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Operations Management

Checkpoint Questions

Week 01

- 1. Which Functions are parts of Operations?
- 2. Which different types of goods flow in the Supply Chain?
- 3. What else flows in the Supply Chain?
- 4. Which are the 6 "rights" of Logistics?
- 5. What are the basic elements in a "process view" of business?
- 6. What is the meaning of PDCA?
- 7. What does "conformity" mean?
- 8. Who defines the needed level of Quality in a product?
- 9. ISO 9000 started the Quality Revolution in the Western world (Y/N)
- 10. Is ISO 9000 about conformity or about excellence?
- 11. Why were the Americans so confident of their manufacturing superiority?
- 12. Which were the two "evils" for Deming?

- 1. What is the purpose of an ABC analysis?
- 2. How to manage differently "A" parts/ Clients/ Suppliers from "C" ones?
- 3. What is an Article Cube?
- 4. Mention the key Market challenges for manufacturing companies

5. What is a Quality Policy? Does it tell if a company is excellent?



- 6. What tells that a company is on the path to excellence?
- 7. What needs to be the "right one" for a Company to be excellent in the long run?
- 8. What have Vision and Strategy to do with Excellence?
- 9. Why applying repeatedly the PDCA cycle?
- 10. Where in PDCA is the stabilisation phase, making changes a part of the routine work?
- 11. Which Tool helps setting Action plans coherent with the company strategy?
- 12. What use has a self-assessment? Is it precise enough as analysis tool?
- 13. What charts are best to show self-assessment results?
- 14. Mention the key Kaizen conduct rules

- 1. Why outsource in and/or outbound Logistics?
- 2. Which transportation means is more relevant globally?
- 3. What are the advantages & disadvantages of the 4 transportation means?
- 4. How to store bulk items? And small items? How to protect them?
- 5. What are the 4 categories of Inventory in a Plant?
- 6. What are Obsoletes?
- 7. Who tells you lots of useful information that helps you improve your sales?

8. How to measure Customer Satisfaction?



9. What is the Customer Activity Cycle?

10. Why reviewing & recording product requirements is stressed by ISO9001?

- 11. 20% of products generate 80% of margin: what to do with the rest 80%?
- 12. What Tool helps capture Customer needs and bring them into Product and Process specifications?

13. Which are the main activities performed in Inbound & Outbound Logistics?

- 1. What does a Customer measure about the performance of a supplier?
- 2. Are customer audits a substitute for ISO9001 audits ?
- 3. The Safety Stock covers the demand during lead time (Y/N)
- 4. How is the Reorder Point determined?
- 5. How much is "Available to promise" to customers?
- 6. Why are periodic physical inventory counts necessary?
- 7. How is the Safety stock calculated ?
- 8. Disadvantages of Automated Guided Vehicles
- 9. Risks with fork lifts in a factory
- 10. Mention different ways and tools for moving goods in a plant
- 11. What is the purpose of product traceability?



Week 05

- 1. What data are necessary to execute a MRP?
- 2. What if we cannot satisfy the planned Lead Time?
- 3. What can go wrong in planning materials needs?
- 4. What is the value of a Customer complaint system? Which are its main elements?
- 5. What data are reported on a CAR or 8D report?
- 6. What is pegging?
- 7. Why is a Customer complaint system relevant for Operations?
- 8. Why knowing the Customer Activity Cycle is valuable?

- 1. Mention the main processes in R&D
- 2. What is the purpose of the Product Development process?
- 3. Who should be responsible for Products, from cradle to grave?
- 4. Who is responsible for the Development phase of products?
- 5. Mention the activities required to set up and execute a Project
- 6. What is a Work Breakdown Structure?
- 7. What is the advantage of Quality/Stage Gates?
- 8. What are some typical pitfalls in Project management?

- 9. Which are the conflicting goals of a project?
- 10. What is the meaning and which the reference values of $C_{\boldsymbol{p}\boldsymbol{k}}\boldsymbol{?}$
- 11. Mention criteria one can use to select and prioritize innovation ideas
- 12. Why managing Product development on Platforms?
- 13. Mention advantages and disadvantages of FMEA
- 14. What is Advanced Product Quality Planning?
- 15. What is the difference between Creativity and Innovation?
- 16. Is the business plan done before or after the Prototyping phase?
- 17. Mention some methods that help in the generation/ discussion of ideas

- 1. What % of costs is on average influenced by Purchasing in an industrial company?
- 2. Which are the essential elements of the Purchasing process?
- 3. What is the difference between a Buyer, a Category specialist, a Lead Buyer?
- 4. Describe the 3 way check & responsibilities
- 5. How is Purchasing organised? (traditional & evolved structure)
- 6. What is the Purchasing Managers' Index? Why is it useful?
- 7. Describe the 4 classes of the purchasing matrix
- 8. Who is the best purchaser for each of the 4 purch. classes?

9. Advantages and disadvantages of Purchasing Auctions



10. Why try to standardise purchases?

Week 08

- 1. List the 7 deadly wastes
- 2. What is the meaning of "value adding activity"?
- 3. List the "5S" steps (in english)
- 4. Where can you obtain information about suppliers or competitors?
- 5. What is Market Intelligence and what are its advantages?
- 6. What is "breach of warranty"? And which are the 3 categories of product defects for which a manufacturer is liable?
- 7. What is Cycle Time? Takt Time? Lead time? What is their difference?
- 8. List and explain the 4 basic production types
- 9. For a successful 5S, managers must allow workers to take
- 10. What are the two evils in Production? (remember Deming)
- 11. Why Japan embarked into Kaizen?
- 12. What are the principles of the Toyota Production System?
- 13. What differs between traditional production and the Toyota way?

- 1. Put in relation Takt time and Lead time
- 2. What are the advantages of a U-Cell?
- 3. What is production levelling?
- 4. Why is 1 piece flow better?
- 5. Describe how Kanban works
- 6. To manage constraints I have first to identify the _____

7. What can I understand and then do with a Current-state Value Stream Map?



- 8. What minimum information is needed on a Kanban card?
- 9. Describe the differences between traditional production planning (in "push" mode) and the "pull" mode
- 10. What is OEE? Which are its 3 components?
- 11. What is the ratio Standard Cycle Time/ Actual Cycle Time?

- 1. Can a Future-state VS map be very different from the current?
- 2. Once identified a bottleneck: what to do?
- 3. Can you draw examples of cycle time charts on your own?
- 4. Why should Cycle time always be reasonably lower than Takt time?
- 5. What is a Focused factory?
- 6. What are SAWT?
- 7. Which Tool to use if changeover of production takes too long?
- 8. Which Tool helps prevent occurrence of mistakes in production?
- 9. Provide examples of Visual management
- 10. Why are standards needed? Give examples
- 11. What is mandatory to do regularly on measuring tools used in production?
- 12. What is the use of Information Boards?



14. Production improvements can be up to 10% (True/ False)

Week 11

- 1. Which TPS tools are enablers for 1 piece flow? ____/ ___
- 2. Kaizen applies to production environment, not to services nor offices: T/F
- 3. Biggest contribution to Kaizen comes from top educated people: T/F
- 4. What are the major hurdles for big Kaizen projects ?
- 5. What is the role of Communication in a Kaizen initiative?
- 6. You are nominated Kaizen responsible: what will you make sure to obtain?
- 7. TPM means? Who is asked to perform TPM tasks?
- 8. Give examples for Costs of non-quality
- 9. Safety is the responsibility of each individual in a plant T/F
- 10. What are the main categories/ root causes of safety accidents?
- 11. What is a Kaizen week?
- 12. What are the 3 components of Sustainable businesses?

- 1. Can you draw examples of cycle time charts on your own?
- 2. Can operations for one part be executed in parallel? Give examples
- 3. What is the impact of setup-time on the total Lead Time for a part?

- 4. What relation has OEE with actual cell production?
- 5. Can production planning at machine level be done by ERP systems?
- 6. Which cost types are harder (and more controversial) in their attribution to products? What is a variable cost? What a fix? Is fix always fix??
- 7. Is Standard product cost independent from production volumes?
- 8. Does Cost Accounting represent reality without distortions?
- 9. One cannot calculate the product cost without:
 - a.
 - b.
 - c.

- 1. What is the purpose of a chart? What should you never do with charts?
- 2. What is a scattergram?
- 3. What does KPI mean? Give some examples of plant KPI
- 4. Why reporting operational KPI? Aren't financial KPI enough?
- 5. What is a Management review?
- 6. What is the driver of the transfer of production to the East?
- 7. Is a move to East equally useful for all industry segments?
- 8. What can keep Manufacturing in CH successful?
- 9. What is Reshoring? What are the reasons for it?
- 10. What keeps operation heads or plant managers awake at night?