Informatik-Projektentwicklung
– Lecture 11 –

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Software Component Technology

Wintersemester 04/05

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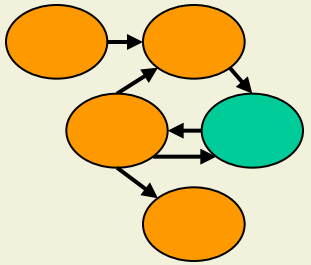
Exam

- Monday, January 31, 9:15-10:00
  - But lecture starts at 8:15!!
- 30 multiple choice questions
  - 4 answers, only one is correct
- Only simple calculator allowed
  - No books, documents or other material
  - No scientific calculator or other electronic equipment
- You should participate, even if you do not have enough points in the case studies

Stages and Leadership Styles



Forming

Storming

Norming

Performing

Adjourning

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Stages of Group Development

Forming	Storming	Norming	Performing	Adjourning
Awareness and orientation Tasks need to be clarified	Competition and conflict Team leader needs conflict resolution skills	Cooperation Team willing to work together and establish procedures	Trust and performance Team focused on results and performance	Separation and moving on Team focus shifts to “what will I do next?”
Directing	**Coaching**	**Supporting**	**Delegating**	

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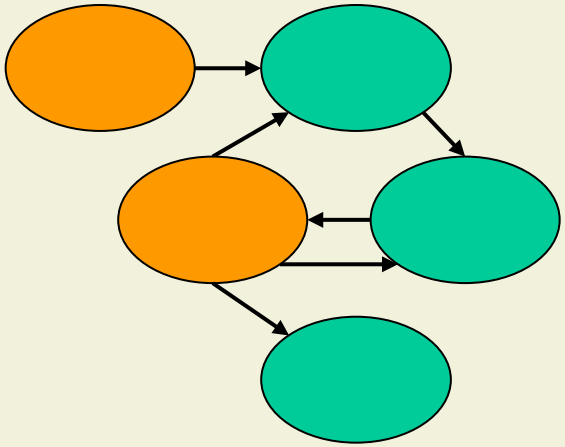
Agenda for Today

11. Procurement Management

- Procurement Planning
- Solicitation Processes
- Contract Administration and Closeout



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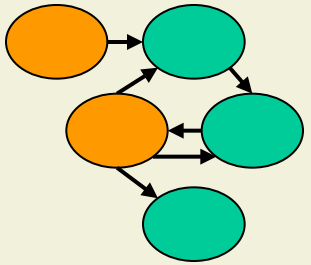
Aspects of Project Management



Project Management

- Project Integration Management
- Project Scope Management
- Project Time Management
- Project Cost Management
- Project Quality Management
- Project Human Resource Management
- Project Communications Management
- Project Risk Management
- Project Procurement Management

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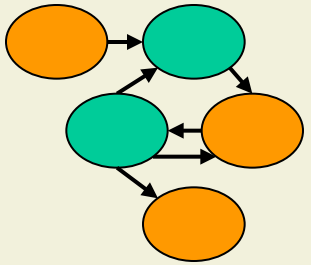
Overview



Planning

Procurement Planning → Solicitation Planning

Execution

Solicitation

Source Selection → Contract Administration

Closing

Contract Closeout

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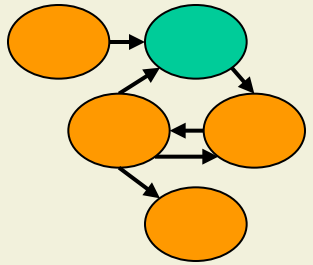
Make-or-Buy Decisions



- Each component should be analyzed to determine whether it can be produced cost effectively by the performing organization
- Analysis should include direct and indirect costs
- Analysis must reflect
  - The immediate needs of the project
  - The perspective of the performing organization
- Often a decision between flexibility and cost

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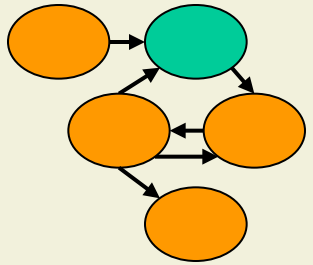
Contracts



- Definition:
  An agreement that establishes an enforceable legal relationship between two parties;
  a mutual exchange of promises.

- A good contract should
  - Share risks fairly
  - Motivate each party
  - Balance the interests of the parties involved
  - Prevent surprises

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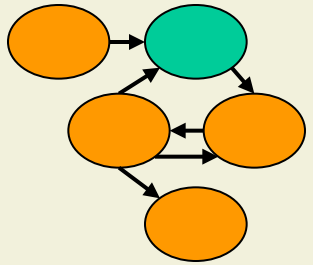
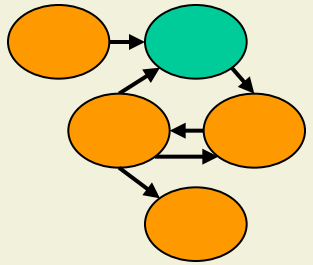
Major Contract Types



- Fixed-price contracts
  - Firm-fixed-price
  - Fixed-price-incentive fee (incentive if defined performance criteria are met)
- Cost-reimbursable contracts
  - Cost-plus-fixed fee (fixed amount of profit)
  - Cost-plus-incentive fee
- Time & materials (negotiated price per unit of time plus cost of materials)

Contract Types and Risk



Fixed-price	Time & Materials	Cost-reimbursement

FFP FPIF T&M CPIF CPFF

Low ← Buyer's risk → High

High ← Seller's risk → Low

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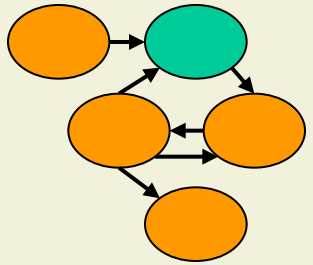
Advantages of Contract Types



- Fixed-price
  - Buyer knows total price at project start
  - Seller has strong incentive to control costs
  - Less work for buyer to manage
- Time & Materials
  - Quick to create
  - Good choice when hiring “bodies”
- Cost-reimbursement
  - Simple scope of work (can start immediately)
  - Generally lower cost (less added for risk)

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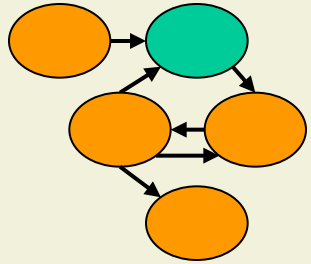
Procurement Planning: Summary



- Purpose
  - To identify which project needs can be best met by procuring products or services outside the project organization
  - To consider whether, how, what, how much, and when to procure

Inputs	Tools & Techniques	Outputs
1. Scope statement 2. Product description 3. Procurement resources 4. Market conditions	1. Make-or-buy analysis 2. Expert judgment 3. Contract type selection	1. Procurement management plan 2. Statement(s) of work

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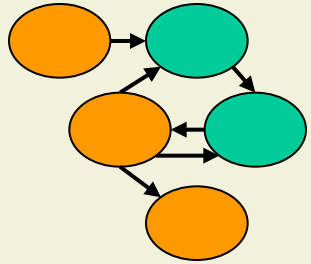
Solicitation Processes: Summary



- Solicitation Planning
  - To prepare the documents needed to support solicitation
- Solicitation
  - To obtain responses (bids and proposals) from prospective sellers
- Source Selection
  - To receive bids or proposals and to apply evaluation criteria to select a provider

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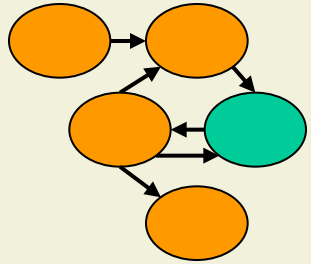
Contract Administration: Summary



- Purpose
  - To ensure that the seller's performance meets contractual requirements

Inputs	Tools & Techniques	Outputs
1. Contract 2. Work results 3. Change requests 4. Seller invoices	1. Contract change control system 2. Performance reporting 3. Payment system	1. Correspondence 2. Contract changes 3. Payment requests

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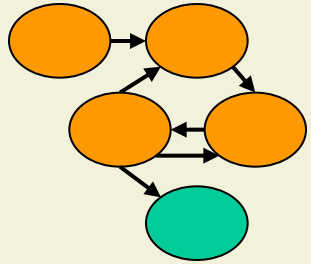
Contract Closeout: Summary



- Purpose
  - To verify products (was all work completed correctly and satisfactorily?)
  - To update records to reflect final results and to archive such information for future use

Inputs	Tools & Techniques	Outputs
1. Contract documentation	1. Procurement audits	1. Contract file 2. Formal acceptance and closure

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	Initiating	Planning	Executing	Controlling	Closing
Integration		Project Plan Dev.	Project Plan Execution	Integr. Change Ctrl	
Scope	Initiation	Scope Planning Scope Definition		Scope Change Ctrl	
Time		Act. Definition, Act. Sequencing, Schedule Dev.			
Cost		Resource Planning Cost Estimating Cost Budgeting			
HR		Organizational Pl. Staff Acquisition	Team Development		
Comm.					
Risk		Identification Analysis Response Planning		Monitoring and Control	
Procurement		Procurement Pl. Solicitation Pl.	Solicitation Source Sel. Contract Admin		Contract Closeout

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