

# Management and Support Issues

- Overview
- IS Planning
- Organizational Structures
- Development and Deployment
- Monitoring and Control

Amjad Umar

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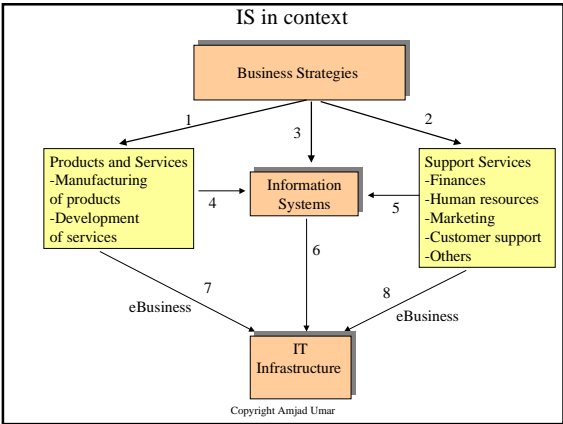
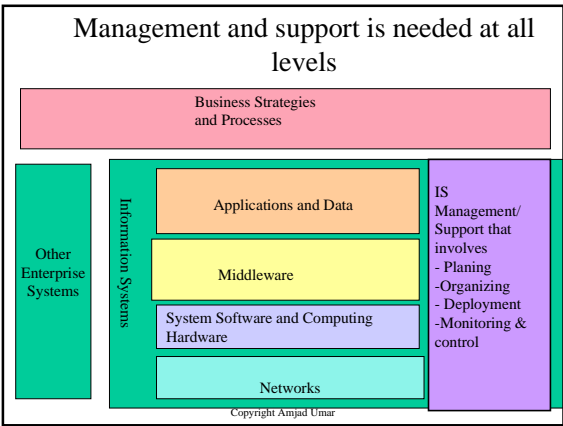
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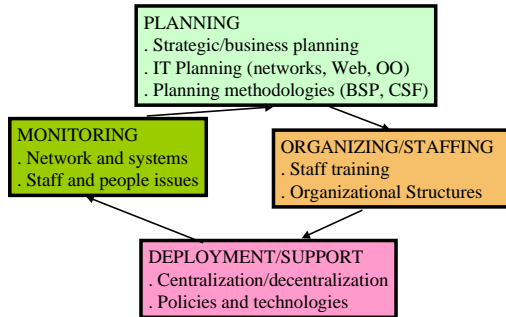
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## Management Issues



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## Planning Types and Levels

	Business	Information System	IT Infrastructure
<b>Strategic Plan(3-5 years)</b>	Strategic business planning Goal: What new markets to get into in the long run	Strategic IS planning Goal: What ISs will be needed to support the strategic business plan	Strategic IT infrastructure planning Goal: What type of IT infrastructure will be needed to support strategic IS plan
<b>Tactical Planning (1-2 years)</b>	Tactical business planning Goal: What to do with the existing products and services	Tactical IS planning Goal: How to support the tactical business plan through ISs, and also the strategic IS plan	Tactical IT infrastructure planning Goal: How to support the tactical IS plan through IT, and also the strategic IT plan
<b>Operational Planning(6months-1 year)</b>	Operational business planning Goal: How to deliver the products and services to existing customers	Operational IS planning Goal: How to support the operational business plan through ISs, and also the tactical IS plan	Tactical IT infrastructure planning Goal: How to support the operational IS plan through IT, and also the tactical IT plan

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## Planning: Traditional Approaches

- IBM's Business System Planning (BSP)
  - Start with business processes
  - Identify applications that support the business processes
  - Prepare an impact matrix showing the relationship between business processes and apps
  - Identify holes (processes not being supported by apps) and improve
- Critical Success Factor Approach (by Rockart)
  - Focus on few critical processes instead of all processes
  - Steps similar to BSP
- Stage Approach (by Nolan)
  - Identify the budget allocated to IT
  - If the budget is larger than industry norm, what is the additional benefit
- Many others (e.g., Martin)

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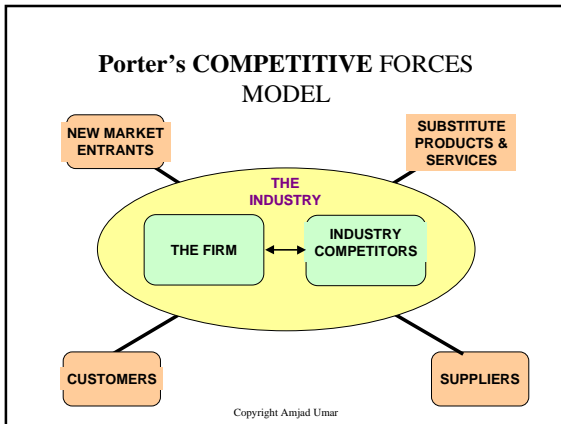
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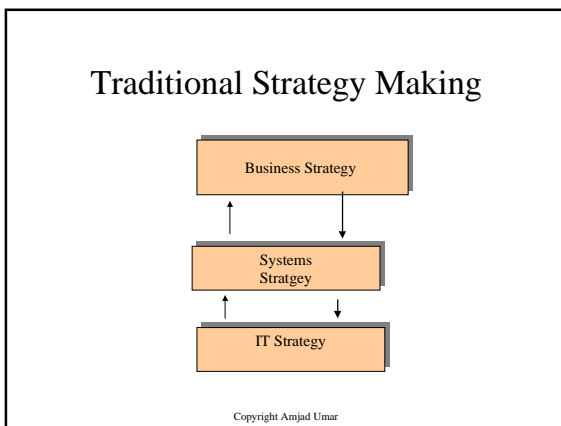
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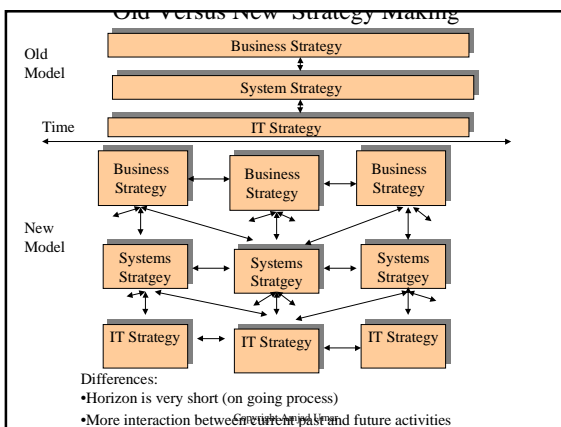
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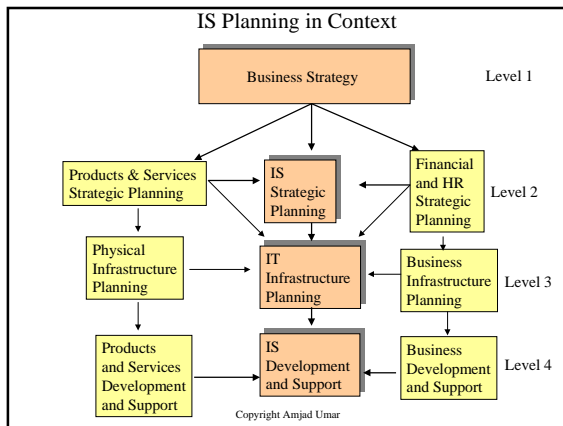
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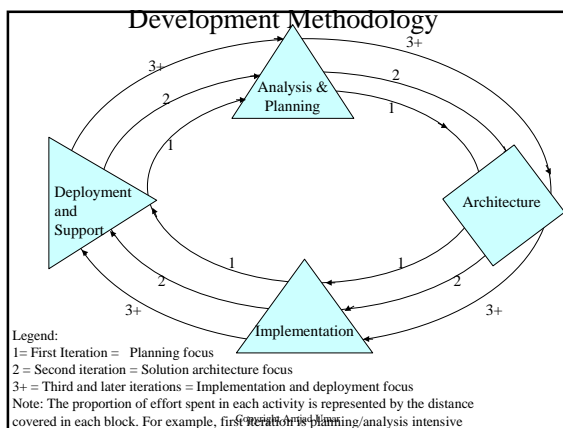
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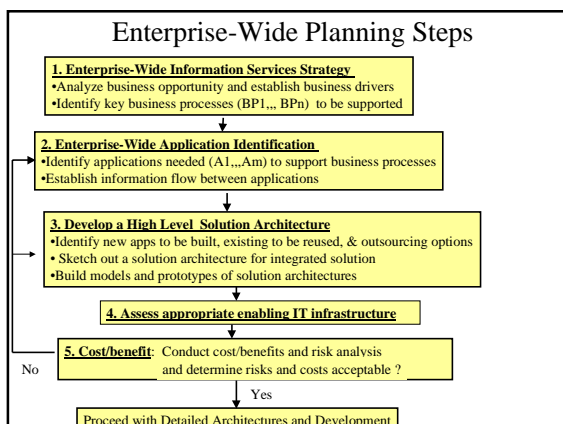
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### Procedure for Organizational Structure Design

1. Identify the problems that need to be addressed (interdependencies, lack of coordination, etc.).
2. Identify the main candidate structures which appear to address the problems identified (should not exceed 4, current structure must be a candidate)
3. List the major requirements to be satisfied by the organization:
  - organizational requirements
  - responsiveness to change
  - integration requirements
  - human needs/requirements
4. Assign importance to the requirements (0 to 5) and choose, if possible, the most important requirements (about 10)
5. Evaluate the candidate structures against the requirements on the scale 0 to 5
6. Repeat steps 1 through 4 if needed
7. Analyze the results and make recommendations

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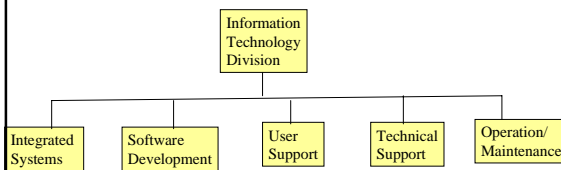
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### Sample Org chart



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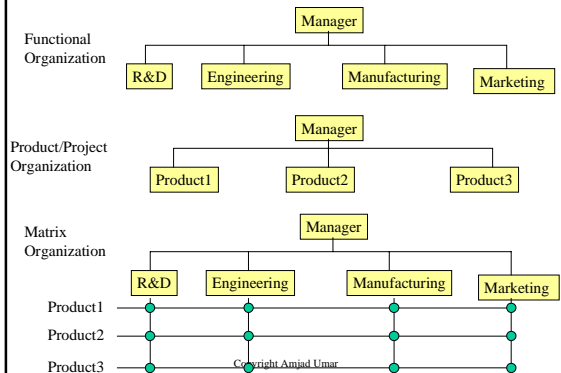
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### Organizational Design



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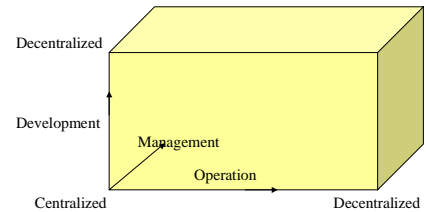
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# Organizing

Centralization versus decentralization Issues



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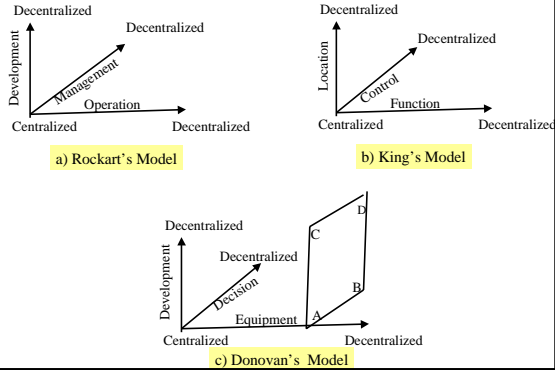
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## Centralization versus decentralization



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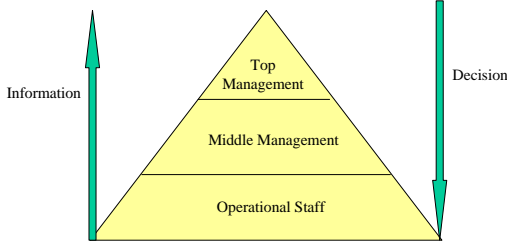
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## Traditional Organizational Model



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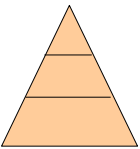
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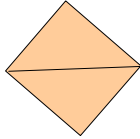
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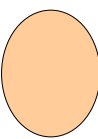
### Evolution of Organizational Structures



a) Traditional



b) Two Levels



c) One Level  
(Knowledge Workers)

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Evaluation Criteria	Structure1	Structure2	Structure3
1. Decision Effectiveness:			
- goal setting ease	3	4	5
- time required to make decision	5	2	1
- progress monitoring ease	5	4	4
- problem diagnosis ease	3	4	4
- openness to innovation	2	4	5
- standards and policy enforcement	2	3	4
- feedback facilitation	2	4	5
- path length reduction	3	2	4
2. Responsiveness to change			
- change in manufacturing process	2	2	2
- change in the market place	1	2	4
- change in organizational focus	1	2	4
3. Technology Utilization (see note 2)			
- computing technology	2	4	3
- communication technology	2	4	3
- software technology	2	4	3
- compatibility	3	4	5
4. Integration Effectiveness			
- coupling (interdepartmental communication)	2	3	4
- binding (intra departmental communication)	4	3	2
5. Human Resource Utilization			
- professional growth	2	3	3
- promotion opportunity	2	3	4
- job security	3	4	4
- employee turnover reduction	2	3	4
- burnout reduction	4	3	2
- productivity improvement	2	3	4

Notes:  
1. Criteria: v. good (5), good (4), so-so (3), bad (2), v. bad (1), unknown(?)

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### Dealing with Skill Shortage

- Outside consultations
- Partnerships
- Training
- Knowledge management
- Use of knowledge-based tools
- Others?

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## Development and Deployment

- Main issue: How to build applications quickly
- Many new platforms becoming available for quick development and deployment
  - Integrated development environments (IDEs)
  - CASE tools
  - Application servers
  - Ecommere platforms
- Discussion point: audience experience/knowledge/“feelings” about the COTs platforms

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## Monitoring and Control

- Five key areas (FCAPS):
  - Fault management
  - Capacity management
  - Accounting(access) management
  - Performance management
  - Security management
- FCAPS at all layers of a stack (network, middleware, apps)
- Many management platforms (e.g., IBM Tivoli, HP OpenView, CA Unicenter)
- Many started with network management
- Now drifting to applications management
- Discussion point: what are specific issues in EB/EC

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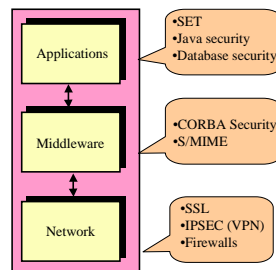
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## Security is a Major Concern

- Security is needed at different levels of the architecture
- Security at each level fulfills different requirements
- Securing a certain layer while keeping lower layers unsecured makes system vulnerable to intrusions from the lower layers



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**Monitoring and Control of IT Assets**  
**-- Summary**

- Monitoring and Control Functions:  
Faults, Security and Performance
- Management Platforms --  
Technologies to Manage  
Technologies
- Customer Contact and Operational  
Support

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