# 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.
  - Department of Corporate Economy (5th floor)
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- **Study material**: will be updated regularly after every lesson (is.muni.cz)
- So far there is a 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 ...2019 mmdd e.g. 20190916 if not specified otherwise in advance
- Attendance: seminar and lectures are obligatory see subject specification (is.muni.cz) first vital condition to be admitted to exam)
- Excuses: if serious reason emerges- only written form is accepted
- **Seminar work**: will be assigned after some theory will be presented. Accepted seminar work is the second condition to be admitted to an exam. Assign time: 4.11.2019 and 6.11.2019
- 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: P312 (308) and VT206, AOMA: VT206 if not specified otherwise

## Basic synergy

**Shop floor (production)** 

**Accounting department** 





Warehouse

Data

Selling department





### **Shop floor (production)**



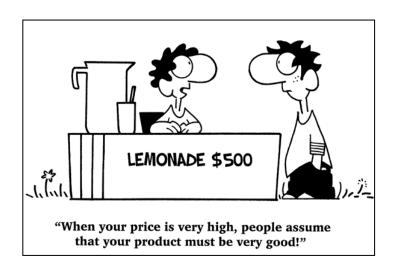
- Do we have enough material (items)?
  - Connection to Inventory
  - Connection to Suppliers
  - Connection to Demand (Customers)
- Do we have enough capacity (resources)
  - Machines (shifts, capacities, breakdowns,..)
  - Workers (loss of working hours, skills,..)
- Production planning
  - Due dates
  - 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 0000 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
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# Synergy



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