

# Low level models: organization

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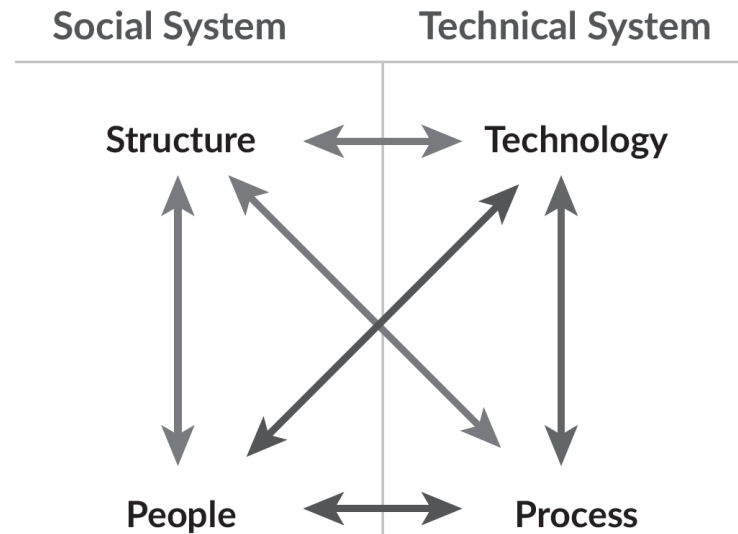
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# Low level models

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- Structure
- People
- Process
  - ◆ Process
  - ◆ Data
- Technology



# Organizations

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- Organization
  - ◆ Group of people gathered for a common purpose
  - ◆ Command and control structure that manages operational processes
- Organizational unit (OU)
  - ◆ Part of organization:
    - Division, office, department, group, business function, area, ..

# Organizations and IS

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- Processes involving many organizations
  - ◆ Inter organizational
- Processes involving one organization
  - ◆ Intra

# Inter organizational – model

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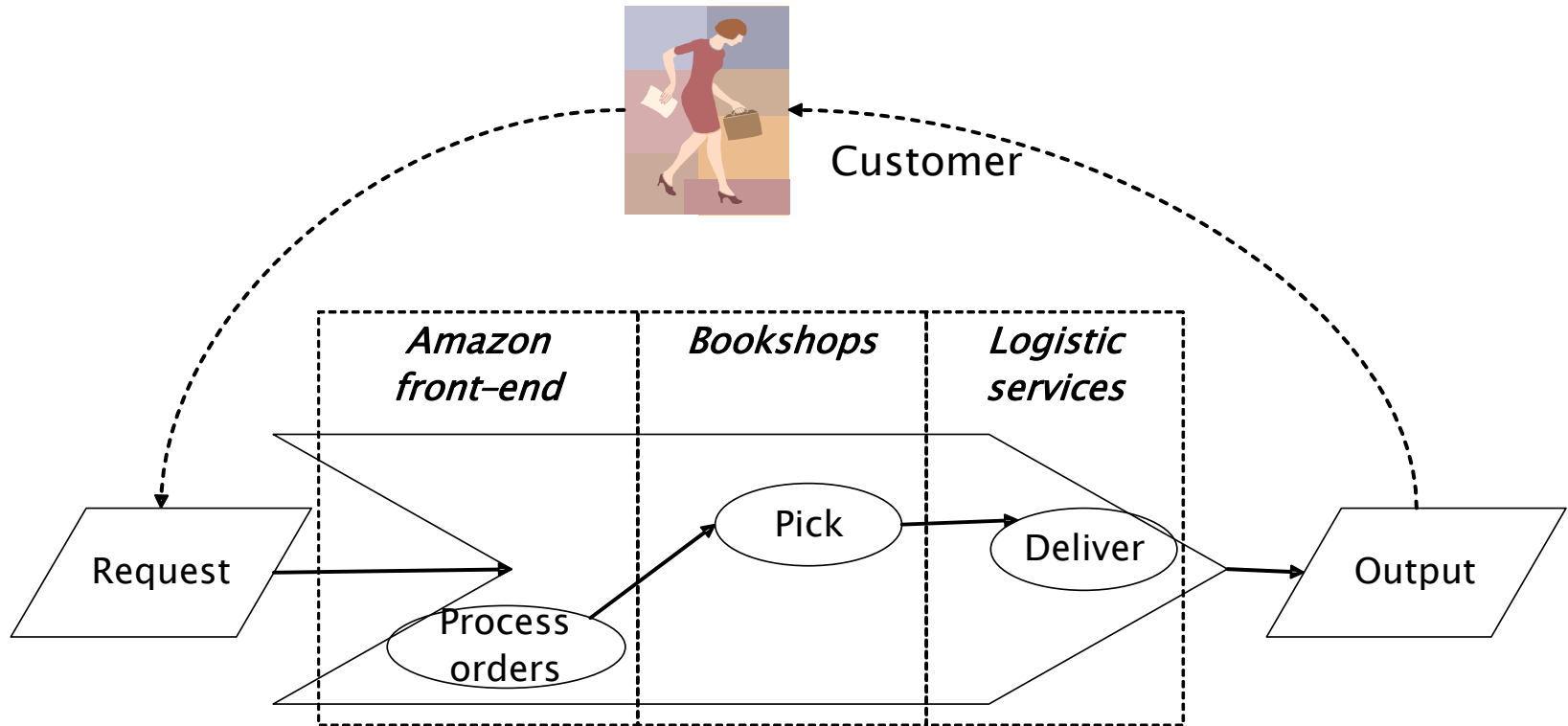
## 1 List organizations involved

- ◆ Ex: E-commerce

- E-commerce vendor + product manufacturer  
+ credit card system + logistic provider

## 2 CRASO model

ISSUE: integration of IS of various organizations



| Customer         | Request    | Activities performed (summary)                    | Organizations involved (summary)             | Output (summary)  |
|------------------|------------|---|--|-------------------|
| Private customer | Book order | Process order,<br>Order-picking,<br>Book-delivery | Front-end,<br>Bookshop,<br>Logistic services | Delivery of books |

# Intra organizational models

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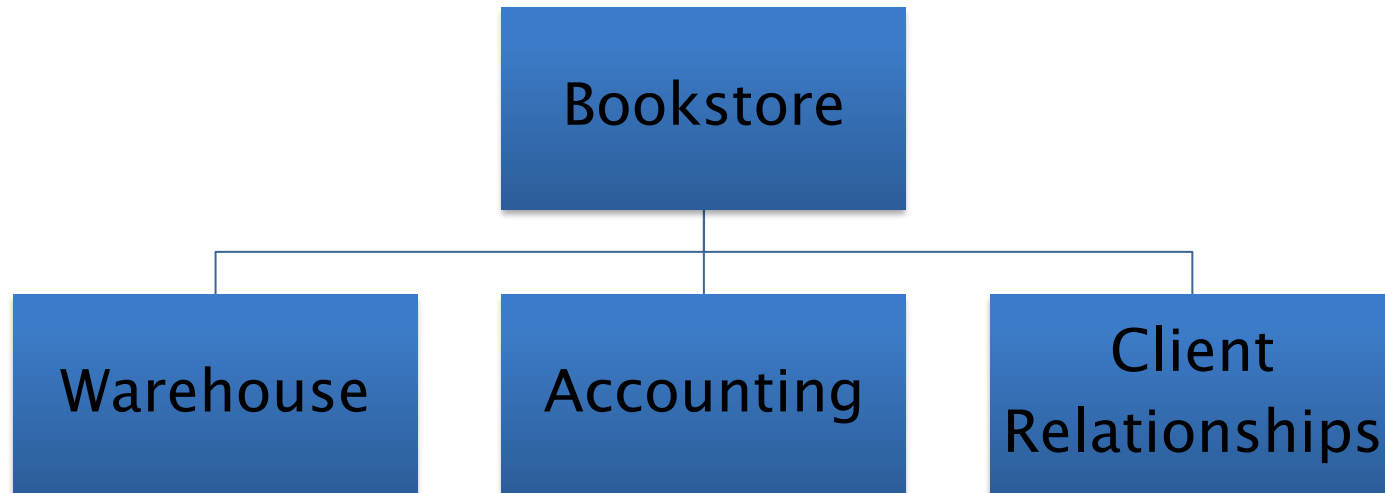
- Organizational chart
  - ◆ Macro level
  - ◆ Micro level
- Linear Responsibility Chart (LRC)
- Swimlane (in activity diagrams UML, in BPMN)

ISSUE understand interactions and needs of different OUs

# Organizational chart – ou

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- Node = OU
- Line = composed of (cfr UML class diagram, aggregation)

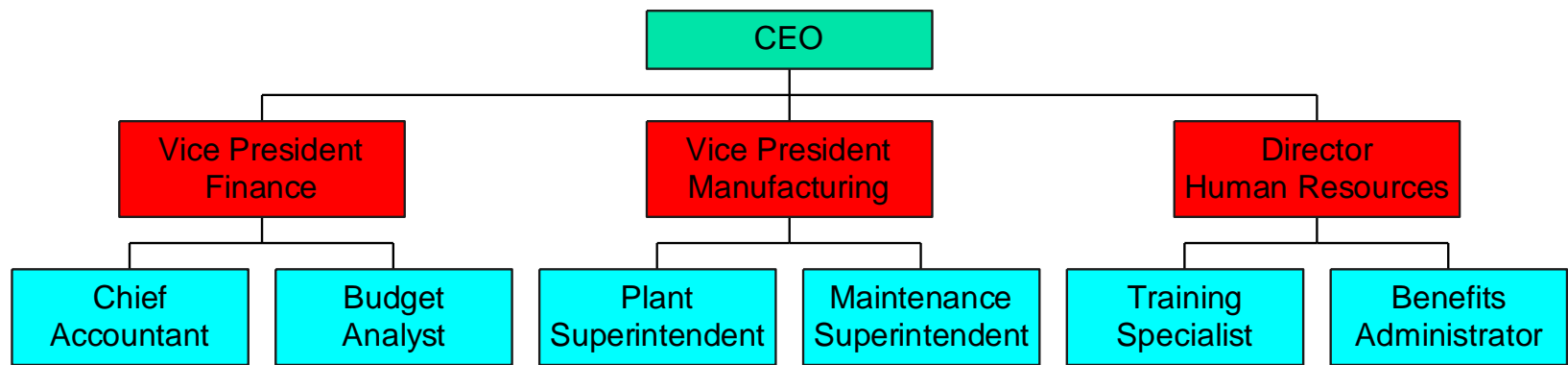




# Organizational chart – roles

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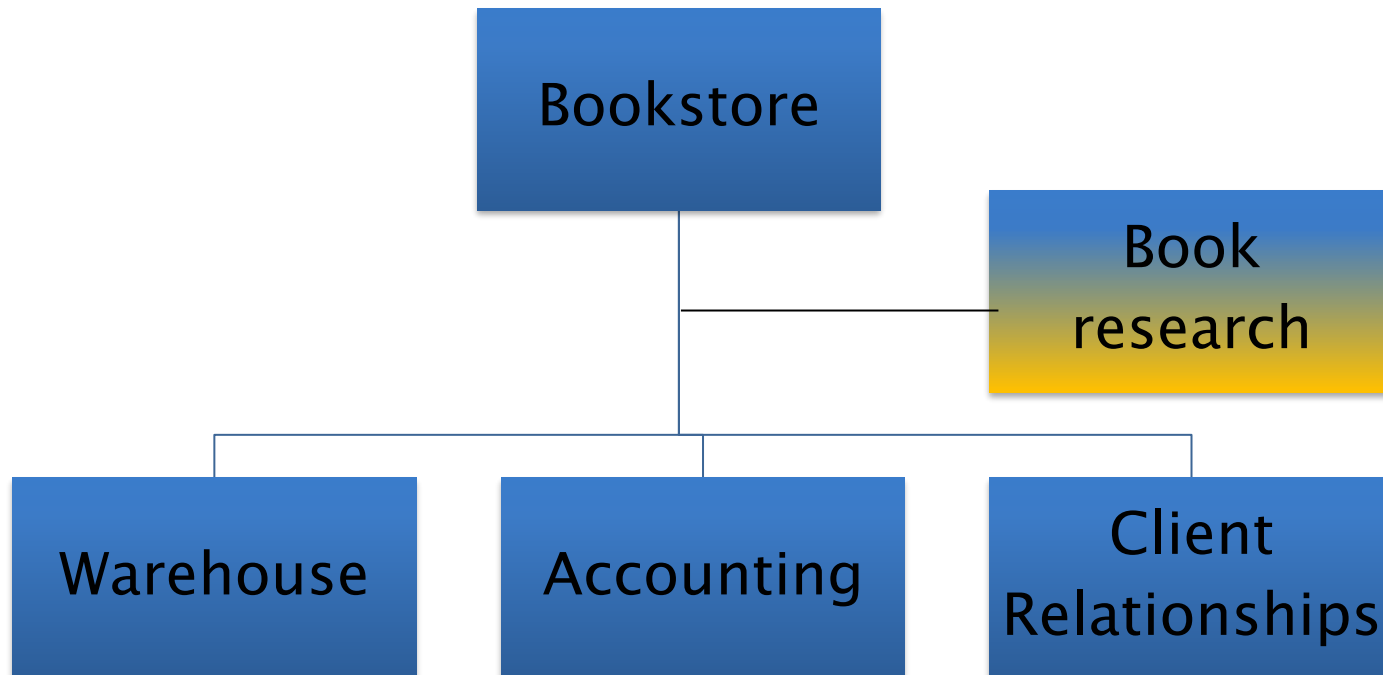
- node = role
- Line =
  - ♦ Top down: commands, controls
  - ♦ Bottom up: reports achievements



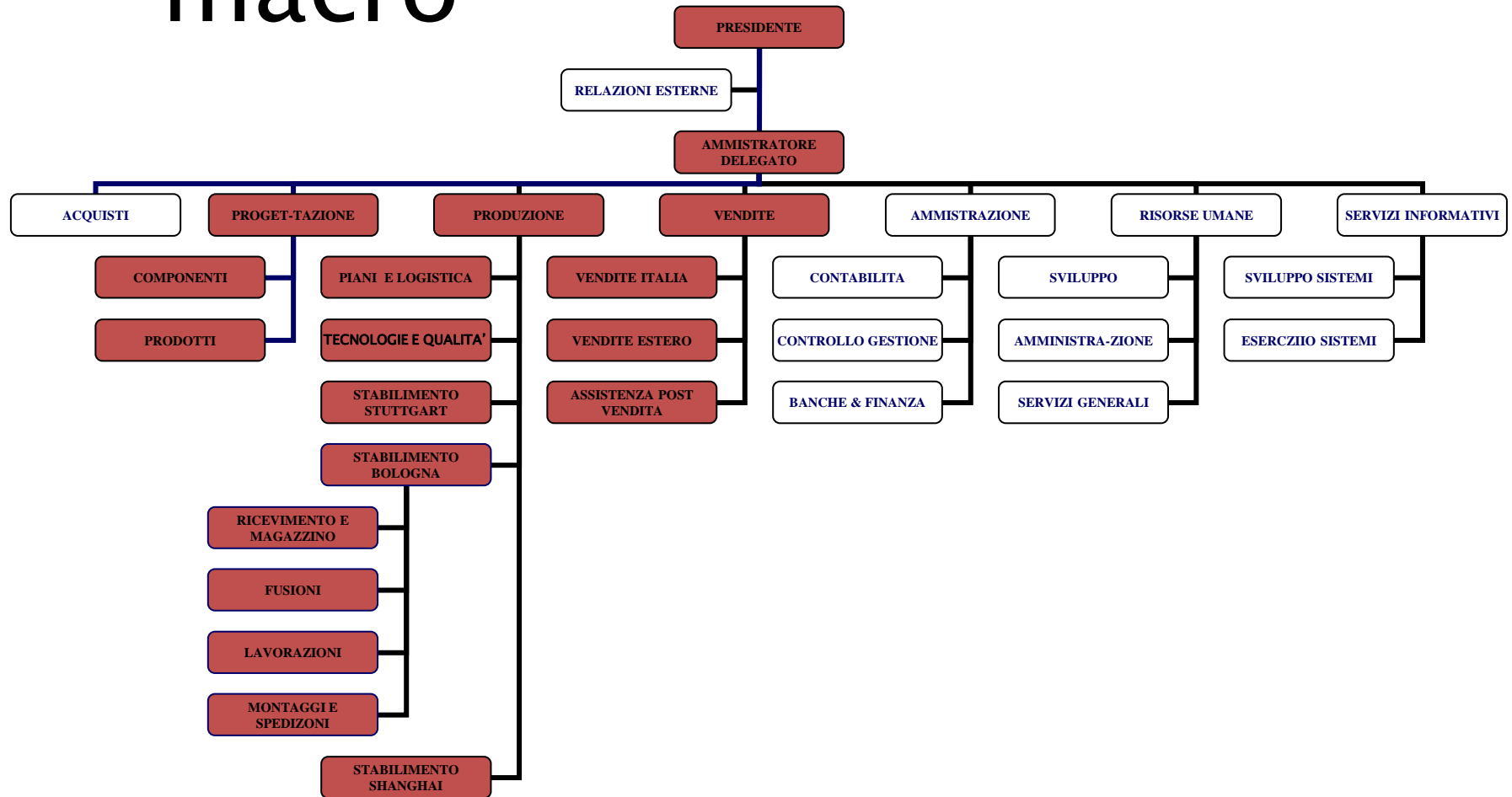
# Org chart – line vs staff

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Staff OU: works to support the upper OU  
ex book research is a staff function  
working for bookstore

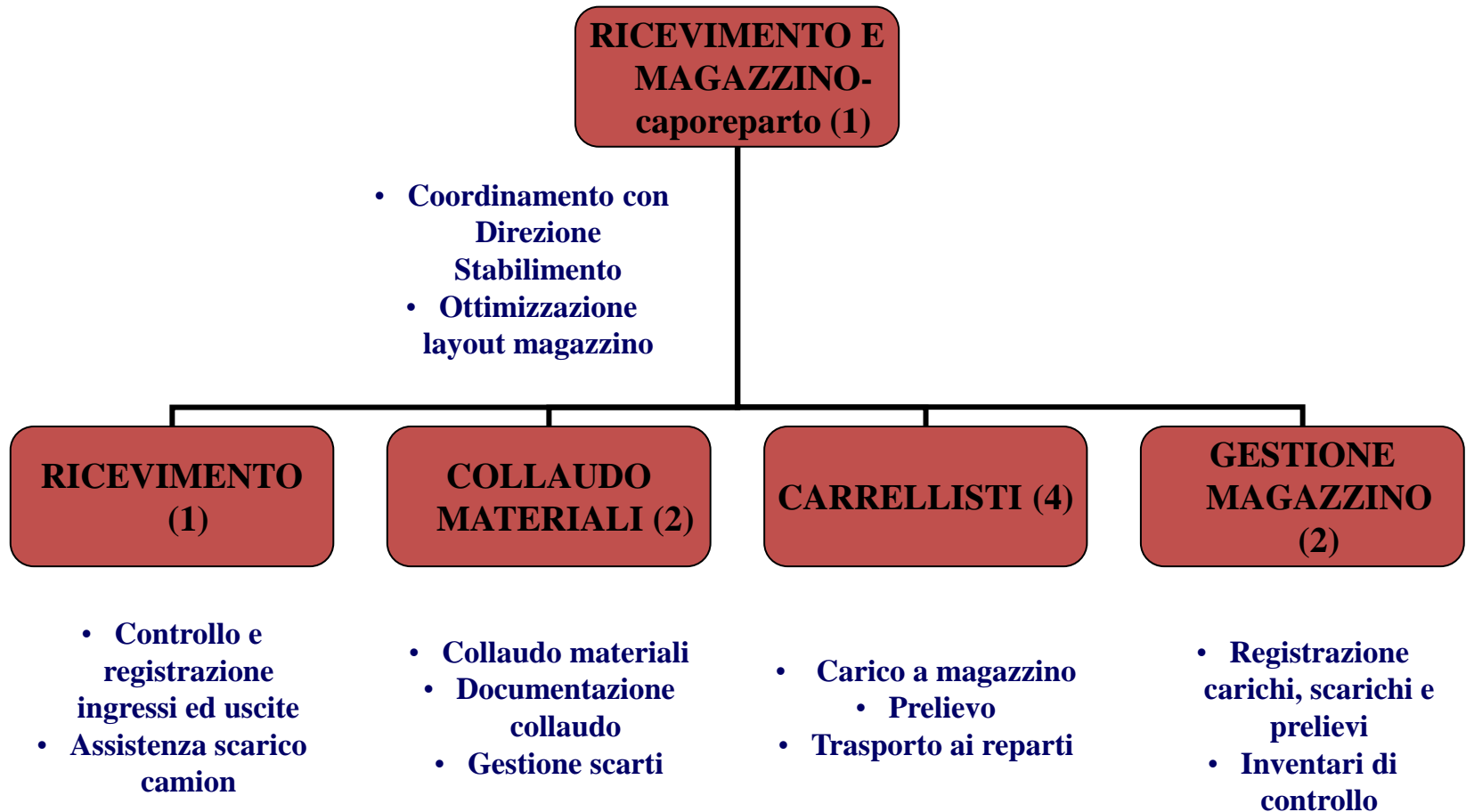


# Organizational chart – macro



# Organisational chart – micro

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# Org chart – warnings

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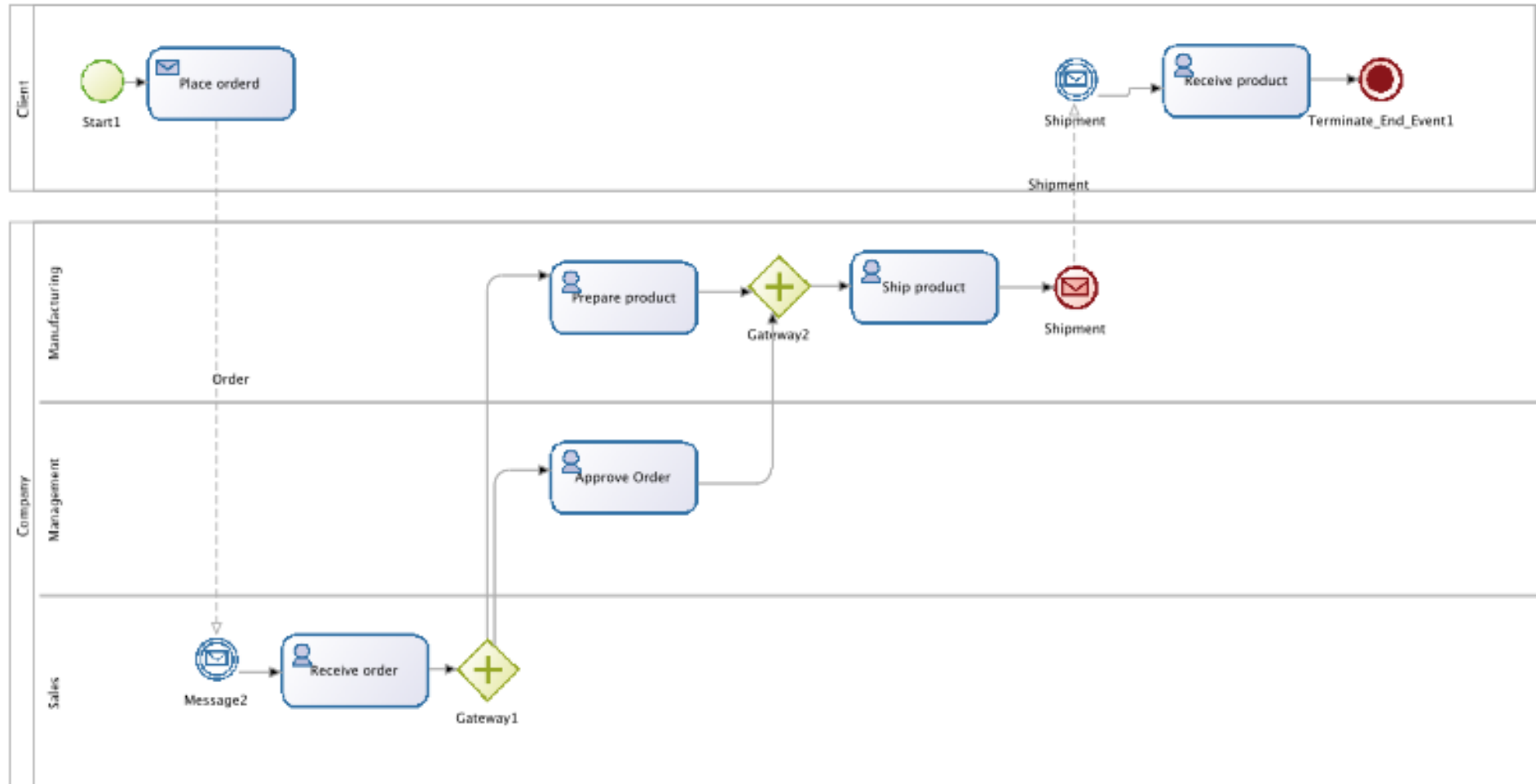
- Shows vertical relations (command and control)
- does not show horizontal relations (collaborations, information sharing)
- Does not show all kind of social relations between individuals and groups

# Linear Responsibility Chart (LRC)

| Processes<br>(samples)       | Organizational units |        |            |       |        |                 |                     | External Actors |          |
|------------------------------|----------------------|--------|------------|-------|--------|-----------------|---------------------|-----------------|----------|
|                              | Purchase             | Design | Production | Sales | Admin. | Human Resources | Information Systems | Supplier        | Customer |
| Management Report Production | C                    | C      | C          | C     | P      | C               | C                   |                 |          |
| Customer Order Processing    |                      |        | P          | P     |        |                 |                     |                 | C        |
| Procurement                  | P                    |        | P          |       |        |                 |                     | P               |          |

P=Participant C=Client

# BPMN: Pool – lane



# Structure

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- More on the topic in chapter 'Organizations', organizational variables