# 1. Introduction

- **Statement**

- "The ultimate leader is one who is willing to develop people to the point that they surpass him or her in knowledge and ability." - Fred A. Manske, Jr 2

- **Project**

- Management Institute of USA defines project as: "a temporary endeavor to create a unique product or service"

- According to Cleland and King, a project is "a combination of human and non human resources pulled together in a temporary organization to achieve a specified purpose"

- According to Harold Kerzner, "a project is any series of activities and tasks that have a specific objective to be completed within certain specifications, have defined start and end dates, have funding limits and consume resources"

- Dr. Govinda Ram Agrawal in his book; Project Management in Nepal described project as, "a set of one time only activities designed to attain specific objectives within the constraints of time, cost and quality performance in a dynamic environment, through the planning use and control of a variety of resources to create a unique product or service within a temporary life span in a dynamic environment"

- Harvey Maylor defined project as "any non repetitive, low volume, high variety activity which is a temporary endeavor undertaken to create a unique product or service with a start and a finish, done by any individual or an organization to meet the specific performance objective within defined schedule, cost and performance parameters"

- The engineering project is a particular type of technological system, embedded in the context of technological systems in general.

- Engineering projects are, in many countries, specifically defined by legislation, which requires that such projects should be carried out by registered engineers and/or registered engineering companies. That is, companies with license to carry out such works as design and construction of buildings, power plants, industrial facilities, installation and erection of electrical grid networks, transportation infrastructure, gadgets, robots, software, and the like.

- According to the ..\Desktop\ICTPM\PMBOK.pdf Guide, "A project is a temporary endeavor undertaken to create a unique product, service or result."

- Project management is the process that helps projects achieve their objectives. These processes include initiating the project, developing the plan to execute the project, executing the project according to the approved plan, controlling the project activities throughout its lifetime, and finally handing over the output of the project to the client, and closing the project.

- Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.
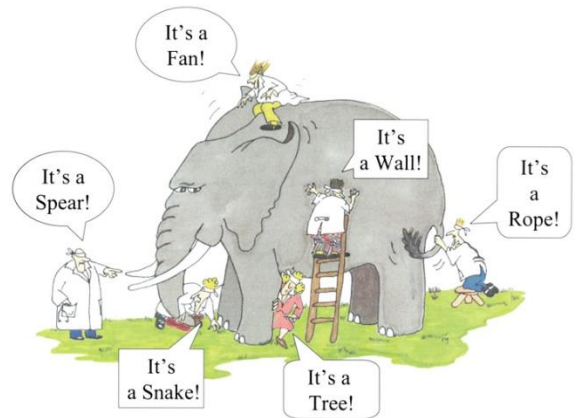
- **Program**

- A program is a group of related or similar projects managed in a coordinated way to get the benefits and control not available from managing them individually. This means that in a program you will have multiple projects which are either similar or related to each other.

- Program management is defined as the centralized coordinated management of a program to achieve its strategic objectives. In program management, you only manage the interrelated or interdependent projects as a group to achieve the desired result.

- The objective of program management is to optimize the utilization of resources among projects and reduce the friction or constraints so as to increase the organization's performance.

- https://pmstudycircle.com/2012/03/project-management-vs-program-management-vs-portfolio-management/

- The following are a few benefits of program management:

- Less conflict among projects

- Optimal utilization of resources

- Resource constraints are minimized

- Better communication and coordination among projects

- Improves organization's performance

- **Portfolio**

- Portfolio refers to a group of related or non-related projects or programs. A portfolio can consist of multiple programs or multiple projects without having a single program. A portfolio can have multiple non-similar projects without having a program, because two or more non-related projects will be managed under portfolio management. Conversely, in program management only related projects are managed.

- Portfolio Management: Portfolio management has a bigger scope and objective than program management. In portfolio management, there is a centralized management whose job is to identify, prioritize, and authorize the projects or programs. This centralized management controls and manages the projects or programs to achieve the organization's strategic business objectives.

- Please note that, although portfolio management sets the priority of the projects or programs in a group, it does not oversee any individual project or program.

- <u>The following are a few benefits of portfolio management:</u>
- Optimal allocation and utilization of resources among projects or programs
- Provide constant support to projects or programs
- Fewer conflicts and better communication among projects or programs
- Better coordination among projects or programs

- **Organizational/Corporate Management**
- Corporate management is accountable to its shareholders/minister for delivering the products/services it was established to provide.
- Corporate management is therefore responsible for determining the structure of its businesses/portfolios, and for setting the strategic direction for the whole organization, through developing the organizational strategic plan. It is also responsible for developing the management structure to ensure good governance of the organization, through ensuring the generic levels of organizational management, as outlined above, are provided for. It must also ensure that the organization both provides its products and services, and has an integrated means of improving them.
- Corporate management occurs on a longer time horizon than its businesses or portfolios that achieve its corporate objectives.
- Source: McGrath, SK (2007). Integrating Project, Program, Portfolio, Asset and Corporate management. In Proceedings of the PMOz Conference, Surfers Paradise, Australia, 2007.
- **IT Project**
- IT Projects Success & Failure
  - Successful Projects : 12% in 1994, 46% in 2001 & 36% in 2004
  - Failed Projects: 37% in 1994, 51% in 2001 & 13% in 2004
- Nature of Failed Projects
  - Complex & Technology Driven
  - Ambiguous and Have Poor Change Management
  - Lack of Experts Involvement
- Nature of Successful Projects
  - Small Scale, Well defined Objectives, Modular
  - Better Infrastructure and Management Support, Better Tools, Methodology
  - Proper Testing and QA

- **Challenges in IT Projects**
- Communication; Staff Turnover
- Information Security and Privacy
- Visibility; Political & Cultural Risks
- Environmental & Infrastructural Risks
- Connectivity Problems
- Brain Drain & Loss of Institutional Knowledge
- Regulatory Requirements

Why do projects fail?
- What the user wanted -
- What the budget allowed for -
- What the timescale allowed for -
- What the technician designed -
- What the user finally got -

- **Success and Failure of IT Projects: (A Study in Saudi Arabia)**
- **Reasons For IT Projects' Failure And The Most Important Reason @52.43%**
- Lack of a clear project goal and value
- Not having clear, complete and stable requirements
- Lack of project manager competency and leadership
- Poor planning (unrealistic schedules, users are not identified, etc)
- People issues (lack of communication, conflicts, etc)
- Alfaadel, F., Alawairdhi, M., & Al-Zyoud, M. (2012, April). Success and failure of IT projects: a study in Saudi Arabia. In *Proceedings of the 11th WSEAS international conference on Applied Computer and Applied Computational Science* (pp. 77-82). World Scientific and Engineering Academy and Society (WSEAS).
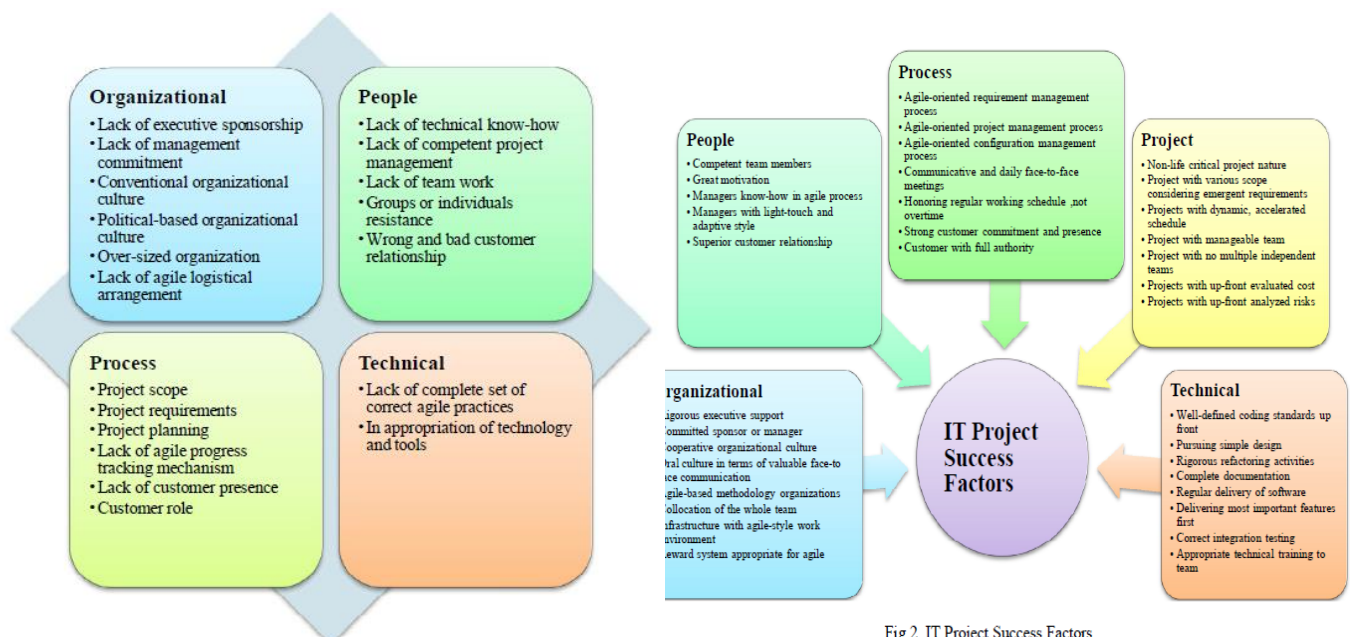
Organizational
- Lack of executive sponsorship
- Lack of management commitment
- Conventional organizational culture
- Political-based organizational culture
- Over-sized organization
- Lack of agile logistical arrangement

People
- Lack of technical know-how
- Lack of competent project management
- Lack of team work
- Groups or individuals resistance
- Wrong and bad customer relationship

Process
- Project scope
- Project requirements
- Project planning
- Lack of agile progress tracking mechanism
- Lack of customer presence
- Customer role

Technical
- Lack of complete set of correct agile practices
- In appropriation of technology and tools

Fig 1. IT Project Failure Factors

Process
- Agile-oriented requirement management process
- Agile-oriented project management process
- Agile-oriented configuration management process
- Communicative and daily face-to-face meetings
- Honoring regular working schedule ,not overtime
- Strong customer commitment and presence
- Customer with full authority

People
- Competent team members
- Great motivation
- Managers know-how in agile process
- Managers with light-touch and adaptive style
- Superior customer relationship

Project
- Non-life critical project nature
- Project with various scope considering emergent requirements
- Projects with dynamic, accelerated schedule
- Project with manageable team
- Project with no multiple independent teams
- Projects with up-front evaluated cost
- Projects with up-front analyzed risks

Organizational
- Rigorous executive support
- Committed sponsor or manager
- Cooperative organizational culture
- Oral culture in terms of valuable face-to-face communication
- Agile-based methodology organizations
- Collocation of the whole team
- Infrastructure with agile-style work environment
- Reward system appropriate for agile

Technical
- Well-defined coding standards up front
- Pursuing simple design
- Rigorous refactoring activities
- Complete documentation
- Regular delivery of software
- Delivering most important features first
- Correct integration testing
- Appropriate technical training to team

IT Project Success Factors

Fig 2. IT Project Success Factors

Taherdoost, Hamed, and Abolfazl Keshavarzsaleh. "A theoretical review on it project success/failure factors and evaluating the associated risks." *14th International Conference on Telecommunications and Informatics, Sliema, Malta.* 2015.

- **Project Objectives**
- Objectives are the ends towards which the activities of an organization are directed. These are **project delivery.**
- A project has a desired objective. It is result directed. It ceases to exist when object has been achieved.
- A project without objective is unthinkable. Hence, the first step of your project is to define your objectives.
- You need to define your objectives in order to be able to like as:
- Make sure that you have identified your objective/s.
- Focus in the other member of the project team about what the project is about.
- Create team commitment and agreement about the project objectives.
- Ensure that you involved all interested parties in achieving a successful project output.
- SMART Goal and Objectives
- **S**: Specific, clearly defined, not vague.
- **M**: Measurable, so that the project achievement can be measured, compared and controlled.
- **A**: Agree, by all the members of the team. Agreed goals raise the sense and commitment.
- **R**: Realistic considering the given possible resources, experience, knowledge and time available.
- **T:** Time bound, if there is no time to complete the process it will never be completed.
- **Project Characteristics**

1. **Specific Objective:** A project clearly defines objectives, on achievement of which a project succeeds. Objects are the deliverables of a project and the end results. Objectives are predetermined and outputs are measurable.

2. **Temporary (Life Span):** A project cannot continue endlessly. It is a temporary endeavor. It has beginning and end from its birth to death. It passes through various stages i.e. formulation, planning, design, construction, operation and termination.

3. **Non-routine and Non-repetitive:** A project is non routine and non- repetitive in nature.

4. **Constraints:** A project operates within constraints of time, cost and quality.

5. **Uniqueness:** No two projects are exactly similar. There are complex set of activities involved within a project which doesn't go with some other case.

6. **Flexibility:** A project operates in a dynamic environment, so project needs flexibility to provide rapid response to changing environment. Risks and changes are inevitable and project needs to address these issues for which a project needs to be flexible.

7. **Resource Integration:** Every project uses resources such as man, machine, money and minutes. So, integration of these resources is necessary for efficient use of these resources.

8. **Contracting and Subcontracting:** Most projects are contract based. Complexity of a project increases the need of contracting and subcontracting. Contract may be of various types such as, lump-sum contract, unit price contract, negotiated coat plus fixed fee contract and turnkey contract.

- **9. Beneficiaries:** The ultimate users of the project are the project beneficiaries. Each project has certain community of beneficiaries who are directly associated with the project outputs.

- **10. Team Work:** A project normally consists of diversified personnel specialized in their respective area. They work from a various discipline so the coordination among them is called team work. A manager leads the team to accomplish the goal of the project.

- **11. Planning and Control:** each project has an effective planning and control system in order to efficient and effective completion of the project.

- **Project Classification**

- The classifications on the basis of different factors are:

A. Sponsorship of Project: Customer, Organization, Contractor, Government, Donor

B. Nature of Project: Individual, Staff, Special, Complex

C. Orientation of Project: Product, Process

D. Speed of Project: Normal, Crash, Disaster

E. Funding Source of Project: Indigenous and Foreign: Joint Venture, Bilateral, Multilateral

F. Technique of Project: Labor Intensive and Capital Intensive

G. Size of Project: Small, Medium, Major, Mega

H. Objectives: Social Development and Economic Growth

I. Number of Key Purposes: Single Purpose and Multi Purpose

J. Type of Relationship: Independent, Dependent, Mutually Exclusive

K. Nature: Fixed Time, Fixed Budget, Emergency

- **Project Constraints: (tcsq)**

- To analyze or understand the difficulties that may arise in project implementation or execution the project management triangle is used.

- Although there are many such project constraints, these should not be barriers for successful project execution and for the effective decision making.

- There are three main interdependent constraints for every project; **time, cost and scope.** This is also known as *Project Management Triangle*.

- Project Management Triangle:

- The three constraints in a project management triangle are

- time, cost and scope.

- Time:

  - Completion of tasks depends on a number of factors such as the number of people working on the project, experience, skills, etc.

  - Time is a crucial factor which is uncontrollable.

  - Failure to meet the deadlines in a project can create adverse effects.

  - Most often, the main reason for organizations to fail in terms of time is due to lack of resources.

- Cost
  - It's imperative for both the project manager and the organization to have an *estimated cost* when undertaking a project.
  - Budgets will ensure that project is developed or implemented below a certain cost.
  - Sometimes, project managers have to allocate additional resources in order to meet the deadlines with a penalty of additional project costs.

- Scope
  - Scope looks at the outcome of the project undertaken.
  - This consists of a list of deliverables, which need to be addressed by the project team.
  - A successful project manager *will know to manage both the scope of the project and any change in scope which impacts time and cost.*

- Quality
  - It is not a part of the project management triangle, but it is the ultimate objective of every delivery. Hence, the project management triangle represents implies quality.
  - Many project managers are under the notion that *'high quality comes with high cost',* which to some extent is true.
  - By using low quality resources to accomplish project deadlines does not ensure success of the overall project.
  - Like with the scope, quality will also be an important deliverable for the project.

- **Project management**
- Project management is the discipline of **planning**, **organizing**, **controlling** and **managing** every aspect of the project to bring about the successful completion of specific project goals and objectives
- Successful project management can be defined as **having achieved the project objectives** within time and cost at the desired level of performance and technology while utilizing the assigned resources effectively and efficiently.
- According to Harold Kerzner, project management is the **planning**, **organizing**, **directing** and **controlling** of company resources to complete specific goals and objectives.
- Dr. Govinda Ram Agrawal gave the definition of Project management as, the **task of getting the project activities done** on time, within budget, and according to specifications by a project team in a dynamic environment
- **Project management**
- Project management is accomplished through the use of process such as: initiating, planning, executing, controlling and closing
- Project management involves project planning and monitoring and include such items as:
- Project Planning: Definition of work requirements; Definition of quantity of work; Definition of resources needed
- Project Monitoring: Tracking progress; Comparing actual to predicted; Analyzing impact; Making adjustments

- Advantages of project management:

- The main advantage of project management is that is helps to manage the projects effectively, enabling to resolve problems more quickly.

- It takes time and money to manage a project, however following are the advantages of PM
    - improve the chances of achieving the desired result
    - gain a fresh perspective on the project, and how it fits with the business strategy
    - priorities your business' resources and ensure their efficient use
    - set the scope, schedule and budget accurately from the start
    - stay on schedule and keep costs and resources to budget
    - improve productivity and quality of work
    - encourage consistent communications amongst staff, suppliers and clients
    - satisfy the various needs of the project's stakeholders
    - mitigate risks of a project failing
    - increase customer satisfaction
    - gain a competitive advantage

- **Project Management Body of Knowledge Basics**
- PMBOK is a collection of Processes and Knowledge Areas generally accepted as best practice within the Project Management.

- PM fundamentals are always of same irrespective of what the knowledge base is: i.e. construction, software, engineering, automobile, gadget development or social ones.

- Description: Much of PMBOK is unique to Project Management, like CPM (Critical Path Method) , PERT(Program Evaluation and Review Technique), WBS (Work Breakdown Structure), Earned Value Analysis (EVA), etc. Some areas overlap with other management disciplines. General Management includes Planning, Organizing, Staffing, Coordinating, Leading and Controlling operations of an organization. Financial Forecasting, Organization Behavior and Planning techniques are also similar.

- PMBOK recognizes FIVE Process Groups and NINE Knowledge areas for every type of project.

- FIVE Process Groups:

fig

1. Initiating Process Group

2. Planning Process Group

3. Executing Process Group

4. Controlling Process Group

5. Closing Process Group

- Processes are described in terms of:

1. Inputs: Documents, Plans, Designs, Artifacts, etc.

2. Tools & Techniques: Mechanisms Applied to Inputs

3. Outputs: Documents, Products, Service, Knowledge, Artifacts.

- NINE Knowledge Areas [ST]
1. Project Integration Management
2. Project Scope Management
3. Project Time Management
4. Project Cost Management
5. Project Quality Management
6. Project Human Resource Management
7. Project Communications Management
8. Project Risk Management
9. Project Procurement Management

Note: Each Knowledge Area contain some of or all of the Project Management Processes.

- Knowledge need for Project Management

- Application Area Knowledge, Standards and Regulations

- Understanding the Project Environment

- General Management knowledge and Skills

- Interpersonal Skills

- Skills Requirement of a Project Manager
- Technical Skills
- Managerial Skills
- Interpersonal Skills
- Conceptual Skills
- Team Building Skills

- **Project Environment**
- Projects are Environment Specific. Environment consists forces that influence the project's ability to achieve its objectives. Environments' dynamicity needs to be addressed with flexibility.
- Projects must continually adapt to Environmental Changes.
- Environmental influences on projects occur through:
    - Complexity
    - Uncertainty
    - Competition for Resources
    - Flexibility
    - Rapid Technological Changes
- Project Environment: Classification
1. Internal Environment
2. Task Environment
3. External Environment
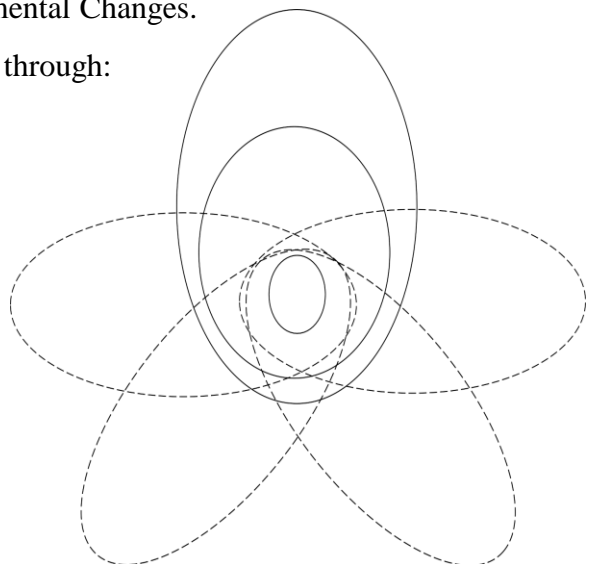
- Internal Environment
- Located within Project
- Controllable by the Project
- Strengthen or Weakens Project
- They are:
  - Project Objectives
  - Constraints
  - Structure
  - Resources
- Task Environment
- Immediately surrounds Project
- Made up of Stakeholders
- Interest and Impacts are Interrelated
- Affect Project Activities
- Project can Influence Task Environment
- They are:
  - Client
  - Contractors
  - Consultants
  - Competitors
  - Suppliers
  - Government
  - Labor Unions
- Financers
  - Owner
  - Shareholders
  - Organization
  - Donor
- External Environment
- Broad Forces in Surroundings
- Affects Climate in which Project Operates
- Located Outside the Project
- Influences the Project
- Can't be Controlled by the Project

- Pre Assessment of External Environment is done through PESTLE Analysis
- The External Environments are:
  - Political
  - Economic
  - Socio-Cultural
  - Technological
  - Legal
  - Environmental (Natural)

- Political
  - System
  - Institutions
  - Philosophies
- Economic
  - System
  - Policies
  - Conditions
  - Regional Groups
- Socio-Cultural
  - Demographic
  - Social Institutions
  - Pressure Groups
  - Social Changes
  - Culture
- Environmental
  - Global Warming
  - Climate Change
  - Ecology & Geography
- Legal
  - Laws
  - Courts
  - Law Administrators
- Technological
  - Level of Technology
  - Technology Change
  - Technology Transfer
  - R&D

- **General Management Skill:**
- Basic Skills are:
- ✓ Planning (Strategic, Tactical, Operational)
- ✓ Organizing
- ✓ Leading
- ✓ Staffing
- ✓ Coordinating
- ✓ Controlling
- ✓ Executing
- Other Skills are:
- ✓ Financial Management
- ✓ Rewarding
- ✓ Accounting
- ✓ Budgeting
- ✓ Contracting & Commercial Law
- ✓ Purchasing
- ✓ Procurement
- ✓ HR Recruitment
- ✓ Promotion & Transfer
- ✓ Motivating
- ✓ Counselling
- ✓ Monitoring/Evaluation
- ✓ Decision Making
- ✓ Leadership

- **Effective and Ineffective Project Managers**
- Effective Project Managers
- ✓ Lead By Example
- ✓ Visionaries
- ✓ Technically Competent
- ✓ Decisive
- ✓ Good Communicators
- ✓ Good Motivators
- ✓ Stand up to Top Level Management
- ✓ Support Team Members
- ✓ Encourages New Ideas
- Ineffective Project Managers
- ✓ Set Bad Examples
- ✓ Confused
- ✓ Lack Technical Expertise
- ✓ Indecisive
- ✓ Poor Communicators
- ✓ Poor Motivators/ Demotivates
- ✓ Complaining about Top Level Management
- ✓ Lacks Team Spirit
- ✓ Conservative

- Essential Interpersonal and Managerial Skills

A. Project Manager must be a people manager.

B. Soft skills are must.
  A. Negotiations
  B. Communication
  C. Interpersonal

C. Energized & Initiators
  A. Fitness and Full of Energy
  B. Work under Pressure and Odd Conditions

D. Influencing
  A. Ability to get people do what they wont otherwise.

E. Communication
  A. Expressing Ideas in Written and Oral Form
  B. Ensure:
  C. Simplicity & Clarity, No Complexity & Ambiguity, Completeness & Comprehensiveness, Adequate Feedback (If Necessary)

F. Leadership
  A. Impart Vision
  B. Gain Consensus for Goals
  C. Establish Direction
  D. Inspire

  E. Motivate
  F. Self Assured

G. Motivator
  A. Energize people to achieve high level of Performance to Overcome Barriers to change

H. Result Oriented
  A. Not just complete work for work's sake but to achieve the Project Objectives.

I. Problem Solver
  A. Able to deal with Problems.
  B. Have Problem Solving Attitude.
  C. Have Problem Analysis know- how.

J. Global Literacies
  A. Ability to work in Cross Cultural Environment.
  B. Understand Cross Cultural Issues.

K. Negotiation
  A. Ability to resolve conflicts.
  B. Achieve Consensus
  C. Understand the best solution to the Problem.

L. Perspective Nature
  A. Ability to look beyond the team.
  B. See how Project & Team fit into Organization.

M. Problem Solving using Problem Tree
  A. Details…

- **Problem Solving using Problem Tree** *(2 figures…)*
- The steps are (examine, analyse and develop)
- Steps for Developing a Problem
1. Identify major problems existing within the stated problem areas.
2. Analyze their interrelationship and common issues. Determine the core problem among the major problem.
3. Write the causes of the major problems.
4. Write effects caused by the core problem.
5. Form a diagram of problem tree showing causes, effects and problems.
6. Review the diagram as a whole. Verify its validity and completeness.
7. Repeat from step 2 if required. Iteration helps!

- **Roles of Project Manager**

- Roles are an organized set of behaviors related to an identifiable position. Roles of Project Manager: Leadership Role, Balancing Role, Decisive Role, Information Role

- Sommerville, James, Nigel Craig, and Julie Hendry. "The role of the project manager: all things to all people?." *Structural Survey* 28.2 (2010): 132-141.

Survival Roles:	Achiever	Communications facilitator *	Decision maker *
	Ideas generator	Implementer *	Marketeer
	Monitor/evaluator	Organizer *	Negotiator
	Presenter		
Social Roles:	Diplomat *	Group figurehead	Human resource manager
	Mentor	Motivator *	Social organizer
	Spokesperson	Team worker *	Trainer
Technical Roles:	Inspector *	Planner *	Progress controller *
	Quality coordinator *	Safety coordinator *	Specialist
	Technical advisor		
Commercial Roles:	Chairperson	Disturbance handler	Entrepreneur
	Financial manager	Resources allocator	Risk manager

- Some of the Responsibilities of Project Manager are:

  ✓ Project Definition

  ✓ Project Team Building

  ✓ Stakeholders Management

  ✓ Project Planning

  ✓ Project Organization Design

  ✓ Project Implementation

  ✓ Project Progress Control

  ✓ Financial Management

  ✓ Change Management

  ✓ Conflict Management

  ✓ Project Output Delivery

  ✓ Project Termination Management

- **PMI: Project Management Institute**

- PMI is the world's largest not-for-profit membership association for the project management profession.

- PMI - Project Management Institute

- Aim is to bring standardization in the profession of Project Management

- Established a common language of Project Management across World

- Define principles of Ethics & Code of conduct for Professionals

- Bring Project Managers from various geographies into one Network.

- Focus on continuous improvement, Knowledge Sharing & building Network

- <u>PMI Framework</u>
- This standard describes the nature of project management processes in terms of the integration between the processes, their interactions, and the purposes they serve.
- For this standard, it is assumed that the project, the project manager and the project team are assigned to the performing organization.
- Project management processes are grouped into five categories known as Project Management Process Groups (or Process Groups)

- *Project Mgmt Process Groups or/ (Process Groups)*
1. Initiating Process Group. Those processes performed to define a new project or a new phase of an existing project by obtaining authorization to start the project or phase.
2. Planning Process Group. Those processes required to establish the scope of the project, refine the objectives, and define the course of action required to attain the objectives that the project was undertake to achieve.
3. Executing Process Group. Those processes performed to complete the work defined in the project management plan to satisfy the project specifications.
4. Monitoring and Controlling Process Group. Those processes required to track, review, and regulate the progress and performance of the project; identify any areas in which changes to the plan are required; and initiate the corresponding changes.
5. Closing Process Group. Those processes performed to finalize all activities across all Process Groups to formally close the project or phase.

Sharing a Purpose

To advance the practice, science and profession of project management throughout the world in a conscious and proactive manner.
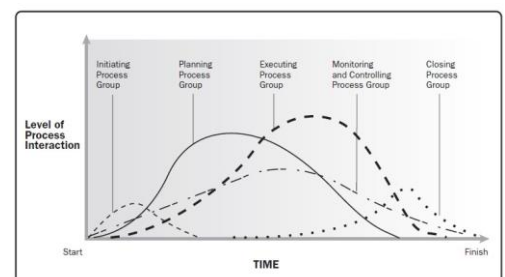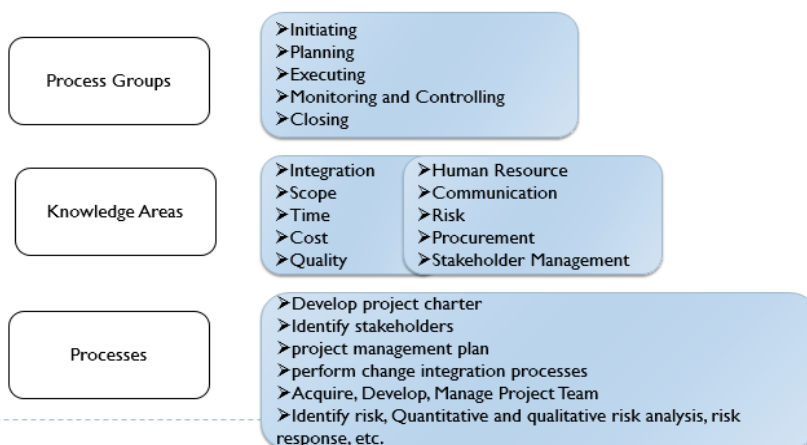
Figure A1-1. Process Group Interactions in a Project

- Global Certification:
- 53% of Active certification holders are outside of North America
- PMI professional certification ensures that you're ready to meet the demands of projects and employers across the globe.
- What would/could you say if ask…Why?
- Why should an organization care?
- Fig: I understand some people had an idea.
- Fig: I understand some "products" were created.
- Fig: I understand some people got a certification

Sharing a Purpose

To advance the practice, science and profession of project management throughout the world in a conscious and proactive manner.

Evolving Times & Needs

Rapid growth in the profession led to increased demand for:

- Demonstration of knowledge and experience
  » 1984 – PMP® launched
- Recognition of superior practice
  » 1989 – First Project of the Year (POY) awarded
- Standardization
  » 1994 – PMBOK ® Guide exposure draft released

2016
499,735 Total Members. 777,262 Active Certifications
In Nearly Every Country in the World

Active PMI Certifications 364,575
Active PMI Certifications 113,925
Active PMI Certifications 258,856
Active PMI Certifications 39,906

* As of August 2016

- Based on Henri Fayol's thinking on the functions of management

1. Planning: generating plans of action for immediate, short term, medium term and long term periods.

2. Organizing: organizing the resources, particularly human resources, in the best possible manner.

3. Staffing: positioning right people right jobs at right time.

4. Directing (includes leading, motivating, communicating and coordinating): Communicate and coordinate with people to lead and enthuse them to work effectively together to achieve the plans of the organization.

5. Controlling (includes review and monitoring): evaluating the progress against the plans and making corrections either in plans or in execution.

- **Strategic Planning**

- "Strategic planning is an organizations process of defining its strategy, or direction, and making decisions on allocating its resources to pursue this strategy"

- Strategic Planning Process

- The process can be explained by figure in 6 phases:

- Strategic management

- Strategic management is a set of management decisions and actions that determines the long-run performance of a corporation. It includes environmental scanning, strategy formulation, strategy implementation and evaluation and control to achieve the objectives of an organization.

- The study of strategic management emphasizes the monitoring and evaluating of external opportunities and threats in light of a corporation's strengths and weaknesses.

- Fred R. David: strategic management is an art and science of formulating, implementing and evaluating cross functional decisions that enable an organization to achieve its objectives.

- Channon: strategic management is defined as that set of decisions and actions that result in formulating of strategy an its implementation to achieve the objectives of the corporation.

| Gather Facts | SWOT Analysis | Review Inputs | Strategic Matrix | Define Strategies | Review & Adjust |
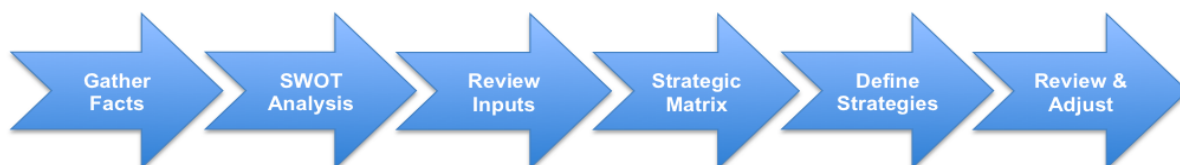
Gather Inputs
- From all Stakeholders
- Customer analysis
- Competitor analysis
- Industry analysis
- Environmental
- Company performance
- Company strategies

SWOT Analysis
- External Analysis
  - Opportunities
  - Threats
- Internal Analysis
  - Strengths
  - Weaknesses
- Strategic Questions
- Strategic Issues

Review Inputs
- All Stakeholders
- Review Inputs
- Review SWOT Analysis
- Define 3-4 key statements

Strategic Matrix
- All Stakeholders
- Define Strategies to address SWOT combinations:
  - Opportunities vs Strengths
  - Opportunities vs Weaknesses
  - Threats vs Strengths
  - Threats vs Weaknesses

Define Strategies
- Objectives
- Key Strategies
- Short and Long Term Goals
- Operational Plans

Final Reviews
- All Stakeholders
- Review Strategies
- Review Goals
- Review Plans
- Adjust as necessary