

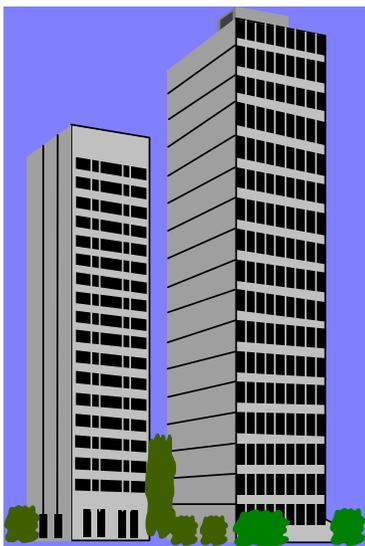
# 企业建模-ARIS

- **ARIS** ( Architecture of Integrated Information Systems )
  - **IDS Scheer**
    - 全球业务流程管理软件领域领导者和开拓者 (by Gartner Group and Forrester, 2007 )
    - 客户遍布世界各地, 约 4,000 多家, 如大众、宝马、壳牌等 500强公司。
    - 与SAP合作
      - 超过60%的ARIS产品在SAP R/3基础上进行定制和应用。
  - **Professor Scheer对ARIS的定义**
    - 描述业务流程的体系结构; 包含各种元模型的建模技术;
    - **ARIS**工具集软件系统的理论基础; 基于计算机的业务流程管理的概念。

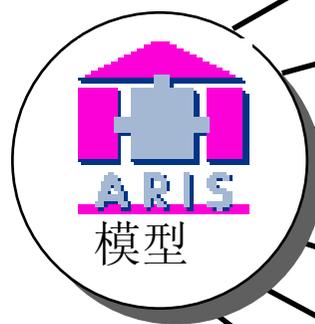
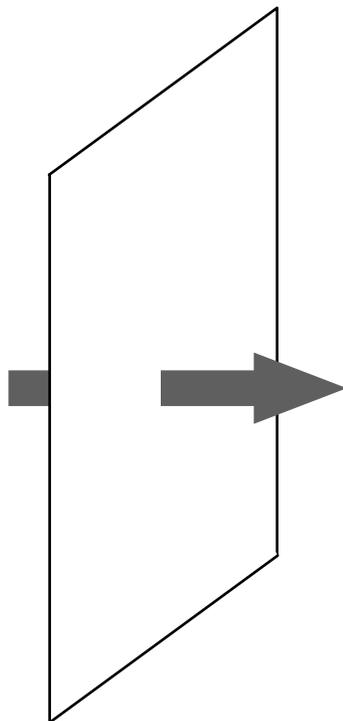


# 企业建模-ARIS

## 业务现状



- 今天 (现状)
- 明天 (目标)



ARIS X.0

## 目的

- 标准软件的介绍
- 软件的开发
- 业务工程
- 成本核算
- workflow 系统的实施
- ISO 9000 质量论证
- 标准软件客户化

缩小企业与信息技术之间差距  
准确描述和详细分析业务流程概念  
面向企业级信息系统



# 企业建模-ARIS

- 描述企业的角度
  - 功能
    - 检查信用度, 输入客户订单, ...
  - 数据
    - 商品, 客户, 材料, 供应商, ...
  - 组织单元
    - 销售, 采购, 会计, 生产部门, ...
  - 事件
    - 客户订单已到达, 发票已寄出, ...
  - 资源
    - PC, 文件, 车床, ...
  - 服务/产品
    - BPR 咨询, 芯片, 电路板, PC

哪些对象能用于描述企业?

他们不是孤立的,  
彼此存在联系。



# 企业建模-ARIS

## ■ 如何描述过程

### ■ 文本

“销售部负责核查客户的信用度。”

### ■ 表格

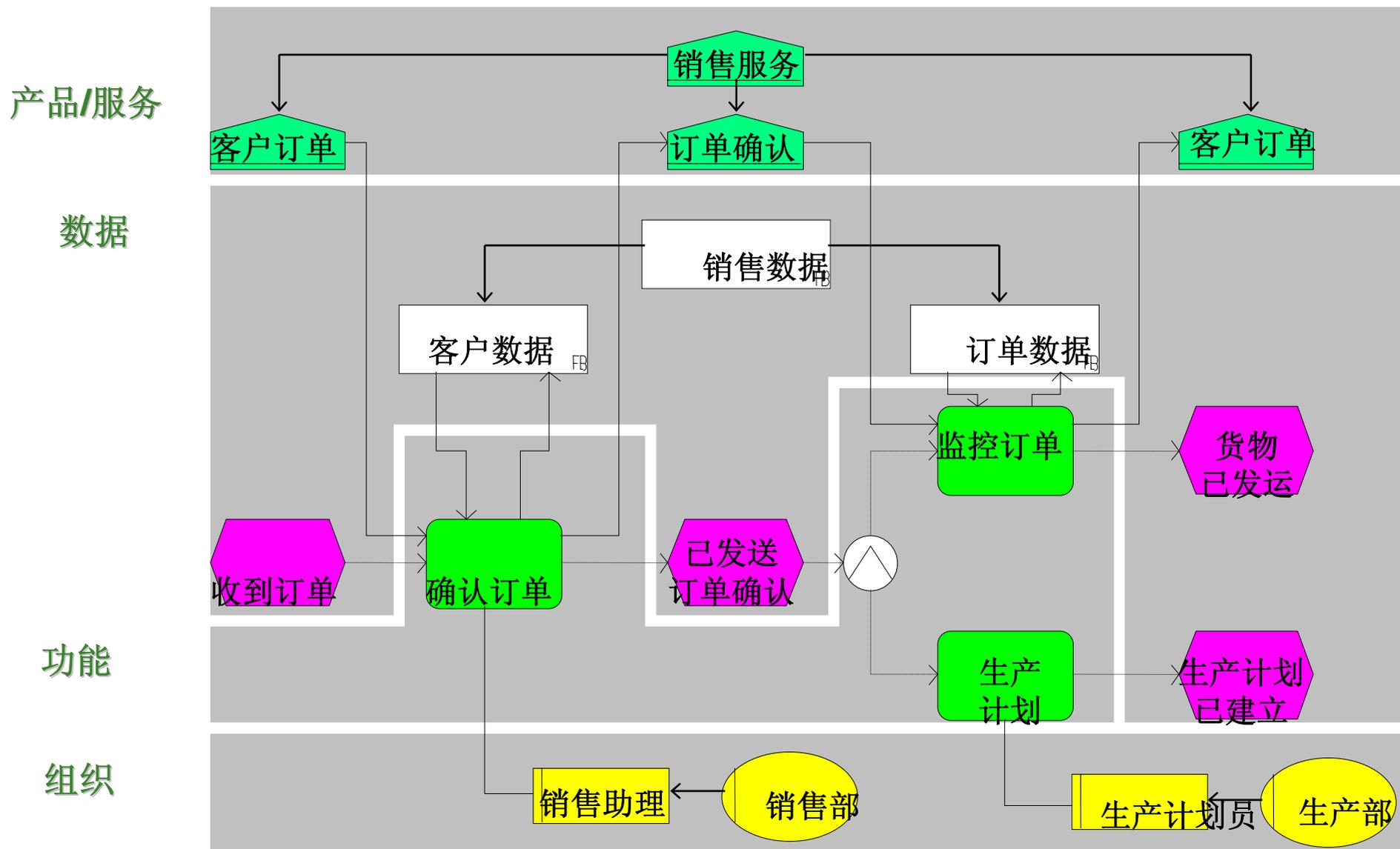
功能	组织单元	关系
检查信用	销售部	负责

### ■ 图形



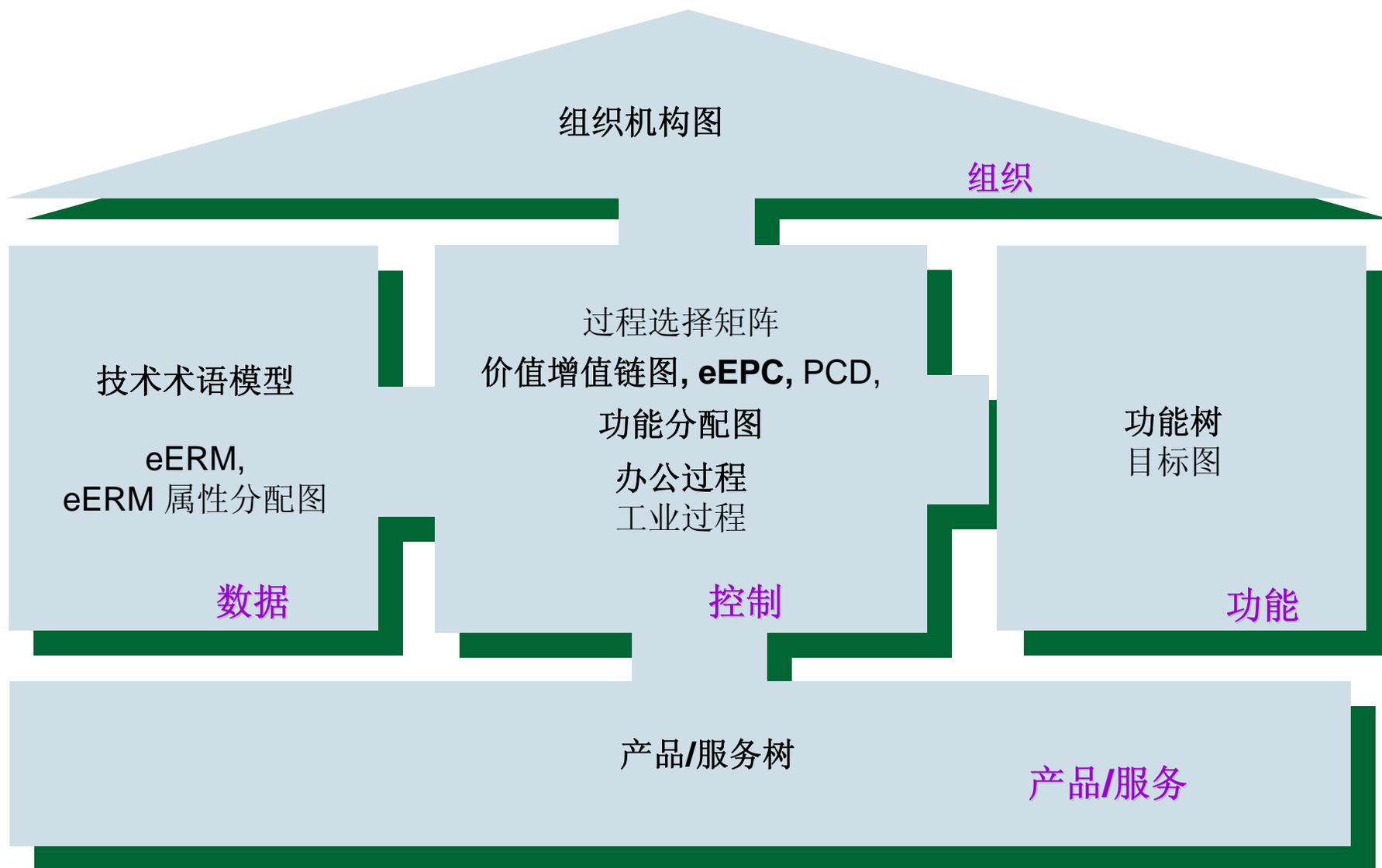
# 企业建模-ARIS

ARIS 方法





# 企业建模-ARIS



模型类型



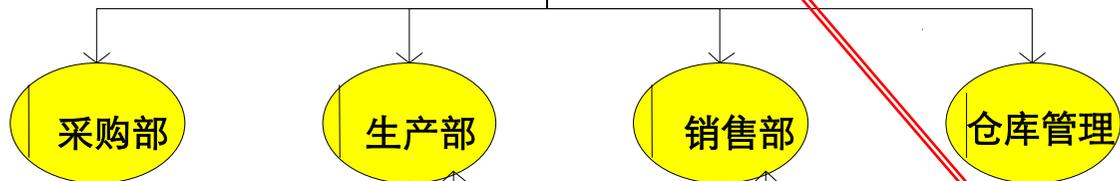
# 企业建模-ARIS

模型

模型类型



组织机构图



每个模型都有其具体的类型

模型通过标志符号展示了对象以及对象间的关系

对象

对象类型



功能

每个模型都都有其特定的对象

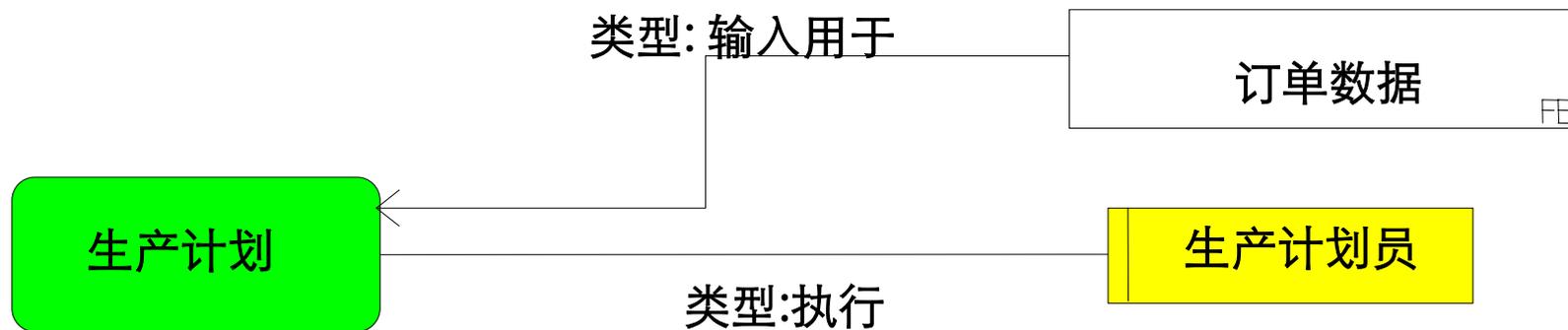
生产计划员

岗位



# 企业建模-ARIS

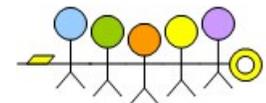
关系从源对象出发终止于目标对象：关系可能是直接或是非直接的



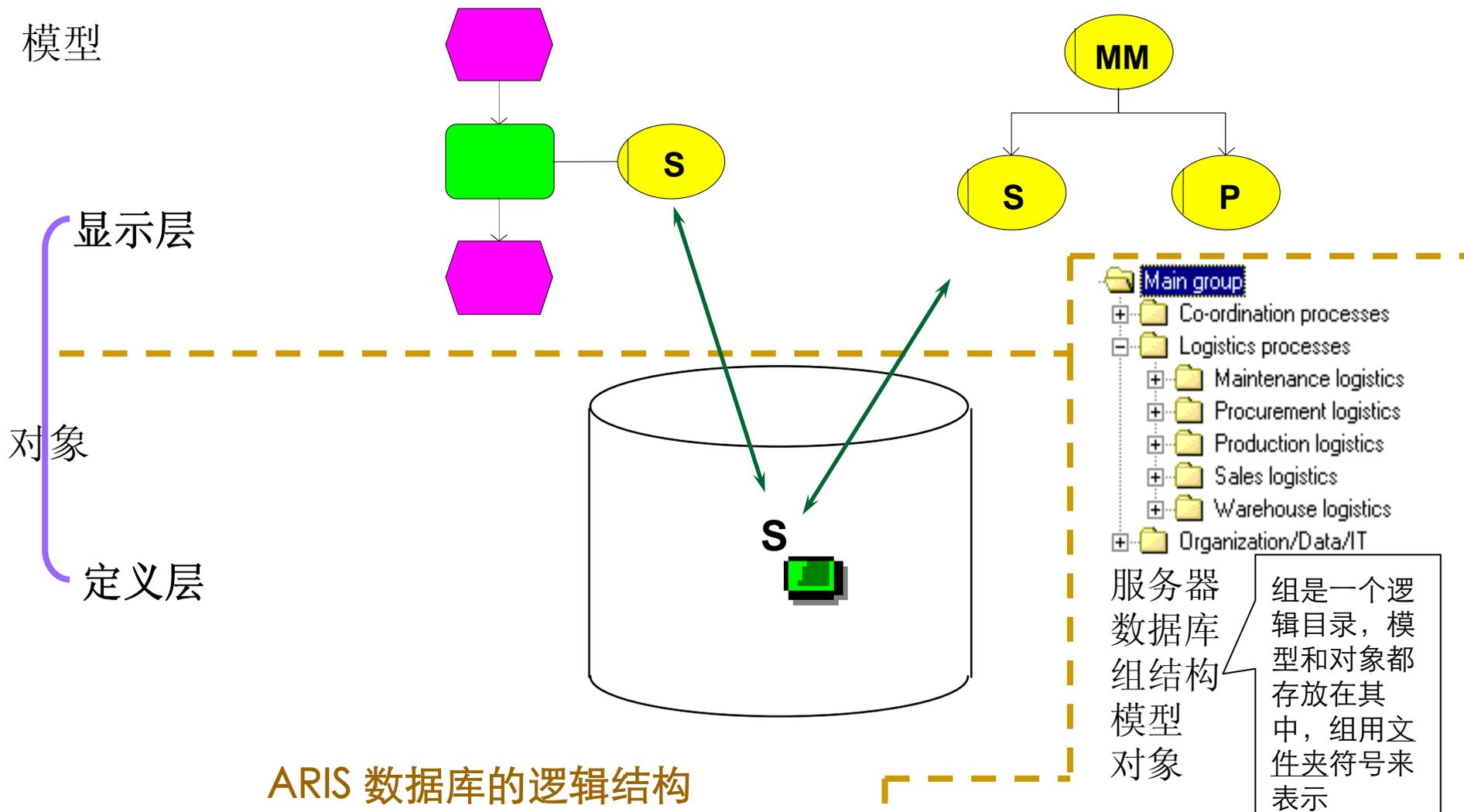
对象间通过不同类型的关系联系到一起

关系的类型由源对象和目标对象符号以及模型类型所决定

每个模型类型，对象类型以及关系类型都具有特殊的属性类型；模型、对象和关系都可以用属性详细定义其特性。

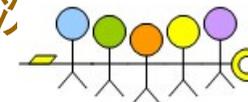


# 企业建模-ARIS



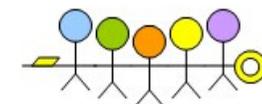
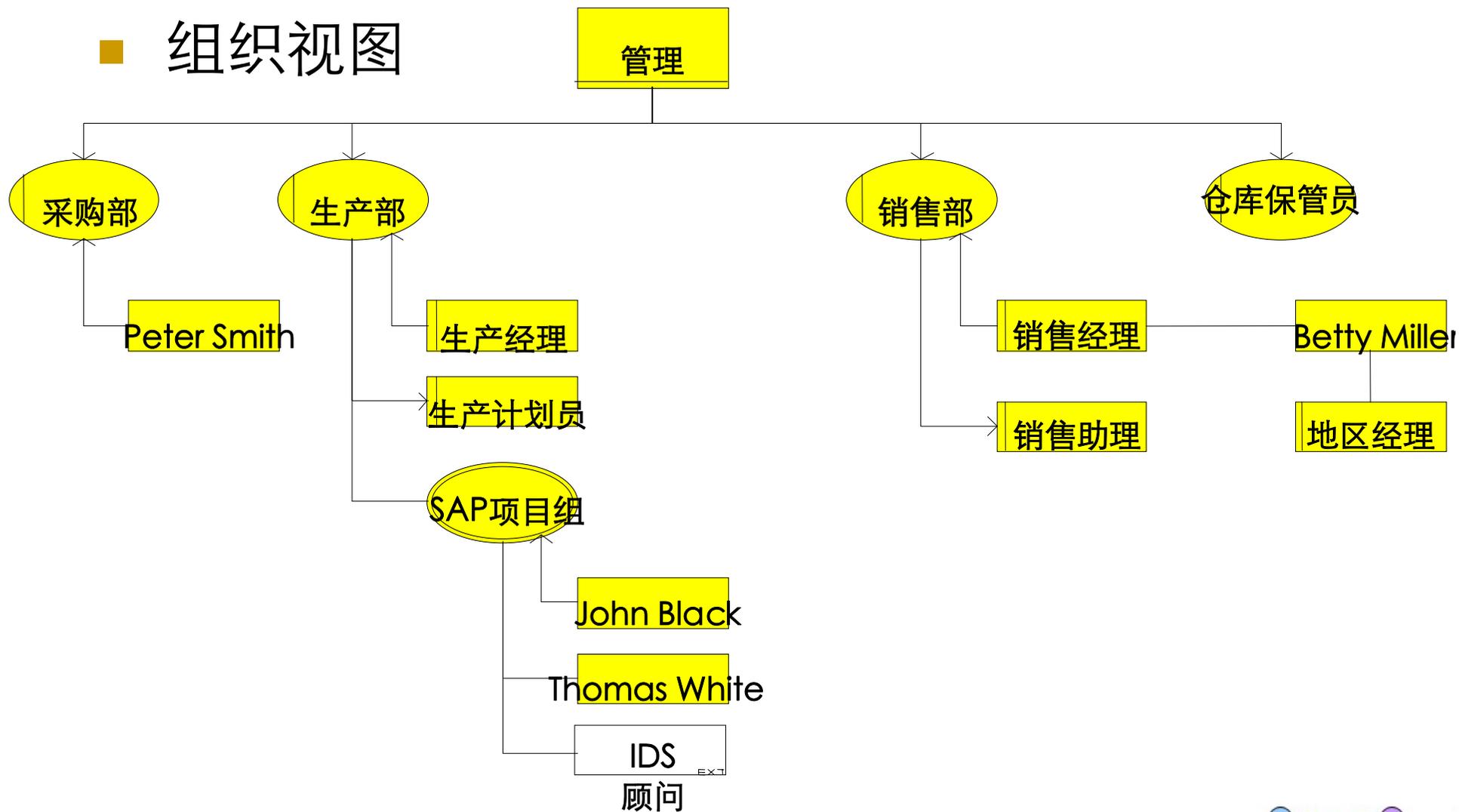
ARIS 数据库的逻辑结构

ARIS 数据库的层次



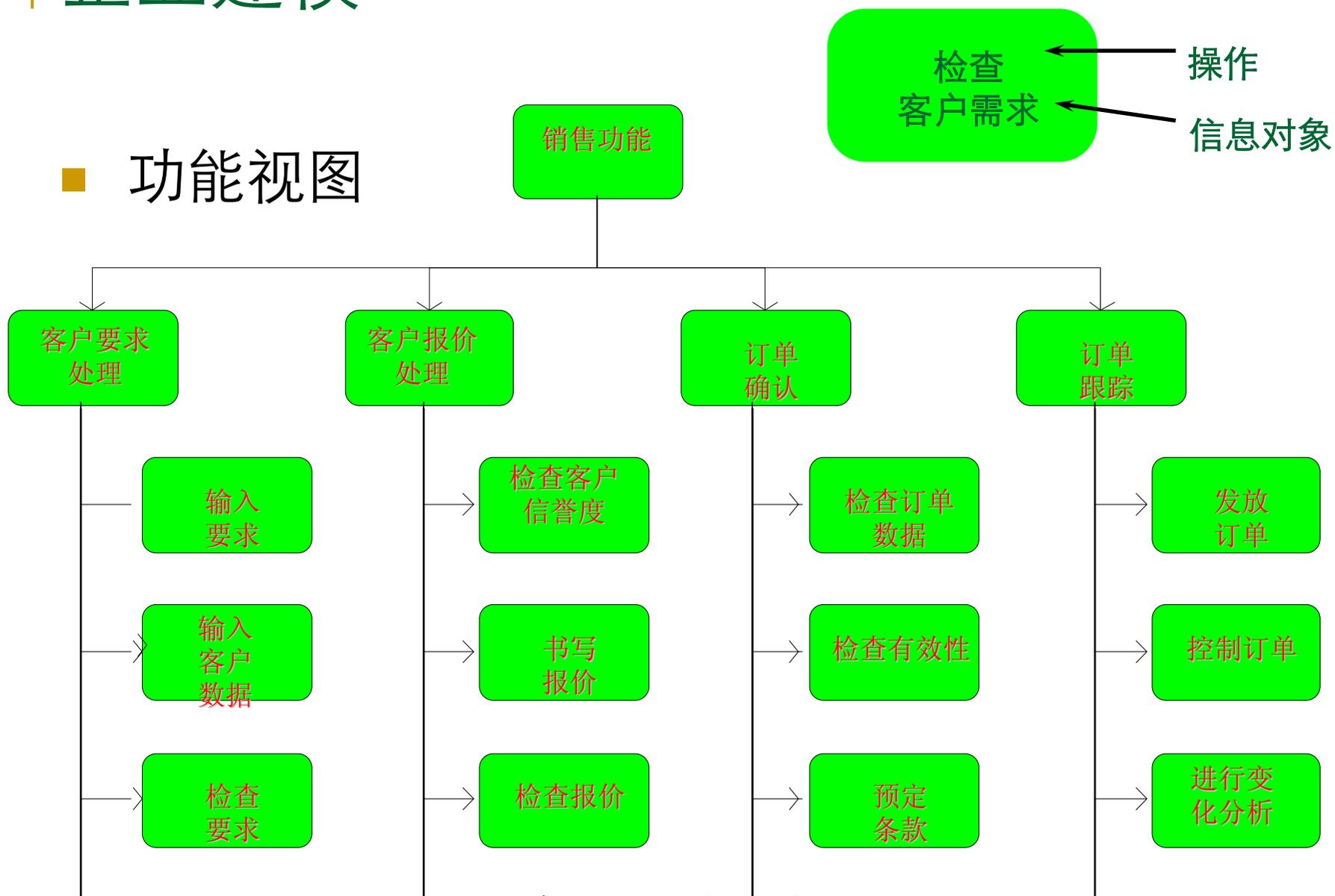
# 企业建模-ARIS

## ■ 组织视图

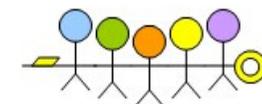


# 企业建模-ARIS

## ■ 功能视图



面向过程的功能树



# 企业建模-ARIS

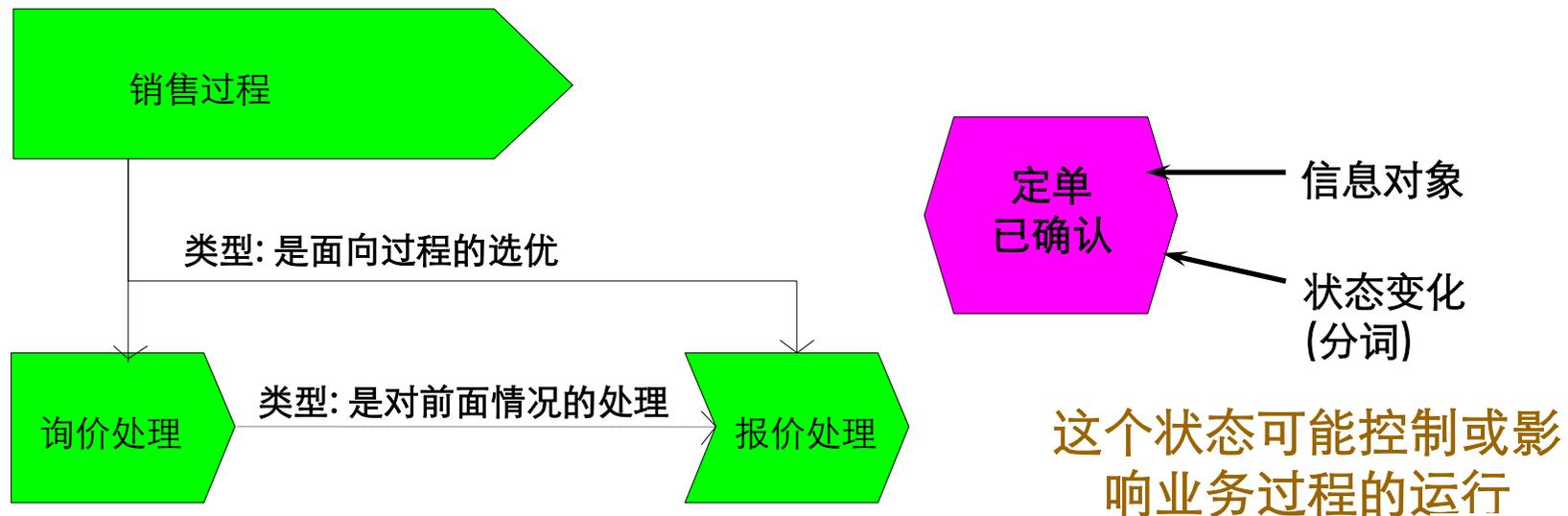
## ■ 控制视图

### □ 增值链图

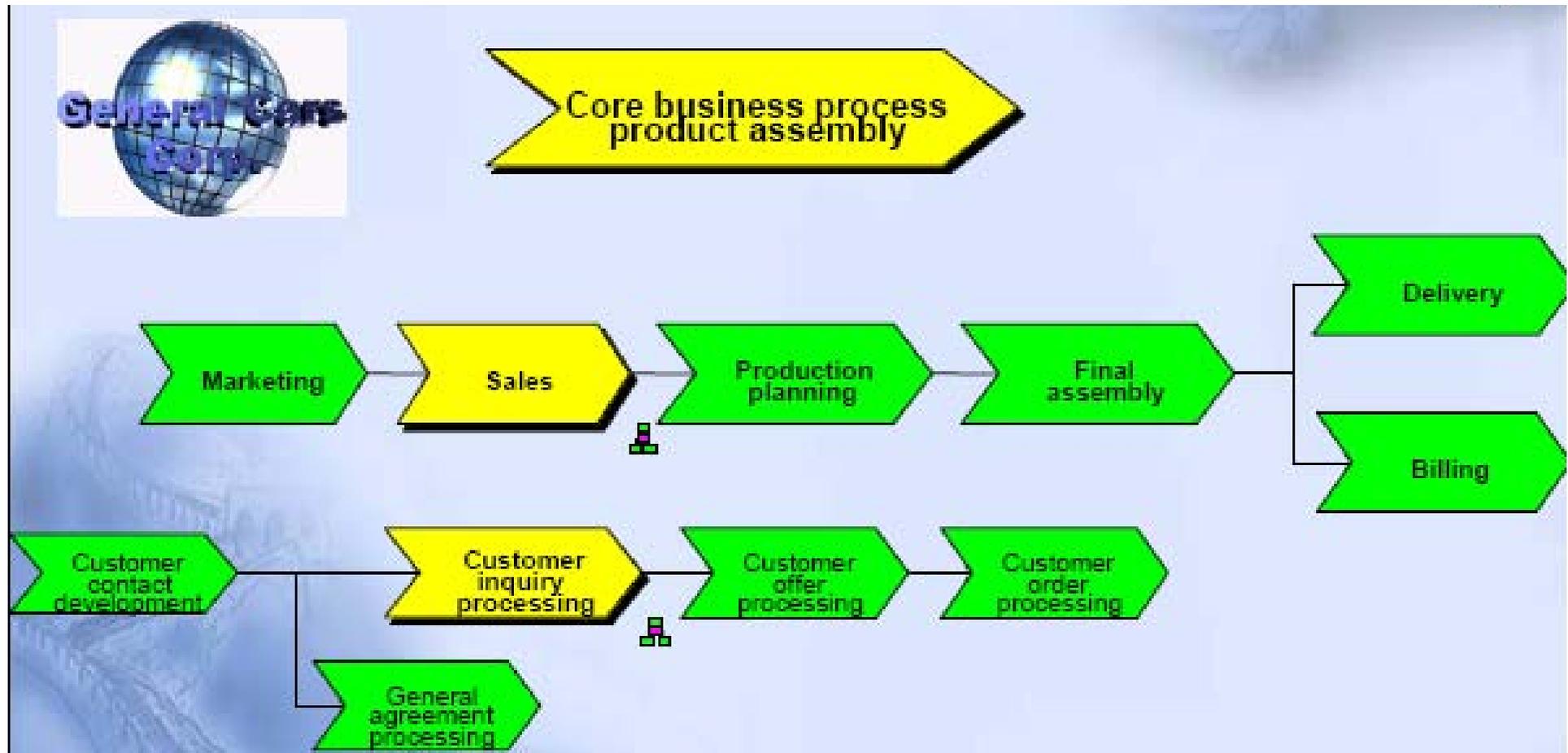
- 价值增值链图描述直接给企业带来价值增值的过程

### □ 扩展事件驱动过程链（eEPC）

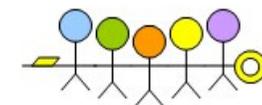
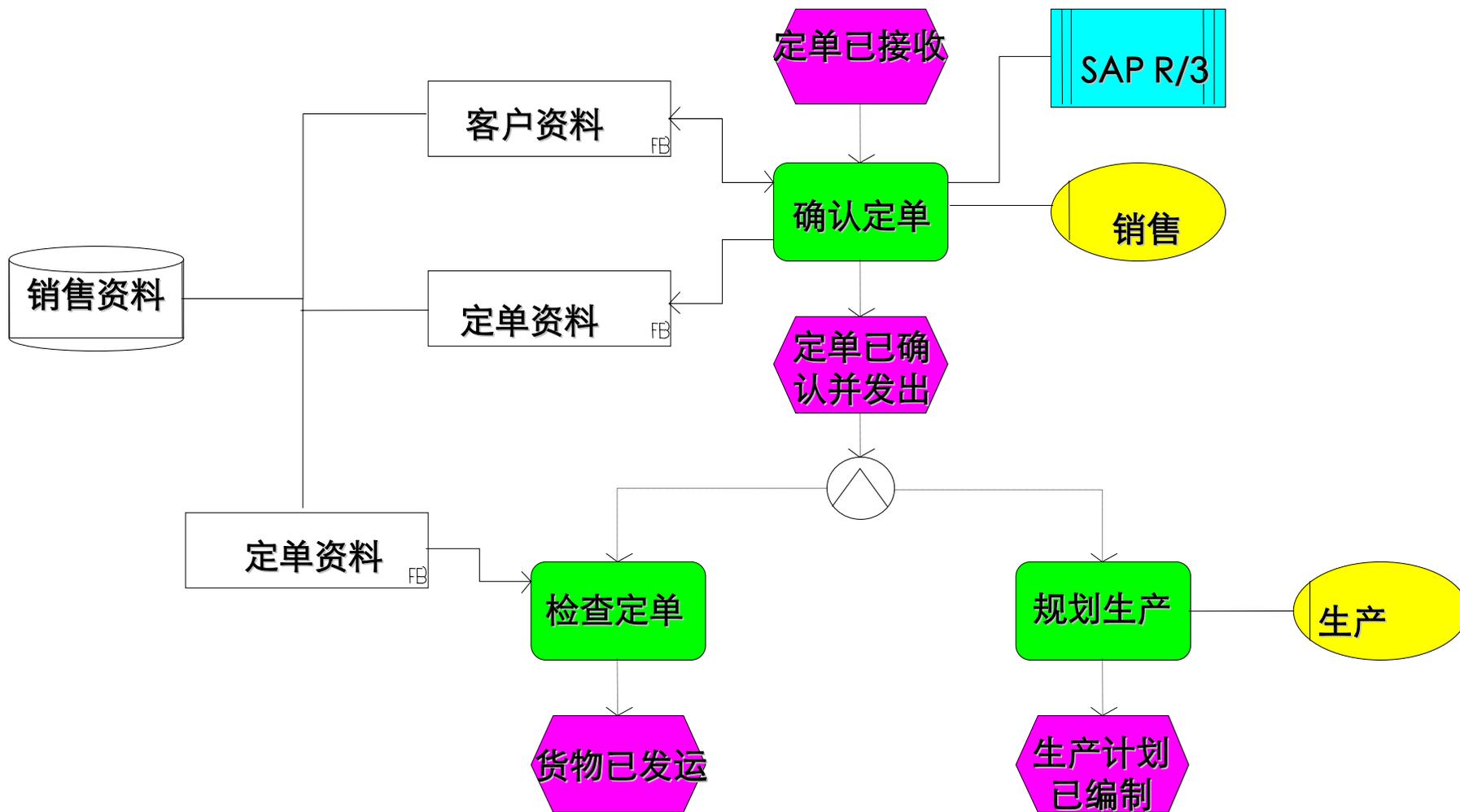
- 事件描述与业务相关的信息对象的状态

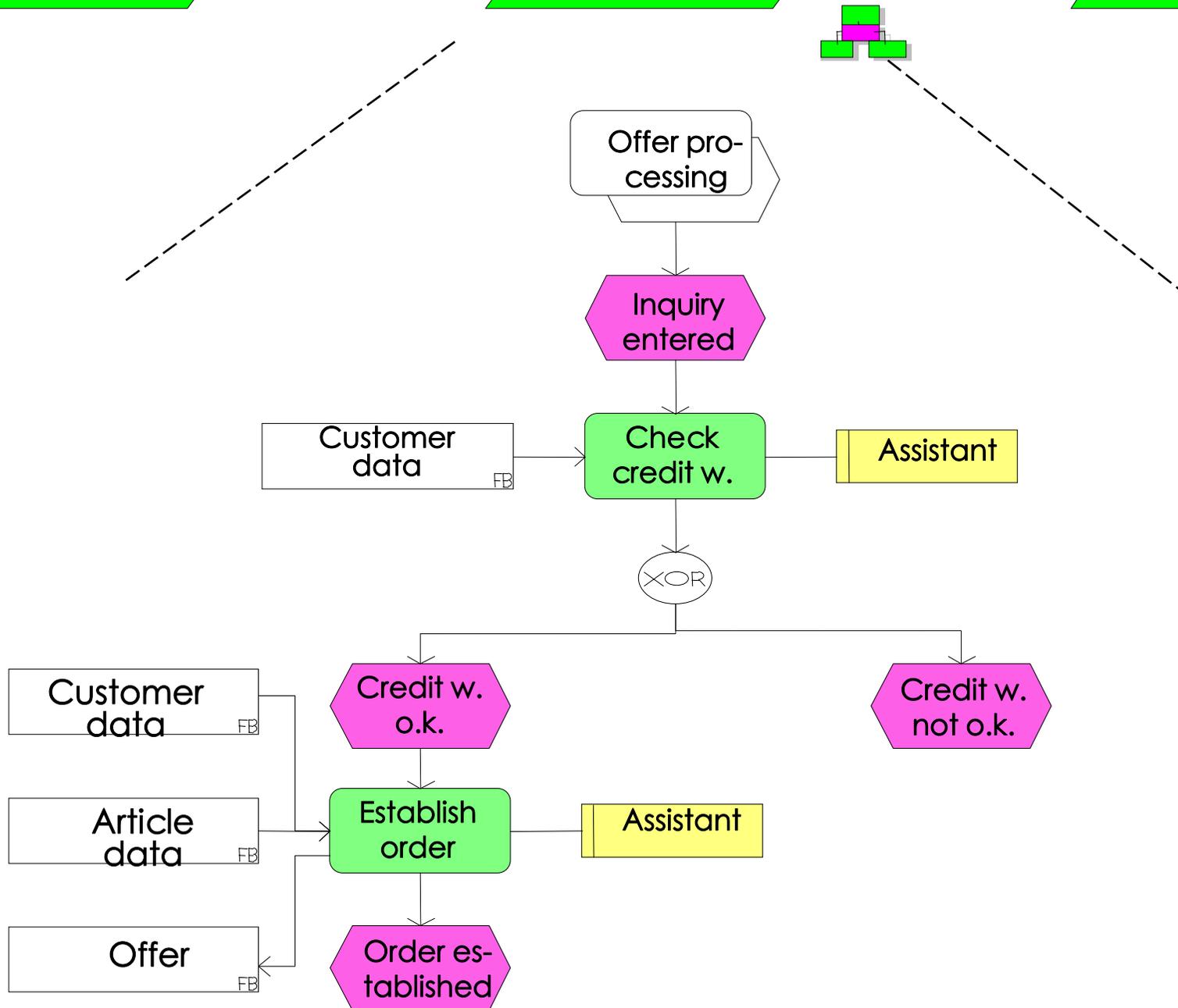


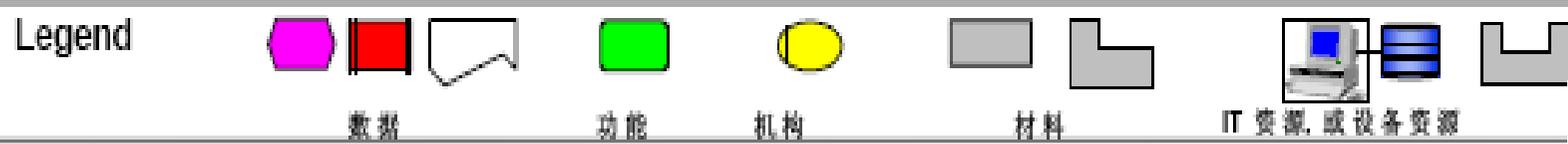
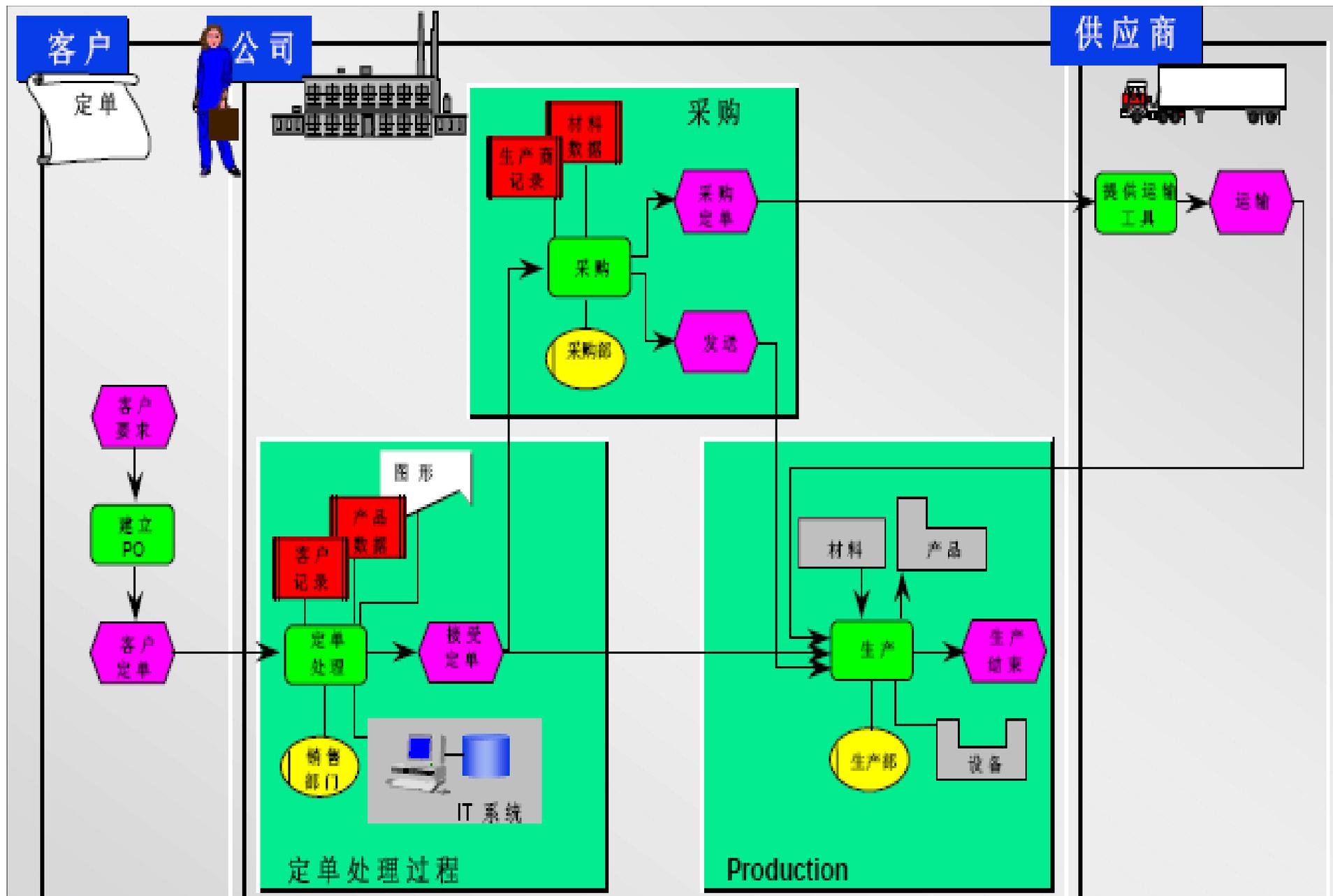
# General Motor Co.' s value-added chain 通用汽车的增值链图



# 企业建模-ARIS





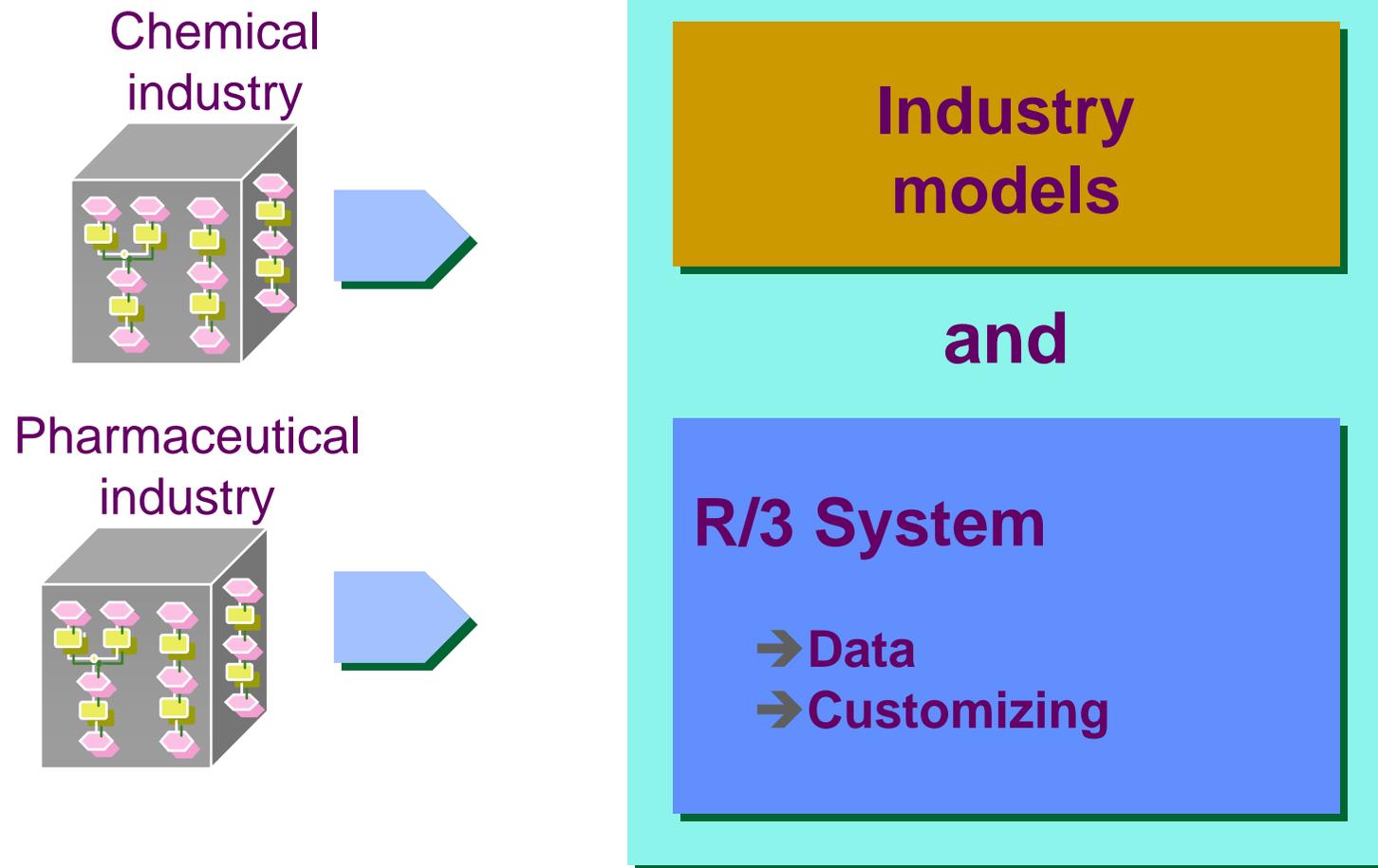


# 基于流程重组的ERP实施

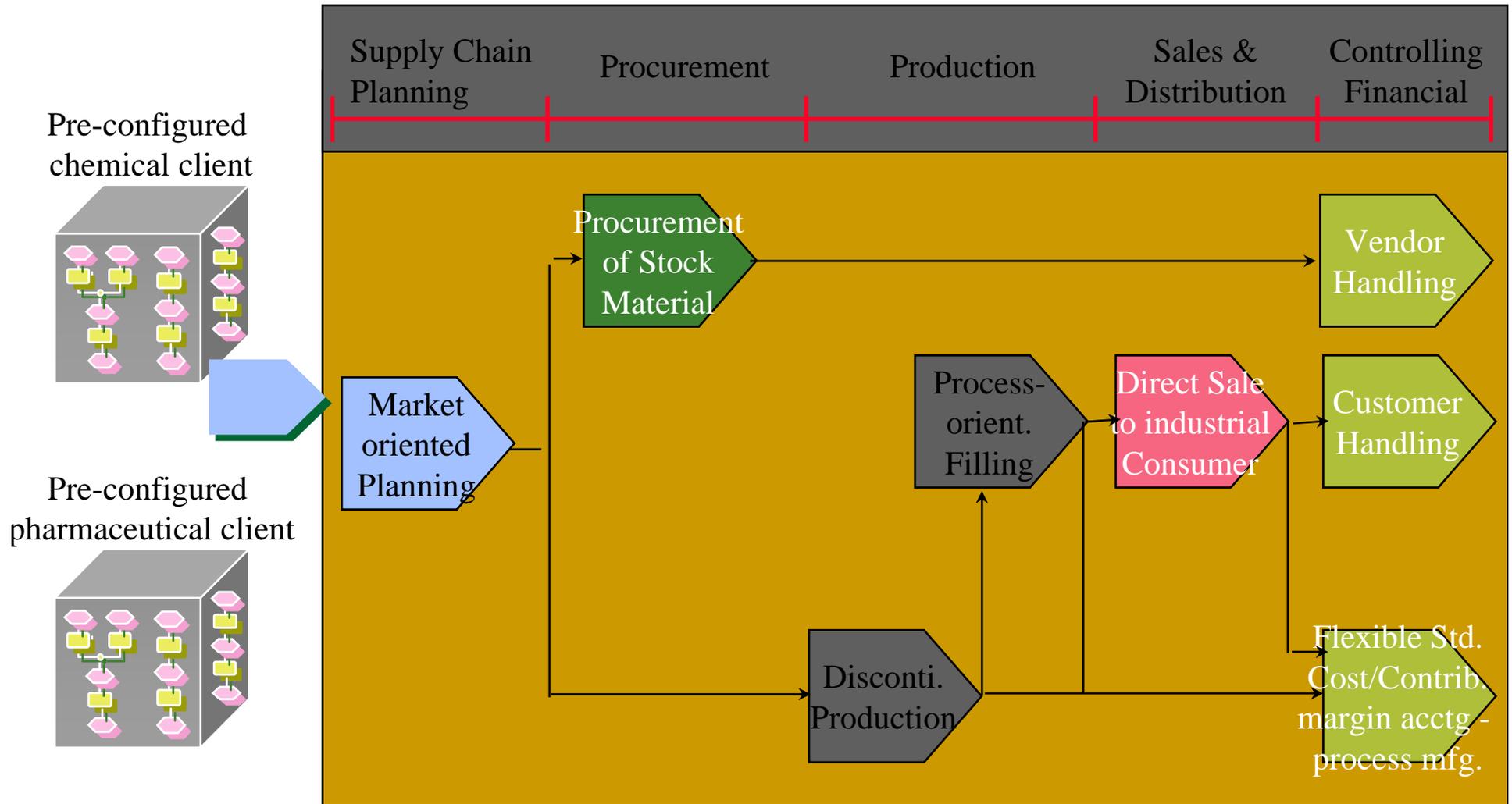
SAP R/3 case



# Pre-Configured Industry System for Process Industries

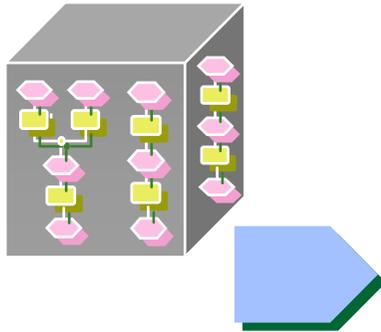


# Industry Client: The Integration Model

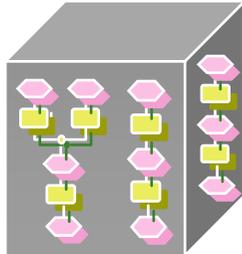


# Pre-Configured Industry System I

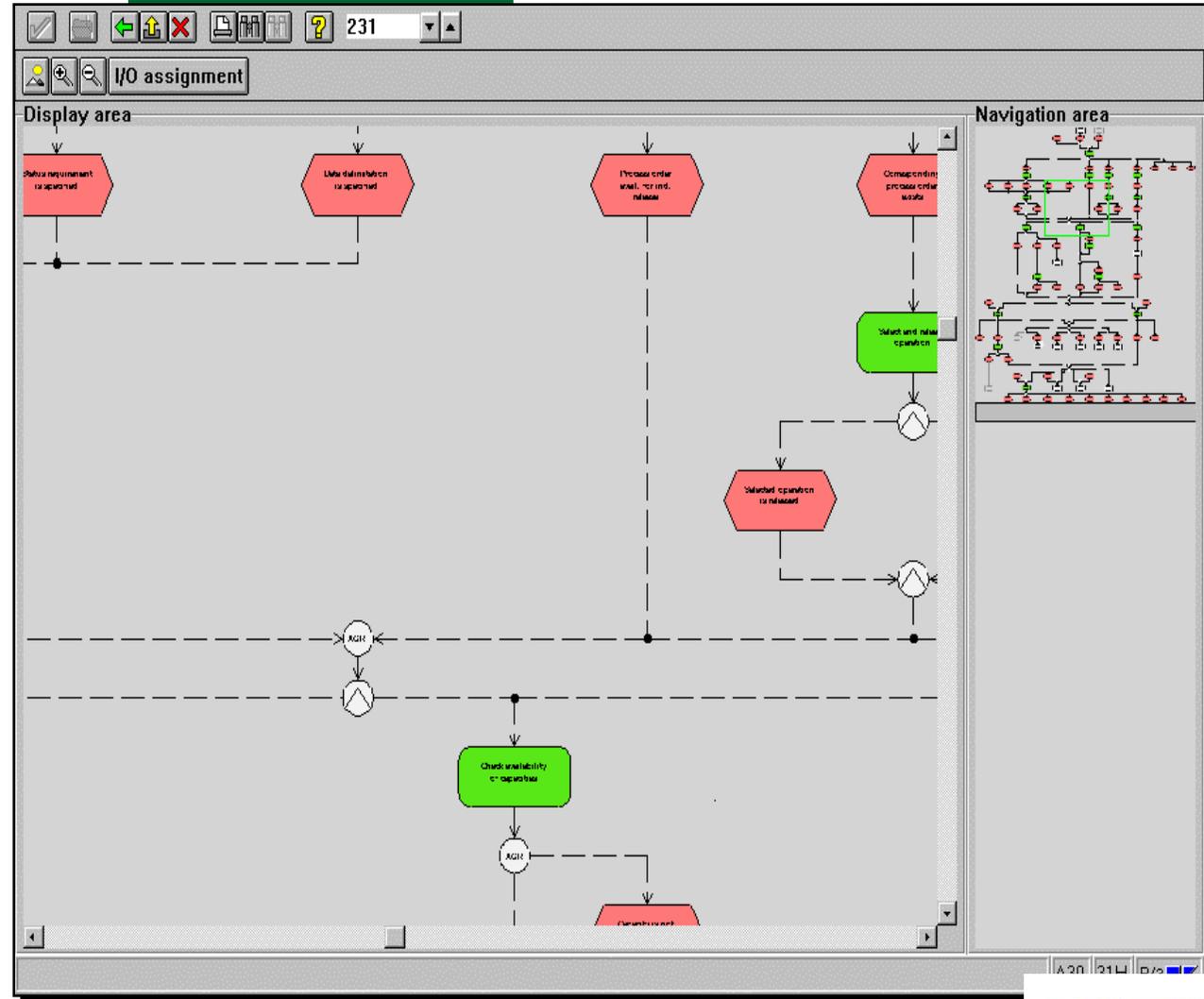
Pre-configured chemical client



Pre-configured pharmaceutical client

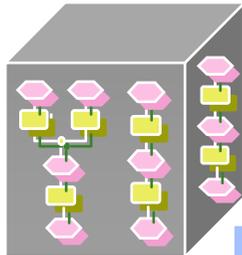


## Industry models

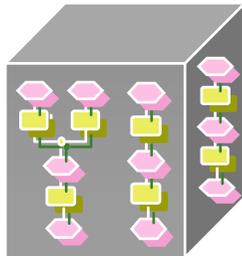


# Pre-Configured Industry System II

Pre-configured chemical client



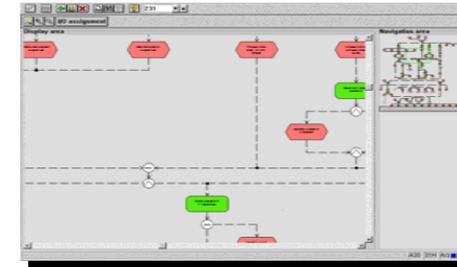
Pre-configured pharmaceutical client



Industry models

R/3 System

→ Data



Change Master Recipe: Operation Overview

Recipe Edit Goto Operation Extras System Help

Proclnst. Material list Relationships

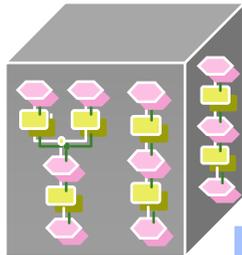
Recipe group: **COLORSNA** Recipe: **1** Master Recipe for Colors  
Plant: **3100** Chicago

Op.	Ph	SOp.	CRD	Resource	CtrK	StTextK	Txt	Description
<input type="checkbox"/> 1000	<input type="checkbox"/>			R_1110	PI02		<input type="checkbox"/>	Charge & Dissolve Operation
<input type="checkbox"/> 1005	<input checked="" type="checkbox"/>	1000	01	R_1110	PI01		<input type="checkbox"/>	Charge Base Materials
<input type="checkbox"/> 1010	<input checked="" type="checkbox"/>	1000	01	R_1110	PI01		<input type="checkbox"/>	Analyze & Adjust
<input type="checkbox"/> 1020	<input checked="" type="checkbox"/>	1000	01	R_1110	PI01		<input type="checkbox"/>	Discharge to Reaction Vessel
<input type="checkbox"/> 2000	<input type="checkbox"/>			R_1120	PI01		<input type="checkbox"/>	Reaction Vessel
<input type="checkbox"/> 2005	<input checked="" type="checkbox"/>	2000	01	R_1120	PI01		<input type="checkbox"/>	Prepare reaction base materials
<input type="checkbox"/> 2015	<input checked="" type="checkbox"/>	2000	01	R_1120	PI01		<input type="checkbox"/>	Add mix from Operation 1000
<input type="checkbox"/> 2020	<input checked="" type="checkbox"/>	2000	01	R_1120	PI01		<input type="checkbox"/>	Heating & Analyzing
<input type="checkbox"/> 2030	<input checked="" type="checkbox"/>	2000	01	R_1120	PI01		<input type="checkbox"/>	Discharge to Condenser
<input type="checkbox"/> 3000	<input type="checkbox"/>			R_1130	PI02		<input type="checkbox"/>	Diazotize & Coupling Operation
<input type="checkbox"/> 3005	<input checked="" type="checkbox"/>	3000	A1	R_1130	PI01		<input type="checkbox"/>	Receive mix from Operation 2000
<input type="checkbox"/> 3010	<input checked="" type="checkbox"/>	3000	01	R_1130	PI01		<input type="checkbox"/>	Heating

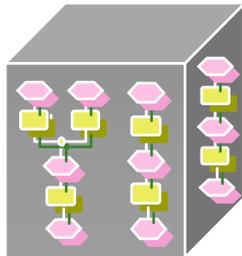


# Pre-Configured Industry System III

Pre-configured chemical client



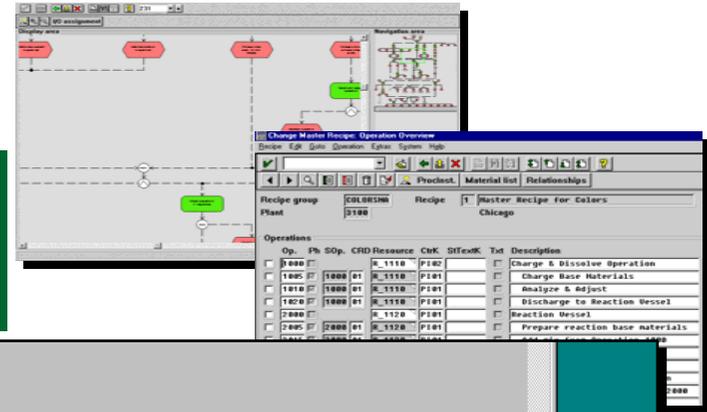
Pre-configured pharmaceutical client



## Industry models

R/3 System

- Data
- Customizing



Production Planning - Process Industries

- Production Planning - Process Industries
- Transport sample settings from SAP reference client
- Master Data
  - Resource
  - Master Recipe
    - Settings for the Task List
    - Data for the Recipe Header
    - Data for Operations and
    - Define control key
    - Define setup groups
    - Create user-defined
    - Define overview variant
    - Define relevancy to
  - Material List
    - Define priority sequence
    - Define overview variant
    - Develop enhancement for
  - Authorization Management
- Sales & Operations Planning (Production Planning)

Change View "Control Keys for Operations": Details

Control key: PI01    Master recipe/ Process order no QM

Indicators:

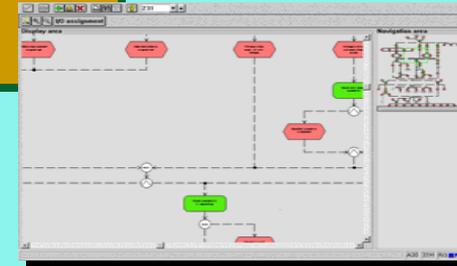
- Scheduling
- Capacity planning
- Inspect. char.s
- Aut. goods receipt
- Time tickets
- Rework
- Print confirmation
- Print operation
- Costing indicator
- Confirmation: [ ]
- External processing: [ ]



# A head start in configuring R/3 for your enterprise

- **Industry Model**
  - Preconfigured for the needs of the industry.
  - Can be used as the basis for an enterprise's own model
- **Customizing Settings**
  - Preconfigured to meet the functional requirements typically required in the industry
  - Can be selected and transported to test system
- **Data**
  - Sample master data for learning or test purposes

*Industry Model*

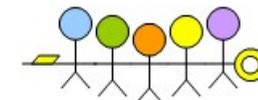
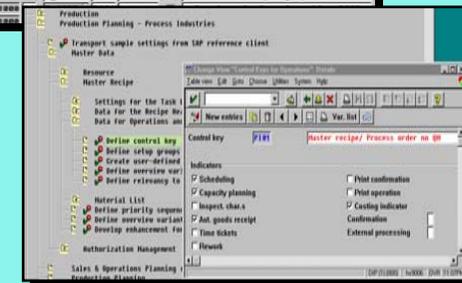


*and*

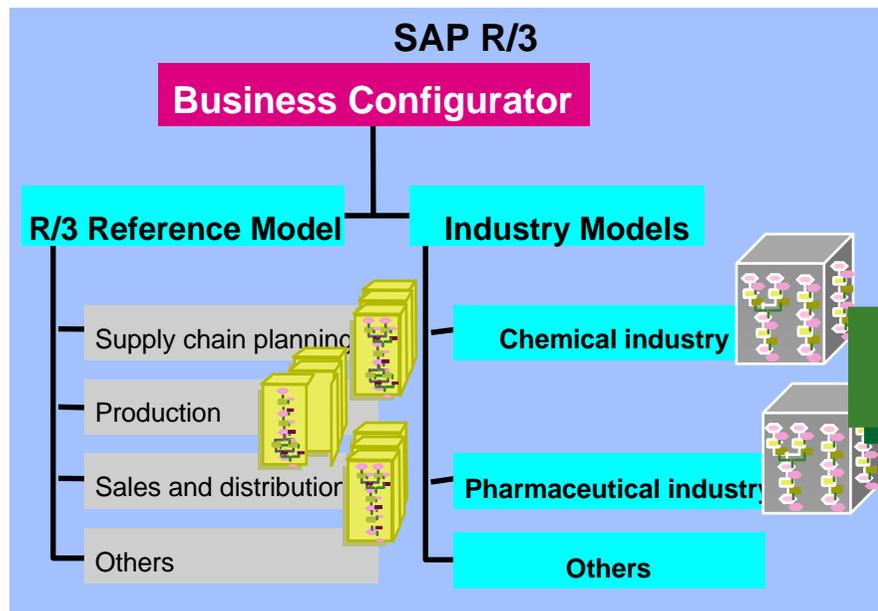
→ *Customizing*  
→ *Data*



Op.	Pk	Stp.	CRD	Resource	Ck	Sfte	Tst	Description
1000	1000	01	R_1110	P102				Charge & Dissolve Operation
1000	1000	01	R_1110	P101				Charge Base Materials
1010	1000	01	R_1110	P101				Analyze & Adjust
1020	1000	01	R_1110	P101				Discharge to Reaction Vessel
2000			R_1120	P101				Reaction Vessel
2005	2000	01	R_1120	P101				Prepare reaction base materials
2015	2000	01	R_1120	P101				Add mix from operation 1000
2020	2000	01	R_1120	P101				Heating & Analyzing
2030	2000	01	R_1120	P101				Discharge to Condenser
2000			R_1130	P102				Diazotize & Coupling Operation
3000								
3005								
3010								



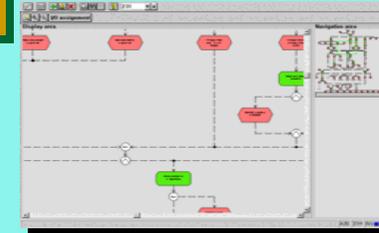
# Reflects the Industry Models



SAP R/3 System

Pre-Configured Industry System

Industry models



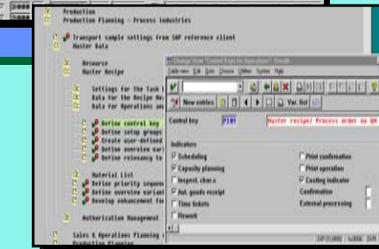
and

R/3 System

→ Data

→ Customizing

Op.	P#	Qty.	CHD Resource	CNK	SRTxM#	Text
1000	01		R_1118	PI02		Charge & Dissolve Operation
1000	01		R_1118	PI01		Charge Base Materials
1000	01		R_1118	PI01		Mixing & Adjust
1000	01		R_1118	PI01		Discharge to Reaction Vessel
2000	01		R_1124	PI01		Reaction Vessel
2000	01		R_1128	PI01		Prepare reaction base materials
2000	01		R_1128	PI01		Add mix from Operation 1000
2000	01		R_1128	PI01		Heating & Mixing
2000	01		R_1128	PI01		Discharge to Condenser
2000	01		R_1128	PI02		Reactivate & Coupling Operation



◆ Estimated completion date (ECD):

*End of 1997*      *(chemical industry)*  
*Mid-1998*        *(pharmaceutical industry)*

