



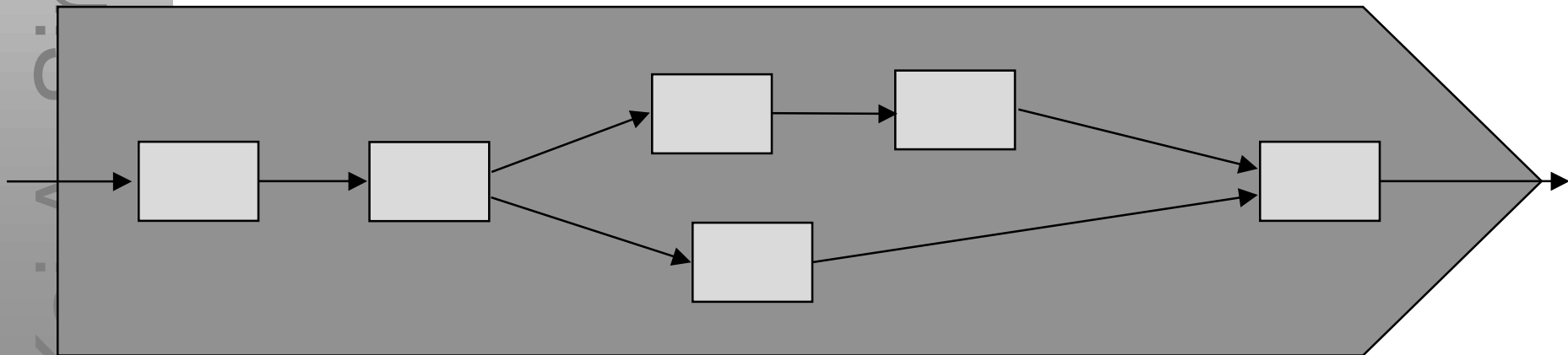
# Workflow and WF-technology

- What is Workflow & WF technology
- Workflow & Information flow
- Workflow- vs Process-paradigm
- Former of Workflow
  - Production
  - Cooperation
  - Administration/Ad-hoc
- Market and vendors



# Workflow definition

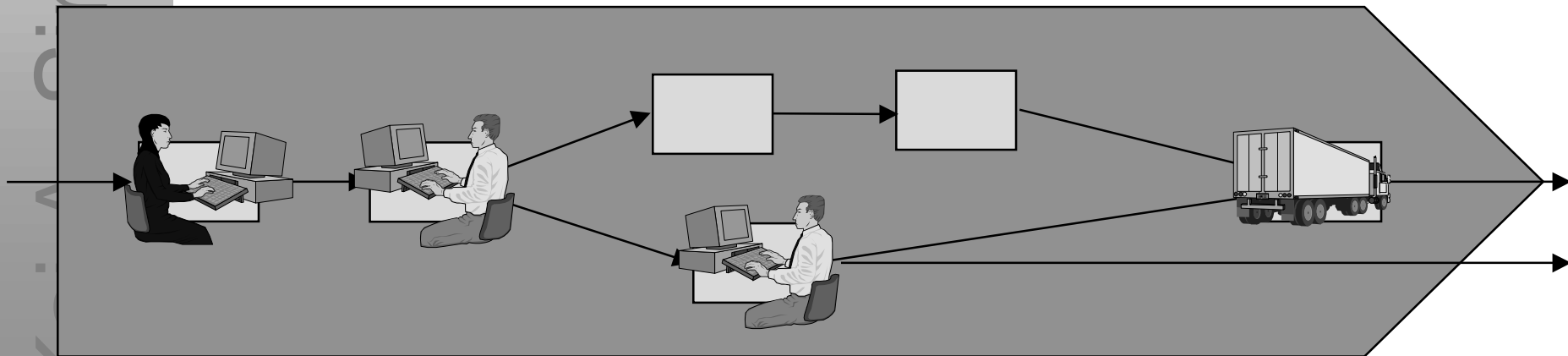
- **Workflow is the sequence of actions or steps used in business processes. Workflow implies that there is more than one person involved in the process.**





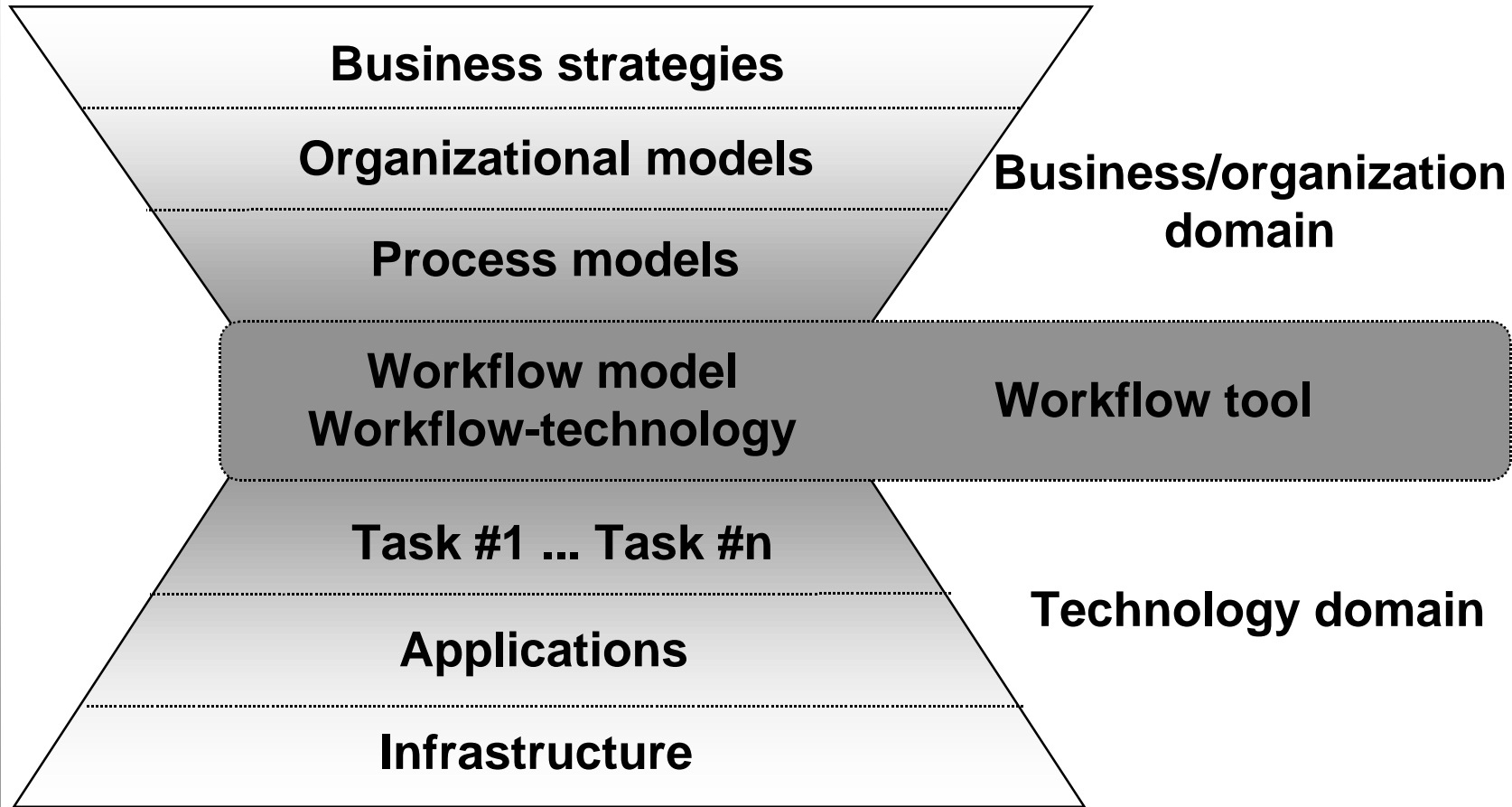
# Workflow definition

- **Automated workflow applies technology to the process, though not necessarily to every action. Workflow software holds the promise to combine, to reorganize, and to compress business processes.**





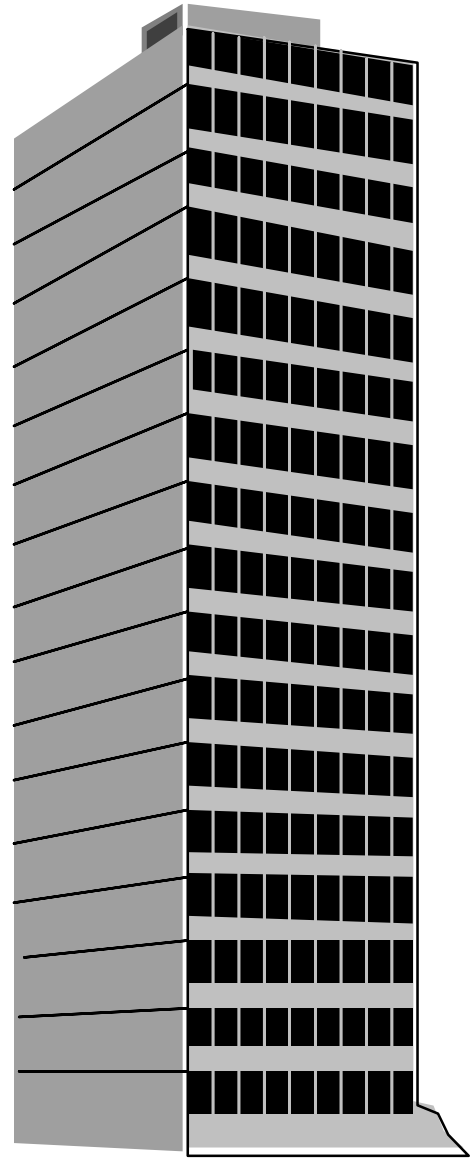
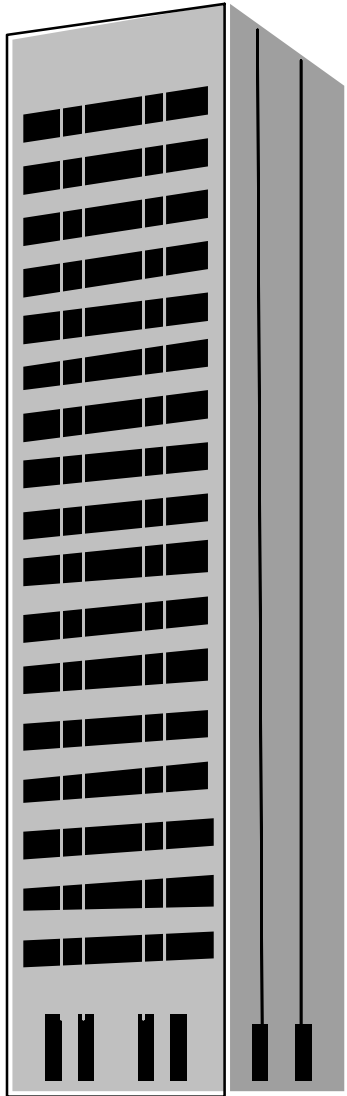
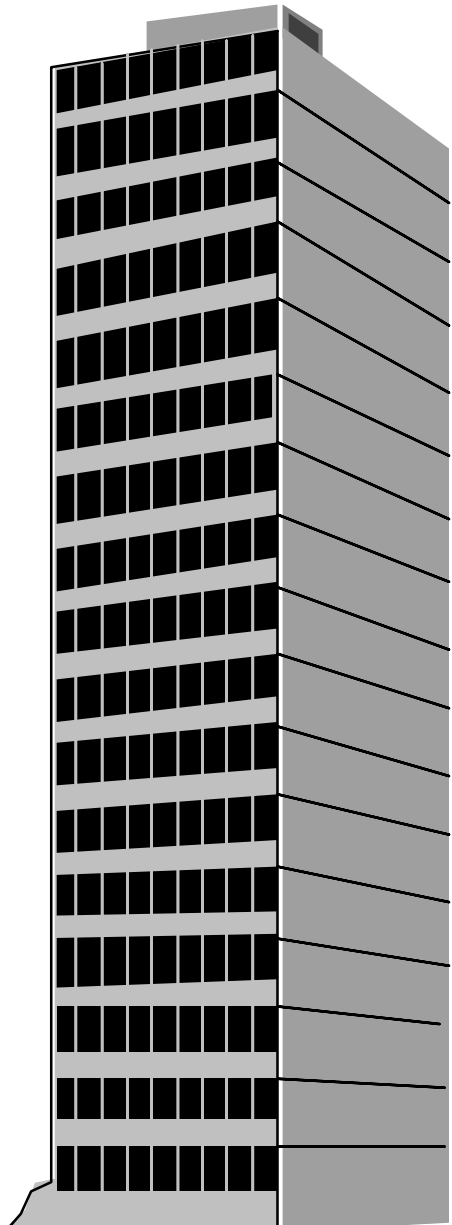
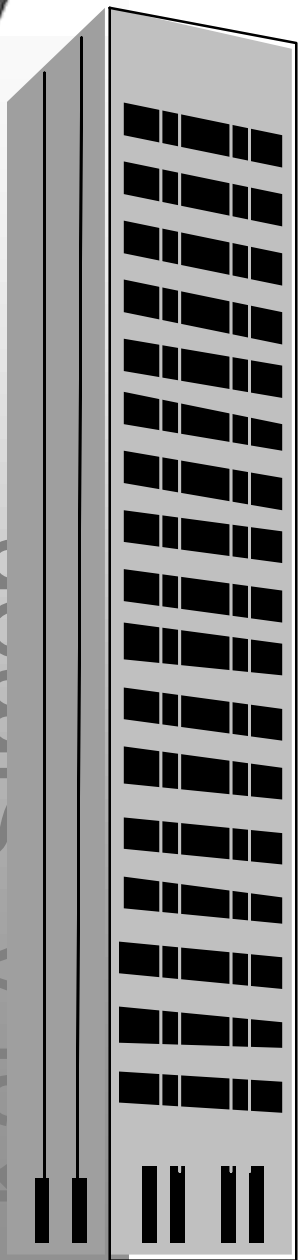
# Different starting points





# Towers of technology

Ma: A Cimon





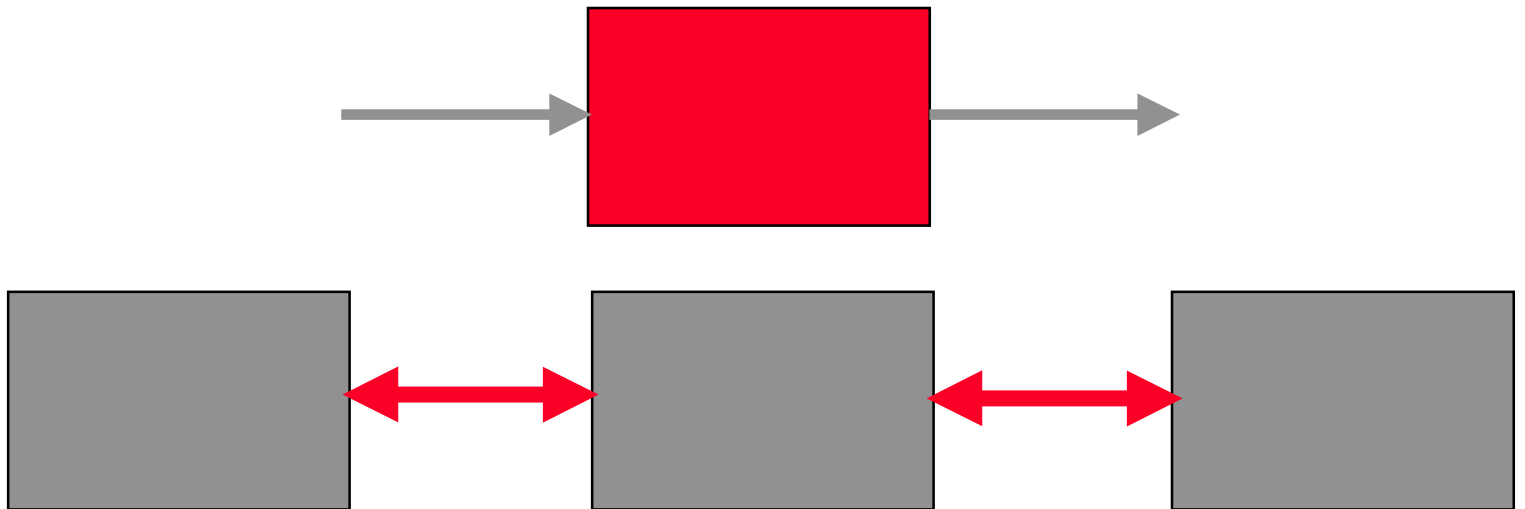
# Strategies for bridging

- Interoperability standards
  - WfMC IOP standard - proof of concept
  - No existing standard
- EDI
  - Standard messages
  - Loss of functionality
- Tailormade gateways
  - Expensive
  - Non-reusable, difficult to change



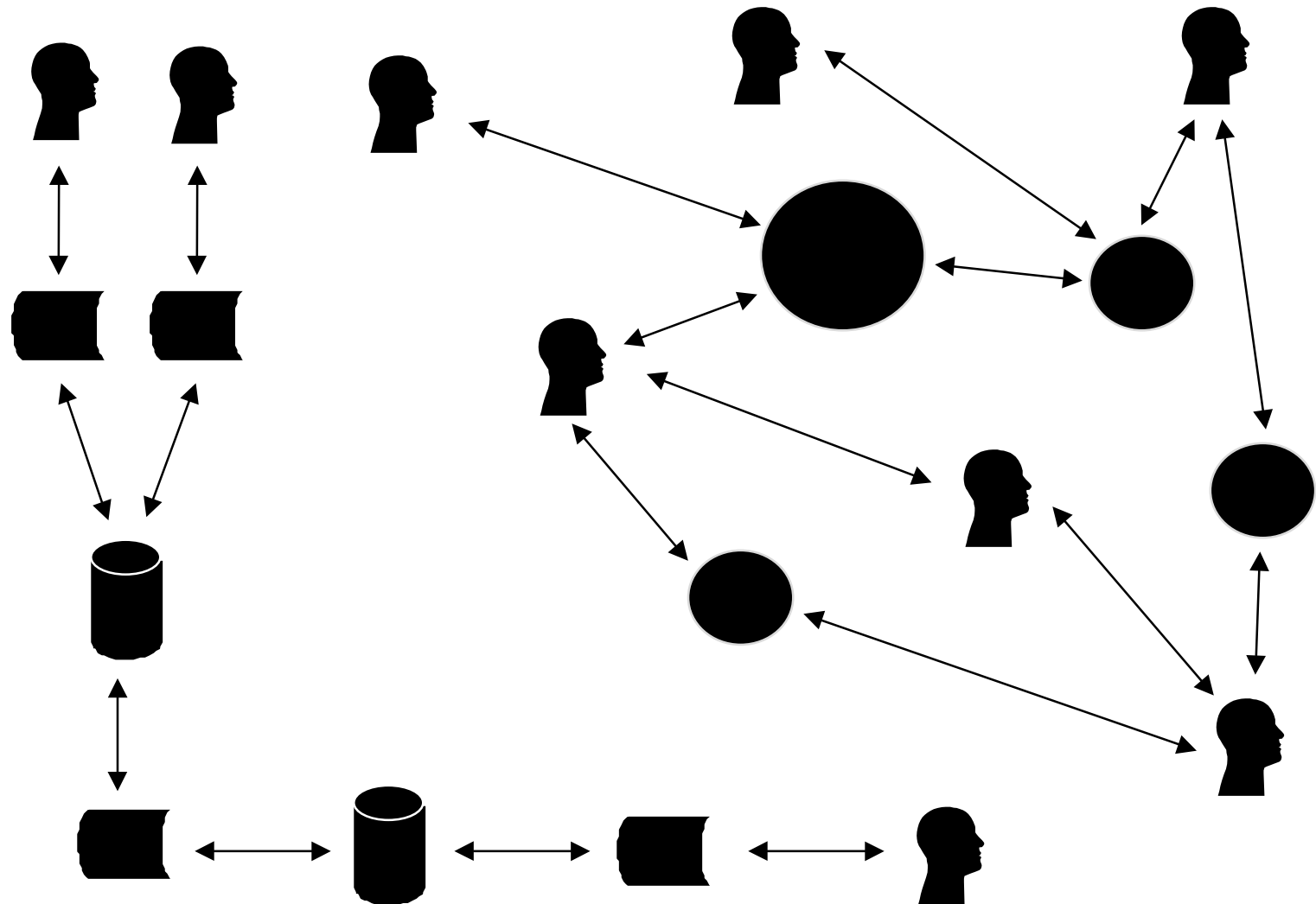
# Why Workflow?

- Focus shift from ITO to interaction and cooperation mechanisms
- Bottlenecks, mistakes, misunderstandings often occur in the interaction





# Data -> kommunikation Actor-network (Latour)





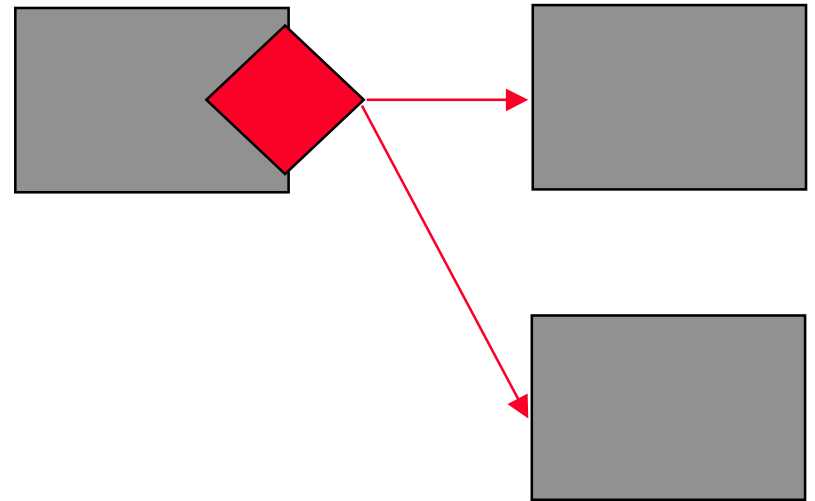
# Workflow systems

- Work-flow and teams
- Moving tasks/work between people
- Reducing manual work
- Reducing transaction costs and time
- Flow efficiency
- Activities and routing



# Workflow functions

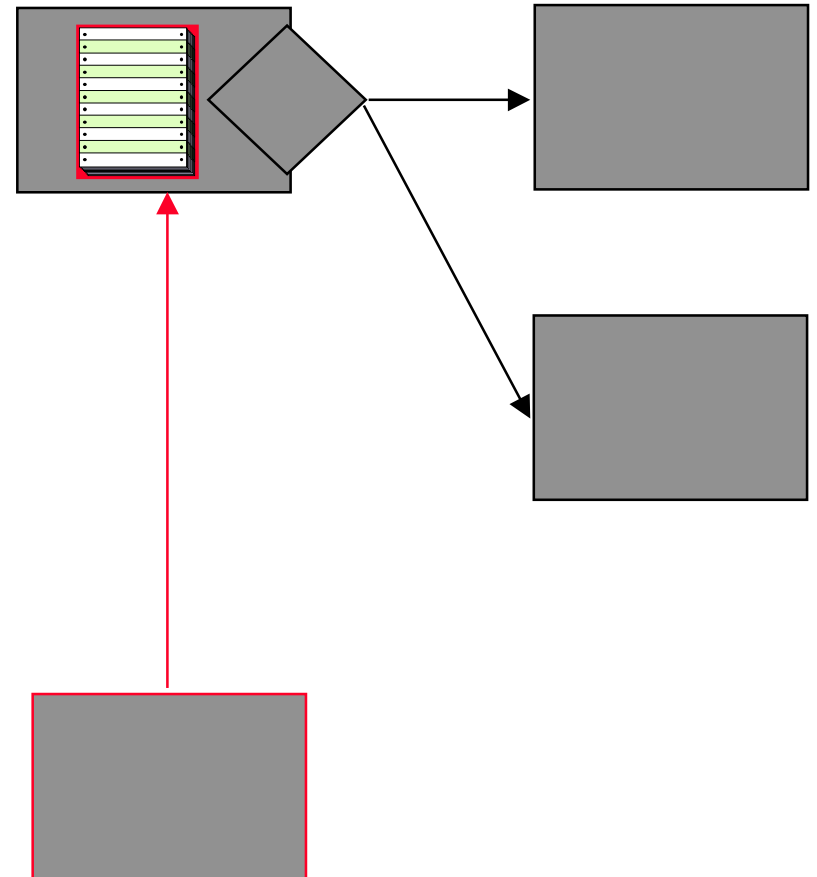
- **Routing**
- Tracking
- Dynamic distribution
- Prioritizing
- Measurement
- Communication
- To do





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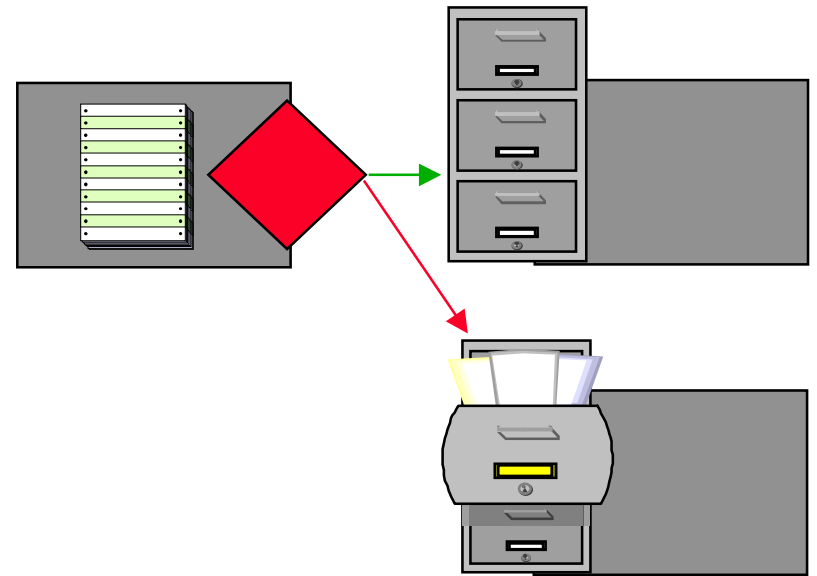
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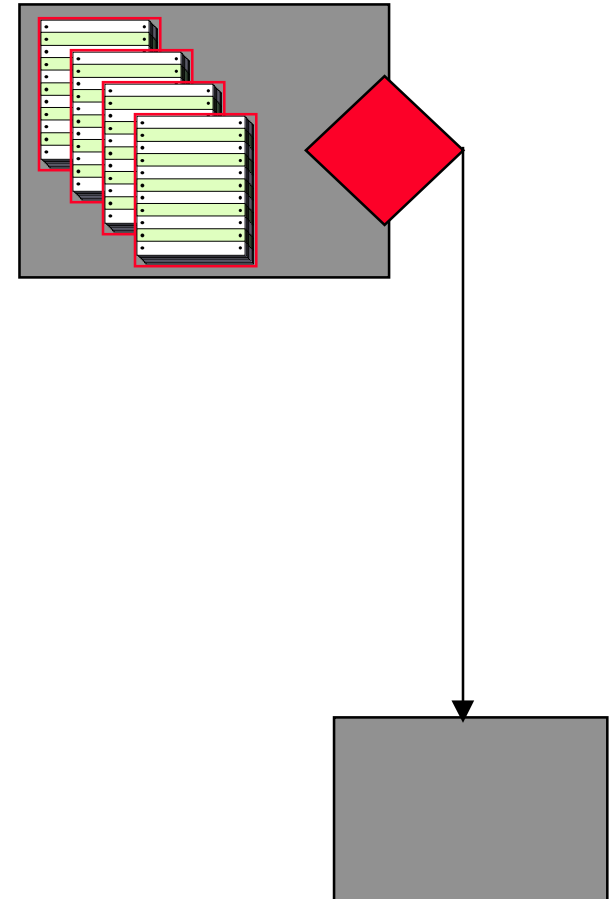
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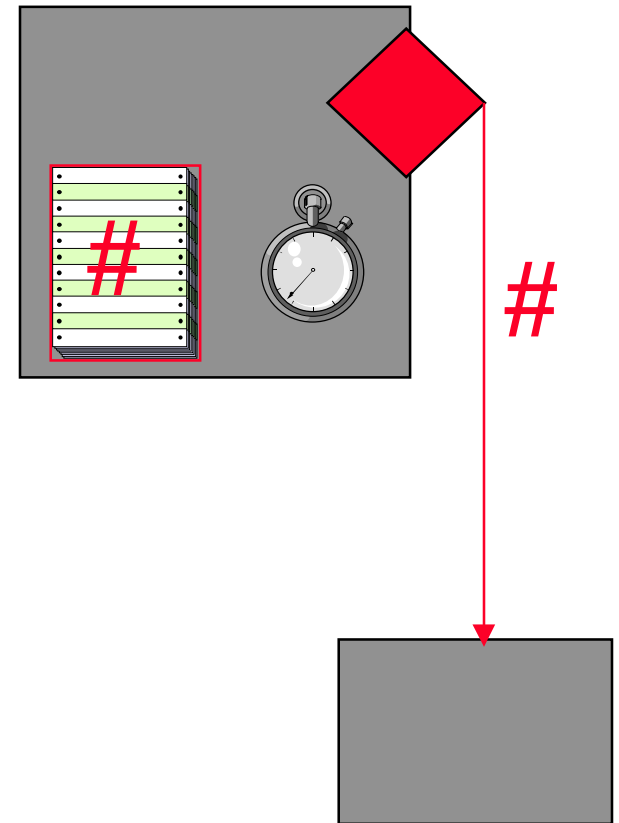
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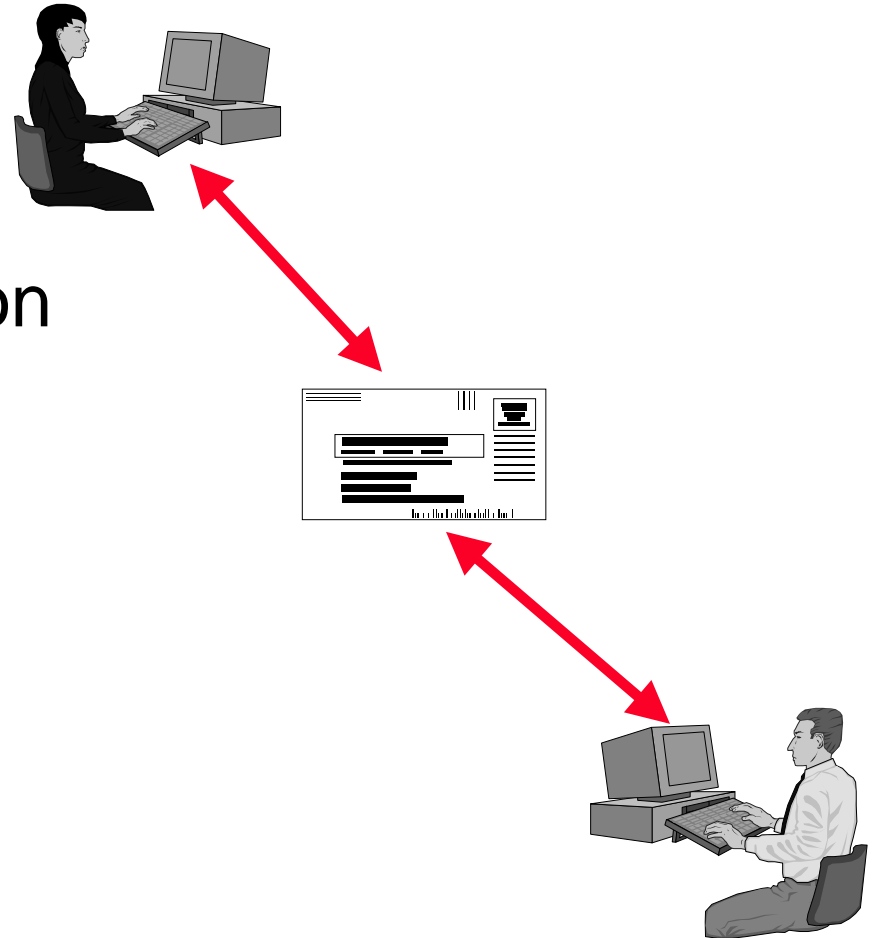
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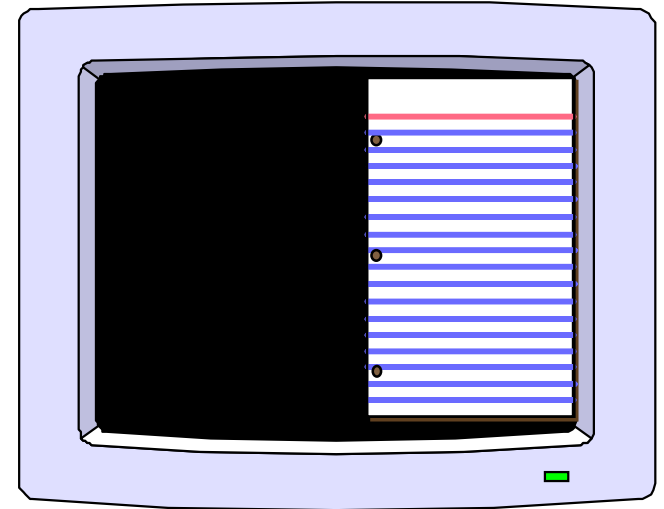
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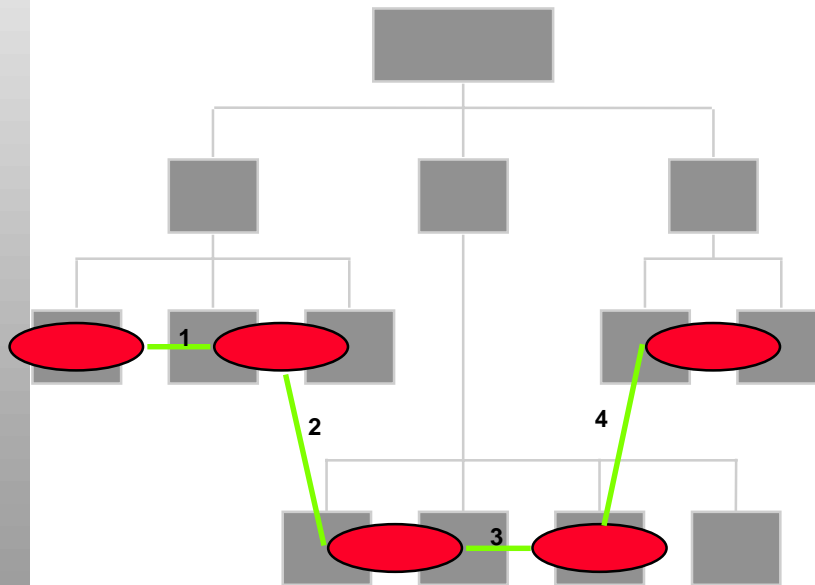
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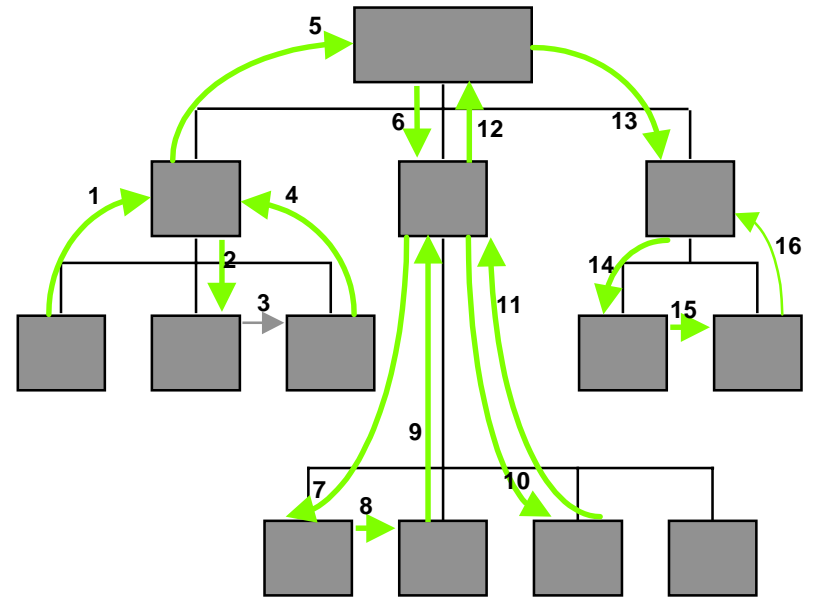


# Work-flow and info-flow

“Business”



“Busy mess”





# Work-flow and info-flow

- Traditional approach  
info-flow mirrors organization
- Work-flow = process
- Optimum: organization = process
- Info-flow = Workflow



# Process and workflow

## Process paradigm

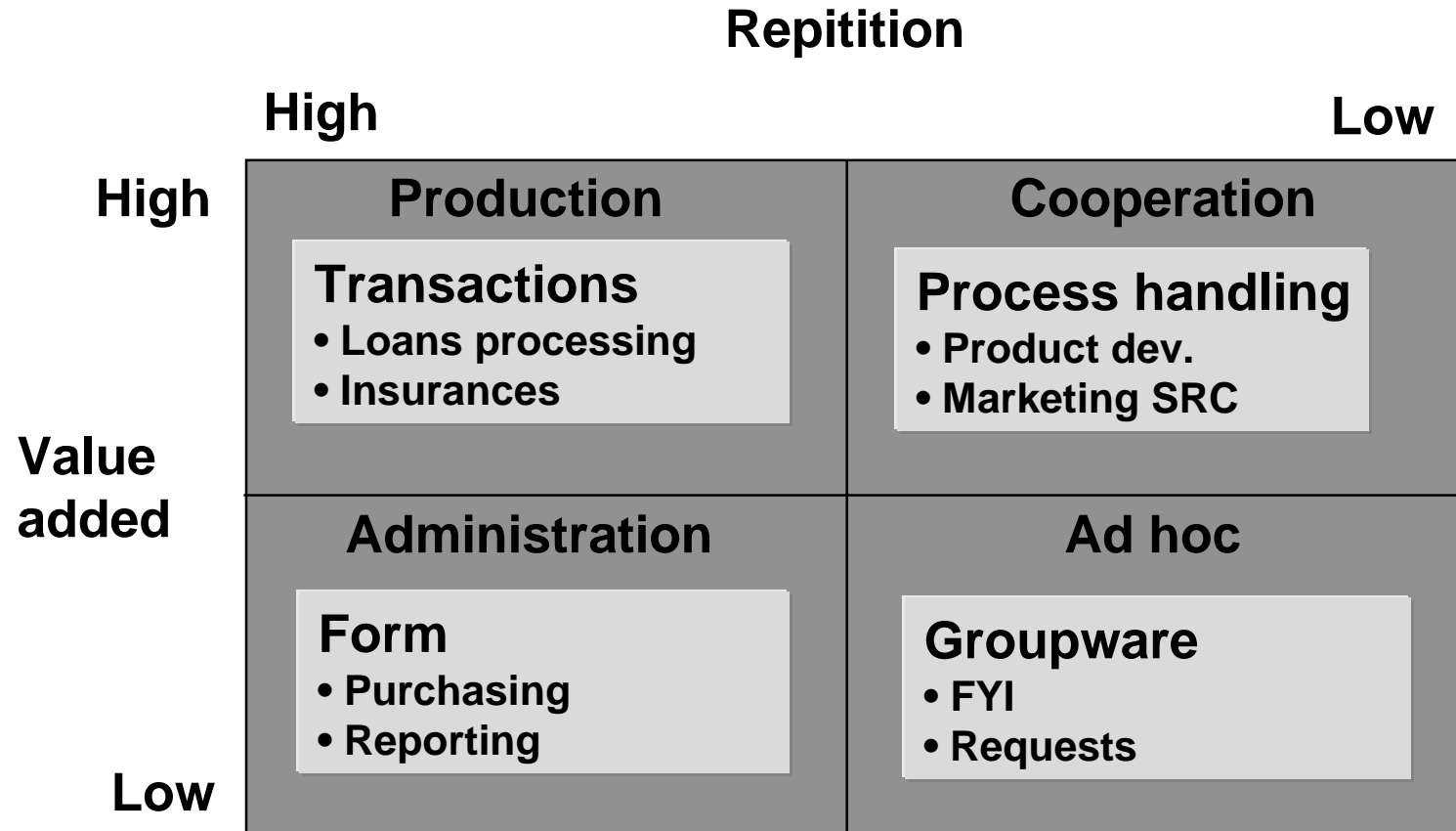
- Focus on organization
  - Transformation through organizational change
  - Human actors
- Cross-functional
- Customer focus
- Customer satisfaction
- Top-down
- Departure in future oriented strategies
- Doesn't consider current organization

## Workflow paradigm

- Focus on information
  - Transformation through automation
  - IT-support
- Technological opportunities and limitations
- Operational focus
- Efficiency goals
- Bottom-line
- Productivity
- Make routine work more efficient through automation



# Types of workflow






# Production - WF

- Transaction handling and management
- Mature technology (Imaging, OCR/ICR)
- Vertical applications
  - Banks, insurance companies, health care
- High costs
- Key aspects
  - High performance
  - Integrated applications
  - Reliability
  - Rule-based routing and flow-management
  - Integrated document bases
  - Standardized environment



# Applications and vendors

	<b>Imaging</b>	<b>Non-imaging</b>	<b>Package</b>
<b>Application</b>	Loans Accounts rec./pay Claims handling Tax-systems		HRM Accounting Order
<b>Vendor</b>	FileNet, Sigma, ViewStar, IBM, Optica, Wang, Recognition 	ActionTechnol., Staffware, XSoft	SAP, Oracle PeopleSoft, D&B



# Cooperation - WF

- Mainly based on process-thinking
- Increasing maturity
- Horizontal applications
  - Process industry
  - Concurrent engineering
- ROI focus
- Key aspects
  - Information sharing
  - Corporate-wide
  - Not necessarily homogeneous environment
  - Ad-hoc routing
  - Integration of document base



# Applications and vendors

	<b>Process management</b>	<b>High End Doc. Man.</b>
<b>Application</b>	Complex processes, Knowledge work, e.g. Product development	Repository manage- ment, dokument- management
<b>Vendors</b>	Action, Portfolio, IBM, XSoft, KeyFile, Staffware, Recognition	Alpharel, HP, Odesta Cimage, InterLeaf, Documentum, JCST



## Admin./Ad hoc WF

- Desktop tool
- Messaging
- Mass-market
- Low cost
- Key aspects
  - IOS, corporate wide
  - Often as e-mail
  - Often multiple environments
  - Pop-up
  - Ad-hoc routing



# Applications and vendors

	<b>E-forms</b>	<b>Proc.manag.</b>	<b>Desktop</b>
<b>Applications</b>	Admin. process, Cost reports, Travel requests	FYI, correspond.	Routing for comments, approval
<b>Vendors</b>	Delrina, Lotus, JetForm, IBM Banyan	Lotus (Notes), ICL, Action, DEC	KeyFile, IBM, Saros, XSoft, PCDOCS, Novell



## Conclusions ...

- Paving the cowpath
- Functional automation vs supporting and enabling business processes
- Developers and users
- Platforms, standards, interoperability
- Functionality