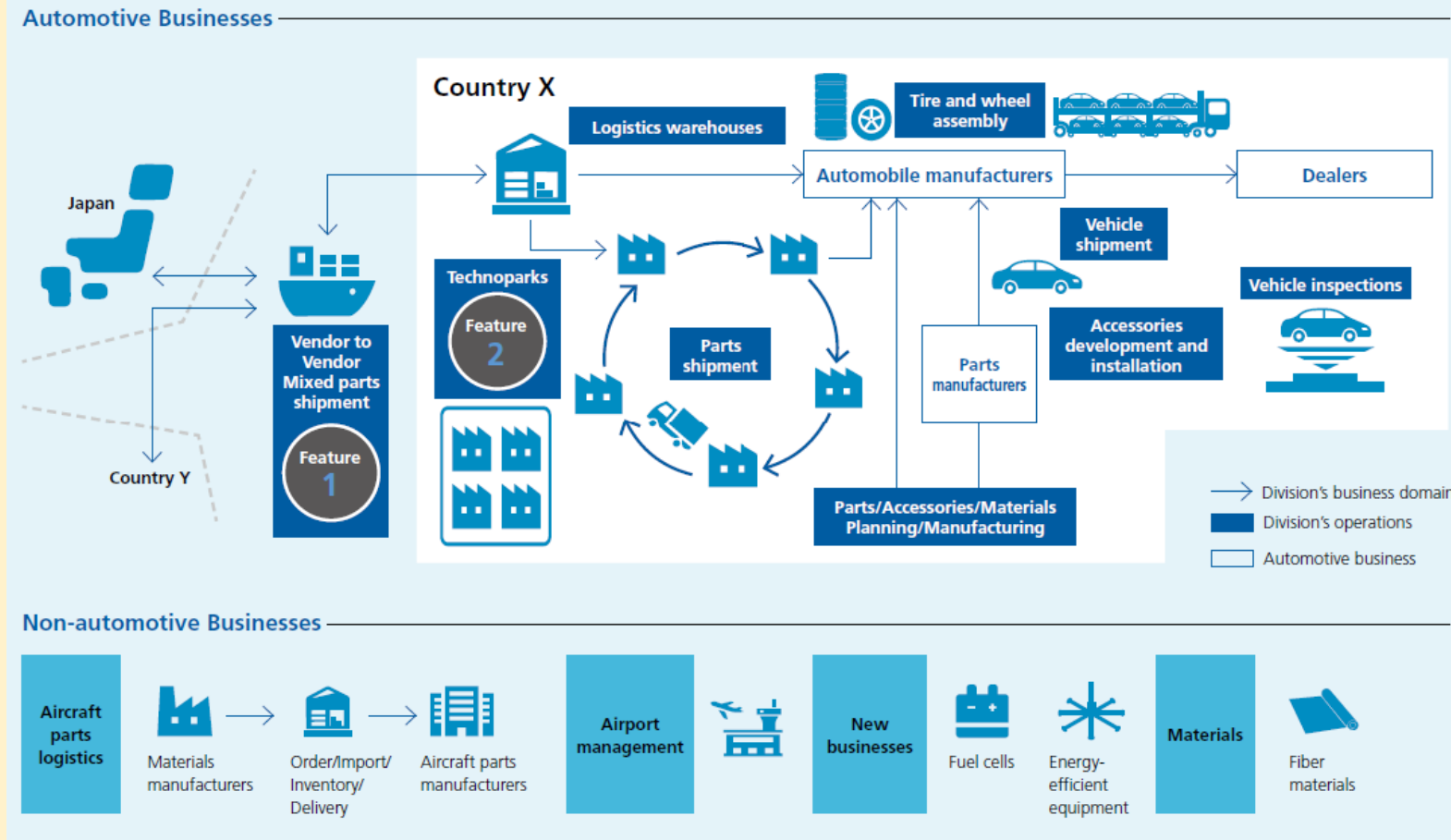
Tier 1 Suppliers- Modules  
RevEner Power

Automotive Manufacturers

# Toyota Motor North America (TMNA) Parts Network

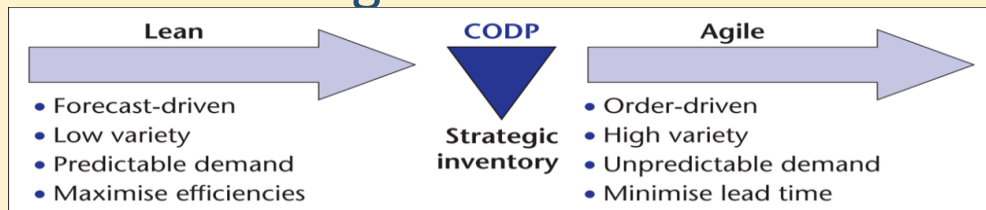


# Global Parts & Logistics



# 4.0 Supply Chain Strategy

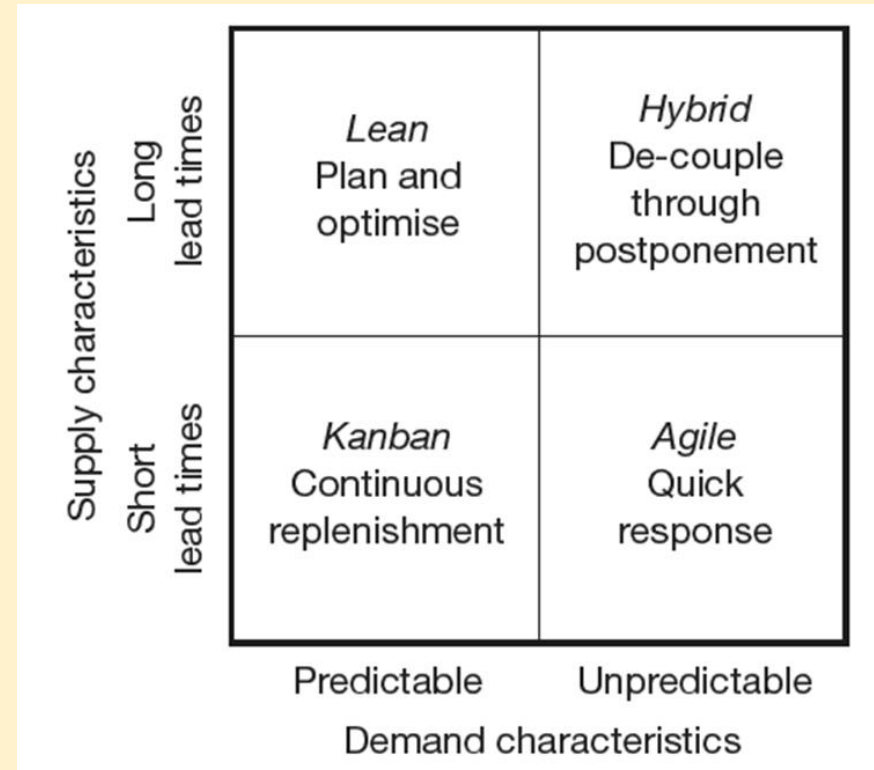
- **Discuss the overall strategy** that RevEner should use:
  - Lean or Agile or Hybrid
    - If Hybrid, identify the **de-coupling point** in the supply chain
    - Discuss which type of **Postponement** will be used
  - Use and **review literature** to support your recommendations, build argument, justify design, why?
  - Draw the **recommended** Supply Chain Stages, showing what part is lean and agile.



Harrison et al (2008)

## Tip

- > Use Lecture 5 and 6
- > Session 5 and 6 Handout
- > Christopher (2016) Chp 6
- > Harrison et al (2008) Chp 6 and 7



Source: Christopher (2016)

## 4.1 Implementing Leagility

- So if using Lean, it means that the following practice will have to be implemented by RevEner:

1. Just in time
2. Level scheduling

Therefore, discuss HOW it will be applied to RevEner's operation

- So if using Agile, it means that the following practice will have to be implemented by RevEner :

1. Discuss need for **SC Collaboration** to share information
  - Build a Digital Supply Chain
  - Use of Industry 4.0 Technologies
2. Discuss any other relevant characteristics or enablers for Agile SC



## 4.1.1 Planning

### Tip

- > Chopra (2013) Chp 7, 8, 9
- > Harrison et al (2008) Chp 6
- > Slack et al (2013) Chp 11, 14  
Supplement

- Here discuss the need for RevEner to implement:
  - **Sales and Operations Planning (S&OP)**
    - Demand Planning and Forecasting
- Discuss these briefly, its benefits and how it will aid RevEner to solve its issues with production, fulfilling orders, etc.

## 4.1.2 Sourcing

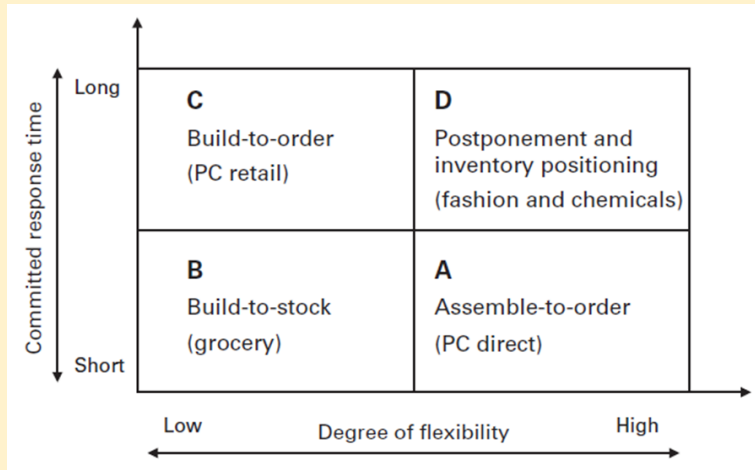
- Make recommendations to resolve supply issues i.e. shortages, high prices, long lead times:
- Discuss the need to implement:
  1. Supply Planning
  2. Strategic Sourcing
    - Apply Kraljic Matrix, use some of BOM items (list in appendix) to plot on the matrix
- The idea is to develop a tailored portfolio of Suppliers that consists of a combination of responsive and low-cost suppliers



Kraljic, P. (1983) Purchasing Must Become Supply Management, Harvard Business Review, 1983  
<https://hbr.org/1983/09/purchasing-must-become-supply-management>

## 4.1.3 Manufacturing

- Discuss the appropriate **Manufacturing Strategies**



Simchi-Levi (2010)

- Make sure to link to earlier strategy-hybrid with postponement
- Consider MTS, ETO, ATO
  - Where? Upstream/downstream from CODP

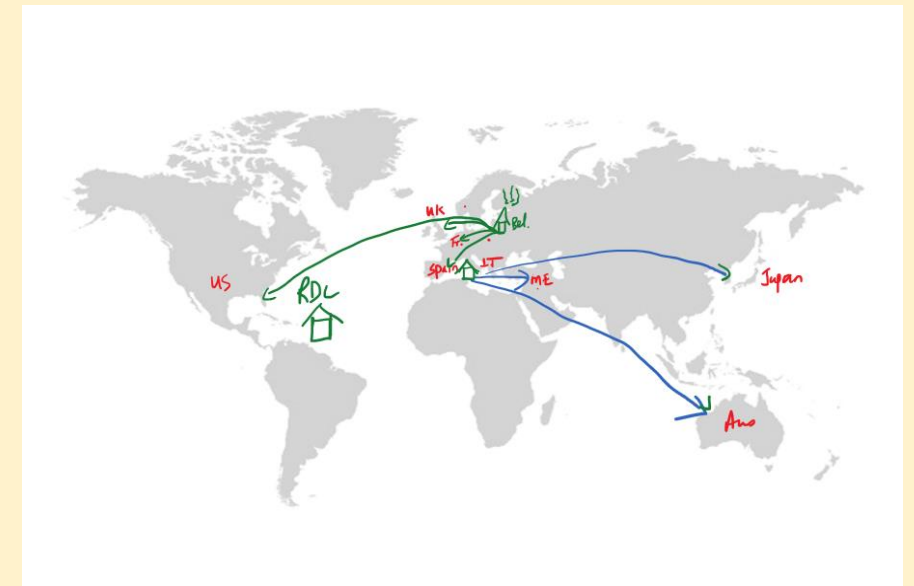
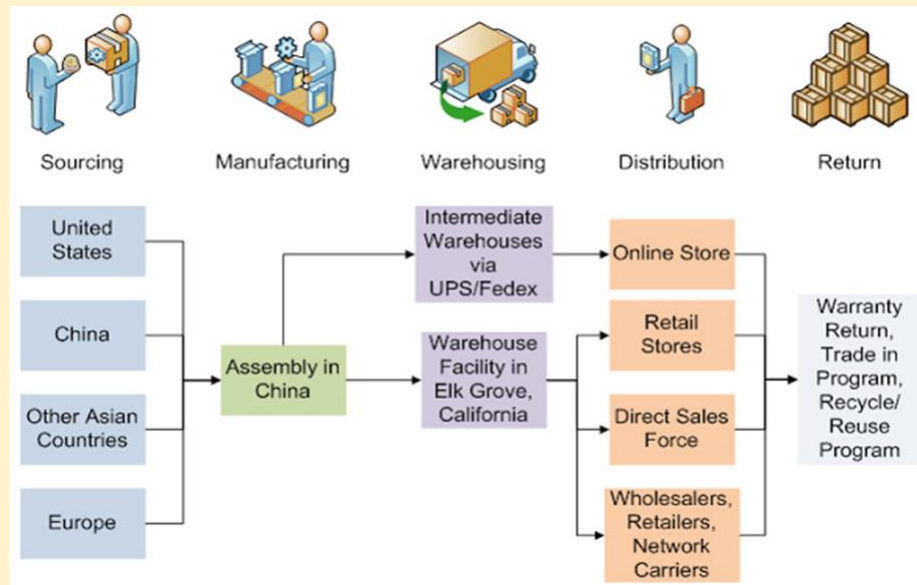
- Discuss whether RevEner should continue with:
  - Centralized Manufacturing in Spain  
OR
  - Consider Multiple Manufacturing Locations
    - To serve potential new markets of China, North America, Europe, and even Africa
- Need to decide whether RevEner should **outsource** Manufacturing to contractors to meet required production levels based on future demand
- Justify decision by developing arguments using literature to support your choices

## 4.1.4 Distribution and Return

- Discuss appropriate **Distribution Strategy**. Consider:
  - Direct distribution from Factory in Spain to Automotive Manufacturers Warehouses
  - DC's for other Customers
- Consider **Outsourcing** of DC's
- Recommend New Logistics provider, upgrade to **4PL/5PL** for inventory handling and warehousing of finished products
- Discuss how **Returns** from clients will be handled
  - Discuss the concept of Reverse Logistics and creating a Closed loop
  - Debate and recommend whether to **outsource** to 3PL or handle reverse logistics in-house

## 4.2 Global Supply Chain Network Design

- Given your recommendations above and RevEner's global expansion
- Using a World map, visualize the Global SC



# 5.0 Supply Chain Risk Management

Tip

> Use Lecture 9

> Session 9 Handout

- **Identify** and discuss possible risk RevEner will encounter by going Global
- **Assess** these risks, build a table
- Discuss **mitigation** strategies
  - Could add to table as a new column

Risk name	Owner	Probability points	Consequence points	Total severity points
IT system fails	IT	Low: 1	High: 3	(1x3)=3
Key supplier strike	Buyers	Medium: 2	High: 3	(2x3)=6
Hail damage	Facilities	Low: 1	Low: 1	(1x1)=1
Obsolete inventory	Production	High: 3	High: 3	(3x3)=9
Unrealistic key customer demands	Sales	Low: 1	Medium: 2	(1x2)=2

## 6.0 Conclusion

- Provide a summary of key findings from Scenario Analysis
- Give a summary of key recommendations