Inventory Management

Format	Module/Topic	Learning Objectives	Prerequisites	Duration (mins)
eLearning *Foundation*	*Module 1:* Importance of Inventory Management	- Explain why inventory management is important. - Define the goal of inventory management. - Define which costs can be influenced by inventory management. - Explain why inventory management has to be done right.		30-45
	Module 2: The Need for Inventory	- Explain the reasons for keeping inventory. - Explain what a customer order decoupling point is. - Define what the three main questions of inventory management are.		30-45
	Module 3: Classifications of Inventory	- Explain the classification of inventory in functions, such as safety stock, cycle stock and buffer stock. - Explain the classification of inventory in types, such as physical inventory and economical inventory.		30-45
	Module 4: Safety Stock and Service Level	- Explain what the safety stock and order point are. - Explain why it is important to have the right amount of safety stock. - Explain what the main factors are that influence the safety stock. - Provide an easy formula to calculate the safety stock.		30-45
	Module 5: Order Quantity	- Explain why the order quantity is important. - Show which costs are effected by the order quantity. - Explain how to calculate the Economic Order Quantity.		30-45
	Module 6: Classifying your Portfolio	- Explain why it is important to classify your portfolio. - Show how you can classify your portfolio and what you can do with this classification. - Explain how the lifecycle phase of an item is important as extra actions might be needed.		30-45
	Module 7: KPIs	- Provide the definition of the main Inventory Management KPIs. - Show how to calculate and interpret these KPIs.		
	Module 8: Inventory & Demand Management	- Define the relation between demand management and inventory management. - Show how the forecast error effects inventory levels. - Explain what service level differentiation is and show how it can help to bring your inventory down.	IM module 4	30-45
	Module 9: Inventory & Supplier Management	- Explain the effect of lead times on the inventory level. - Explain the effect of lead time variability on the inventory level. - Explain the effect of the minimum order quantity on the inventory level.	IM module 4	30-45
	Module 10: Inventory in Distribution Environments	- Show how the distribution footprint influences inventory management. - Explain what the bullwhip effect is.	IM module 1-5	30-45
	Module 11: Inventory Management in MRP	- Show how MRP deals with Inventory Management. - Explain what the advantages and disadvantages of MRP are regarding Inventory Management.	IM module 1-5	30-45

Demand Planning

Format	Module/Topic	Learning Objectives	Prerequisites	Duration (mins)
eLearning *Foundation*	*Module 1:* Why Do you Need Demand Planning?	- Provide an understanding why Demand Planning is needed. - Show the difference between tactical and operational goals. - Explain the different aggregation levels. - Explain the three rules of forecasting.		30-45
	Module 2: The Process of Demand Planning	- Explain which steps should be taken in a good demand planning process. - Explain which functions in the organization are involved with demand planning. - Provide an example of a demand planning process.		30-45
	Module 3: Making and Measuring Forecasts	- Explain the different methods of forecasting. - Explain the difference between qualitative and quantitative methods. - Provide an insight in some of the qualitative methods. - Explain the difference between time series and causal methods. - Explain how to measure the forecast quality.		30-45
	Module 4: Forecasting and MRP	- Explain the effect of forecast changes on MRP. - Explain the different methods to consume the forecast.	DP module 1-3	30-45
	Module 5: Statistics behind Forecasting	- Explain the theory of some statistical forecasting techniques. - Explain the Theory of Moving Average. - Explain the Theory of Weighted Moving Average. - Explain the Theory of Single Exponential Smoothing. - Explain how to apply the formula's.	DP module 1-3	30-45
	Module 6: Metrics of Forecasting	- Provide metrics to measure the forecast accuracy. - Self-practice applying the metrics. - explain about the differences between accuracy and bias. - Create awareness of pitfalls when using metrics.	DP module 1-3	30-45

S&OP				
Format	**Module/Topic**	**Learning Objectives**	**Prerequisites**	**Duration** *(mins)*
eLearning *Foundation*	*Module 1:* Importance of S&OP	- Explain the importance of S&OP. - Define the essence of S&OP. - Describe the different S&OP maturity levels. - Define and explain the complexity of S&OP in a multinational environment.		30-45

	Module 2: S&OP Mind Map	- Define the key aspects when bringing S&OP to the next level in terms of:
		  - Company
		  - Process
		  - Information
		  - Organization
				30-45

	Module 3: S&OP Level 3	- Explain the main differences between S&OP Level 1,2 and Level 3. - Explain the right S&OP Level 3 planning horizon. - Explain the level of detail that is needed for S&OP in Level 3.	S&OP Module 1	30-45
	Module 4: Integrated Business Planning	- Explain the concept of managing the business with One Integrated Set of Numbers. - Explain the reasoning of having different plans for managing the business at strategic, tactical and operational level at this stage of S&OP's Journey. - Define the challenges to achieve an Integrated Set of Numbers. - Explain the differences between Targets, Plans, Forecasts and how to use these instruments. - Explain the key areas where S&OP Level 3 and S&OP Level 4 differ from each other. - Define and explain the purpose of the changes in role and behavior that are necessary in Finance and Operations to reach S&OP Level 4.	S&OP Module 1-3	30-45
	Module 5: S&OP Enablers	- Define the enablers are required for an effective S&OP process. - Explain The importance of data preparation. - Define the importance of a structured S&OP framework.	S&OP Module 1-3	30-45
	Module 6: S&OP Implementation	- What are the most important aspects to take into account when implementing S&OP. - Explain that change management ought to be an integral part of an S&OP implementation. - Explain why implementing S&OP is simple but not easy.	S&OP Module 1-3	30-45

Supply Chain Strategy

Format	Module/Topic	Learning Objectives	Prerequisites	Duration (mins)
eLearning *Foundation*	*Module 1:* Introduction to Supply Chain Strategy	- Define the importance of supply chain strategy. - Explain how the supply chain strategy can be formulated and implemented on different maturity levels. - What are the common obstacles and barriers for executing a supply chain strategy.		30-45
	Module 2: The Competitive Landscape	- Derive that the supply chain strategy should depend on the competitive landscape. - Explain how the competitive landscape is formed by suppliers, technology and customers. - Explain how the suppliers, technology and customers all have their own characteristics on how to influence the supply chain strategy.		30-45
	Module 3: The Unique Value Proposition and Segmentation	- Explain what the Unique Value Proposition entails. - Explain the importance of creating a segmentation between customers. - Explain the impact of this segmentation on the supply chain process.		30-45
	Module 4: Supply Chain Processes	- Explain how the competitive landscape and the unique value proposition give direction to the supply chain process. - Explain how the supply chain process influence more than just costs. - Provide enablers for the successful implementation of a supply chain.		30-45

Production Management				
Format	**Module/Topic**	**Learning Objectives**	**Prerequisites**	**Duration** *(mins)*
eLearning *Foundation*	*Module 1:* What is Production Management?	- Explain what is production management. - Show how production management affects the stakeholders in the company. - Show how manufacturing environments can differ in fundamental ways.		30-45
	Module 2: Objectives of Production Management - Efficiency	- Explain that efficiency is not only about costs, but about output as well. - Explain how the bottleneck operations determine the output of the system. - Define the different types of costs in manufacturing environments. - Explain that there are trade-offs involved in improving efficiency.		30-45
	Module 3: Objectives of Production Management - Lead times	- Explain the difference between the process times and the throughput time. - Show how inventory can shorten the customer lead times. - Explain what the value added ratio is and what it can tell you regarding decreasing throughput times		30-45
	Module 4: Objectives of Production Management - WIP & Inventory	- Explain the relation between throughput time and work-in-process. - Explain the role of the customer order decoupling point for inventory in production. - Explain what the capacity stock is and how it can be used production.		30-45
	Module 5: Batch Sizing	- Explain the first method to determine batch sizes: Economic Order Quantity. - Explain the second method to determine batch sizes: every product, every interval. - Explain in which situations each method can be applied.	PM modules1-4	30-45
	Module 6: Improving Production Management	- Explain how the variability is the root cause of most production management issues. - Define what can be done about this variability. - Explain what can be done to absorb the remaining variability.	PM modules1-4	30-45
	Module 7: MRP	- Define what MRP does. - Explain how MRP works. - Explain the advantages and pitfalls of MRP.	PM modules1-4	30-45
	Module 8: Lean in 30 minutes	- Show that lean is about improving the value stream. - Show some tools that can be used to improve the value stream. - Explain why and how Lean is more than this set of tools, it is a philosophy.	PM modules1-4	30-45
	Module 9: QRM	- Show how the lead time can be the most important KPI. - Explain what the main ideas behind Quick Response Manufacturing are.	PM modules1-4	30-45
	Module 10: A quick tour through Theory of Constraints	- Explain the idea behind the Theory of Constraints. - Show the main tools of Theory of Constraints.	PM modules1-4	30-45
	Module 11: Production Management Metrics	- Provide the definitions of some important metrics such as Overall Equipment Efficiency and Throughput. - Explain some of the pitfalls in implementing these metrics.	PM modules1-4	30-45

Portfolio Management

Format	Module/Topic	Learning Objectives	Prerequisites	Duration (mins)
eLearning *Foundation*	*Module 1:* Introduction to Portfolio Management	- Explain the importance of portfolio management. - Explain why having an active product costs money. - Explain the good and bad complexity. - Explain how business strategy drives portfolio management.		30-45
	Module 2: Analyzing your Portfolio	- Show how ABC analysis can help to identify delisting candidates. - Show how the ABC analysis can be done using many different criteria. - Define the limitations and risks of using ABC analysis. - Explain the concept of "Assignable Contribution Rate" - Define the potential and benefits of looking at other levels of Bills of Materials.		30-45
	Module 3: Integral Approach to Portfolio Analysis	- Explain the different roles of fixed and variable costs. - Show how the fixed cost reductions come in steps. - Show how the fixed costs need to be taken into account too. - Explain the use of scenarios and modelling. - Define the risks associated with portfolio pruning decisions.		30-45
	Module 4: Pruning the Portfolio	- Show the different ways to simplify your portfolio. - Explain how to define the different stakeholders and the importance of Change Management. - Show ways of how to maintain a healthy portfolio. - Explain the use of KPIs to measure the health of your portfolio.		30-45

Supply Chain Network Design				
Format	**Module/Topic**	**Learning Objectives**	**Prerequisites**	**Duration** *(mins)*
eLearning *Foundation*	*Module 1.1:* SC Network Design Fundamentals – Part One	- Explain the importance of SC network design. - Explain the trade-off cost vs service. - Explain the trade-off Make-to-Order vs Make-to-Stock.		30-45
	Module 1.2: SC Network Design Fundamentals – Part Two	- Explain the trade-off central vs decentral structure. - Explain the trade-off single tier vs multi-tier SC network design.	SC Network Design Module 1	30-45

		Warehousing & Logistics		
Format	**Module/Topic**	**Learning Objectives**	**Prerequisites**	**Duration** *(mins)*
eLearning *Foundation*	*Module 1:* Importance of logistics	- Explain the goal and importance of logistics. - Define the scope of logistics. - Explain what are logistics cost drivers and what is the share of logistic costs in total costs. - Explain how the service offering to the market impacts logistics.		30-45
	Module 2: Warehouse Management	- Explain the goals of warehouse management. - Explain which factors influence warehouse costs. - Explain the basic warehouse processes. - Explain the highlights on warehouse equipment and IT.		30-45
	Module 3: Transport Management	- Explain what are transport modes and when to use which one. - Define the objective of transport planning from the shipper and carrier perspective. - Explain what are transport configurations and cost drivers. - Explain the function of a Transport Management System in the system landscape.		30-45
	Module 4: Logistics Outsourcing	- Explain the advantages of outsourcing logistics. - Explain which logistics functions can be outsourced and on which level. - Explain when to outsource logistics. - Define role and function of different outsourcing partners.		30-45
	Module 5: Transport Responsibilities	- Explain what are incoterms. - Explain which actors are there in transport. - Explain what are typical documents used in transport.		30-45