Project Management 1-2

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Why a Firm exists?

CONTEXT OF STRATEGIC MANAGEMENT

and

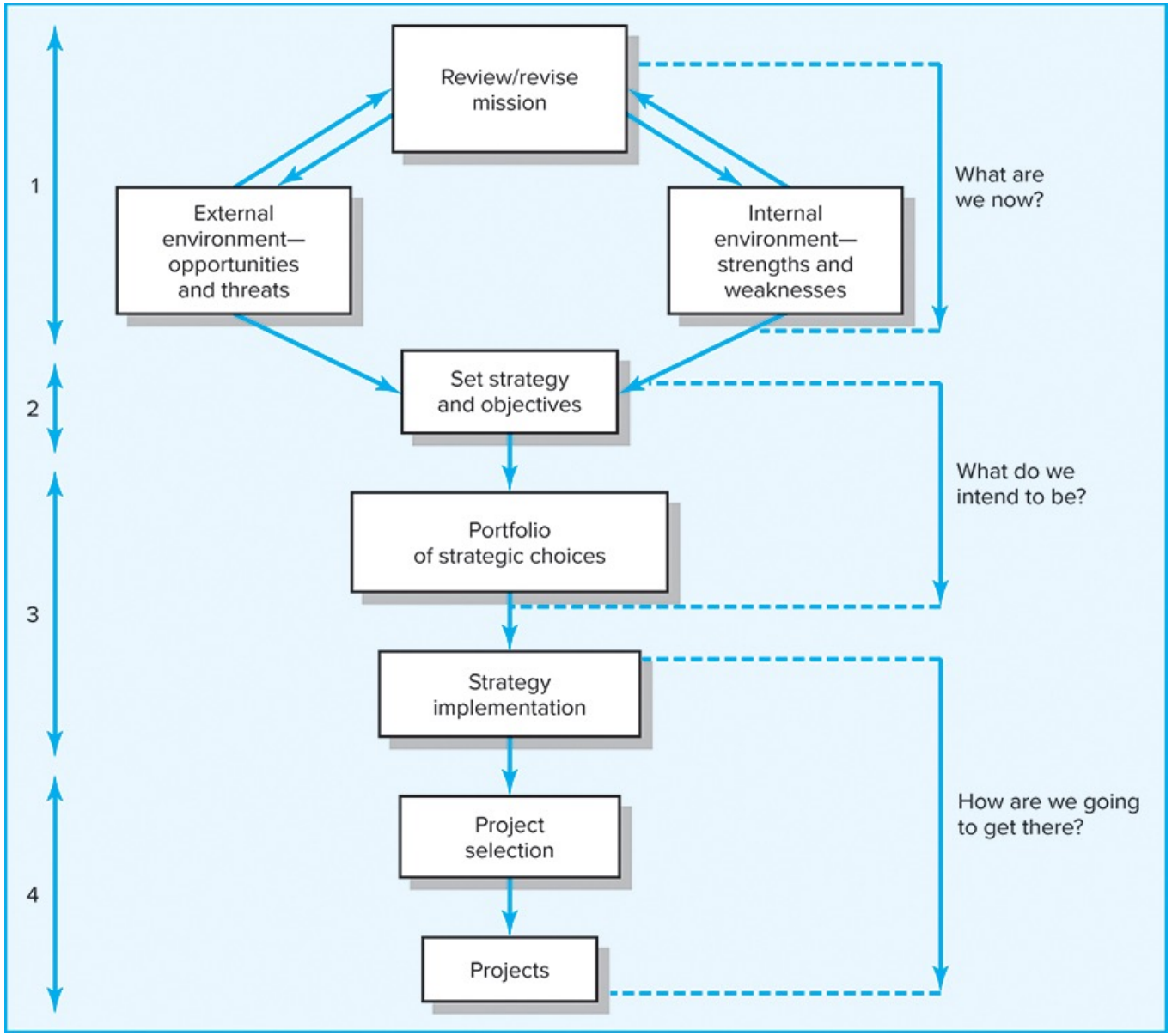
THE ROLE OF PROJECTS IN ACHIEVING FIRM'S VISION & MISSION

Why a Firm exists?

- To create VALUE

  - Value for Customers
  - Value for Employees
  - Value for Supplier

Strategic Management Process



A strategy is forged in the context of a firm's **vision**, **mission**, and **values**.

Vision

Defines a desired future state of a firm articulating in bold terms what the company would like to achieve.

Mission

Describes what a company does or strives to do; it is a statement of purpose.

Values

State how people within a firm should conduct themselves, how they should do business, and what kinds of things they should care about.

Strategic Management Defined

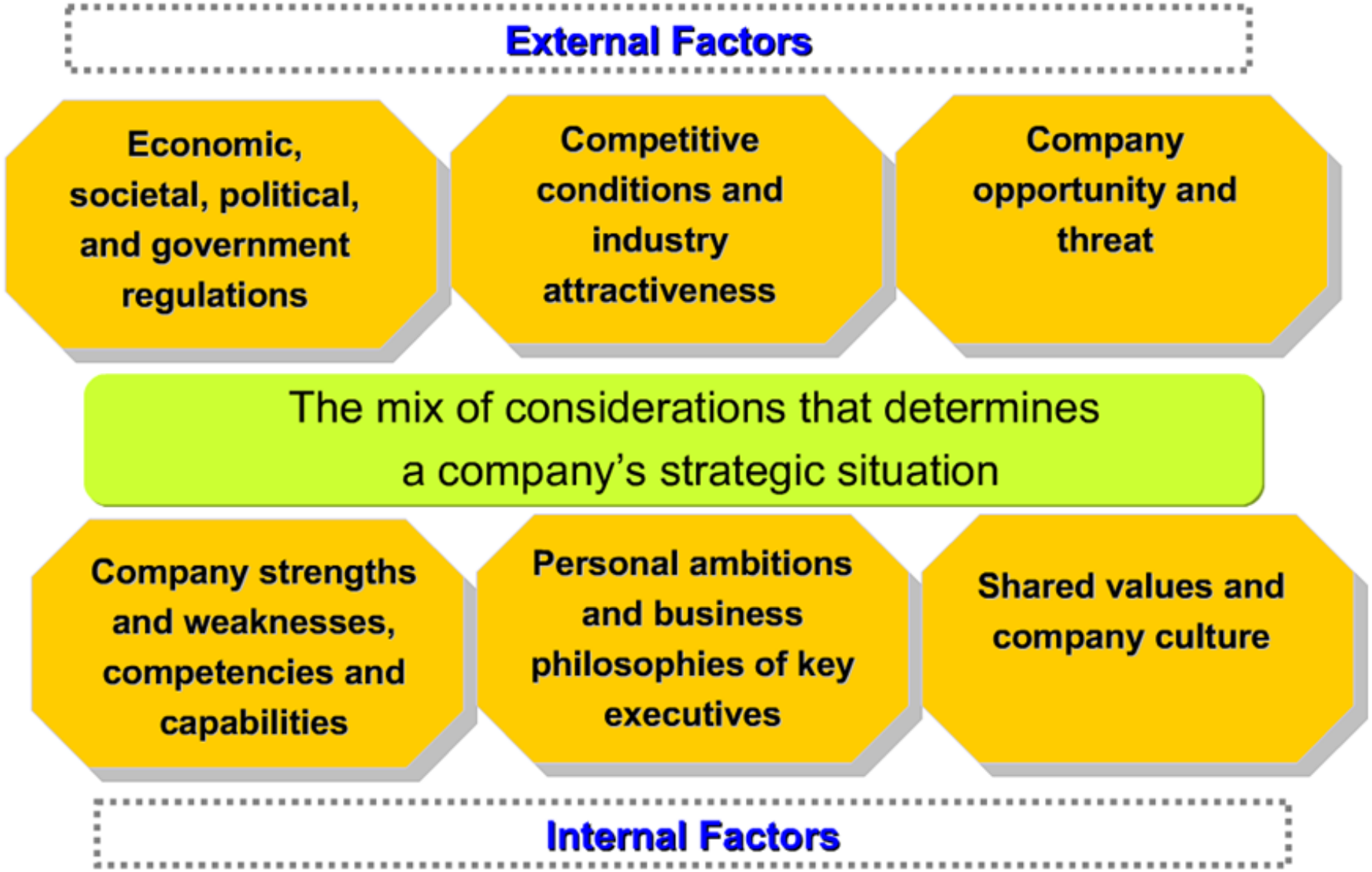
- Is the process of assessing “what we are” and deciding and implementing “what we intend to be” and “how we are going to get there.”
- Is a continuous, iterative process aimed at developing an integrated and coordinated long-term plan of action.
- Requires strong links among mission, goals, objectives, strategy, and implementation.

Two Major Dimensions of Orgnaizational Strategy:

1. Responds to changes in the **external environment** and allocates the firm's scare resources to improve its competitive position.

2. **Internal responses** to new action programs aimed at enhancing the competitive position of the firm.

Factors shaping choice of strategy



Tests of best strategy

- A good strategy boosts company performance.
- Two kinds of performance improvements are the most telling of a strategy's caliber: gains in profitability and gains in the company's competitive strength and long-term mar-ket position.

G.E. CEO (Jack Welch) on performance test

Two main reasons project managers need to understand their organization's mission and strategy:

1. So they can make appropriate decisions and adjustments.
   - How a project manager would respond to a suggestion to modify the design of a product or to delays may vary depending upon strategic concerns.

2. So they can be effective project advocates. They have to be able to:
   - demonstrate to senior management how their project contributes to the firm's mission in order to garner their continued support.
   - explain to stakeholders why certain project objectives and priorities are critical in order to secure buy-in on contentious trade-off decisions.
   - explain why the project is important to motivate and empower the project team.

ACHIEVING MISSION & VISION THROUGH OPERATIONS MANAGEMENT

WHAT IS OPERATION

- *Opus* (latin) = Work

- Perform your prescribed duty, for action is better than inaction. A man cannot even maintain his physical body without work. (Bhagawat Gita 3:8)

- The term “operations” refers to the application of resources (capital, materials, technology, and human skills and knowledge) to the production of goods and services.

WHAT IS OPERATIONS MANAGEMENT

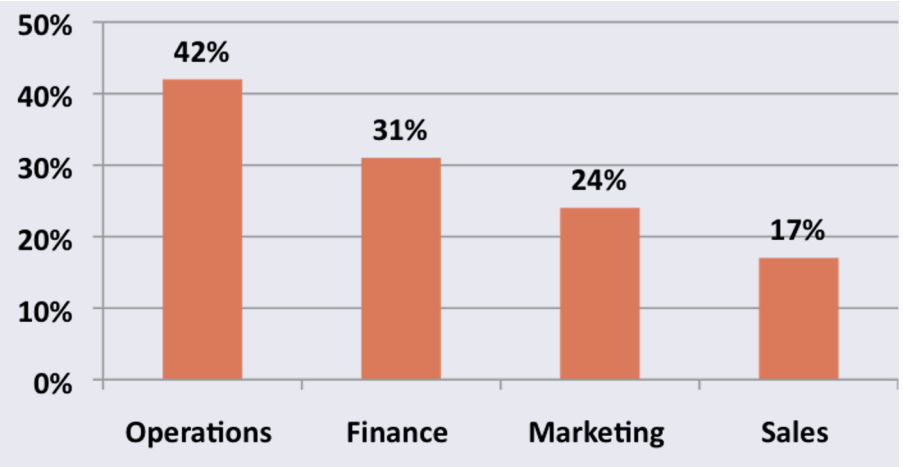
Operations Management (OM) is defined as the design, operation, and improvement of the systems that create and deliver the firm's primary products and services.

Operations Management Modules

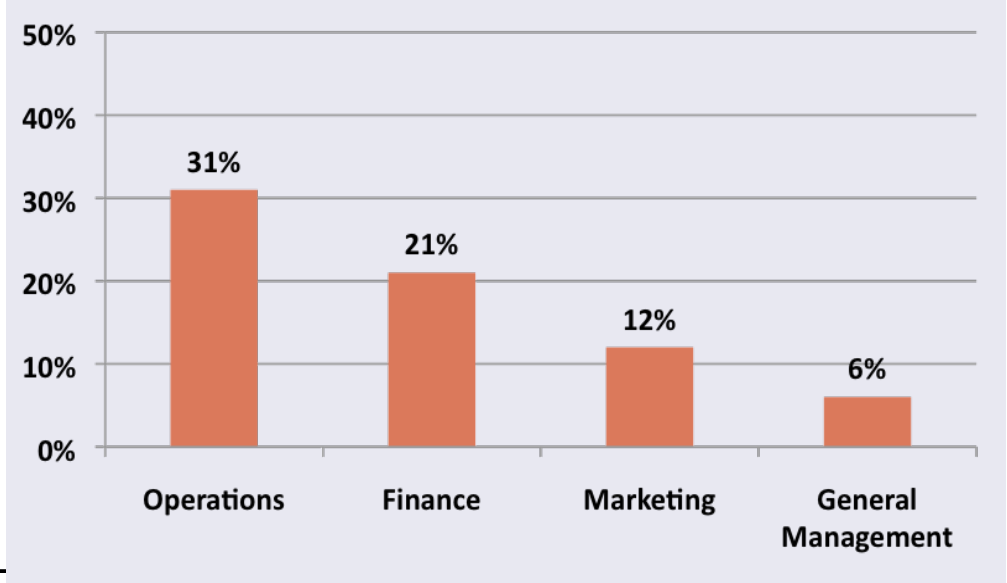
Module I	Overview of Operations Management and Operations Strategy
Module II	Process and Capacity Management
Module III	Quality Management
Module IV	Product Development
Module V	Project Management
Module VI	Supply Chain Management

"Route to the top" of CEOs of S&P 500 companies

- 42% had Operations experience at some point in their career



- 31% were in Operations immediately before becoming CEO



Project Management

Overview of Project & Prog Management.

- WHAT : Project & different Types
- WHY: Important for Organizations' success
- WHAT : Project vs. Program
- MEASURE of Project SUCCESS
- WHY: Project Fail?
- WHY : Framework (like PMBOK) required for Success

GLOBAL ECONOMY INVOLVES...

AGRARIAN ECO.	Crops, Live Stock (Seeds), Animal Specialties, Forestry, Fishing, Hunting, Trapping,
	Mining: Metals, Gold/ Silver Ores, Coal/ Lignite,
	Crude Petroleum, Natural Gas, etc
	Coffee Beans
INDUSTRIAL ECO.	**Manufacturing:** Food Processing, Daily Products, Brewing, Clothes, Paper, Plastic, Furniture
	Chemicals, Pharma, FMCG, Steel, Cement,
	Automobile, White Goods, Machine Tools, Electronic Items,
	Aircrafts, Trains, Ships, Jwellery
	Construction: Residential, Commercial, Water / Sewer Pipelines, Transmission lines etc
	(Instant) Coffee Powder
SERVICE ECO	Transportation (Air, surface, water)
	Communications: Telephone, Mobile, VC etc
	Utilities (Power & Water); Inverters, Bottled water, Gas at door,
	Wholesale Trades : of various items / Retail Sale / Direct sales etc
	Financial & Insurance Services etc
	Hospitality Services, Tourism etc
	Professional Services (legal, Healthcare, Medical, Architecture, Educational, Social etc
	IT Services (Software Development + Maintenance)
	Restaurant/ Fast Food centers Coffee
	Café Coffee Day

North American Industry Classification System

Engg., Mgt., Mixed, Social, Govt, Global

SMALL , MEDIUM, LARGE

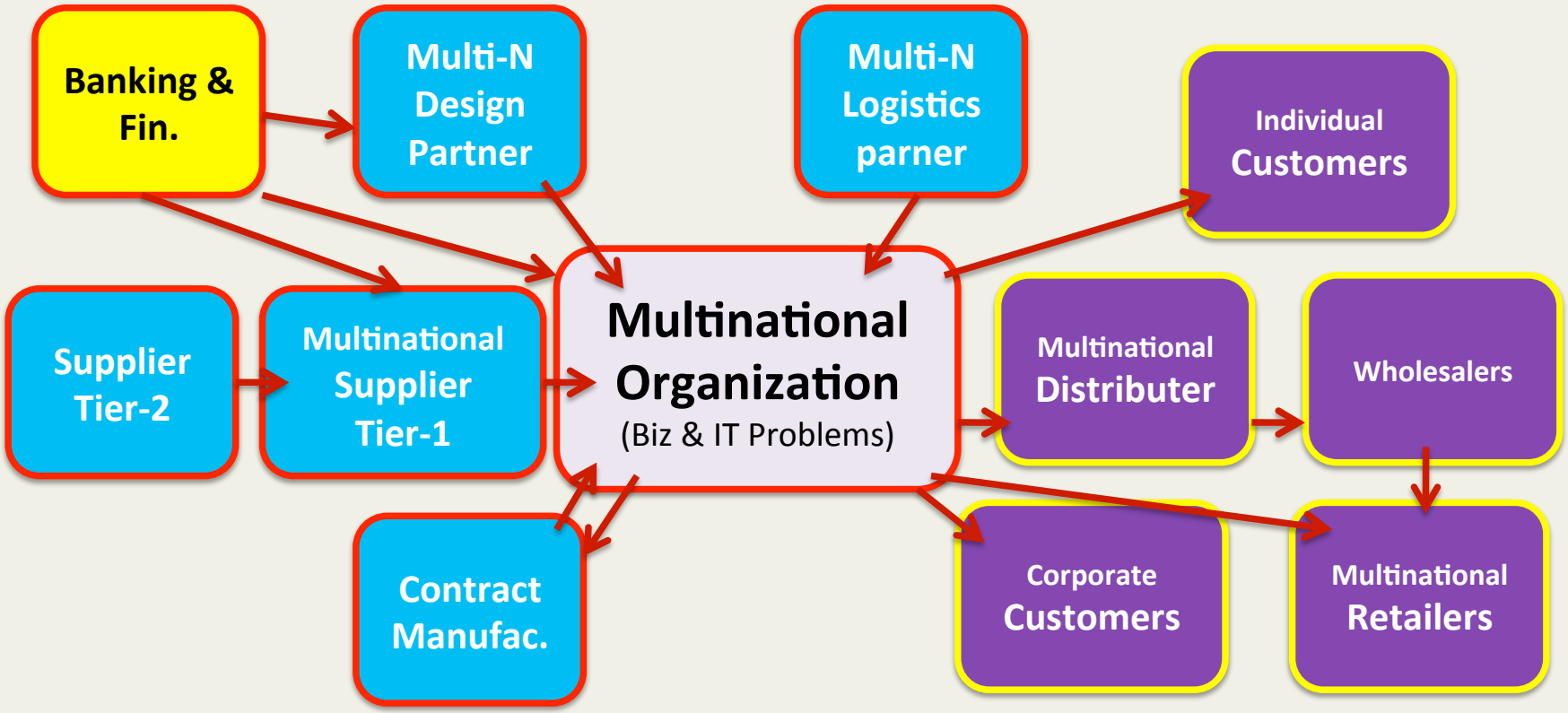
SHORT-TERM, LONG-TERM

INTERNAL, EXTERNAL

DIFFERENT TYPES OF PROJECTS

Business Complexities-'VALUE' Chain

(current & future)



Complexities of CHANGE & its 'RATE':

- Dynamic relationship with Suppliers & other Business Partners
- Dynamic relationship with Distributers/ Retailers
- Dynamic change of 'Competition & Collaboration'

Current Drivers of Project Management

- **Factors leading to the increased use of project management:**
  - Compression of the product life cycle
  - Knowledge explosion
  - Triple bottom line (planet, people, profit)
  - Increased customer focus
  - Small projects represent big problems

PROJECTS you have WORKED/ Familiar with :

- LIST DOWN 3 PROJECTS OF PAST, WHERE YOU WERE A PART or ARE FAMILIAR WITH
- CLASSIFY THOSE into some MEANINGFUL WAY
- IDENTIFY WHY THE PROJECT WAS IMP?
- EXPLAIN in 2 MIN (Random call)

INDIVIDUAL ACTIVITY: 5:00 MINUTES

Examples of Projects Given to Recent College Graduates

- **Business information:** install new data security system
- **Physical education:** develop a new fitness program for senior citizens
- **Marketing:** execute a sales program for a new home air purifier
- **Industrial engineering:** create a value chain report for every aspect of a key product from design to customer delivery
- **Management:** implement a new store layout design
- **Sport communication:** create a promotion plan for a women's basketball project
- **Systems engineers:** develop data mining software of medical papers and studies related to drug efficacy
- **Accounting:** work on an audit of a major client
- **Public health:** design a medical marijuana educational program
- **English:** create a web-based user manual for a new electronics product

“SAMPLE” TYPE of IT / DIGITAL PROJECTS :

IT SERVICES : PACKAGES/ PRODUCTS
IT SERVICES : CUSTOMIZED APPLICATIONS
IT PRODUCT DEVELOPMENT
IT CONSULTANCY/ OTHERS

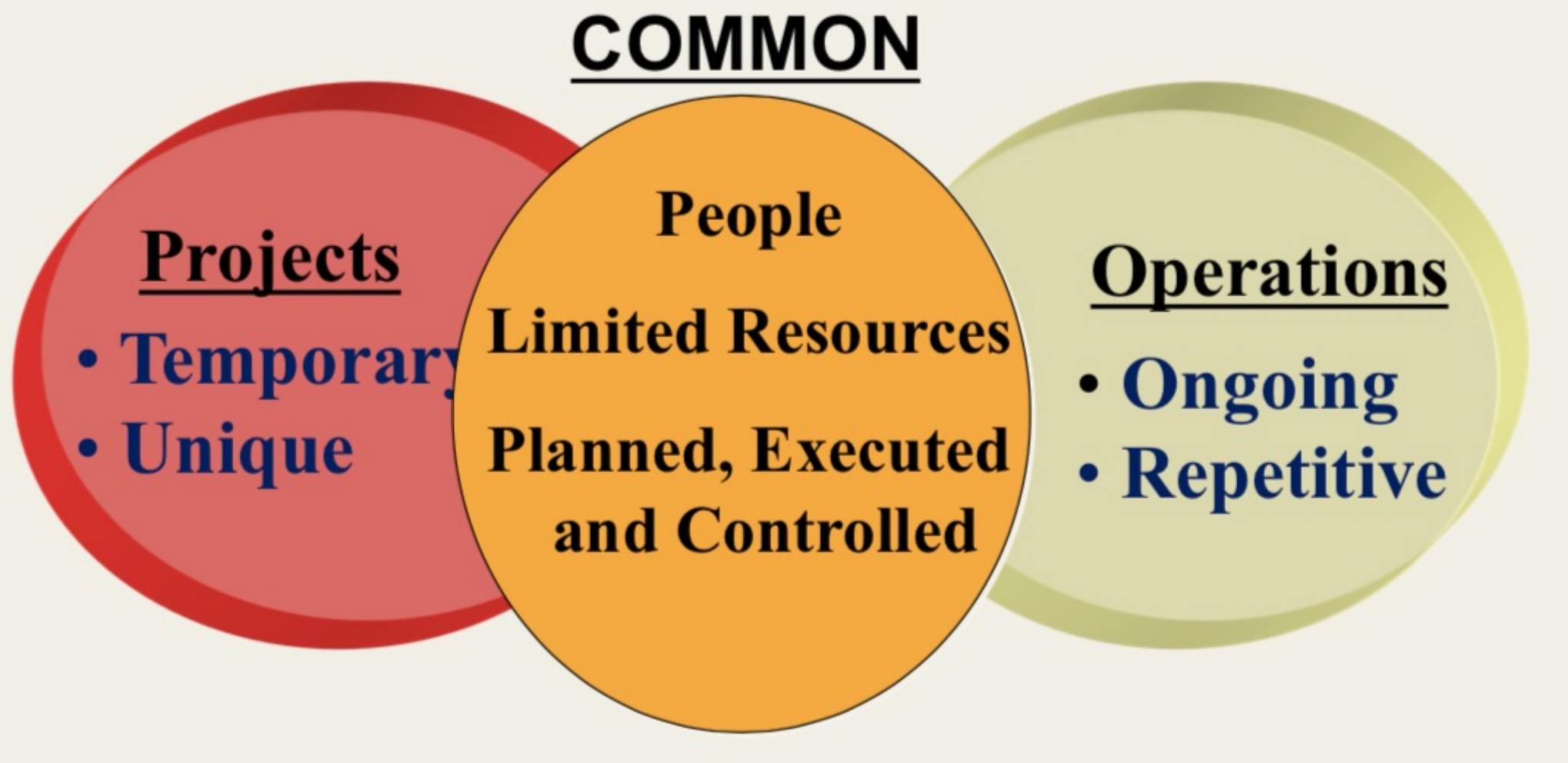
PROJECT

A project is a **Temporary** endeavor undertaken to create a **Unique** product, service, or result

Temporary
- definite start & end
- Small or Large

Unique
- at least 1 attribute
- Some deliverables can be repetitive

PROJECTS VS. OPERATIONS



Comparison of Operations (Routine Work) with Projects

Operations/ Routine, Repetitive Work

- Daily entering sales receipts into the accounting ledger
- Responding to a supply-chain request
- Practicing scales on the piano
- Routine manufacture of an Apple iPod

Projects

- Setting up a sales kiosk for a professional accounting meeting
- Developing a supply-chain information system
- Writing a new piano piece
- Designing an iPad that is approximately 5X 6 inches, interfaces and functions like a PC, and is able to make calls

Major Characteristics of a Project

- Has an established objective
- Has a defined life span with a beginning and an end
- Involves several departments and professionals
- Involves doing something never been done before
- Has specific time, cost, and performance requirements

PROJECT & PROJECT MANAGEMENT: PMBOK

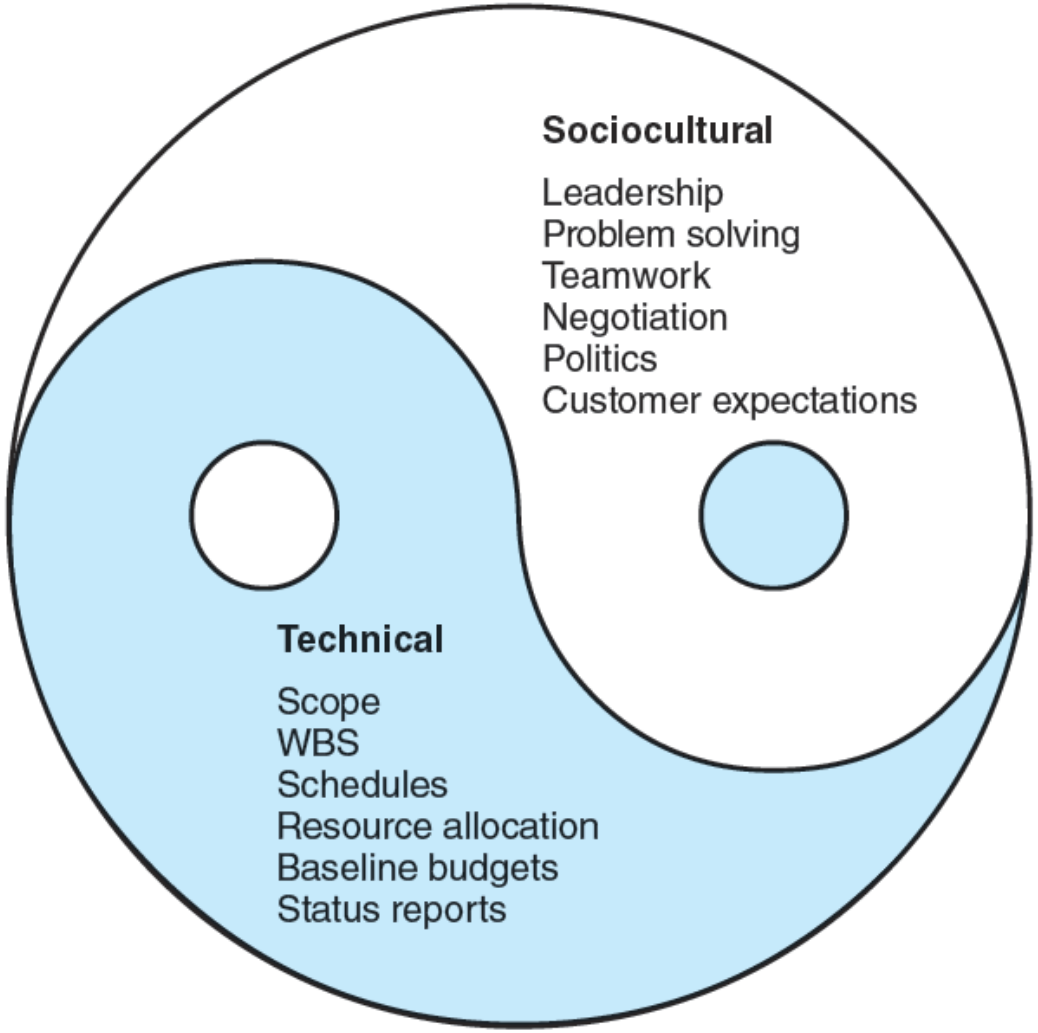
- A Project is a TEMPORARY endeavor undertaken to create UNIQUE product, service or results

- Project Management is the application of knowledge, skills, tools and techniques to project activities in order to meet Project requirements.

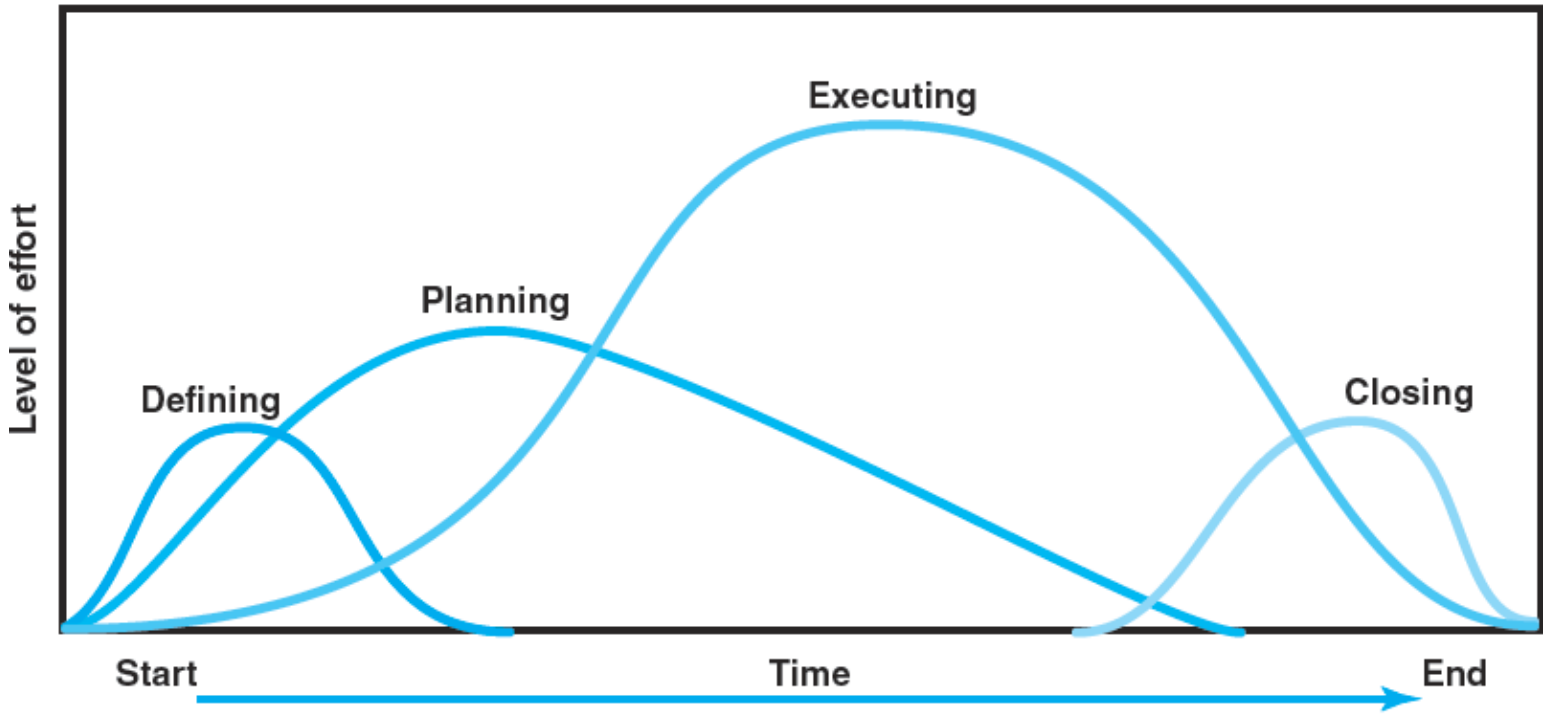
Project Management Today: A Socio-Technical Approach

- **The Technical Dimension (The "Science")**
  - Consists of the formal, disciplined, purely logical parts of the process.
  - Includes planning, scheduling, and controlling projects.
- **The Sociocultural Dimension (The "Art")**
  - Involves the contradictory and paradoxical world of implementation.
  - Centers on creating a temporary social system within a larger organizational environment that combines the talents of a divergent set of professionals working to complete the project.

Project Management - A Socio-Technical Approach



Project Life Cycle



Defining	Planning	Executing	Closing
1. Goals	1. Schedules	1. Status reports	1. Train customer
2. Specifications	2. Budgets	2. Changes	2. Transfer documents
3. Tasks	3. Resources	3. Quality	3. Release resources
4. Responsibilities	4. Risks	4. Forecasts	4. Evaluation
	5. Staffing		5. Lessons learned

The Project Manager

- Manages temporary, non-repetitive activities and frequently acts independently of the formal organization.
- Marshals resources for the project.
- Is the direct link to the customer.
- Works with a diverse troupe of characters.
- Provides direction, coordination, and integration to the project team.
- Is responsible for performance and success of the project.
- Must induce the right people at the right time to address the right issues and make the right decisions.

"WHY" PROJECTS important for SUCCESS

"WHY" PROJECTS :

Type	PROJECT	
1	Client's Business Benefits	
	(growth of Topline, Bottomline, Market Share, New market, New Product , Branding, better Customer/ End-Users experience…)	
2	Service Providers Business Benefits	
	growth of Topline, Bottomline, Market Share, New market, New Product , Branding, better Employees experience…)	
3	Legal/ Statutory Requirements	
4	Technology leverage for new products/ Services	

PROGRAM & PROGRAM MANAGEMENT: PMBOK

- **Program Defined**
  - A group of related projects designed to accomplish a common goal over an extended period of time
- **Program Management Defined**
  - A process of managing a group of ongoing, interdependent, related projects in a coordinated way to achieve strategic objectives

Examples:

- Project: completion of a required eMDP session in project management
- Program: completion of all eMDP sessions required for a certification program

DIFFERENCE BETWEEN PROJECT & PROGRAM

ATTRIBUTE	Project Mgmt.	Program Mgmt.
No. of Projects	One	many
Deliverable Complexity	Low	High
Delivery Size	Small & medium	Very Large
No. of people involved	Few	High
Resource Sharing	Very Low	High
Degree of dependency	Low	High
Focus on Corporate Obj.	Low	High
Team's focus	Project	Organization's Business Value
Co-location of People	One or few places	Globally Distributed
Requirement of Knowledge of External World (Technology/ Competitors)	Low	High

What is a successful project?

Define SUCCESS for IT Projects

Define SUCCESS for IT Projects

PROJECT TEAM (Employees)

- DELIVERABLE WITH-IN TIME/ BUDGET/ SCOPE/QUALITY variance
- NEW KNOWLEDGE
- APPRECIATION/ REWARD

BIZ PARTNERS:

LONG-TERM TRUSTED RELATIONSHIP
FURTHER BUSINESS

What is a successful project?

- CHAOS Six individual attributes of success:

1. On Time
2. On Budget
3. On Target
4. On Goal
5. On Value
6. On Satisfaction.

What is a failed project?

- Traditional Definition: a cost or timescale overrun in excess of 100%.

CHAOS report by Standish Group on Project Failure

Resolution Type 1, or project success: *The project is completed on-time and on-budget, with all features and functions as initially specified.*

Resolution Type 2, or project challenged: *The project is completed and operational but over-budget, over the time estimate, and offers fewer features and functions than originally specified.*

Resolution Type 3, or project impaired: *The project is canceled at some point during the development cycle.*

Source: https://www.standishgroup.com/sample_research_files/CHAOSReport2015-Final.pdf

- What exactly is the project failure:

- Three aspects:

1) the implementation process itself (time, budget & scope);
2) the perceived value of the project; &
3) client satisfaction with the delivered project

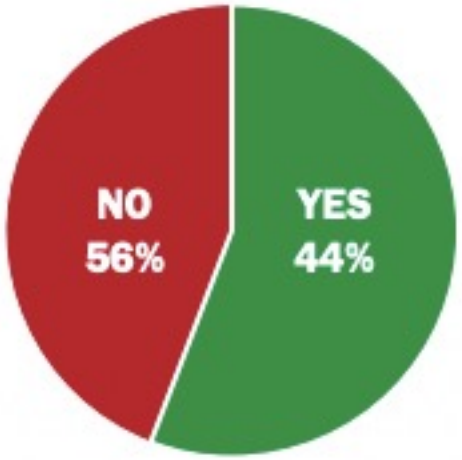
Source: Pinto, J. K., & Mantel, S. J. (1990). The causes of project failure. *IEEE transactions on engineering management*, *37*(4), 269-276.

Why do projects fail or do not meet customer expectations?

- Standish Group Research of 70,000 completed IT projects.
- CHAOS Summary of 2015 research report

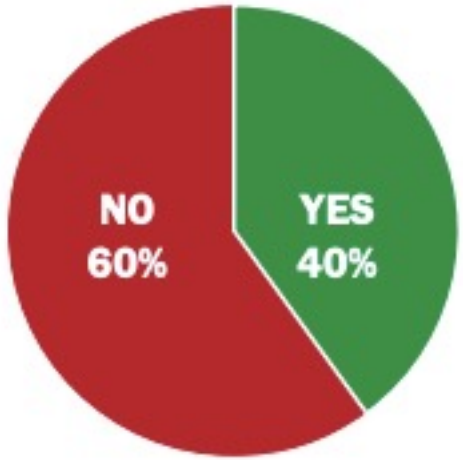
	2011	2012	2013	2014	2015
SUCCESSFUL	39%	37%	41%	36%	36%
CHALLENGED	39%	46%	40%	47%	45%
FAILED	22%	17%	19%	17%	19%

ONBUDGET



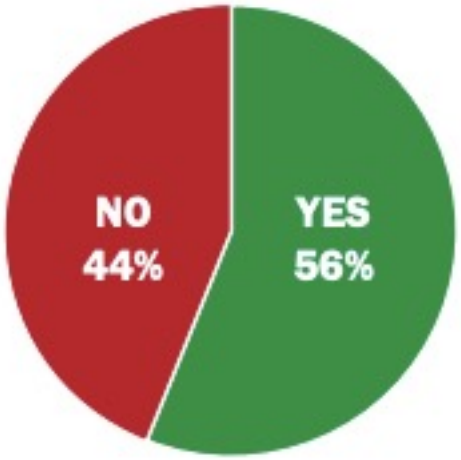
The percentage of projects that were OnBudget from FY2011–2015 within the new CHAOS database.

ONTIME



The percentage of projects that were OnTime from FY2011–2015 within the new CHAOS database.

ONTARGET



The percentage of projects that were OnTarget from FY2011–2015 within the new CHAOS database.

Project Impaired Factors	% of Responses
1. Incomplete Requirements	13.1%
2. Lack of User Involvement	12.4%
3. Lack of Resources	10.6%
4. Unrealistic Expectations	9.9%
5. Lack of Executive Support	9.3%
6. Changing Requirements & Specifications	8.7%
7. Lack of Planning	8.1%
8. Didn't Need It Any Longer	7.5%
9. Lack of IT Management	6.2%
10. Technology Illiteracy	4.3%
Other	9.9%

Source: Standish Group Report, 2014

Why do projects succeed?

Project Success Factors	% of Responses
1. User Involvement	15.9%
2. Executive Management Support	13.9%
3. Clear Statement of Requirements	13.0%
4. Proper Planning	9.6%
5. Realistic Expectations	8.2%
6. Smaller Project Milestones	7.7%
7. Competent Staff	7.2%
8. Ownership	5.3%
9. Clear Vision & Objectives	2.9%
10. Hard-Working, Focused Staff	2.4%
Other	13.9%

Source: Standish Group Report, 2014

WHY PROJECTS FAIL

- Lack of Users Involvement
  - TIME (Availability); TIMINGS
- Rapport / Relationship with Users (Group)
  - COMMUNICATIONS ;
  - EFFECTIVE TEAM WORK;
  - EXPECTATIONS MGT
    (over promising & under Delivering)
- Loss of FOCUS on the BIG PICTURE (Business Objectives)

WHY PROJECTS FAIL

- (Poor) Speed of Decision making

A Simple suggestion:

including Decision maker reduces:

- ✓ meeting time by 20%;
- ✓ increases decision quality;
- ✓ decreases decision reversal……

WHY PROJECTS FAIL

- ❑ **Emotional Maturity**
  - ✓ Perceive; assess; direct & manage emotions & actions of stakeholders
  - ✓ [over-ambition; arrogance; ignorance; abstination; fraudulence]

- ❑ **Scope Optimization**
  - ✓ Doing TOO MUCH what is NOT reqd (non-value)
  - ✓ Doing too less for what is reqd. (value-adding)
  - ✓ 50% features wasted…..many required missed…

PMBOK: BASIC FRAMEWORK

- 5 PROJ. MGT. PROCESS GROUPS
- 10 KNOWLEDGE AREAS
- 47 BEST PRACTICES
- Inputs, Tools and Techniques , Outputs for EACH Best Practice

Because Proj Mgt is both Art & Science

5 PM PROCESS GROUPS

IPECC:

- Initiating Process Group : commitment to execute
- Planning Process Group : prepare approach to action
- Executing Process Group : co-ordinate resources & execute plans
- Monitoring & Controlling Process Group : monitor 'actual' vs. 'planned' & take corrective actions for variance
- Closing: formal acceptance & orderly end

10 KNOWLEDGE AREAS

- Project Integration Management
- Project Scope Management
- Project Time Management
- Project Cost Management
- Project Quality Management
- Project Human Resource Management
- Project Communications Management
- Project Risk Management
- Project Procurement Management
- Project Shareholders Expectations Management
- Professional Responsibility (Code of Conduct)

Areas	INITIATION	PLANNING	EXECUTING	MONITORING & CONTROLLING	CLOSING
INTEGRATION	Dev Charter	Dev PM Plan	Direct & Manage Proj Work	Monitor & Control Proj Work Perform Integrated Change Control	Close Project or Phase
SCOPE		Plan Scope Mgt Collect Requirements Define Scope Create WBS		Validate Scope Control Scope	
TIME		Plan Schedule Mgt Define Activities Sequence Activities Estimate Activities Resources Estimate Activities Duration Dev. Schedule		Control Schedule	
COST		Plan Cost Mgt Estimate Costs Determine Budgets		Control Costs	
QUALITY		Plan Quality Mgt	Perform Quality Assurance	Control Quality	
HR		Plan HR Mgt	Acquire Proj Team Develop Project Team Manage Project Team		
COMMUNI-CATION		Plan Communication Mgt	Manage Communications	Control Communications	
RISK		Plan Risk Mgt Identify Risks Perform Qualitative Risks Analysis Perform Quatitative Risks Analysis Plan Risk Response		Control Risks	
PROCUREMENT		Plan Procurement Mgt	Conduct Procurement	Control Procurement	Close Procurement
STAKEHOLDER	Identify Stakeholders	Plan Stakeholders Mgt	Manage Stakeholders Engagement	Control Stakeholders Engagement	

Defining Project Life Cycle Processes

Project Life Cycle Processes				
Initiating	Planning	Executing	Controlling	Closing
– authorizing the project or phase	– prepare approach to action	– coordinating resources to carry out the plan	– monitor 'actual' vs. 'planned' & take corrective actions for variance	– formalizing acceptance of the project or phase and bringing it to an orderly end

Project Process Deliverables

Project Life Cycle Processes				
Initiating	Planning	Executing	Controlling	Closing
•Project Charter	Project Plan •Scope •WBS	•Project Plan	Change Control •Scope •Schedule	•Sign Off •Lessons Learned

Initiating - Charter

- Formally AUTHORIZES a project/ phase
- Captures initial REQUIRMENTS that satisfy
- STAKEHOLDERS NEEDS & EXPECTATIONS
- Contains info like
  - Project Purpose & Justification
  - Measurable Objectives & Success Criterion
  - Hi-level REQUIREMENTS & Description
  - Hi-Level Risks & Assumptions
  - Summary Budget
  - PM responsible & SPONSOR

Planning – Scoping

- DEFINES HOW PROJECT IS EXECUTED, MONITORED, CONTROLLED & CLOSED

- Contains info like
  - Project life cycle selected
  - Description of tools & techniques for those
  - How work will be executed
  - How changes will be monitored & controlled
  - Performance measurement base-line and management review
  - Plans for managing scope, requirements, schedule, cost, quality, process improvements, HR, communication, risks, procurements etc

Planning – Work Breakdown Structure

What is a WBS?

"Work Breakdown" is about **decomposing** the scope into its basic parts (deliverables),

identifying the relationship between those parts (**predecessors & successors**),

and how much effort and how long it will take to produce each part (**work/duration**).

The **assignment of resources** to produce the parts and assemble them together is the last step.

Planning – WBS

How do I create a WBS?

Phases	• Identify major phases of work (e.g. Feasibility analysis, Initiate, Research planning , Data gathering, Validation, Peer Review, Client Review, Close)
Major Project Deliverables and related milestones	• Identify the major component deliverables of work required (e.g., Research presentation, report, whitepaper as on dd/mm/yy)
Tasks	• Identify the tasks needed to create those deliverables. (Some interim, smaller deliverables such as documents may be involved)

Executing - Tracking

- Compare planned vs actuals
- Find variance
- Take appropriate actions to minimize variances
- Maintain timely & accurate info.
- Forecast costs/ schedules…

Controlling – Change Management

Every client check point or review meeting would result in some update to your work… Do you agree?

- Capture all changes from MOM on to WBS
- Communicate the impact of the change to your project manager/ team/ client
- Suggest recommendations to your project team/ manager

TIME ,
SCOPE

Closing – Lessons Learned Sample

Describe the background and nature of the lesson learned, how it impacted the client, and what the implications were for the project team. For an area that might not have worked well, please include what the team would do differently next time.

Date	Lesson Learned	Project Phase
12/3/19	We did not capture the MOM after the client call. The client got back with too many changes which we could not fix as per original timeline. We should have reworked on the WBS after the client call and committed a realistic time frame.	Planning
12/3/19	We did not plan leave for XYZ in our team, so had to postpone the client review meeting scheduled for 1/3/2019 to 4/3/2019.	Planning

Key Learning's from the Session

- My Key Learning's …

- My actions …