Logistic

Organisations and logistics

Communication

Message A →

← Message B

Speech Act

- Message
  - Verbal
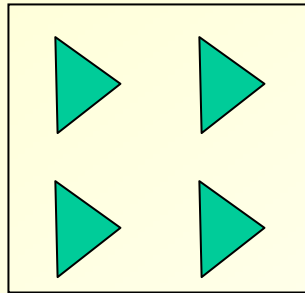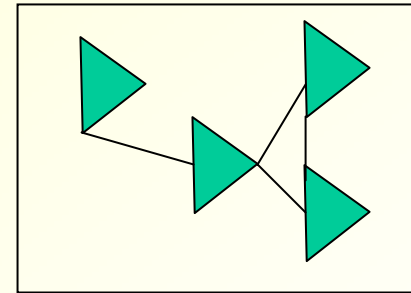   - Ex: Can you begin next Monday?
  - In writing
    - Ex: Order
  - Electronic
    - 11000110
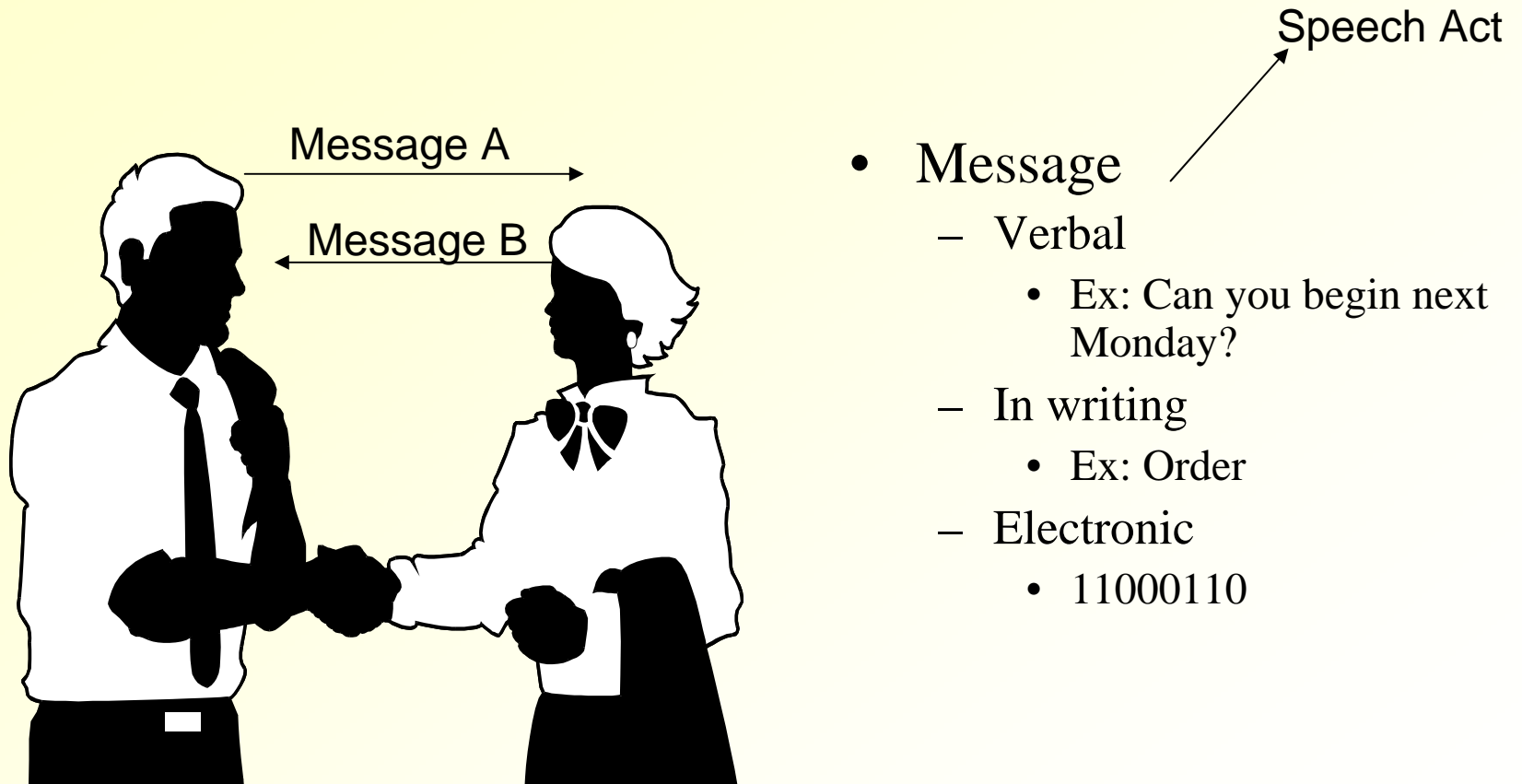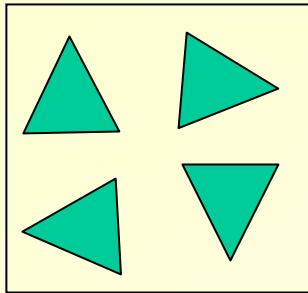
Structure?

Unorganised activities

Goal-oriented organisation

Goal-oriented and co-ordinated organisation

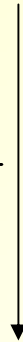# Organisation

Formal organisation

- **Structure**
  - work differentiation
  - information and command
  - responsibility and decision
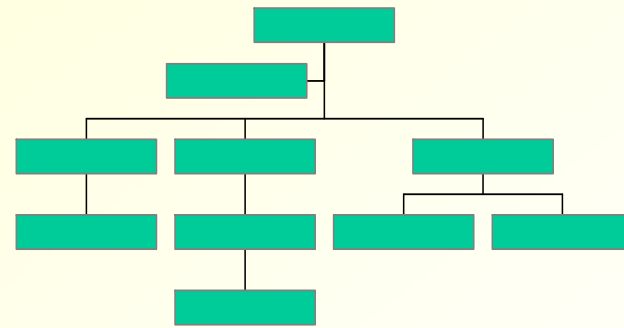
- **Orientation**
  - task
  - products
  - geographical
  - customer

  - etc

Vertical

Horizontal

Job descriptions
Workflow descriptions

Matrix organisations

	Sale	Purchase	Stock
Company A			
Company B			
Company C			

Company group

- Business areas

```
          ┌──────────────────┐
          │ Company group    │
          │ Headquaters      │
          └────────┬─────────┘
         ┌─────────┼─────────┐
┌────────┴──┐ ┌────┴──────┐ ┌┴──────────┐
│ Company A │ │ Company B │ │ Company C │
│ (Computer)│ │ (Printers)│ │ (Paper)   │
└───────────┘ └───────────┘ └───────────┘
```
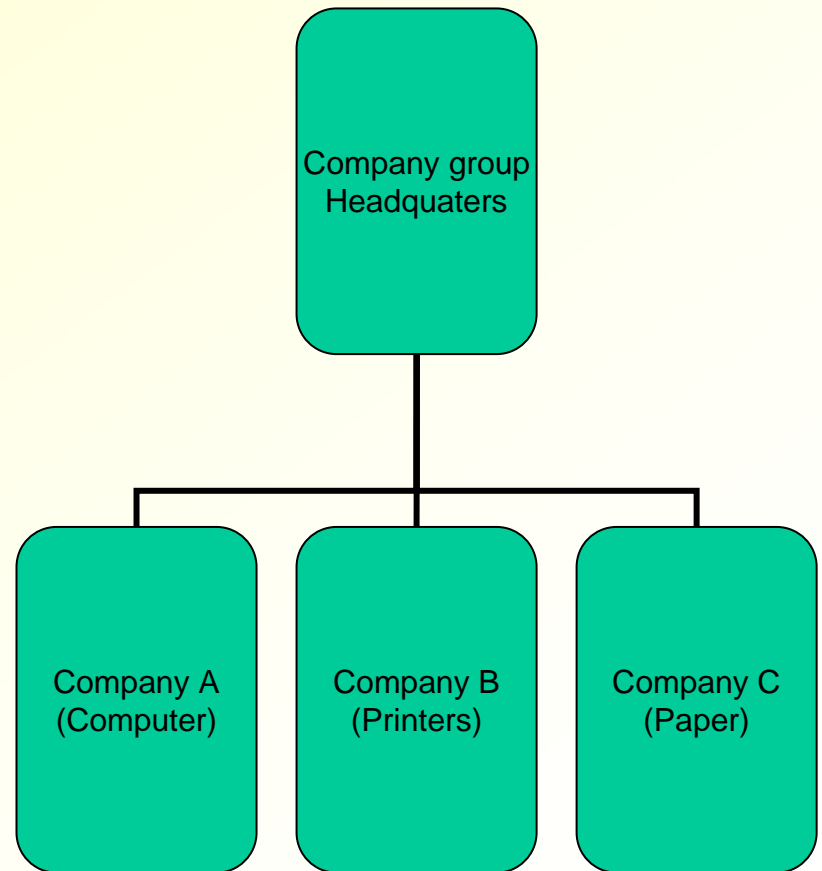
Logistic

Stakeholders?

Customers
Vendors
Owners
Employers
Management
etc

Business-process

Customers

Vendors

Contributions

Logistic

Reward

Reward

Contributions

Process

- Task(s)
- Decision(s) } → Process models
- Responsibility(ies)
- Goal(s)
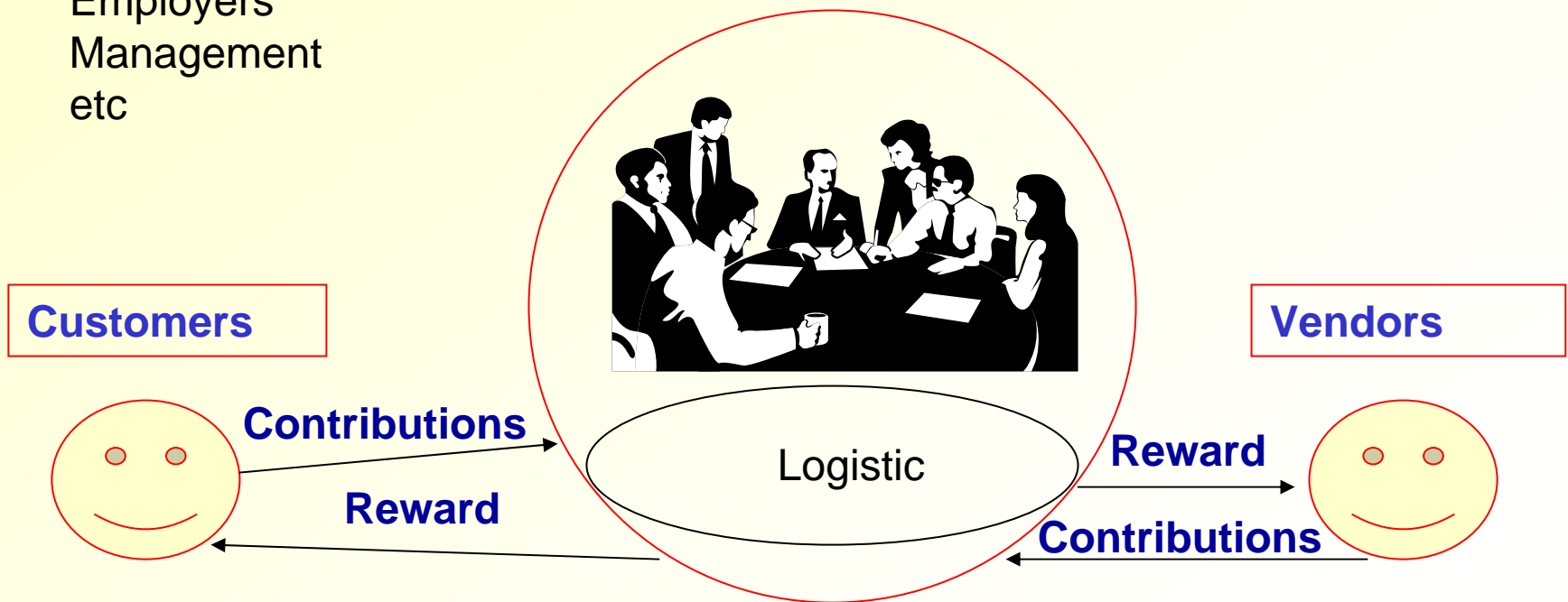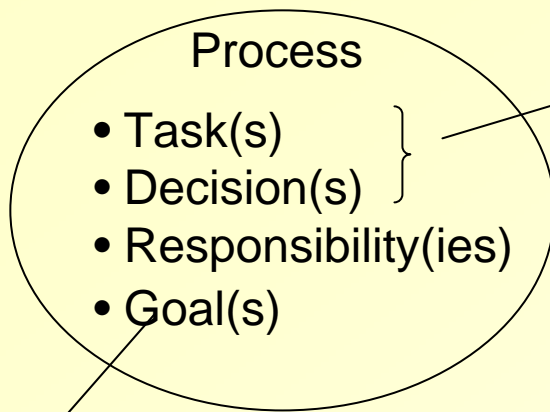
Goal model

Different kinds of business documents

Inquiry

Quotation

Order

Acknowledgement

Shipping note

Invoice

Complaint

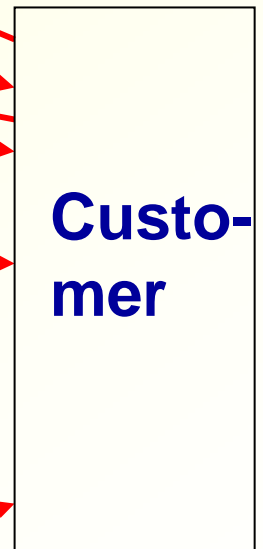Credit note

Vendor

Custo-mer

Management of reminders

Management of debt-collection

Reminder to pay

Debt-collection letter

Order?

Column A

SaTy	Description
AA	Promotion order
AT	Ret.Packaging Pickup
B1	Rebate Cred Memo Req
B2	Rebate Correctn Rqst
CD	Deliv.Free of Charge
CEA	Correction f.ExtAgnt
CF	Consignment Fill-up
CI	Consignment Issue
CP	Consignment Pick-up
CPC	ConsignPick-up CompS
CR	Consignment Returns
CRES	ConsignReturn CompS
CS	Cash Sale
DL	Order Type Sched.Ag.
DR1	Agrmnt Deb.Memo Req.
DR2	Agrmnt Deb.Memo Req.

A

Column B / C

SaTy	Description
L2	Debit Memo Request
MAKO	Dely order correctn
MM	Delvy order returns
OR	Standard Order
PS1	PS: order
PS2	PS: billing request
R3	PartRebSettl.request
R4	Reb.Req.f.Man.Accrls
RA	Repair Request
RAS	Repairs / Service
RE	Returns
RK	Invoice correct. req
RO	Rush Order
RPI	Ret.Packaging Issue
RSA	Returns Sched.Agrmnt
SCO	Stand.Unit Costing

B

C

Column D / E / F

SaTy	Description
SDF	Subs.Dlv.Free of Ch.
SPO	Spare Part Order
TAM	Delivery order
TAV	Standard Order (VMI)
WA	Rel. to value contr.
ZA	Internet order
ZAD4	A&D Order
ZAD5	Standard Order
ZBV	Factory sales
ZEC3	A&D Order
ZL2	SP Debit Memo Req.
ZRRC	Returns Recycling
ZSB	Third Party w/o SN
ZSE	Third Party with SN
ZSP1	SP: Service order

D

E

F

Orders in use, ex

- A
- B
- C
- D
- E
- F

- Cash Sale
- Standard Order
- Rush Order
- Delivery Order
- Internet Order
- Service Order

Each order type has its own set of activities that are to be performed when the order type is in use

Quotation inquiry
What items you
intend to order

Item/article:
- quantity
- price
- delivery terms
- terms of payment
- delivery date
- quantity discount

Order

Delivery address
Contact person
Order total
Reference to quotation

Quotation

Period of validity
Reference to Quotation
Inquiry

Acknowledgement
Reference to order

Price list

Customer facts/
vendor facts

Shipping note

Item
Quantity
Delivery address

Reference to order

Invoice/Credit note

Payment for delivered items
Reference to order,
shipping note,
complaints
etc

Delivery terms

Terms

Freight **Insurance**
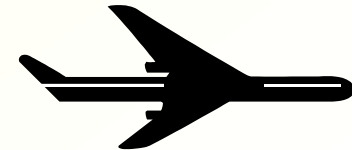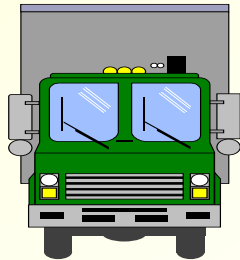
Risk

Vendor (Malmö)

Customer (Stockholm)

- Set of standard clauses stipulation whether vendor or the customer pays for the freight, insurance and risk along with a place.
- Ex. Cif Stockholm

    This agreement stipulates that the vendor pays for freight and insurance to Stockholm
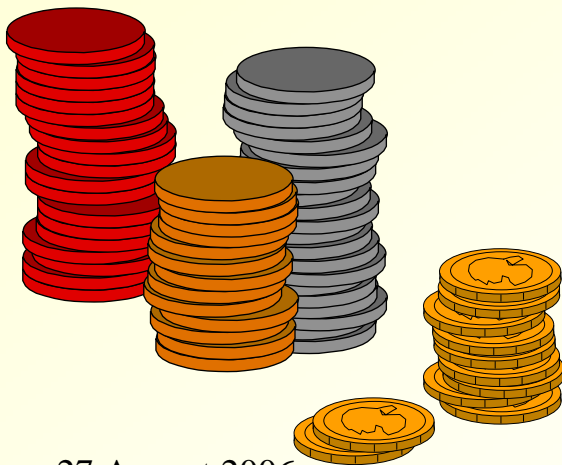- Total numbers of clauses are 6.

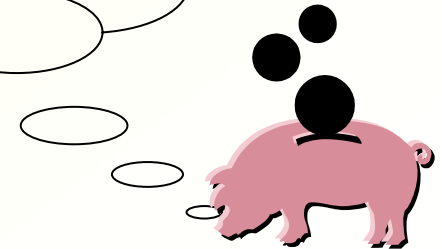# Terms of payment

According to law
- **30 days pay net cash**

According to agreement
- **pay net cash**
- **10 days pay net cash**
- **10 days ./. 3 %discount**
- **Interest on overdue payment 21 %**

Interest on overdue payment 21 % ?

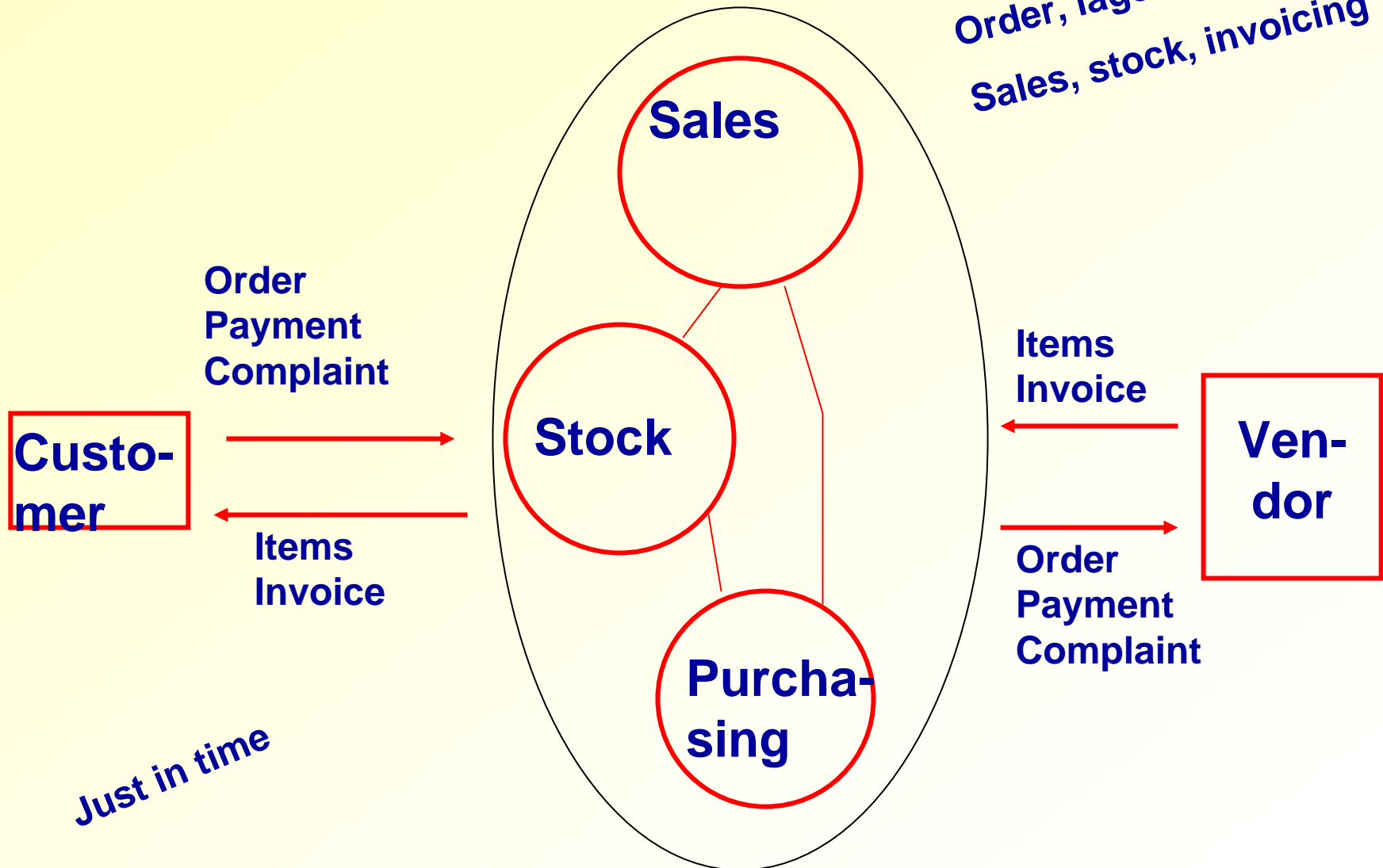# Complaint

- **Incorrect item**
- **Incorrect quantity**
- **Damaged item**
- **items missing**
- **Fault in quality**
- **etc**

Logistic

Sales

**Order
Payment
Complaint**

**Items
Invoice**

**Custo-
mer**

Stock

**Ven-
dor**

**Items
Invoice**

**Order
Payment
Complaint**

**Purcha-
sing**

Just in time

Sales process

Concerns: Line of business

Sales

- Offer
- Order entries
  - Items in stock or not
  - Creditworthy
- Acceptance of order
- Shipment document
  - Collecting order
  - Shipping note
- Payment documents
  - Invoice
  - Reminder invoice
- Complaint handling
- Entries into the stock book

Customer categories

Stock

- Collecting items
- Packaging items
- Stock account of deliveries

Selection of items

Distribution

- Arrange transport
- Load
- Delivery documents
  - Consignment note
  - Customs declaration
- Arrival message
- Acknowledge documents

Complaint
(activities and/or decisions to be made)

- Incorrect delivery
  - Supplementary delivery
  - New sales order
  - Supplementary invoice

- Damaged items
  - Send back
  - Kept by the customer
  - Thrown away by us or the customer

Creditworthy
(activities and/or decisions)

- Check if the order total <= a customers disposable credit (granted credit - unpaid invoices (to be find in customer accounts))

- Punctual payer?

  - Decided by the financial management?

- Special condition

  - Obtainable by the C.E.O.

Stock account

Item no Item name Stocktaking		Buffer stock Safety stock Lead time		Order point Order quantity Optimal order quantity		
Date	Supplier order	Incoming deliveries	Re-served	Deliveries	Available in stock	Stock balance

Purchase process

Selection of items

Line of business

Customer quantities   Customer categories

Purchase	Goods -Receipt	Stock

- Handling purchase needs

- Search for/decides supplier

- New supplier?

- Quotation?

- Orders

- Evaluates Quotations

- Quotation choice

- Make complaints

- Make entries into the stock book

- Receive incoming deliveries
- Check incoming deliveries
- Make entries about complaints
- Handle delivery documents
- Handle acknowledgement documents

- Place items in stock
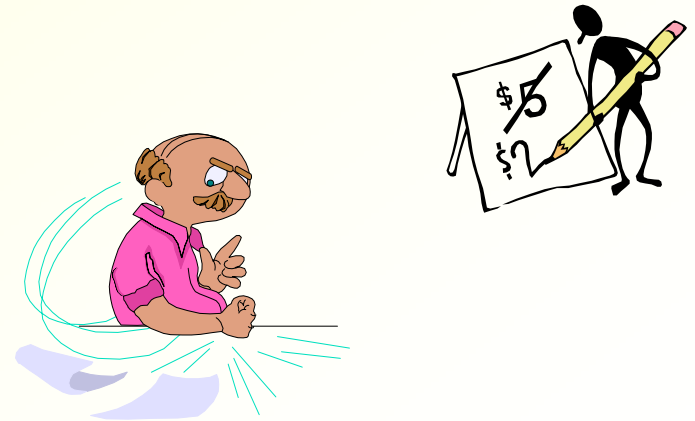- Make entries into the stock book of incoming deliveries

Evaluation and choice of quotations (activities)

- Comparable facts
  - Price in stock
  - Quantity discounts
  - Delivery terms
  - Other facts of interest

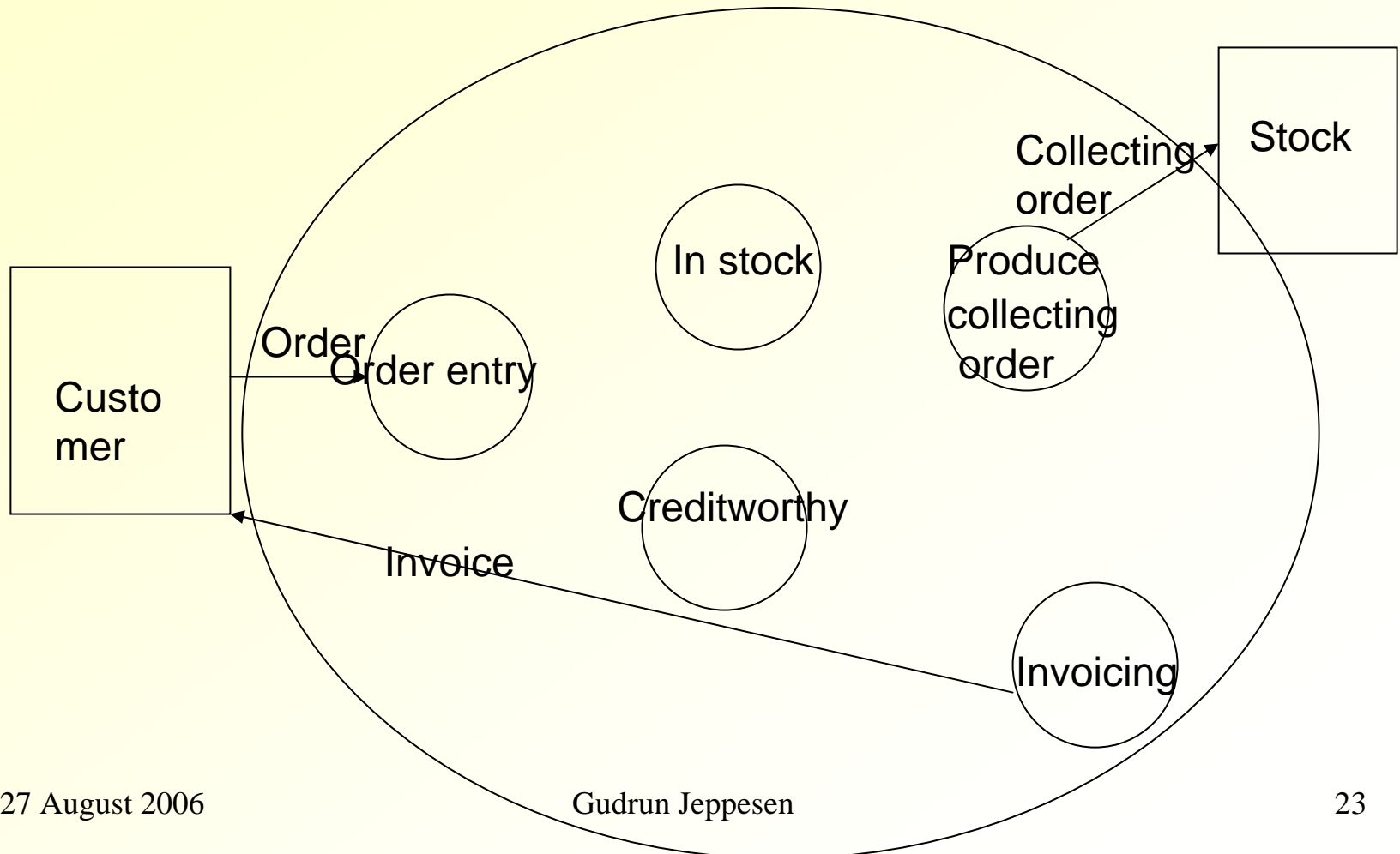- Comparison of quotations
- Choice of quotation
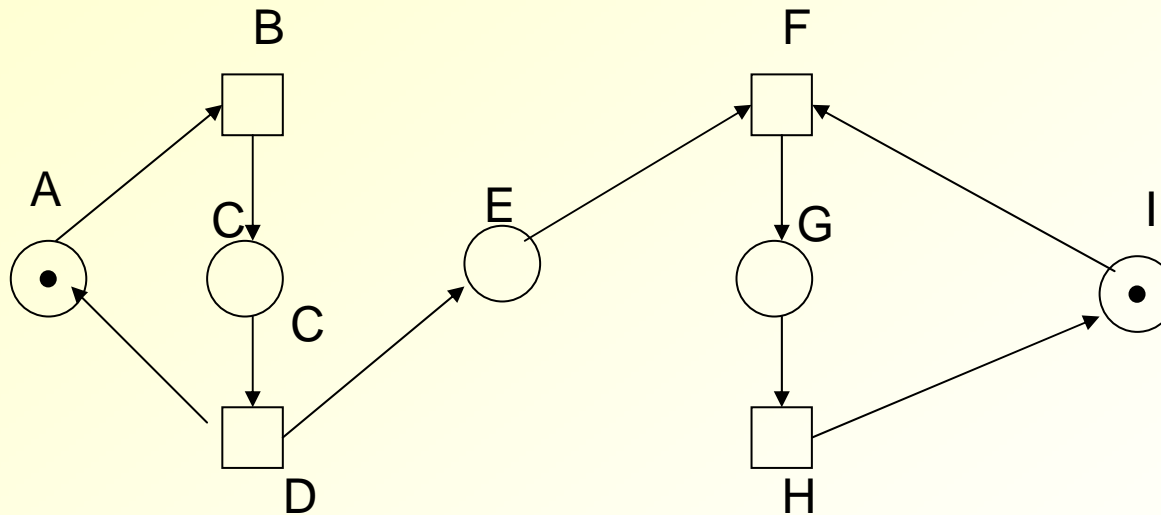
Handling of invoices (activities)

- Certifying of invoices/reminder invoices
- Payment of invoices/reminder invoices
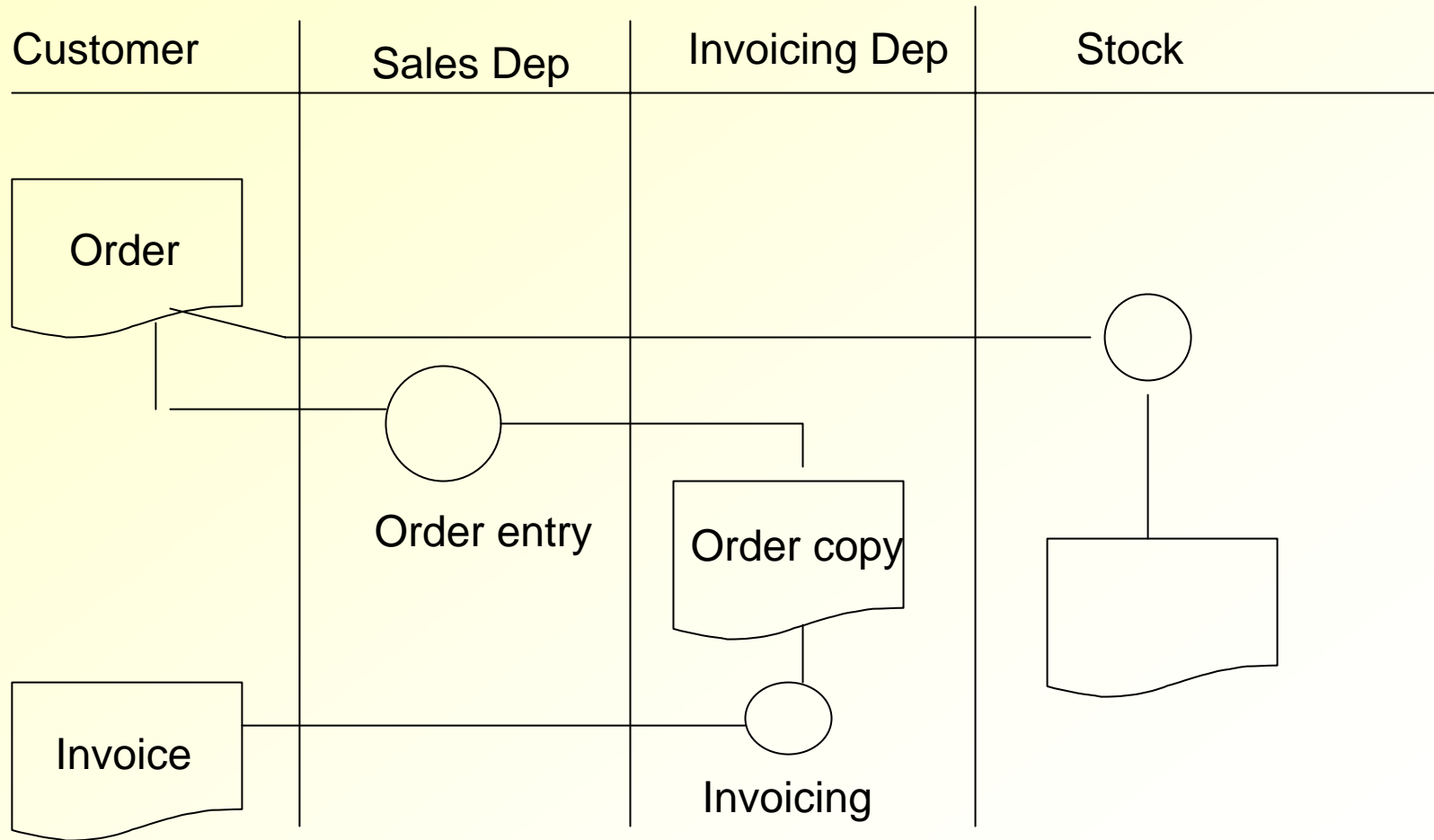- Payment reminders
- Debt-collection

Process model (sales)

Petri net

Gudrun Jeppesen

Ex graphical work flow description: Sales routine

Customer	Sales Dep	Invoicing Dep	Stock
Order	Order entry	Order copy	
		Invoicing	
Invoice			

Value chain

- A value chain describes those activities that are part of a certain scenario e.g a standard sale.

| Order entries | — | In stock? | — | Creditworthy? | — | Writing Collecting orders |
| Distribution | — | Invoicing | — | Etc |