

# Managing a Successful Computing Project

Introduction to Project Planning and Management

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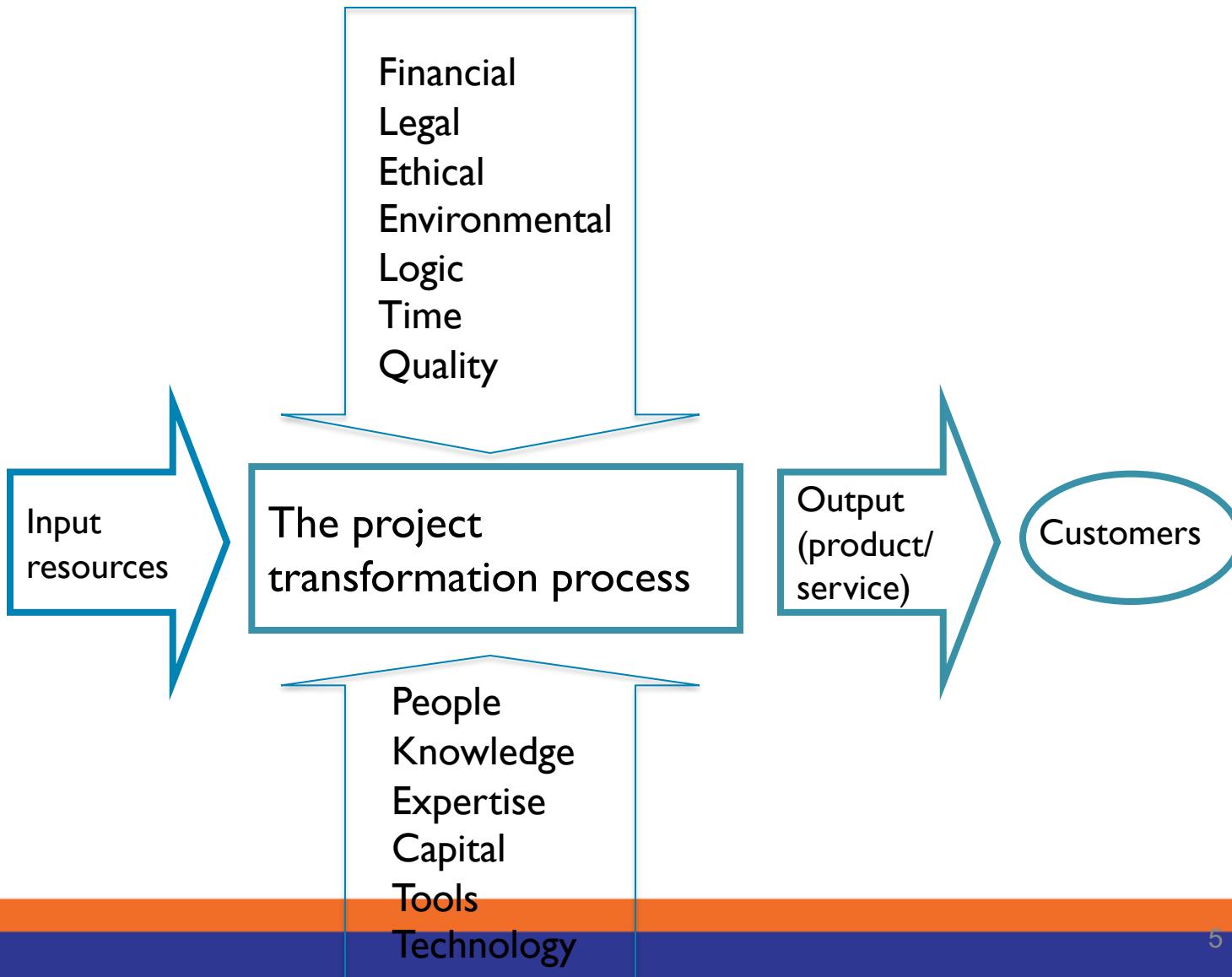


# PROJECT

# What is a project?

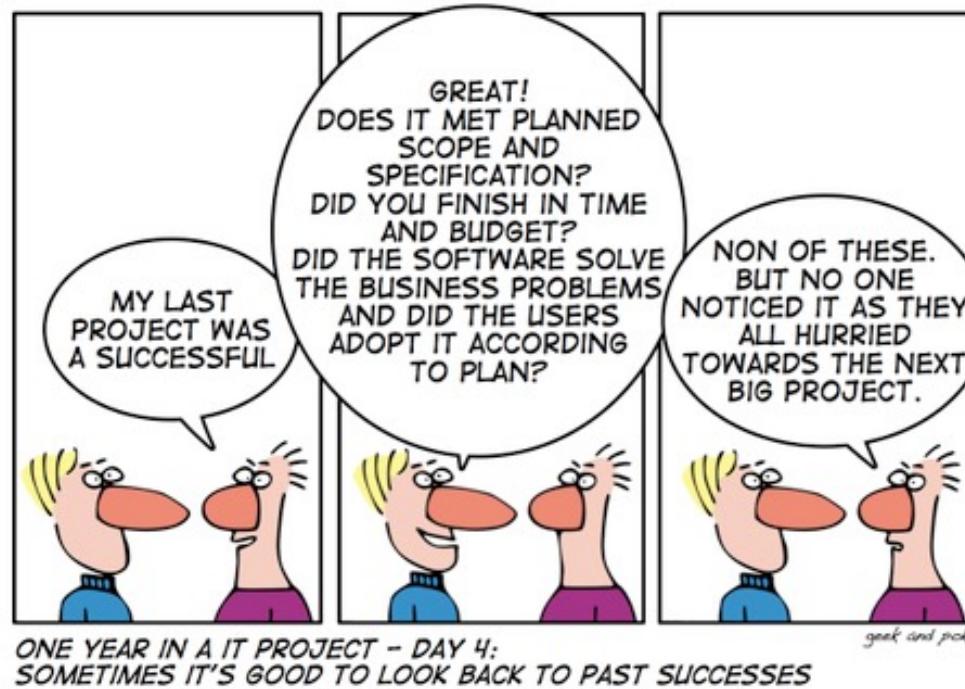
- Unique set of coordinated **activities**, with a definite **starting** and **finishing** points, **undertaken** by an individual or an organization to meet specific **objectives** within defined **schedule**, **cost** and **performance** parameters  
(British Standard 60971, 2000:2)

# What is a project?



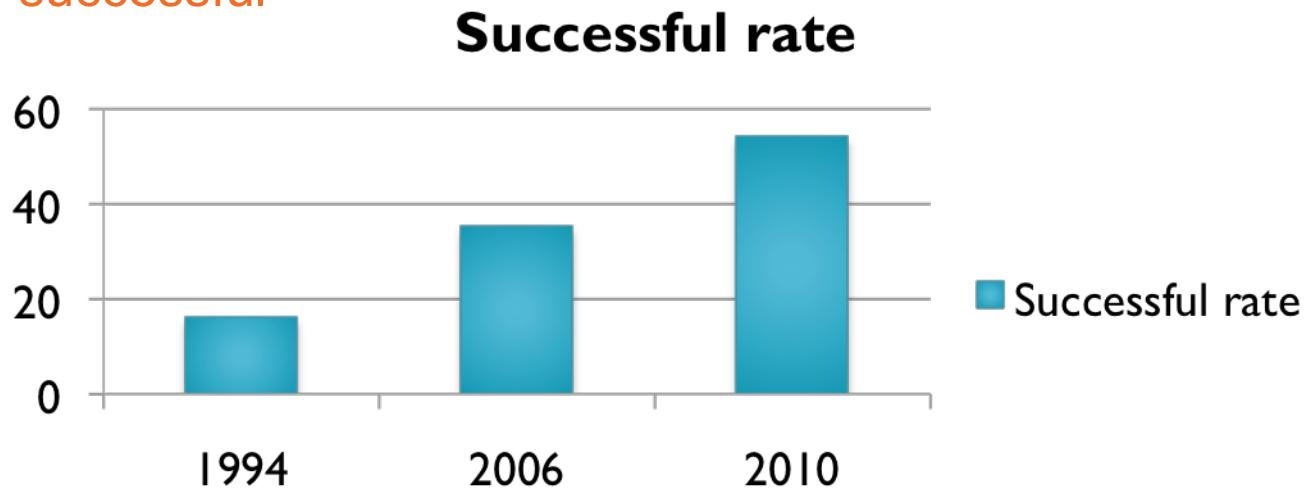
# What is a successful project?

- Complete on time or earlier.
- Do not be surpassed the budget.
- Meet the specifications to the contentment of the customer



# Project's successful rate

- 1994: 16% of IT projects were successful, 31% cancelled before completion, and 53% completed badly (CHAOS study)
- 2006: 35% successful, 19% failed, and 46% weak
- 2010: 47% - 61% successful



<http://drdobbs.com/architecture-and-design/226500046>

# Reasons for failure

**Dilbert**

by Scott Adams



# Project successful factors

- Stakeholder involvement
- Clear statement of requirements
- Proper planning
- Realistic expectations
- Project milestones
- Competent staff
- Hard working and focused staff
- ...

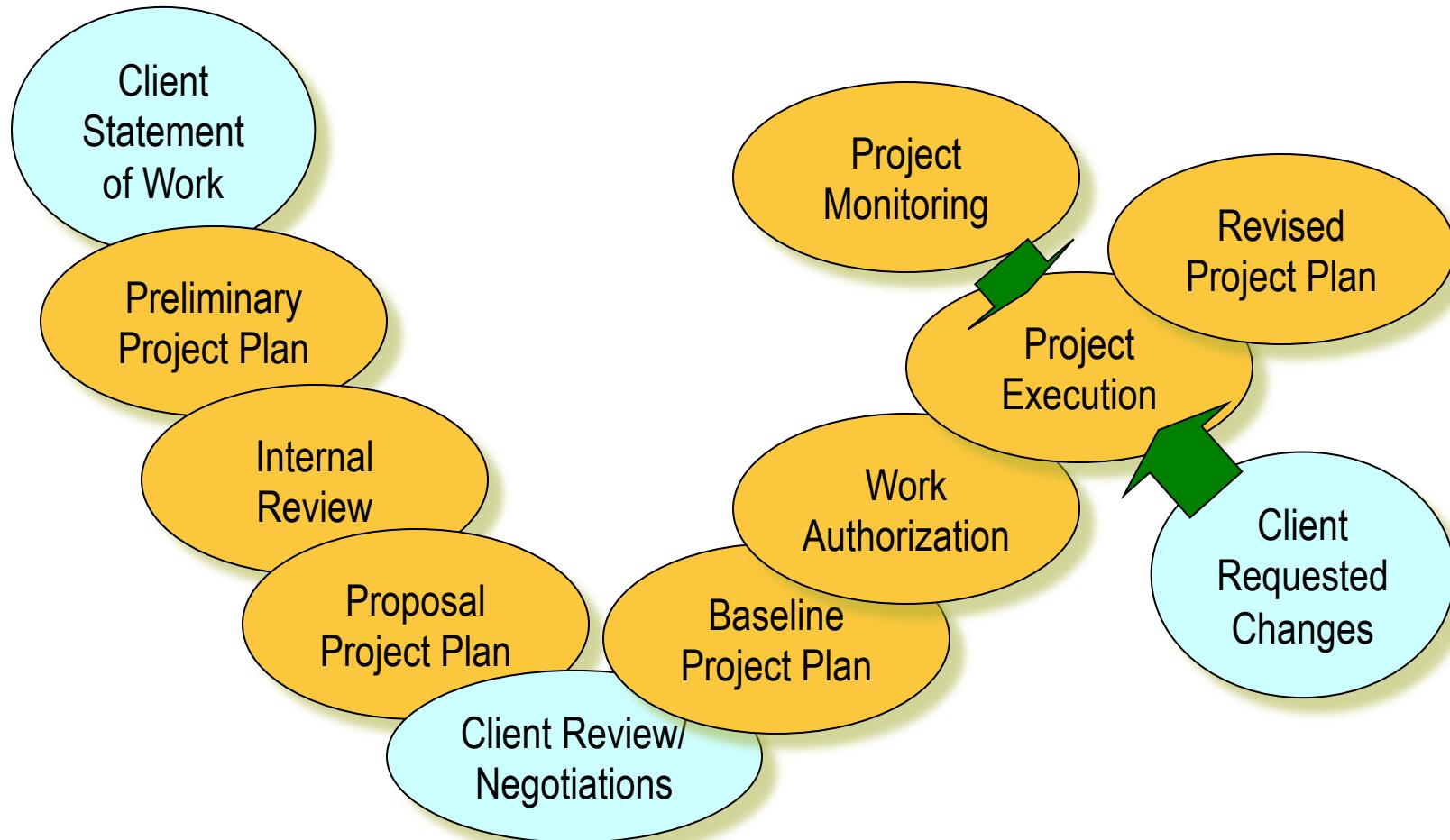
# Project attributes

- Goal
- Time
- Ownership
- Resources
- Roles
- Tasks
- Risks

# Project life cycle

- The project life cycle defines the life of a project in phases
- Initiation
  - Defines the project objectives and grants authority to the project manager.
- Planning
  - Refines the project objectives and scope and plans the steps necessary to meet the project's objectives.
- Executing
  - Puts the project plan into motion
  - Measures the performance of the executing activities and compares the results with the project plan.
- Closing
  - Documents the formal acceptance of the project's product and brings all aspects of the project to a close

# Project life cycle





# PROJECT MANAGEMENT



How the customer explained it



How the Project Leader  
understood it



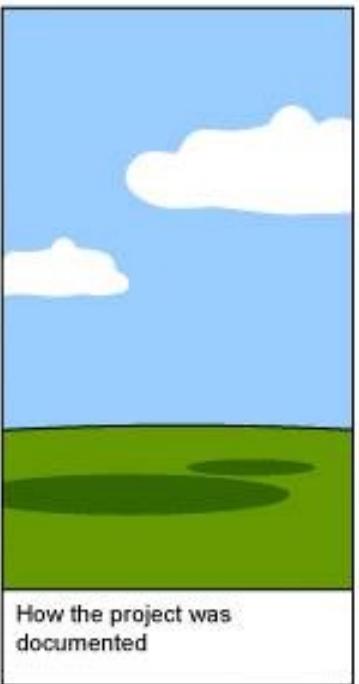
How the Analyst designed it



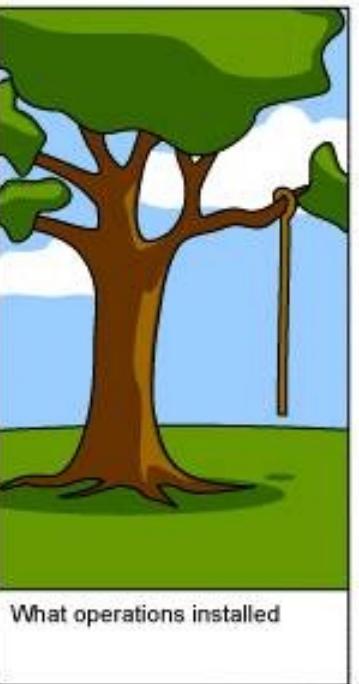
How the Programmer wrote it



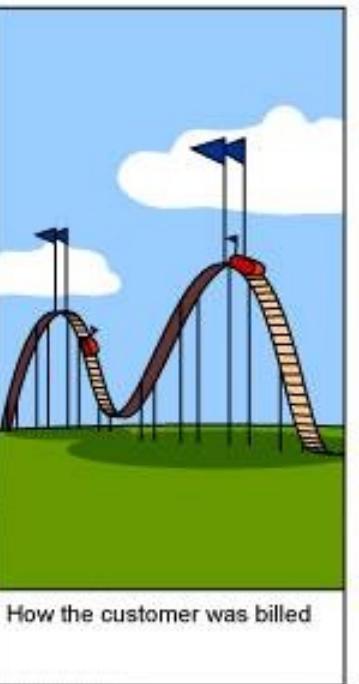
How the Business Consultant  
described it



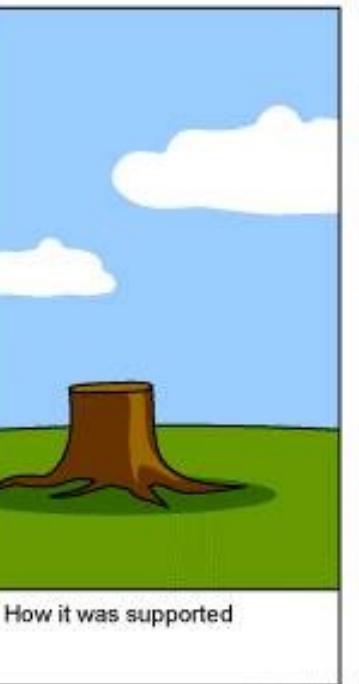
How the project was  
documented



What operations installed



How the customer was billed



How it was supported



What the customer really  
needed

# What is Project Management?

- A **systemized, phased** approach to **defining, organizing, planning, monitoring, and controlling** projects
- Project management was developed to save time / money by properly planning a project and considering all relevant factors which may affect its outcome

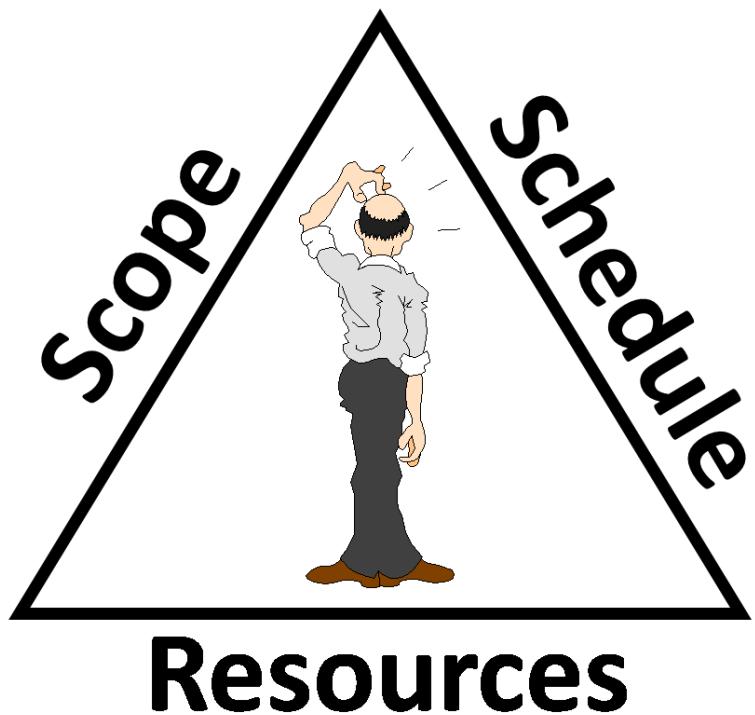
# What does PM help in a project?

- Plan tasks in project
- Avoid problems
- Reduce risks
- Organize project process and timeline
- Improve stakeholder - staff communication
- Improve management of stakeholders' expectations

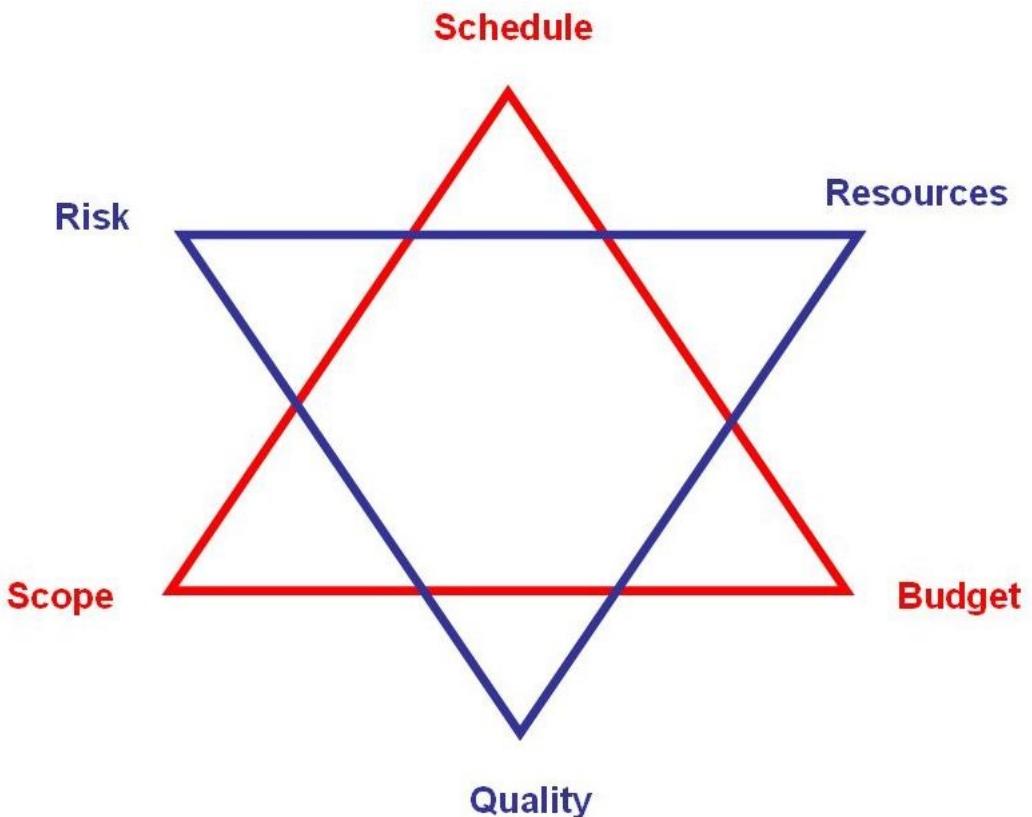
# Benefits of Project Management

- You will have goal clarity and measurement
- Your resources will be coordinated
- Your risks will be identified and managed
- You will increase the possibilities of time savings
- You will increase the possibilities of cost savings
- You will increase the possibilities of achieving the agreed outcome
- You will increase the possibilities to deliver projects successfully

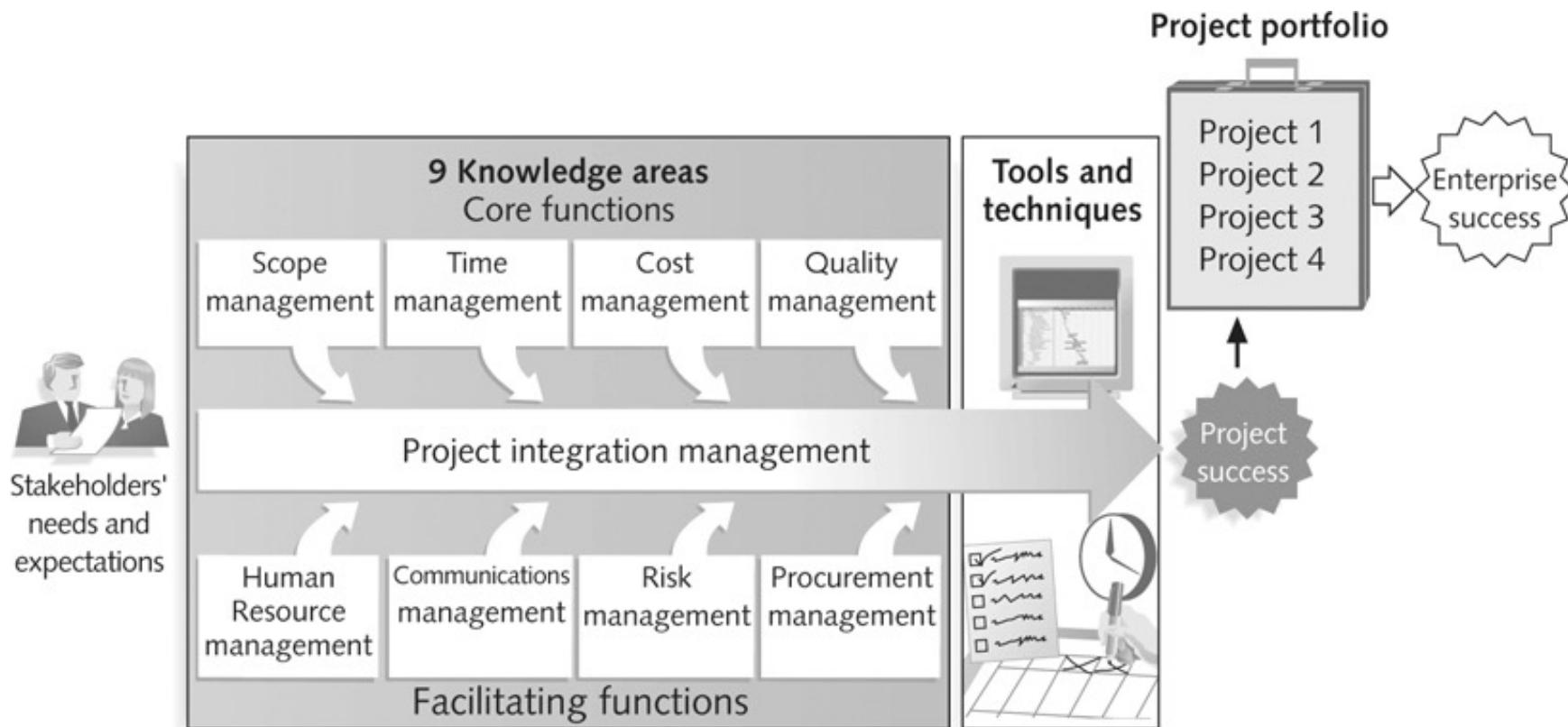
# Triple constraint

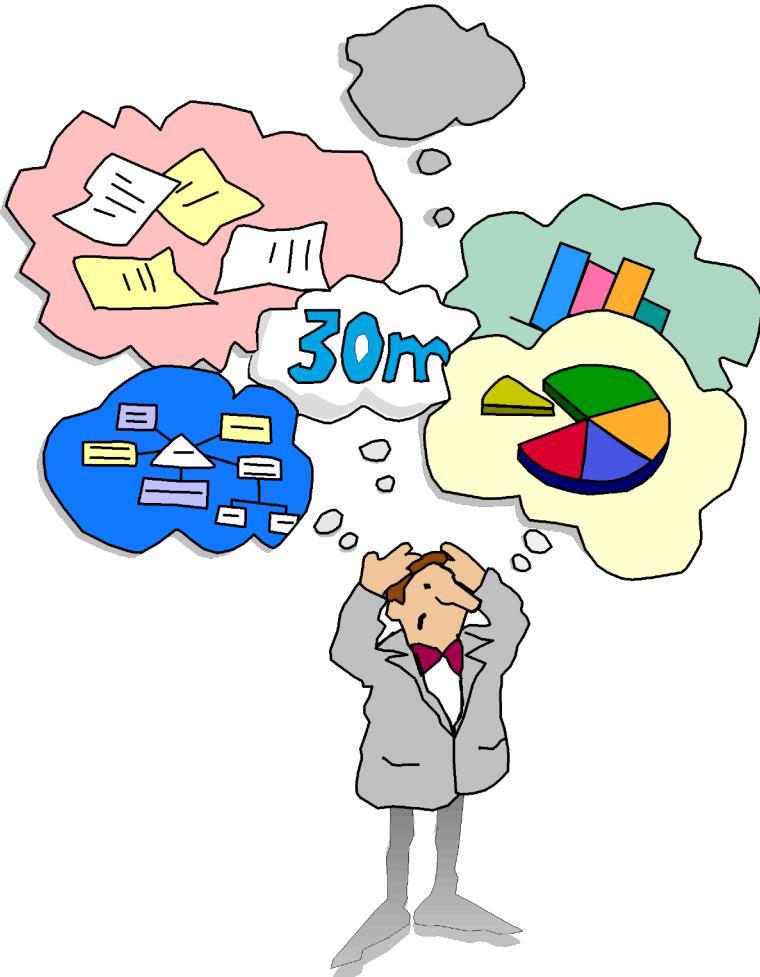


# Triple constraint



# Project Management Framework





# Project manager

- Planning
- Communication
- Coordination
- Integration
- Execution
- Tracking
- Budgeting
- Control
- Reporting

# Role of a project manager

- The role of a project manager is affected by the one-shot nature of the project
- The role of a project manager is difficult when team members are still linked to their permanent work areas
  - Members may be assigned to several projects simultaneously
- Managers must rely on their communication skills and powers of persuasion

# Project manager attributes

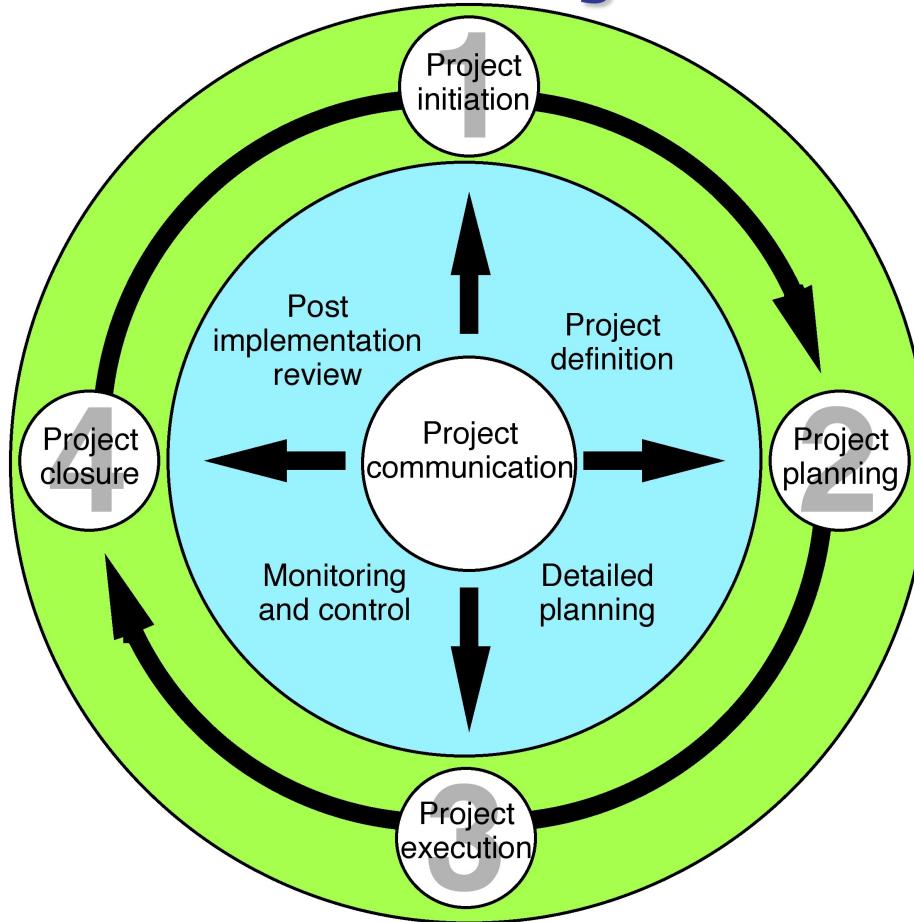
- Leader & manager
- Facilitator, coordinator
- Communicator
- Credibility: Technical/  
Administrative
- Work under pressure
- Goal-oriented
- Innovator
- Flexible
- Knowledgeable about the  
organization
- Sense
- Confront
- Can deal with stress, chaos,  
ambiguity
- Planning and follow-through



# Project manager duties

- Reports to senior management
- Communicates with users
- Plans and schedules
- Obtains and allocates resources
- Controls risks
- Manages people
- Coordinates
- Implements quality assurance
- Controls the budget
- Delivers results

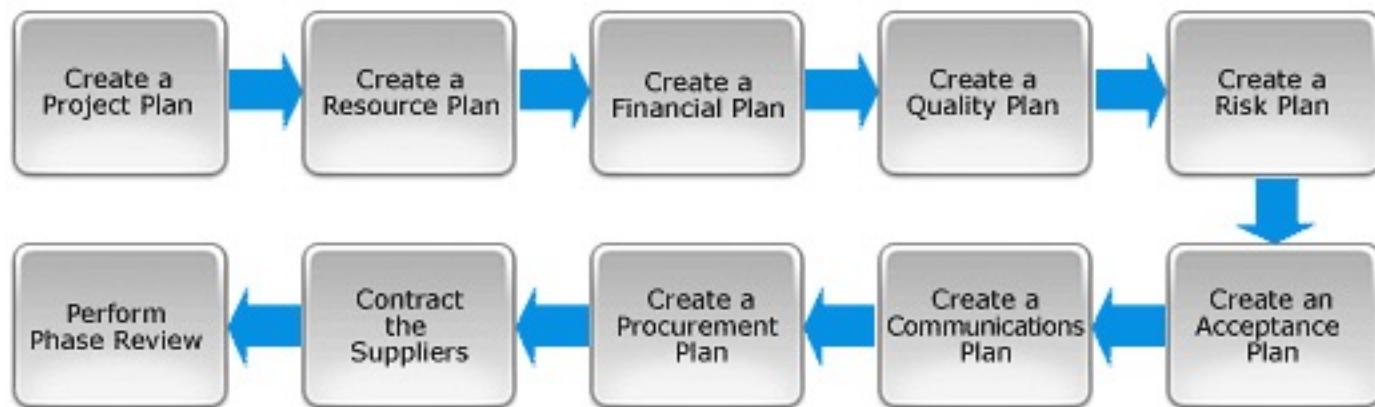
# Project Managements and Project Life Cycle



Managing a project = Managing stages of project life cycle

# Project planning

- Project planning involves creating a suite of planning documents to help guide the team throughout the project delivery.



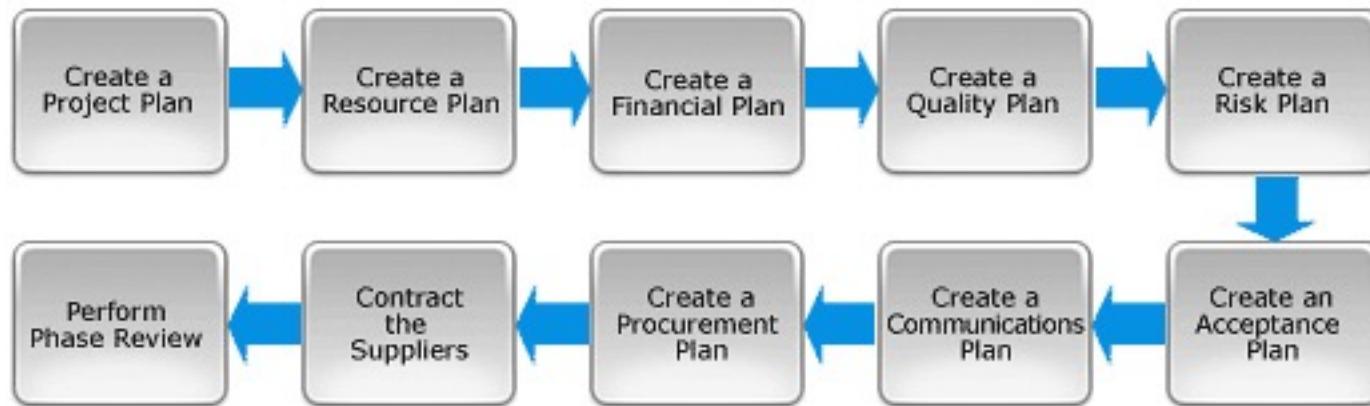
# Project planning

- A **Project Plan** sets out the phases, activities and tasks needed to deliver a project. The timeframes required to deliver the project, along with the resources and milestones are also shown in the Project Plan.



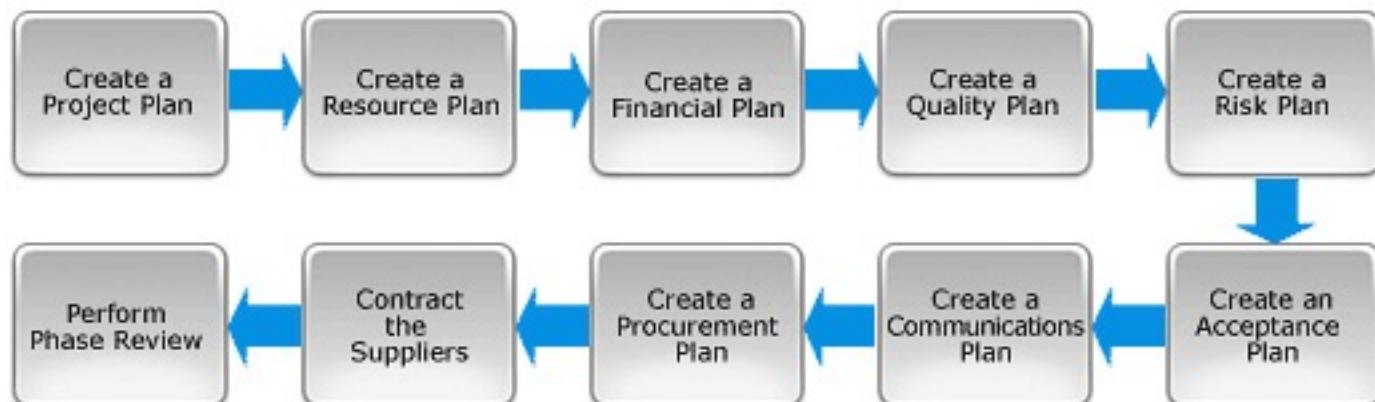
# Project planning

- A **Resource Plan** summarizes the level of resources needed to complete a project. A properly documented Resource Plan will specify the exact quantities of labor, equipment and materials needed to complete your project.



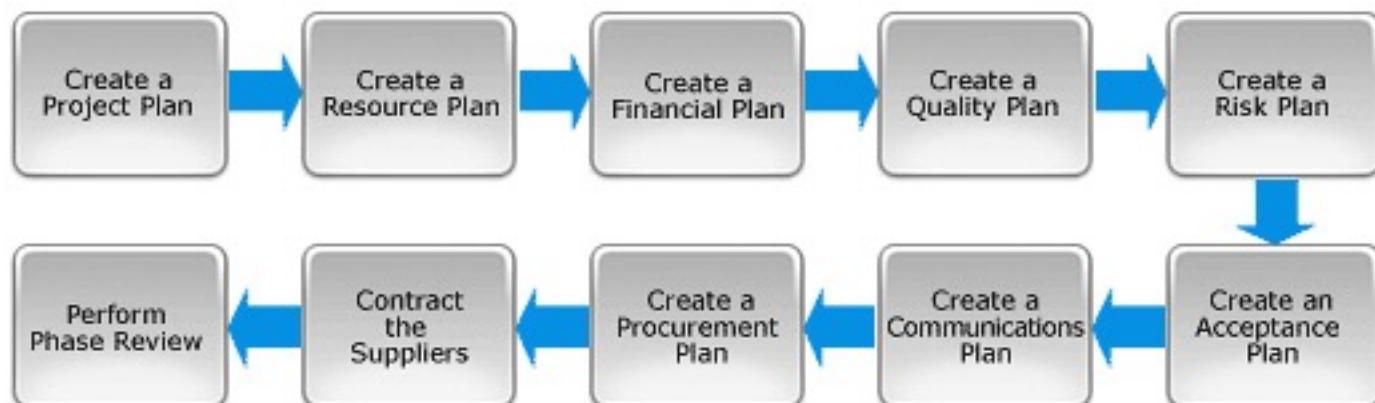
# Project planning

- A **Financial Plan** identifies the Project Finance needed to meet specific objectives. The Financial Plan defines all of the various types of expenses that a project will incur along with an estimation of the value of each expense.
- The Financial Plan also summarizes the total expense to be incurred across the project and this total expense becomes the **project budget**.



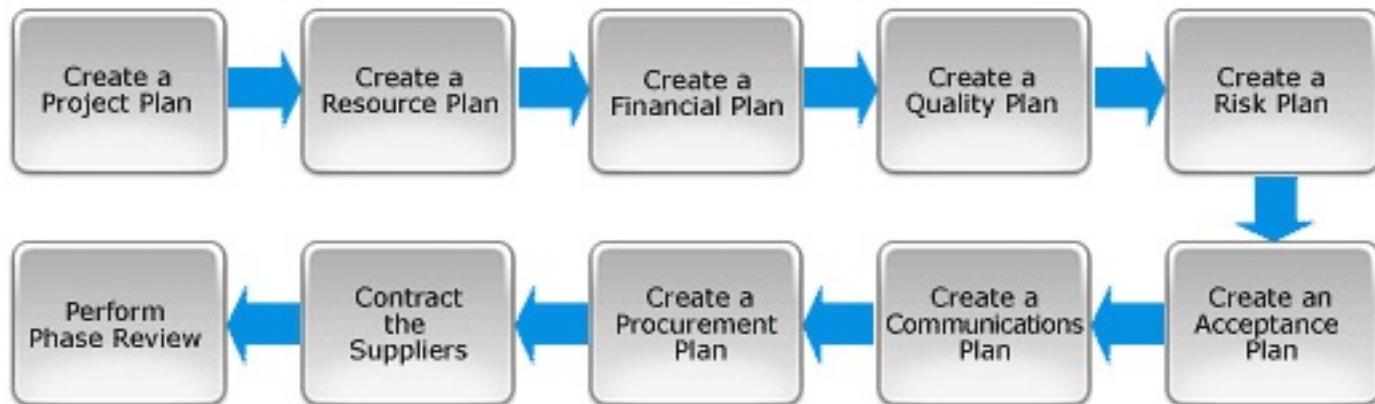
# Project planning

- Use **Quality Plan** to set quality targets by:
  - Identifying the customers requirements
  - Listing the project deliverables to be produced
  - Setting quality criteria for these deliverables
  - Defining quality standards for the deliverables
  - Gaining your customers agreement with the targets set



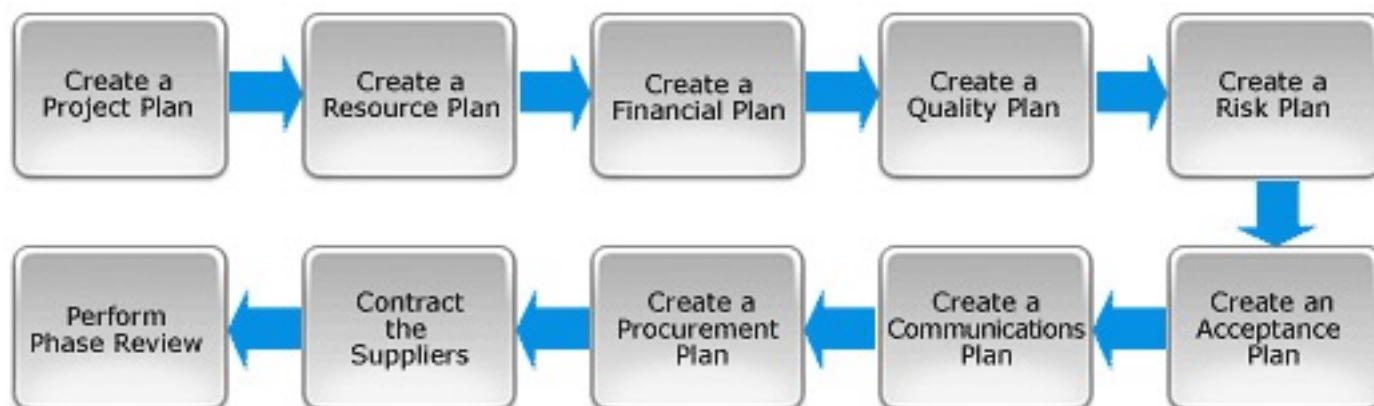
# Project planning

- **Risk Planning** will help to:
  - Identify risks within project
  - Categorize and prioritize each risk
  - Determine the likelihood of the risks occurring
  - Identify the impact on the project if risk does occur



# Project planning

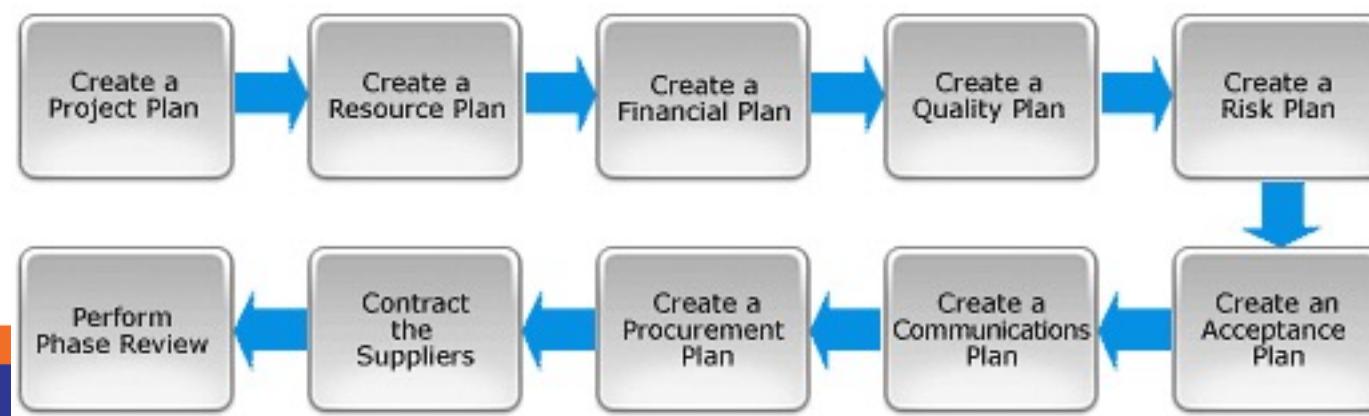
- An **Acceptance Plan** is a schedule of tasks that are required to gain the customers acceptance that what you have produced is satisfactory.



# Project planning

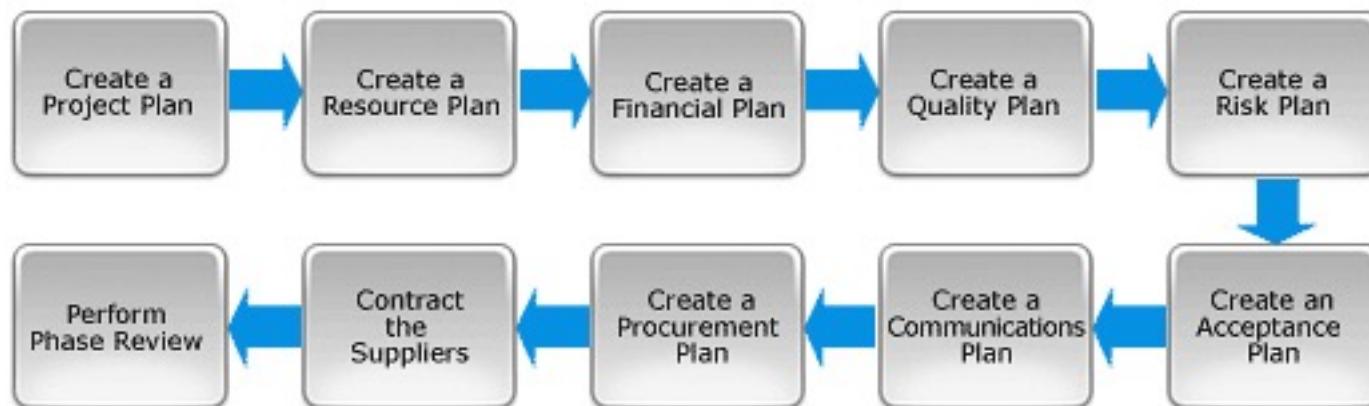
- **Communication Plan**

- Identify the required communications events
- Determine the method and frequency of each event
- Allocate resource to communications events
- Build a communication event schedule



# Project planning

- A **Procurement Plan** defines the products and services that you will obtain from external suppliers.
  - Define your procurement requirements
  - Identify all of the items you need to procure



# References

- <http://www.method123.com/project-lifecycle.php>
- <http://www.mpmm.com/project-management-methodology.php>