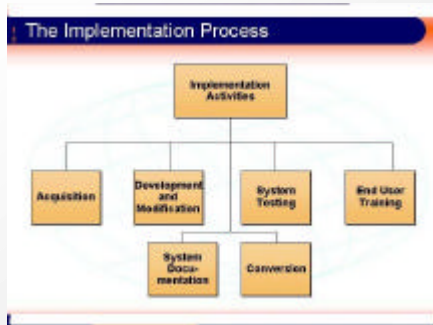


Management at all Levels

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Levels of Management

- ✦ Strategic or Portfolio
 - Organisation Wide
 - Overall Direction
 - Goal
 - ✦ Profitability and Competitiveness of the organisation as a whole
- ✦ Project
 - Limited Scope
 - Additional Constraints
 - Project Direction
 - Goal
 - ✦ Success of project

Two Distinct Parts

- ✦ Managing Systems and Acquisitions
- ✦ Managing Development Projects

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Techniques, Knowledge & Skills

- ✦ Some are needed irrespective of level
- ✦ Some are the same ideas but with different knowledge
- ✦ Higher level decisions set the constraints on lower level management
 - Initial Estimate sets contract values
 - Choice of Development Lifecycle constrained
 - Personnel selection already made

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Portfolio Issues

- ✦ Strategic Planning
- ✦ System Creation Approaches
- ✦ Risk
- ✦ Bidding
- ✦ Financial Recovery Model
- ✦ Corporate wide IS

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Project Issues

- ✗ Project Level Estimation
- ✗ Project Planning
- ✗ Project Level Risk Management
- ✗ Quality Control
- ✗ Security
- ✗ Project Level Budget Control
- ✗ Roll-out/implementation Issues

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Project Problems

- ✗ The end project is not what was originally asked for
- ✗ System/Project changed direction without it being realised.
- ✗ Costs escalated without it being realised, then it was too late to stop it
- ✗ System delivered late, but only know it when it is not possible to add effort
- ✗ Users in the dark over the development and don't know how to make the system work
- ✗ Systems unreliable hence maintenance costs are more than expected

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Projects out of Control Symptoms

- ✗ Direction Unclear
- ✗ Over or under worked staff
- ✗ People and things not where and when needed
- ✗ Rework & Wasted effort
- ✗ Last tasks are rushed
- ✗ Poor Quality
- ✗ Projects late & overspent
- ✗ Small problems have a big impact

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Why do these occur

- ✗ Lack of user involvement
- ✗ Lack of communication
- ✗ Lack of co-ordination
- ✗ Inadequate planning
 - Estimation
 - Planning
- ✗ Lack of progress control
- ✗ Lack of quality control
- ✗ Insufficient and inappropriate measurables

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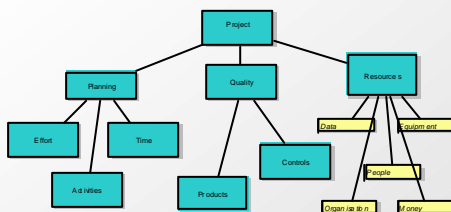
Strategic Planning

- ✗ The forces which influence the success of the company
- ✗ Creating organisational strategies to meet these forces
- ✗ Mapping to operational activities to support the strategies

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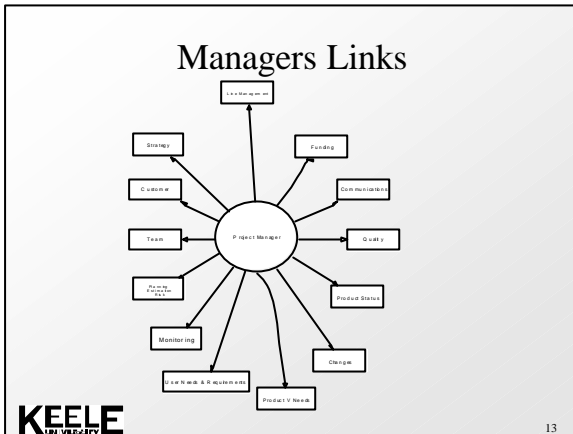
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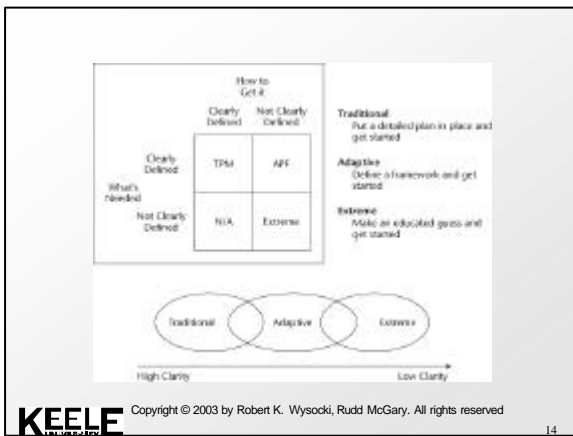
Project Elements



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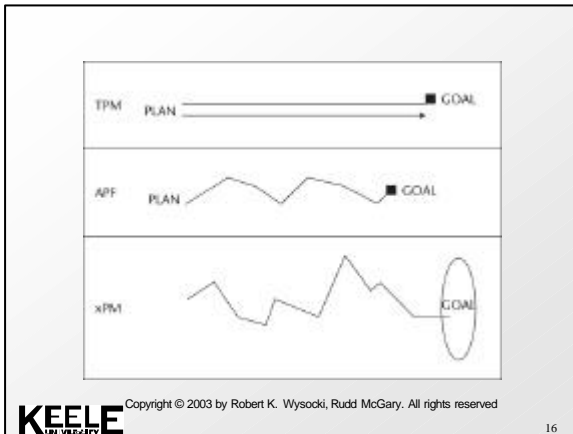




Traditional Example

- ✦ A project to install an intranet system in a field office is traditional, it has been done several times before and the steps to complete it are documented
- ✦ Kennedy's challenge to put a man on the moon by the end of the 60's, goal is clear, ideas exist, but the route is not known.
- ✦ Typical of the .com era, build a web site for B2B or B2C

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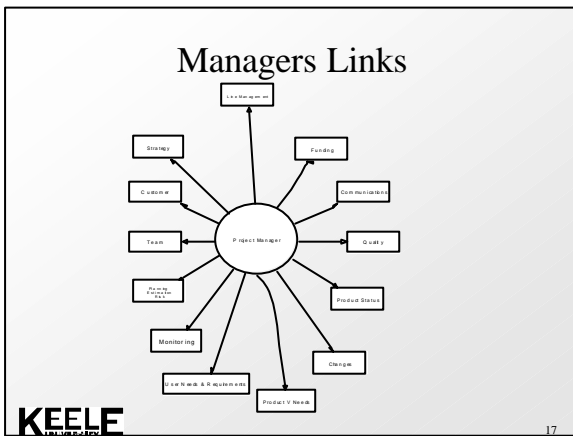


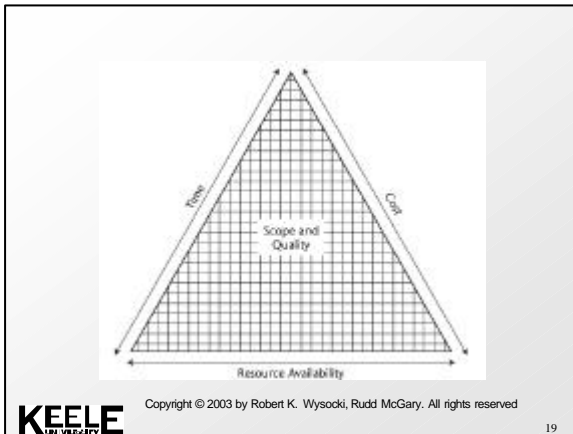
Table 1.1 Example Project Classes and Definitions

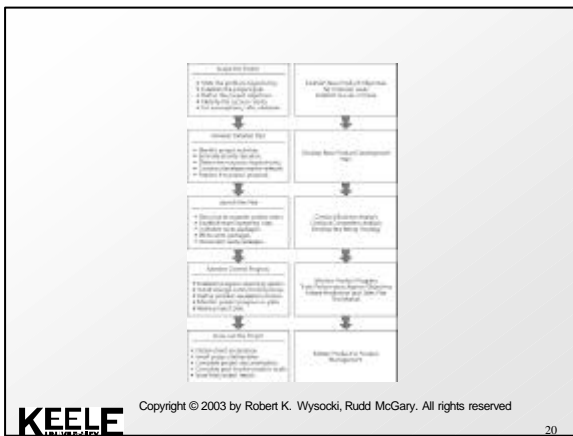
CLASS	DURATION	RISK	COMPLEXITY	TECHNOLOGY	LIKELIHOOD OF PROBLEMS
Type A	> 18 months	High	High	Breakthrough	Certain
Type B	9-18 months	Medium	Medium	Current	Likely
Type C	3-9 months	Low	Low	Best of breed	Some
Type D	< 3 months	Very low	Very low	Practical	None

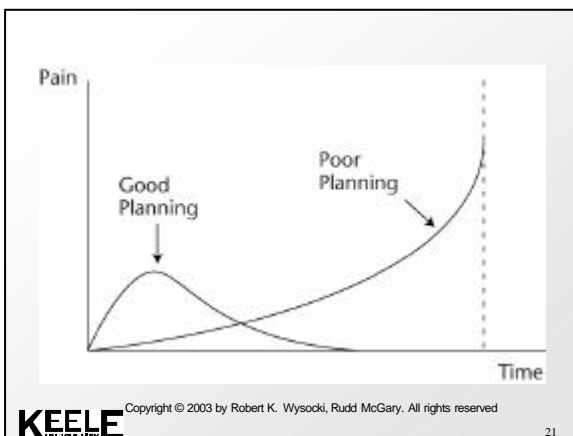
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System Creation Approaches

- ✚ Bespoke
 - Create in house
 - Which lifecycle
 - How to select between them
- ✚ Acquisition
 - Selection
 - How to use Feature Analysis
- ✚ Composition
 - COTS
 - CBSE

Risk

- ✚ Risk needs to function across many projects to allow probability to function
- ✚ We can't have all projects equally risky
- ✚ Looking across projects changes our perceptions
- ✚ Contingency Considerations

Bidding

- ✚ Internal/External
- ✚ Two Questions
 - How Much
 - What is chance of success
- ✚ How Much
 - Estimation, but influenced by pricing, strategy, price to win
- ✚ Chance of Success
 - Influenced by Cost, Competitors, Customer

Financial Recovery

- ✗ System Production costs
- ✗ How does the organisation recover this outlay
- ✗ Various approaches which differ dependent on the type of project
- ✗ Selected approach influences the project behaviour

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Corporate Wide Information Systems

- ✗ An organisation needs systems to support the organisational structure and strategy.
 - Roles need services
 - How do systems relate to each other?
 - How does this influence roll out?

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Project Level Estimation

- ✗ More Knowledge
- ✗ Technical Basis
- ✗ Cost to do work
- ✗ Constrained by previous decisions
- ✗ Influenced by development approach
- ✗ Techniques
 - Which one when
 - Relationship with Risk

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Risk

- ⚡ What are the risks at the project level
- ⚡ How to rank them
- ⚡ How to plan for them
- ⚡ How to monitor them

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Planning

- ⚡ Types of Plan
- ⚡ Methods for project management plan
 - Which method When
- ⚡ What to include

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Quality Control

- ⚡ All people make mistakes
- ⚡ System Development Methods are meant to help
- ⚡ Still need fault removal
 - Use Quality Control techniques
 - What techniques
 - When

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Security

- ✗ IS management is responsible for quality, performance and security
- ✗ errors do occur in systems
- ✗ computers are used for fraud
- ✗ systems are damaged accidentally/ maliciously
- ✗ errors are harder to detect than in manual systems, fewer people involved and much automation not checked routinely
- ✗ effective controls needed for IS security, to provide quality assurance

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Project Control

- ✗ Cost tracking
- ✗ Who holds contingency budget
- ✗ What controls on spending it
- ✗ Cost to complete
- ✗ Problem areas

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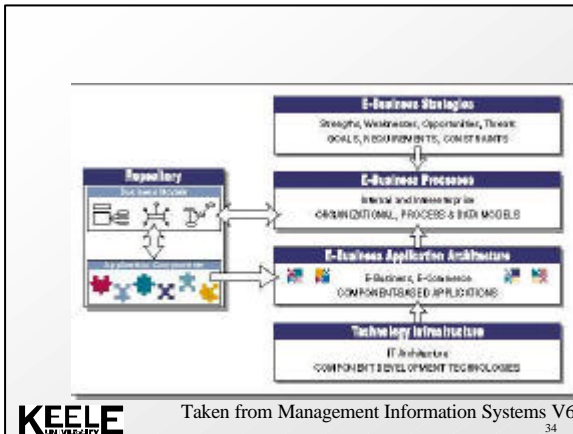
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Roll-out Issues

- ✗ When the system is completed the project is not
 - Needs to be put into practice
 - Training
 - Changeover from existing systems
 - Overcoming opposition

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Taken from Management Information Systems V6

Summary

- ✦ Management is at many levels in Information Technology
- ✦ Professionals need to be aware of issues at all levels as they influence the results achieved just as much as many development methods
- ✦ They are two levels Portfolio & Project
- ✦ They are not however independent of each other
