

Operation Management (OM)

Prerequisites-first lesson and file

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Coordinates (will be part of OM Intro as well)

- **Lecturer** : Ing.Jaromír Skorkovský, CSc.
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- **Study material** : will be updated regularly after every lesson (is.muni.cz)
- So far there is lot of material there but mind you that nearly every part will be slightly or more heavily modified this year. So the correct material will have at the end of its name specification ...2018mmdd e.g. 20180917 if not specified otherwise in advance
- **Attendance** : seminar and lectures are obligatory – see subject specification (is.muni.cz) – first important condition to be admitted to exam)
- **Excuses** : if serious reason emerges- **only written from is accepted**
- **Seminar work** : will assigned after some theory will be presented. Accepted seminar work is the second condition to be admitted to exam. Assign time :1.11.2018
- **Tuition plan** : at the **end** of this slide show
- Name of the tuition plan file : Tuition plan for both groups AOMA and AOPR_20180808
- Locations : AOPR : P104 and VT206, AOMA :VT206 if not specified otherwise

Basic synergy

Shop floor (production)



Accounting department

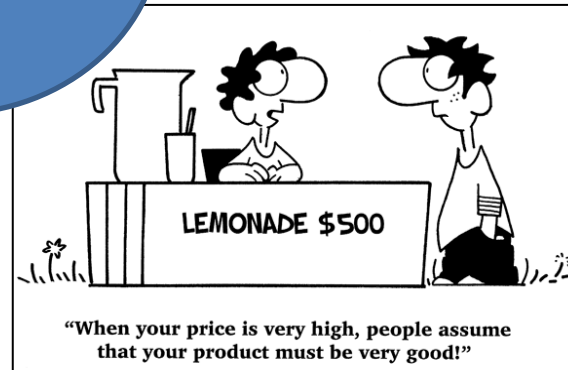


Warehouse



Data

Selling department



Shop floor (production)



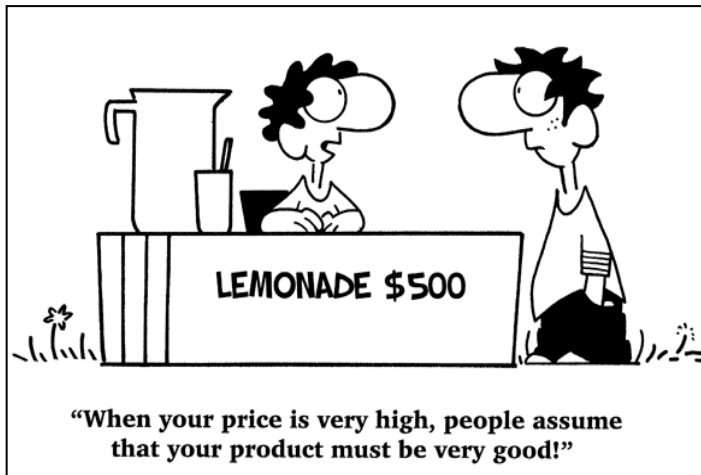
- Do we have enough material (items)?
 - Connection to inventory
 - Connection to Suppliers
 - Connection to demand (Customers)
- Do we have enough capacity (resources)
 - Machines (shifts, capacities, breakdowns,..)
 - Workers (loss of working hours, skills,,)
- Production planning
 - Due dates
 - Capacity and material availability
- And many, many more

Warehouse management



- Locations of item (racks , bins,..)
- Receiving
- Put-away
- Picking
- Shipping
- Quantity to be ordered
- Inventory costing
- Transport of item

Sales orders (Sales management)



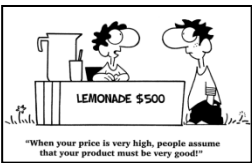
- **1 000 000 USD question** : do we really have profits ?
- Selling price construction (discounts,..)
- Cost of good sold
- Order management
- Customer balances
- Reminders
-

Finance management

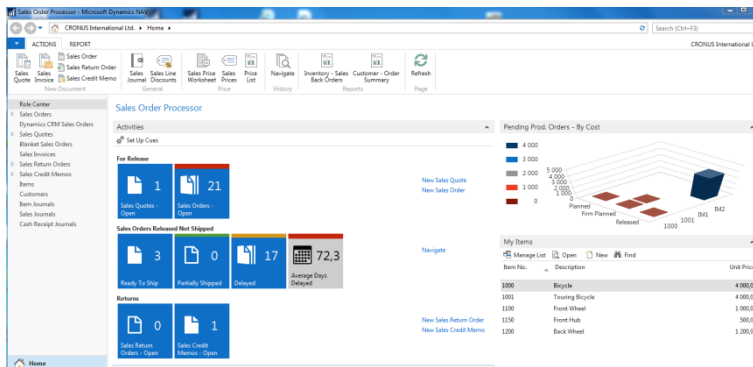
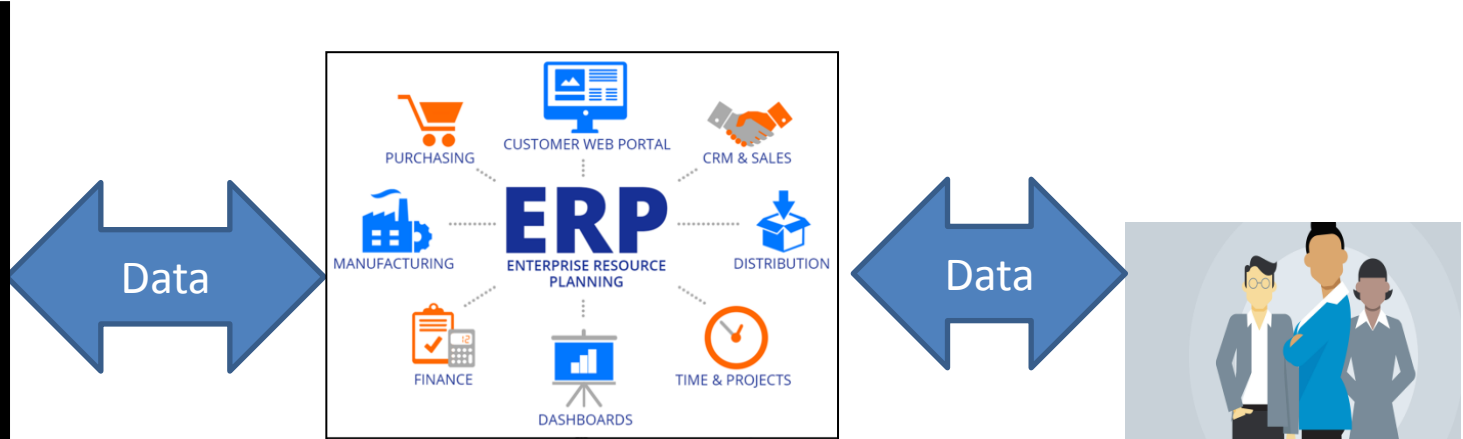


- General Ledger area
- Posting invoices
- Bank management
- Receivables, payables
- Taxes
- Cost management
-

Synergy



"When your price is very high, people assume that your product must be very good!"



Operation management methods

Some OM methods

- Theory of Constraints
- Balanced Scorecard
- Project Management methods (Critical Chain, SCRUM,...)
- Material Requirement Planning (MRP) and Just-in-Time
- Advanced Planning and Scheduling (APS)
- Six Sigma – quality management
- Boston, SWOT and Magic Quadrant Matrices
- Little's Law (relations between WIP, Throughput and Cycle time)
- Linear programming - optimisation
- Yield Management
- Kepner-Tregoe (support of decision making)
- Decision trees