Project Management
Special Presentation
for PEC
Dr Ali Sajid
Project MANAGEMENT

What is project: Overview and Concepts

Dr Ali Sajid, (TI)
• **Never to suffer would never to have been blessed.**
  • *Edgar Allan Poe* (1809 - 1849)
• Although the world is full of suffering, it is full also of the overcoming of it.

• Helen Keller (1880 - 1968)
Nature does nothing uselessly.

• Aristotle (384 BC - 322 BC),
• **So much of what we call management consists in making it difficult for people to work.**

• *Peter Drucker* (1909 - 2005)
• To do right is wonderful. To teach others to do right is even more wonderful – and much easier.

- Mark Twain
“Self-pity is our worst enemy

&

if we yield to it,
we can never do anything wise
in this world”

- Helen Keller
“To be prepared is half the victory.”

Miguel de Cervantes Saavedra
“Treat people as if they were what they ought to be, & you help them to become what they are capable of being”

- Johann Wolfgang von Goethe
The quality of a person's life is in direct proportion to his commitment to excellence, regardless of their chosen field of endeavor.
The race is not always to the swift... but to those who keep on running.
In three words, I can sum up everything I've learned about life:

It goes on.

- Robert Frost
Actions...

“Action may not always bring happiness, but there is no happiness without Action”

- Benjamin Disraeli
• If you have your sight, you are blessed.

• If you have insight, you are a thousand times blessed.
Leadership & learning are indispensable to each other.

- John F. Kennedy (1917 - 1963)
Setting an example is not the main means of influencing others, it is the only means.

- Albert Einstein
• When the Fire begins within himself, a man's worth something.
- Robert Browning
In times of storm, the shallowness of the root structure is revealed.
New Thinking in project Mgmt

• "We cannot solve our problems with the same level of thinking that created them.
  • (Albert Einstein)

• "The true voyage of discovery lies not in seeking new landscapes, but in having new eyes."
Credit on Work in Project Mgt

• "The world is divided into people who do things, & people who get the credit.

• Try, if you can, to belong to the first class. There's far less competition."

• (Dwight Morrow, 1935.)
Value of Positive Words in PM

• "Fantastic things happen to the way we feel, to the way we make other people feel.
• All this simply by using Positive Words."
Projects in Stone Ages

Construction of Alexandria Light House, Ajnata Caves (India) Pyramids, Taj Mahal, Shalamar Garden, Mosques and Forts Great projects But.......... 

Beginning of Modern project Management 

U S Navy's Polaris Program, NASA's Apollo, Space shuttle & SDI ("star wars") programs - specially developed management approaches to extraordinarily complex projects.

“A Project Is A Problem Scheduled For Solution.” J M Juran

Problem -gap b/w where u R & where u want to be, with an obstacle that prevents easy movement to close the gap.

“A project is a temporary endeavour undertaken to create a unique product or service:”
“Unique processes, consisting of a set of coordinated & controlled activities with start & finish dates, undertaken to achieve an objective conforming to specific requirements, including the constraints of time, cost and resources”. (ISO 10006 Standard).

• A group of activities - to be undertaken with limited resources to yield specific objectives in a specific time in a specific locality.

• Creation of Business Value – Important
Attributes of a Project

• **One Goal:** have a single goal as compared to a program

• Has a customer

• **Specified Time:** Completion date

• **Within Budget:** Resource limits (people, money, machines)

• **According to Specs:** Customer expects a certain level of Functionality & Quality (Self-imposed or Customer-specified, & Fixed).
Characteristics of Project

Projects are Temporary

Definite beginning & a definite end.
- When objectives achieved, or When Objectives cannot be met – so terminated. Not short in duration- many last for ys.

Duration - finite:
projects are not ongoing efforts.

Interact with Organization other proj simultaneously within SOPs

Uniqueness Project - never happened before & will never happen again under same conditions. Some elements are unique.

No two are precisely alike.

Some degree of customization is a characteristic of proj.
• **Progressive Elaboration.**

• Developing in steps & continuing by increments.

• **Project Scope** broadly defined in early stages

• More **Explicit as Project team develops** a better understanding of

• **Objective & Deliverables.**
Life Is A project
Your projects Cannot Afford to Fail

- 66% of all IT projects fail, come in over budget or run past the original deadline
- Every year, $55 billion is wasted on failed IT projects in the U.S.
- Business Impacts:
  - Reduced profitability
  - Inability to fund new projects
  - Poor customer satisfaction

Source: Chaos Chronicles
2003, The Standish Group
Stake-holders
Stake-Holders

- Individuals & Org - actively involved in proj
  Whose interest may be affected as a result of project execution
- Project Mgr Responsible for project
  - Customer/end users
  - Performing Organization - whose employees are involved
  - project Mgmt Team - Performing task of project
  - project team members - directly involved
  - Sponsor - who finance
  - Influencer
  - PMO - exists in performing Organization Internal & External, Investor, seller or contractor, Govt Agencies, media people, society at Large.
- Project Manager: Must manage stake Holders expectations.
- May have or negative influence on project
- Internal / External, Owners sellers, Govt Lobbyist, contractors, govt, society
Relevant Stake-holders

OWNERS & SPONSORS

SUPPLIERS

THE PROJECT

CUSTOMERS

SOCIETY

REGULATORS

EMPLOYEES
Project & Strategic Planning

- PMGT - Utilized as a mean of achieving **Org Strategic Plan**.
  - Either by own person or thru outsider
- A **market Demand** (oil company auth a building a oil refinery 4 acute shortage of K2 oil)
- **Customer Request** (power company auth new power plant)
- **Technological Demand** (New video game .new Cell)
- **Legal requirement** (Toxic Waste Disposal Center)
## Classification of Project Types

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Sector</td>
<td>Classified as Social Sector &amp; infrastructure.</td>
</tr>
<tr>
<td>Transportation</td>
<td>Highways, mass transit, airports</td>
</tr>
<tr>
<td>Utilities</td>
<td>Electric power, gas, telephones</td>
</tr>
<tr>
<td>Education</td>
<td>Schools, colleges, HEC Funded</td>
</tr>
<tr>
<td>Public Safety</td>
<td>Police, fire, National guard</td>
</tr>
<tr>
<td>Recreation</td>
<td>Parks, playgrounds, historic sites</td>
</tr>
<tr>
<td>Development</td>
<td>Harbors, dams, irrigation,</td>
</tr>
<tr>
<td>Research</td>
<td>Health, space, agriculture</td>
</tr>
<tr>
<td>Defense</td>
<td>Military equipment and systems</td>
</tr>
<tr>
<td>Conservation</td>
<td>Forests, shorelines, pollution</td>
</tr>
</tbody>
</table>
Project Environment

- Proj Planned & implemented in a Social, Economic & Environmental Context.

  1. Cultural & Social Environment (how project affect people & how they affect project, require understanding of economic, demographic, ethical, ethnic, religious issues)

  2. International & Political Environment (knowledge of applicable international, national, regional or local laws & Customs other factors like Time zone difference, national holidays, travel means & logistic requirements etc)

  3. Physical Environment. Knowledge - Local ecology & physical geography that could affect project or be affected by proj.
The Project Environment

The Organization

Organization Goals

Top Management

Boss

project Manager

project Staff

Managers Controlling Internal Resources

Internal Users

Colleagues

External Users

Government

Suppliers

Sub Contractors
Sub Projects

- Frequently divided into more manageable components or sub Proj although individual/ sub projects can be referred to as projects & managed as such.
- Sub contracted or out sourced.
- Sub proj according to HR needs like Plumbing in Construction
- Based on Project Process- One Phase of PLC
- Based on Specialized Technology Automated Testing of computer program
The Triple Constraint of project Management

- Scope goal
- Cost goal
- Time goal
Triple Constraints
Managing Triple Constraint

Client Agreement

Delivery (Performance)

Cost (Budget)

Time (Schedule)

Manage the Triple Constraint
Project Inputs

Time & Cost Limits

Scope Constraint

Project Output(s)
• The Scope Triangle: Time, Cost, Resources
Cost = f(P, S, T)

Where P is Performance, S is Scope, and T - time

As P & S increase, Cost generally increases...but not linearly

Projects fail when:

A) Estimates are faulty;

B) Time, Talent & Resources - insufficient or incorrectly applied

Relationship of project Objectives
Operations & Projects

- Common characteristics:
  - Performed by people.
  - Constrained by limited resources.
  - Planned, executed, and controlled.

- Operations may include activities such as:
  - Financial mgt & control
  - Continuous manufacture
  - Product distribution

Distinguish b/w projects & operations:
  - Operations ongoing & repetitive
  - Projects - temporary & unique, **performed by teams:**
    - Clearly defined team & individual roles
    - Open & effective communications
    - Visible rewards for good performance, pressure to improve Poor performance

- Projects may include activities such as:
  - Developing a new product or service.
  - Effecting a change in structure, staffing, or style of an Organization.
  - Developing or acquiring a new or modified info system.
## Project Type

### How you categorizing projects

<table>
<thead>
<tr>
<th>Methods</th>
<th>End Requirements</th>
<th>Project Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well defined</td>
<td>Well Defined</td>
<td>Type I</td>
</tr>
<tr>
<td>Poorly defined</td>
<td>Poorly Defined</td>
<td>Type III</td>
</tr>
<tr>
<td>Well defined</td>
<td>Type II</td>
<td>Type IV</td>
</tr>
<tr>
<td>Poorly defined</td>
<td>Type III</td>
<td>Type IV</td>
</tr>
</tbody>
</table>

### A classification of project types
Project Types

**Type I Projects- Large Engineering Projects**
Well Defined project Method, Well defined End project Requirements

**Type II Projects**- Product Development projects, Early Space Proj
(Poorly Defined Method, Well defined proj End requirement)

**Type III Projects** - SW Development proj (shape of end product proceeds)
Well defined proj method, Poorly Defined Proj End Reqts)

**Type IV Projects**- Org Development proj, Vision definition
(Poorly Defined Proj Method , Poorly Defined proj End Reqts)
Project Types

• **Example of TYPE – One Projects**

  Construction of a Large Building

  – Fast Tracking (overlapping of work) to balance **Time & Money**, & Resource Balancing b/w Several projects Possible.

**R & D of Over-the-Counter Pharmaceutical Products**

• Such Development follows well defined objectives, form mkt research

• **Characteristics**
  
  • A) Companies operating in core markets segments
  
  • B) A large pool of **Technical Expertise**
  
  • C) **Well defined new product development techniques**
Project Types

• **Example of TYPE II projects**
  - **Product development**
    - New products & services, a single item for single client, or mass production of product for the wider community
    - (similar to TYPE I projects)

• **Example of TYPE III projects**
  - **Software development**
    - start - poorly defined end requirements
    - Risk management - is of critical importance
    - In terms of commercial interests, user wish-lists, technical capabilities, time & costs
    - New technologies adds another complication
Project Types

- **Example of TYPE IV projects**
  - Development of research facility
    - Stresses on mgt can be intense
    - Mgt- strong enough to stop creative process where it is perceived not to be going in right direction
    - require, very much, more of team approach, with communication being very important
    - PM -be able to see the big picture
    - (helicopter view)

- **Example of TYPE IV Proj**
  - **Visions** statements for Organization- notoriously vague & include such statements as:
    - “to be world class performer”
    - or “to be leader in a particular field
    - “to be recognized by our customers as such”.
    - sound nice but how do you get there?
Project Types

• Example of TYPE IV projects
  – Organization have their own cultures
  – In determining a project method, a method that worked in one Organization may not work in another
  – When dealing with people & change there is an inevitable resistance
  – Successful practices elsewhere have to be studied & adapted to suit a particular Organization
Some Humor!!!!!

- Enthusiasm
- Disillusionment
- Panic
- Search for the guilty
- Punishing the innocent
- Praising those not involved
Project Initiation

1. Identify Needs
2. Establish Objectives & Constraints
3. Establish Scope
4. Undertake Studies
5. Generate Alternatives
6. Approximate Estimating
7. Appoint project Mgr
8. Identify Stakeholders
9. Establish Feasibility
10. Obtain Approvals
   - Not Proceed - End of project
   - Proceed
What is project Management?

- Application of knowledge, skills, tools, & techniques to project activities in order to meet or exceed stakeholder needs & expectations from a project (PMI)

- An Organized venture for managing projects.
  Involves scientific application of modern tools & techniques in planning, financing, implementing, monitoring, controlling & coordinating unique activities or tasks to produce desirable outputs in consonance with pre-determined objectives, within the constraints of time, cost, quality.
Project Management Consists Of

Roles
Who is responsible?

Guiding Principles

Work Products
What to deliver?

Hints & Tips
How to produce?

Processes

Techniques
How to produce?
News Flash

- Establishing a committee is not project management.
- Just about everything that characterizes committees is oriented toward recommendations.
- A project is oriented to results ... Appointing a project manager is not, by itself, establishing a project.
  - Martin (1976)

Mary Lynn Rice-Lively, UT@Austin

11/4/02
Meeting stakeholder needs & expectations involves balancing competing demands among:

- Scope, time, cost, & quality.

*What project Managers Say*

project Management concerns getting the job done:

- On time
- Within Budget
- According to Specifications
Example of Project Mgmt

- Project Management can be applied to any project regardless of size, budget or timeline.

- Some examples are:
  - Developing a new product or service
  - Running a political campaign
  - Sending a Power project in Northern area
  - Designing a compensation system
  - Negotiating a collective agreement
  - Setting up an e-commerce internet site
  - Or as in my current project – reorganization of business areas involving redesign of business processes, collapsing of roles and the introduction of new technology.
Why do Organization use Project Management?

To sum it up.....

1. Improve results  Value........
2. Decrease costs
3. Improve customer service
4. Time
• **What is a Program?**

- different from a project.

Cyclical or repetitive undertaking.

- **Larger in Scope & Comprise Multiple Proj.**

A group of related projects managed in a coordinated manner to obtain **control & benefit** not available otherwise

A new car model broken into project 4 upgrade and design of components.

NGOs Fund raising program, maintenance program

News paper weekly publication - project
Portfolio
Collection of Proj/Programs
Grouped together to **Facilitate Effective mgt** to meet Strategic Business Objectives.

- **May not necessarily be interdependent /related.**

- **Purpose**: To maximize value of Portfolio of Candidate Proj & programs for inclusion in the portfolio

- Timely exclusion of project not meeting Portfolio’s Strategic objectives.
- To balance the portfolio among incremental and radical investments and for efficient use of resources.

Senior managers take on responsibility of Portfolio management for an Org
Project Phases

1. Define the problem and deliverables
2. Plan the project
3. Execute the plan
4. Monitor and control progress
5. Implement/Close project
Project Life Cycle
Defined Sequence of events - constitute a project

- Divide project into Phases
  - “for better control”
  - with appropriate links.
  Collectively, called “PLC”

- Many Organizations identify specific set of LC for use on project.

Org identify a “Set of LC” for all Proj.
Project Life Cycle

The defined Sequence of events that constitute a project.

- Conception/selection
- Planning
- Implementation
- Control
- Evaluation
- Termination
Term Life Cycle emphasizes *time basis* of projects

- **End result of Proj:** Generally something tangible: Continues after “Proj” is finished
- **Proj are “born”** when a need -identified by the Customer.

- **PLC vary in length,** - few weeks to several years.
- **Not all proj formally go through all four phases of PLC**
Phases of the Project Life Cycle

First Phase: Identification of a need, Problem, or opportunity.

Need & requirements usually written by customer into a document (RFP).

Second Phase: Development of a Proposed Solution to need/problem.

Results in submission of a Proposal.

The customer & winning contractor negotiate & sign a contract (agreement).
Phases - Project Life Cycle

• **Third Phase - Performing the Project.**
  – Different types of resources utilized
  – Results in accomplishment of Project Obj

• **Final Phase - Terminating the Project.**
  – Perform close-out activities
  – Evaluate performance
  – Invite customer feedback
Generic Cost & Staffing Life Cycle

- **Concept** 5%
- **Development** 20%
- **Implement** 60%
- **Close Out** 15%
Typical Project Cost & Staffing Level Across Project Life Cycle
Stakeholders’ Influence Over Time

- **Influence of stakeholders** increases over time, starting high and becoming even higher as time progresses.
- **Cost of changes** decreases over time, starting low and becoming even lower as time progresses.
Project Life Cycle – Example Phases

- Concept & Proposal
- Development
- Implementation
- Verification
- Termination

Initial Phase  Intermediate Phases  Final Phase
Characteristics of Proj Phases

- **Delible**: Measurable, Verifiable Work product.

- **Proj Phs. Completion & Approval of Deliverables**
  - Dlivble & Phs- Part of sequential process designed to ensure Proper Con of Proj-

- **Sub phases. (SP)** Due to lvl of Risk, Size, Complexity, CF
  - For Monitoring & Control. SP Aligned with delvrbles

- **SP deliverables related to Primary Phs deliverable. Majority**

- **X-Phases names from these phase deliverables: Reqts, design, build. Startup turnover etc etc.**
Characteristics of Proj Phs

- Phs Concluded with a review
  - Work accomplished
  - Deliverables to determine acceptance.
  - Mgt Review to start New Ph w/o closing Current Phs.
- **Reqs for Module**
  - Info gathered/analyzed
  - b4 designed & constructed.
- Phase closure w/o decision for next.
- Formal phs completion - not auth 4 next.
- Each phs formally initiated to produce a phase-dependent output.
- Phase-End Review (PER) may auth close & to initiate next.
- **Phase-end Reviews called**
- “Phase Exits, Phs Gates, or Kill Points”.
Typical Sequence of Phases in a Project Life Cycle

**Inputs:**
- Idea
- Project Management Team

**Phases:**
- INITIAL
  - Charter
  - Scope Statement
- INTERMEDIATE
  - Plan
  - Baseline
- FINAL
  - Acceptance
  - Approval
  - Handover

**Project Management Outputs:**
- Progress

**Project Deliverable:**
- Product
The Project Management Process

• Clearly define - Project Objective.

• Divide / subdivide Project.

• Define Specific Activities - Needed to be performed.

• Graphically portray Activities in a Network Diagram.

• Make a Time Estimate.

• Make a Cost Estimate.

• Calculate a Project Schedule/ Budget.
What are the Major Roles on a Project?

- **Functional Manager**
  - Managers responsible for activities and resources in a specialized department or function.

- **Sponsor**
  - The internal organization owner of the project. Responsible for establishing the project’s priority within their organization. Has overall responsibility for its success.

- **Stakeholders**
  - Parties involved in or being affected by the project activities.

- **Team Members**
  - Staff who use their skills to contribute to the project’s deliverables. Can report either directly or indirectly to the project Manager.

- **Project Manager**
  - Individuals with the authority and responsibility for delivering the documented project requirements on time and within budget.
Tip-of-the-Iceberg Syndrome for Project Implementations.

Many of the problems surface much later in the project and result in a much higher cost to correct as well as increase project risk.
Collection of project or Program, Other Work, Grouped Together to Facilitate Effective Mgt of Work to Meet “Strategic Business Objectives”.

Project/Program may not be Interdependent/ Directly Related.

- List Candidate project/Program for Portfolio
- Timely exclusion of project not meeting Portfolio’s “Strategic Objectives”.
- Responsibility of Portfolio Mgt = Senior Management
Product Vs. Project Mgt

• Proj Manager focuses - End date of his Proj
• Product Manager not willing to admit - Production line will ever end.
• Prod Mgr wants product to be long-lived & profitable.
• Even with less demand for product  Prod Manager looks to keep Product alive.
Project Initiation

1. Identify Needs
2. Establish Objectives & Constraints
3. Establish Scope
4. Undertake Studies
5. Generate Alternatives
6. Approximate Estimating
7. Appoint project Mgr
8. Identify Stakeholders
9. Establish Feasibility
10. Obtain Approvals
11. Proceed

Not Proceed - End of project
Functional Organization

(Gray boxes represent staff engaged in project activities.)

Project Coordination

Chief Executive

Functional Manager

Staff

Staff

Functional Manager

Staff

Staff

Staff

Functional Manager

Staff

Staff

Staff

Staff
(Gray boxes represent staff engaged in project activities.)
Weak Matrix Organization

(Gray boxes represent staff engaged in project activities.)
Balanced Matrix Organization

Chief Executive

Functional Manager
- Staff
- Staff
- Project Manager

Functional Manager
- Staff
- Staff

Functional Manager
- Staff
- Staff

(project coordination)

(Gray boxes represent staff engaged in project activities.)
Strong Matrix Organization

- Chief Executive
  - Functional Manager
    - Staff
    - Staff
    - Staff
  - Functional Manager
    - Staff
    - Staff
    - Staff
  - Functional Manager
    - Staff
    - Staff
    - Staff
  - Manager of Project Managers
    - Project Manager
    - Project Manager
    - Project Manager

(Gray boxes represent staff engaged in project activities.)
Composite Organization

The diagram illustrates a composite organization structure with the Chief Executive at the top, followed by Functional Managers, Project Managers, and staff. The diagram highlights the coordination between Project A and Project B, with staff engaged in project activities represented in gray boxes.

(Gray boxes represent staff engaged in project activities.)
## Project Organization. Structure Influences on Projects

<table>
<thead>
<tr>
<th>Organization Structure</th>
<th>Functional</th>
<th>Matrix</th>
<th>Projectized</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Weak Matrix</td>
<td>Balanced Matrix</td>
</tr>
<tr>
<td>Project Manager’s Authority</td>
<td>Little or None</td>
<td>Limited</td>
<td>Low to Moderate</td>
</tr>
<tr>
<td>Resource Availability</td>
<td>Little or None</td>
<td>Limited</td>
<td>Low to Moderate</td>
</tr>
<tr>
<td>Who controls the project budget</td>
<td>Functional Manager</td>
<td>Functional Manager</td>
<td>Mixed</td>
</tr>
<tr>
<td>Project Manager’s Role</td>
<td>Part-time</td>
<td>Part-time</td>
<td>Full-time</td>
</tr>
<tr>
<td>Project Management Administrative Staff</td>
<td>Part-time</td>
<td>Part-time</td>
<td>Part-time</td>
</tr>
</tbody>
</table>
Who is a Project Manager?

Project Management is a skill as much as it is a profession – the “Accidental Profession”.

- Project Manager - responsible for managing proj within constraints of

Scope, Quality, Time & Cost

- To deliver specified requirement & meet or exceed Customer Satisfaction.
The Successful Project Manager

[Image: Cartoon of a man with multiple hats and a donkey with a no entry sign]
Project Organization
• **Functional Mgr Vs. Project Manager**
  – PM vs functional Mgr (FM, marketing, engineering, or finance)
  – FM -administratively responsible for deciding:
    - **How Something** done,
    - **Who will do it**,  
    - **What Resource** to accomplish Task.
  – PM general starts career as a specialist  
  – knows about Promotion as PM  
  – PM, to oversee many functional areas.
Functional Mgt Organization chart: marketing dept of an insurance company.
Project management. Organization showing typical responsibilities of a project Manager

- Project Manager
  - Finance
  - Engineering
  - Contracts
  - Planning
    - Manufacturing
    - Procurement
    - Quality
Qualities of Project Manager

- Can Work with large no. of groups & understands their demands & concerns
- “Control & Evaluate project Performance”
- Build Spirit of Cooperation
- Relate, compare, classify, & evaluate facts
- Distinguish Essential vs Non-essential

To complete a task, a Project Manager must:
Set objectives,
Establish plans
• Organization resources,
• Provide staffing
• Set up controls,
• Issue directives
• Motivate personnel,
• Remain flexible
Selecting Project Manager

Selection of PM - most important decisions.

Most popular attributes, skills, & qualities for Project Manager

- Strong technical background
- Hard-nosed manager
- Mature individual understand culture
- Good terms with senior executives
- Can keep project team happy
- One who has worked in several different departments
- Person who can walk on (or part) waters
Characteristics for Project Manager

- **Flexibility & Adaptability**
- Significant initiative & Leadership
- Aggressiveness, confidence, persuasiveness, verbal fluency
- Ambition, activity, forcefulness
- Effectiveness as a communicator & integrator
- Broad scope of personal interests
- Poise, enthusiasm, imagination
- Balance technological solutions with:
  - **Time, Cost, & H- factors**
- Balance in “**Use of Time**”
- Well Organization & disciplined
- Generalist not a specialist
- Devote most of his time-”**Planning & Controlling**”
- Identify Problems
- Willing to make decisions
• **Personal attributes** - either attract or deter desirable individuals.

• **Project Manager Must like trouble.**

• **Capable of evaluating risk & uncertainty.**

• **Basic characteristics:**
  – Honesty & integrity
  – **Personnel problems**
  – **Know project technology**
  – **Business Mgt Competence**
    - Mgt principles
    - Communication
  – **Alertness Quickness**
  – **Versatility**
  – **Energy, Toughness**
  – **Decision-Making Ability**
Q & A
"The step-by-step process itself is easy to understand. But process alone is not at issue. ... Managing any kind of change has far-reaching implications. It requires inspired, in-touch leadership."

Peg Fisher
If things seem under control, you’re just not going “fast enough.”

—Mario Andretti
“Create a ‘cause,’ not a ‘business.’”
“The two most powerful things in existence:
a kind word and a thoughtful gesture.”

Ken Langone, CEO, Invemed Associates [from Ronna Lichtenberg, *It’s Not Business, It’s Personal*]
“Leadership is the PROCESS of ENGAGING PEOPLE in CREATING a LEGACY of EXCELLENCE.”
“Attitude Produces Character, & Character Produces Hope.”

- Mark Brunett
"One of the tests of leadership is the ability to recognize a problem before it becomes an emergency."

- John Glassgow
“Leadership is an action, not a position.”

- Donald H. McGannon
"The difference between a boss and a leader: a boss says, 'Go!' - a leader says, 'Let's go!'"

- E.M. Kelly, Growing Disciples, 1995
"The final test of a leader is that he leaves behind him in other men the “Conviction” and the will to carry on."

- Walter Lippmann
“Our aspirations are our Possibilities”
- Robert Browning
Nearly all men can stand adversity, but if you want to test a man's Character, give him Power."  
- Abraham Lincoln