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TABLE OF CONTENTS

SUPPLY CHAIN PLANNING CERTIFICATE

Supply Chain Planning Certificate Overview

Synchronization is critical to fast, accurate production and delivery. By engaging all parts of the business, professionals can align planning processes and enable their supply chain organizations to experience significantly fewer disruptions.

ASCM's Supply Chain Planning Certificate program introduces these essential planning fundamentals and clearly explains how to integrate all planning functions within a company.

The self-paced, online program includes 20 hours of education and a comprehensive final exam. After passing the exam, learners will receive a certificate and digital badge.

Table of Contents

What Is Synchronized Planning?	4
Strategic Planning–Business Planning	5
Strategic Planning–Demand Planning and S&OP	6
Tactical Planning–Master Scheduling/MRP	7
Operations Execution–Purchasing and Production Activity Control, APS	8
Distribution and Logistics Planning.....	9

What Is Synchronized Planning?

Objectives:

- Explain why companies plan.
- Describe how the various levels of business planning work with each other.
- Identify the components of the manufacturing planning and control (MPC) model.
- Define synchronized planning and identify synchronized planning level-two capabilities.
- Define the digital competency model (DCM).
- Identify technologies that support synchronized planning.
- Explain why it is important to understand the principles and processes underlying, manufacturing and distribution technology.

Topics:

Planning

Why Do Companies Plan?

How Do Companies Plan?

Manufacturing Planning and Control (MPC) System

MPC Overview

Strategic Planning

Operations Management Planning

Operations Execution

Distribution Planning

Technologies within Strategic Planning

What Is Synchronized Planning?

Synchronized Planning Definition

Digital Capabilities Model (DCM)

Why Synchronized Planning?

Level 1 Capabilities

Level 2 Capabilities

Additional Digital Information Technology for Supply Chains

Technologies within the Digital Supply Chain

Strategic Planning–Business Planning

Objectives:

- Explain why business planning is important in well-managed businesses.
- Discuss types of market variables planners should consider when developing strategy.
- Describe technology's impact on business planning.
- Describe the importance of synchronized process linkages from business planning to execution of plans.
- Explain planning horizons and their importance.
- Discuss activities performed at different levels of the synchronized business planning hierarchy.
- Explain the importance of different types of financial statements in business planning.
- Discuss tools and techniques used to support synchronized business planning.
- Discuss the concept of operations strategy.

Topics:

Market and Technology Variables in Business Planning

Current and Evolving Environments

Industry Advances and Technological Evolution

Digital Development

Planning Horizons

Synchronized Business Planning Hierarchy

Introduction to the Planning Hierarchy

Synchronizing the Mission–Getting Everyone on the Same Page

Synchronizing the Vision–Keeping Everyone on the Same Page

Strategic Plans–Balanced Scorecard

Strategic Plans–Channel Network and Scenario Planning

Synchronizing Financial Planning and Growth Strategy

Financial Planning–Profit and Loss Statements

Financial Planning–Sales and General Administrative Expenses

Business Imperatives–Synchronizing Resources with Objectives

Functional Support–Synchronizing Recourses with Objectives

Synchronizing Core Process with Strategic Planning Objectives

Other Tools and Techniques to Support Synchronized Business Planning

Hoshin Kanri - Vertical and Cross Functional Alignment of Objectives

Portfolio Life Cycle Planning–Synchronizing Plans with Product Life Cycles

The ASCM Sustainability Framework

Operations Strategy–Manufacturing Environments

Operations Strategy–Inventory Planning

Supply Chain Strategies

Synchronizing Strategy for Multiple Business Units (in Larger Businesses)

Strategic Planning–Demand Planning and S&OP

Objectives:

- Explain why and how demand planning is done in well-managed businesses.
- Describe the role of technology in demand planning and S&OP.
- Understand how to manage the sales funnel.
- Explain how a robust S&OP process can be helpful in risk management.
- Identify the roles in the planning process and how they fit within the tired S&OP system.
- Interpret the five process steps within the S&OP cycle.

Topics:

Demand Planning

Misguided Assumptions
Synchronizing with Business Planning
Business Plan Objectives
Marketing Investments
Sales Management
Historical Time-Series Data
Digital Contract Management

Sales and Operations Planning (S&OP)

S&OP Overview
Prerequisite Activities and Data Gathering
Key Measurements
Scheduling the Monthly S&OP Cycle and Steps
Software and Product Line Templates
S&OP Cycle and Final Meeting Agenda
Roles and Responsibilities in S&OP
Tiered S&OP
S&OP Handoff to the Organization

Tactical Planning–Master Scheduling/MRP/Capacity Management

Objectives:

- Discuss the objectives and uses of master scheduling.
- Describe the inputs to the master production schedule.
- Outline the steps in the master scheduling process.
- Discuss the objectives and uses of material requirements planning (MRP).
- Describe the inputs to MRP.
- Describe types of bills of material and their uses.
- Outline the process of MRP.
- Define the levels of capacity planning.
- Describe various methods of measuring capacity.

Topics:

Master Scheduling Overview

Objectives of Master Scheduling

Relationship of Master Scheduling to Other Plans

Differences in Master Scheduling based on Manufacturing Strategy/Business Environments

Inputs to the MPS

The Master Scheduling Process

The MPS Grid

Steps in the Master Scheduling Process

Managing Change and the MPS

Material Requirements Planning Overview

Objectives of MRP

Relationship of MRP to Other Plans

Inputs to MRP

Bills of Material

Types of Bills of Material

Other Uses for Bills of Material

The MRP Process

The MRP Grid

Steps in the MRP Process

Managing Change and MRP

Capacity Management

Types of Capacity

Capacity Planning Levels

Methods of Measuring Capacity

Capacity Required (Load)

Scheduling Techniques

Managing Overloads and Underloads

Closed-Loop Planning

Operations Execution–Purchasing and Production Activity Control, APS

Objectives:

- Discuss the purchasing cycle and functions.
- Explain how suppliers are selected.
- Recognize current trends in the procurement process.
- Identify methods of environmentally responsible purchasing.
- Discuss the various types of manufacturing and how they are controlled.
- Explain how to use scheduling techniques.
- Describe the theory of constraints.
- Explain advanced planning and scheduling.

Topics:

Purchasing

Purchasing versus Procurement
Relationship with Synchronized Plans
Purchasing Cycle
Current Functions and Trends
Environmentally Responsible Purchasing
Ethical Sourcing
Purchasing and Supply Chain Management
Purchasing Performance Measurements

Production Activity Control (PAC)

PAC Objectives and Functions
Types of Manufacturing
Data Requirements
Manufacturing Lead Time
Scheduling Techniques
Sequencing and Dispatching Orders
Bottleneck Management
Reporting and Performance Measurement

Advanced Planning and Scheduling (APS)

What Is APS?

Distribution and Logistics Planning

Objectives:

- Explain the role of distribution management in the supply chain.
- Discuss the objectives and drivers of the channel network design and structure.
- Describe critical decisions required when developing a distribution plan.
- Compare and contrast distribution replenishment systems when they would be used.
- Identify critical decisions required for a successful warehouse strategy.
- Describe critical decisions required for a successful transportation strategy.
- Identify common information systems used in the distribution planning function.

Topics:

The Role of Distribution in Supply Chain Management

Distribution Management in the Supply Chain

Distribution Planning and the Business Plan

Channel Network Design

Importance of Good Channel Network Design

Channel Design Tree Structures

Insourcing or Outsourcing within the Channel Network

Labor and Equipment

Inventory Planning

Balancing Supply and Demand

Distribution Channel Dependencies

Push or Pull?

Order (Reorder) Point

Basic Order–Point Model and Order–Point Trigger

Distribution Requirements Planning

Which to Use–Order Point or DRP?

Warehousing

Function and Objectives of Warehousing

Strategic Decision Components

Warehouse Space and Capacity Planning

Types of Warehousing

Warehouse Automation and Systems

Transportation

The Transportation Function

Transportation Strategic Planning

Shipping Requirements

Track and Trace

Information Systems

Enterprise Resources Planning

Trace-and-Track Technology

About ASCM

The Association for Supply Chain Management (ASCM) is the global leader in supply chain organizational transformation, innovation and leadership. As the largest non-profit association for supply chain, ASCM is an unbiased partner, connecting companies around the world to the newest thought leadership on all aspects of supply chain. ASCM is built on a foundation of APICS certification and training spanning 60 years. Now, ASCM is driving innovation in the industry with new products, services and partnerships that enable companies to further optimize their supply chains, secure their competitive advantage and positively impact their bottom lines.

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