

# LOGISTICS, PRODUCTION & RETAIL

TRACK PRESENTATION

MASTER ORIENTATION DAY

SEBASTIAN BRÄUER & MARTIN VANAUER

# PURPOSE OF DOMAIN TRACKS

## OVERVIEW



### Method Tracks Objectives

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- In a total of 5 tracks, you study relevant methods which are applicable to a wide range of application fields (**method tracks**)
  - For instance, process modelling techniques (PM track) are relevant for almost all industries, as processes are essential business corner stones
  - The same e.g. applies to mathematical (BI) or software development skills (ISD) which are used to develop solutions for multiple functions or industries

### Domain Tracks Objective

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**Domain tracks** allow you to gain knowledge on the application of methods (e.g. studied in other tracks) in a **specific application field of IS**

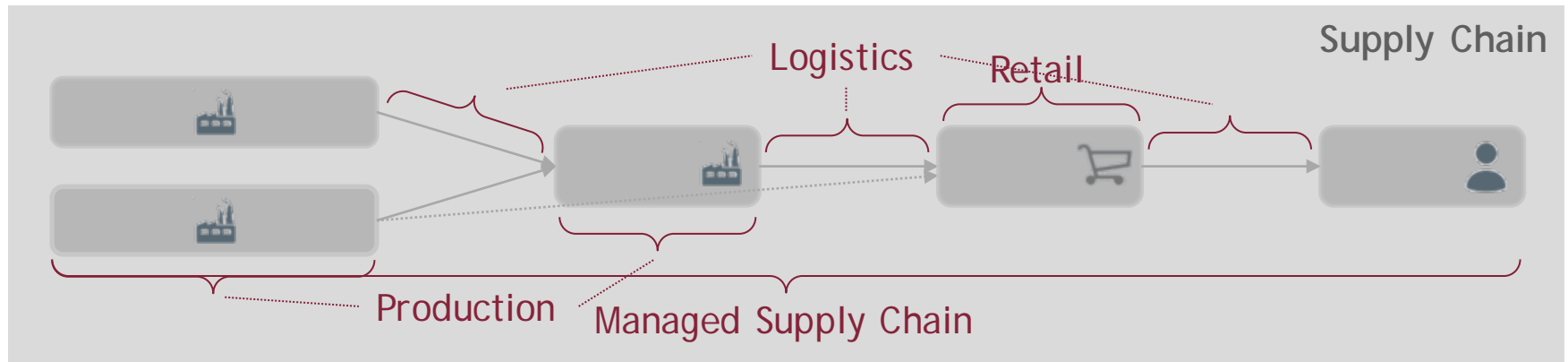
- Application fields of IS are for instance specific business functions or industries seen in real-life organizations
- Currently, the IS Master Program offers you the chance to explore the domain “Logistics, Production and Retail” in a corresponding track

# LOGISTICS, PRODUCTION AND RETAIL


## TRACK OVERVIEW



### Motivation




### Building Blocks (Lectures)



**PPC**  
Production Planning & Control



**SCM**  
Supply Chain Management



**Ret**  
Retail





Logistics, Production & Retail

# Production Planning and Control



# PRODUCTION PLANNING AND CONTROL

## OVERVIEW



### Basic Data

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Learn about the management and controlling of manufacturing processes, central documents and data structures as well as useful tools and techniques.



*Winter Term*



*Lecture & Tutorials*



*100% Exam*

### Motivation

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- Accurate production planning and control is necessary to achieve higher levels of productivity for:
  - Creating higher quality products
  - Delivering better customer value and service
  - Achieving shorter delivery times
  - Reducing labor and material costs
- Current challenges are the energy revolution (establishing a “greener” production) and the smart factory (usage of sensors for smart products and smart services)

# PRODUCTION PLANNING AND CONTROL

## CONTENT

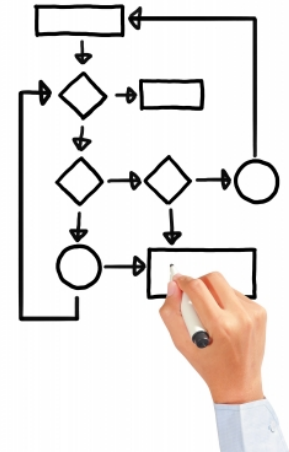


### Building Blocks (the course will ...)



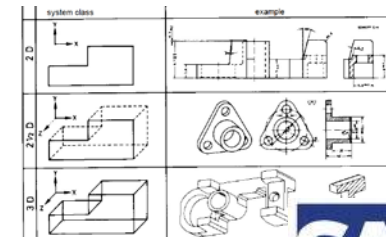
Present...

- theoretical knowledge on production planning and control
- an overview of concepts and methods linked to typical problem statements in the manufacturing industry



Convey...

- practical application of production planning and control techniques
- skills on IT tools that support PPC tasks

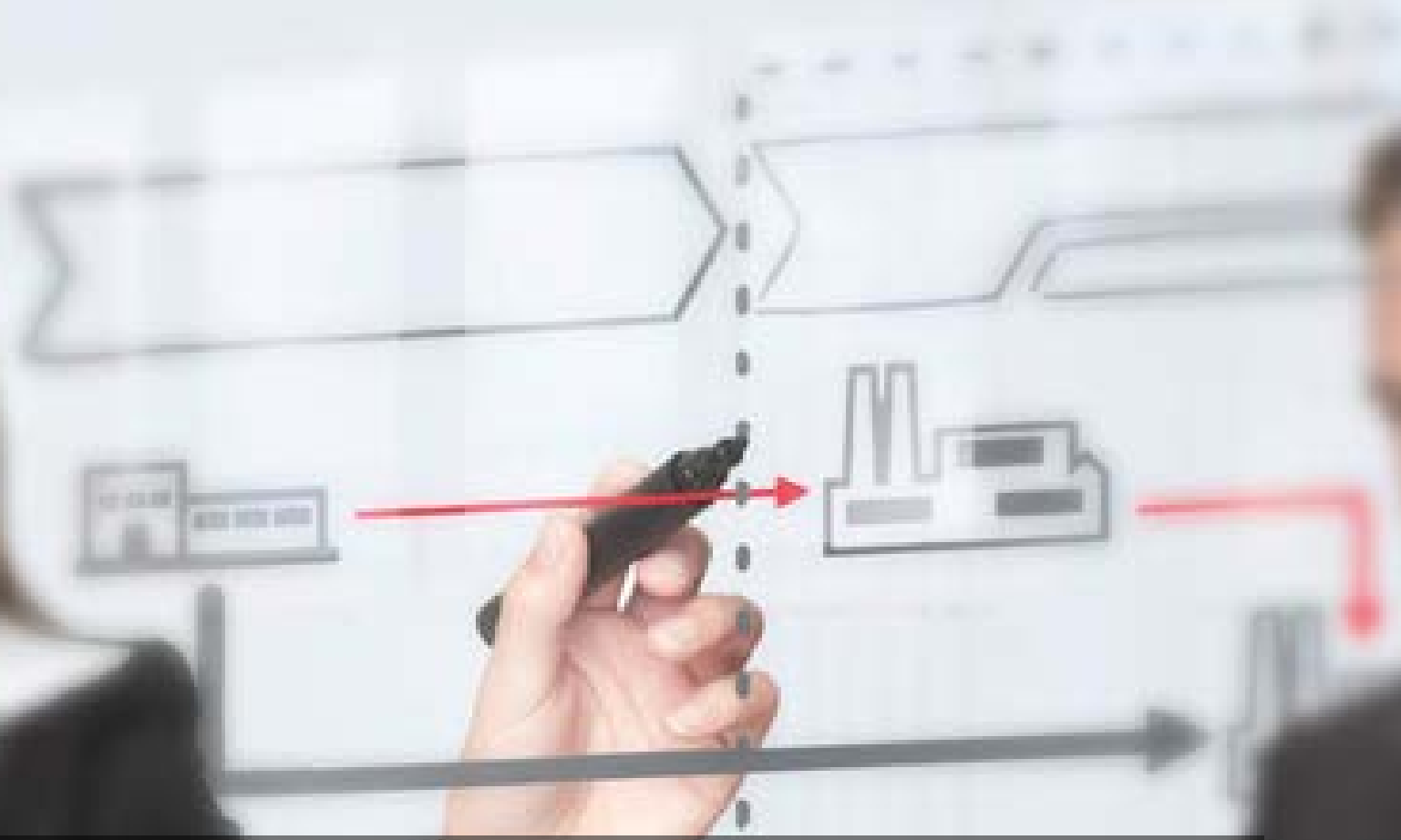


# PRODUCTION PLANNING AND CONTROL

PRELIMINARE SCHEDULE UNTIL CHRISTMAS BREAK



Day	Date	L/E	Content
Monday	19.10.2015	No Lecture	Information Modeling uses Slot
Thursday	22.10.2015	No Lecture	Information Modeling uses Slot
Monday	26.10.2015	Lecture	1 - Introduction to PPC
Thursday	29.10.2015	Lecture	2 - Product Offering and Product Design
Monday	02.11.2015	No Lecture	Information Modeling uses Slot
Thursday	05.11.2015	Lecture	3 - Demand Management and Forecasting
Monday	09.11.2015	No Lecture	Information Modeling uses Slot
Thursday	12.11.2015	Lecture	4 - Materials Management
Monday	16.11.2015	Lecture	5 - Cost Engineering
Thursday	19.11.2015	Exercise	Exercise I (BOM)
Monday	23.11.2015	Lecture	6 - Inventory and Capacity Management
Thursday	26.11.2015	Exercise	Exercise II (MM)
Monday	30.11.2015	No Lecture	Information Modeling uses Slot
Wednesday	02.12.2015	Lecture	7 - Production Control
Thursday	03.12.2015	Exercise	Exercise III Cost Engineering
Monday	07.12.2015	No Lecture	Information Modeling uses Slot
Wednesday	09.12.2015	Exercise	Exercise IV Inventory and Cap. Management
Thursday	10.12.2015	Lecture	8 - Data Models



Logistics, Production & Retail

# Supply Chain Management and Logistics



# SUPPLY CHAIN MANAGEMENT & LOGISTICS



## OVERVIEW

### Basic Data

The SCM course elaborates on networks of companies, focusing on the coordination and optimization of the flows of material, information and finances between them.



*Winter Term*



*Lecture, Tutorials & 2 Case Studies*



*60% Exam; 40% Cases*

### Motivation

- Products and services are nowadays created by a **network of organizations**
  - Companies **cooperate** for specific products and market segments
  - The same companies **compete** in others
  - **Individualized products and services** are a major competitive advantage
- Competitiveness of supply chains can be improved twofold:
  - **Closer coupling** of involved companies and **improved coordination** of flows
- To achieve this, companies must
  - **overcome organizational barriers, adjust their individual strategies, and accelerate decision making through the use of information systems**

# SUPPLY CHAIN MANAGEMENT & LOGISTICS

## CONTENT

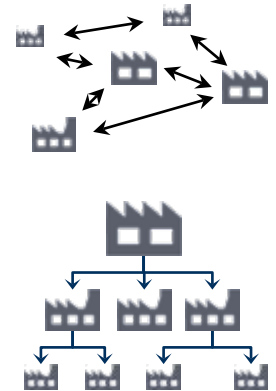


### Building Blocks (the course will ...)



Present...

- Different types and structures of Supply Chains and Supply Chain modeling techniques,
- procedures and methods for designing, planning and controlling Supply Chains,
- as well as IT systems used in these different areas



Convey...

- practical skills in Supply Chain Design by work on a case study in cooperation with 4flow using their tool "4flow Vista", and
- practical skills in Supply Chain Planning (network and inventory planning) by work on a case study with SAP SCM (APO).





# Logistics, Production & Retail

## Retail

# RETAIL

## OVERVIEW



### Basic Data

The Retail course highlights the importance of retail as an important sector for the economy and presents business processes and data structures according to the Retail-H reference model.



*Summer Term*



*Lecture, Tutorials & Case Studies*



*100% Exam*

### Motivation

- Retail in Germany
  - 450 billion Euro annual turnover
  - 50 million customers per day
  - >3 million employees
  - Retail, wholesale, mail order, online retail
- Raising challenges
  - Period of consolidation, regulation and heavily increasing competition
  - Rapidly growing e-commerce market
- Business process management in retail is steadily gaining importance

# RETAIL

## CONTENT

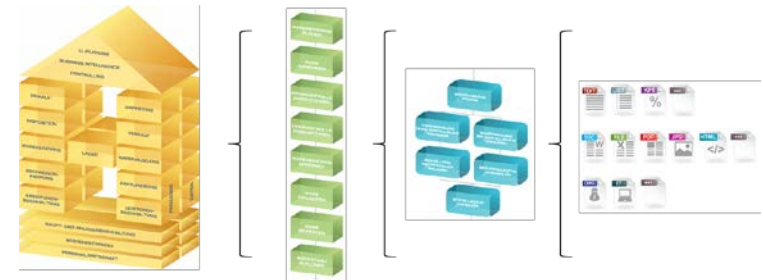


### Building Blocks (the course will ...)



Present...

- Business processes, data structures following the Retail-H reference model
- ERP-system selection and implementation



Convey...

- Apply domain specific techniques for business process modeling and data modeling
- Gain practical insight into IT-challenges in retail by work on business process management and ERP-related case studies

