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Introduction to IT project management

Agenda



Lif	ecycle models	
	Sequencial • Waterfall	
	Evolutionary	
	• iterative • agile • spiral	
	Component	

Software Development Life Cycle Project Life Cycle



The project lifecycle



Phase One: Initiation

Stakeholders identification

Timeframe definition

Rationale for the project

Core project deliverables, assumptions, and potential risks identification

Phase Two: Planning



Planning document

Project schedule

Communication plan

Phase Three: Delivery

Execution Monitoring

Control

Phase Four: Closeout



The Approved Project Closeout Document constitutes the final deliverable for the Closeout Phase the project as a whole

Project Lifecycle



Project Lifecycle



Monitor the performance of the project

Lifecycle models

Sequencial

• Waterfall

Evolutionary

- iterative
- agile
- spiral

Component

Waterfall

System design

• Preparation of a detailed system design

Implementation

• Coding and module testing

• System and acceptance tests

Usage and Maintenance

• Bug fixes and possible development

Definition of requirements

 Definition of goals and specific requirements

Waterfall

Cons	Pros
Rigorous definition of the sequence of phases	Ease of management
The cost of mistakes is high	Predictability
Little contact with the client	Facilitates planning, scheduling and monitoring of the project

Evolutionary model







Prototyping

Cons

Additional cost of producing a prototype

Pros

the possibility of a quick demonstration of the working version of the system

the possibility of training before a full system is built

Potential disagreement with the customer who hopes the prototype is a working system

reducing the impact of possible errors in the early stages of the life cycle on the project

Iterative and incremental models



Spiral model Analysis Construction Testing

Planning



Spiral model

Cons	Pros
The model is never fully	Ready components can be used
developed	The evaluation phase of each cycle helps to avoid or detect errors early
Requires experience and	It is possible to develop the software all the time
economic)	Frequent quality checks in subsequent cycles of the spiral
High cost of removing	A focus on error detection and control, not prevention
(iterations)	Management orientation, time and budget.



Component model

