

Supply Network Design [L6M9]

Target Audience: For those who are successful in completing the CIPS Level 5 Advanced Diploma in Procurement and Supply; this represents the final level of CIPS qualifications for those working towards MCIPS Chartered Procurement and Supply Professional.

Hours: 60 Hours

Pre-requisite: You will need to have achieved the CIPS Level 4 Diploma in Procurement and Supply.

1.0 Understand the strategic nature and influence of

supply network design

1.1 Assess the meaning of supply network design and the influence that it has on the organisation

- What is supply network design
- Supply network terminology and structures
- Supply network vs. supply chain
- Where are operations located in the supply network
 - logistical impact
- What influence does capacity and resources have on the supply network
- Value adding and competitive advantage

1.2 Evaluate how a strategic supply chain network should be configured

- Influence of the internet – ‘disintermediation’
- The value net and four players - suppliers, customers, competitors and complementors
- Decisions such as:
 - Make or buy
 - Insource or outsource
 - Vertical integration
 - Outsourcing and offshoring

1.3 Assess the influence of capacity on strategic supply chain design

- Optimum capacity
- Large vs. small capacity – advantages and disadvantages
- The timing of capacity change
- Capacity increments:
- Capacity leading and lagging strategies
- Inventory ‘smoothing’
- Break even analysis for capacity expansion

2.0 Understand operations strategy and its contribution to overall business success

2.1 Assess the meaning of operations strategy and the impact that it has on the organisation

- What is operations strategy
- How to identify if an organisation has an operations strategy
- Is the operations strategy relevant and aligned to the overall business strategy
- Does the operations strategy align with market requirements and available resources
- The contribution of operations strategy to competitive advantage and added value

2.2 Evaluate the key elements of an operations strategy

- Should include key elements such as:
- A clear vision and objectives
- The 4 stages model of operations – internal neutrality, external neutrality, internally supportive and externally supportive
- Performance objectives – quality, speed, dependability, flexibility and cost
- Reconcile strategic decisions to objectives

- capacity and resources vs. timescales and outputs

2.3 Assess the role of improvement in operations strategy

- Continuous improvement
- Drivers for effectiveness and efficiency
- Improving operations through trade-offs between performance objectives
- Trade-offs and the efficient frontier
- Improving operational effectiveness by overcoming trade-offs

3.0 Assess the strategic value of resource planning and

control

3.1 Evaluate the concept of strategic resource planning and control

- What is resource planning and control
- Influences on resource planning such as:
 - Translating customer need into operational delivery
 - Customer expectation and management
 - Forecasting, capacity, resources, priorities, scheduling, monitoring, control
- Information and data gathering and management

3.2 Assess the key elements of a resource strategic planning and control system

- Core mechanics of the process such as:
 - Loading
 - Prioritisation and sequencing
 - Scheduling
 - Monitoring and control
- Decision mechanism:
 - Planning and control staff
 - Planning and control information system

- Customer interface
- Supply interface
- Other business functions

3.3 Contrast methods of monitoring and controlling the strategic operation

- Degree of difficulty in controlling operations
- Consider methods of control such as:
 - Push and pull
 - Theory of constraints (TOC) and drum (bottleneck), buffer stock and rope
- MRP and MRP II
- Web-integrated and supply network ERP