

Project Management Technologies PMG 312

Project management in a nutshell
(Cont.)

Prepared by Dr. Majid Saad

Lecture 2



The background features a series of vertical panels with rounded ends. The first panel on the left shows a person's hands typing on a laptop. The subsequent panels are semi-transparent and contain white line-art icons: a graduation cap, a play button, a target with an arrow, an open book, and a magnifying glass. The overall color palette is warm, with shades of orange and brown.

Project Management Technologies PMG 312

Lecture 2

Prepared by
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AGENDA

- **Project requirements definition**
 - Workshop
 - Brainstorming
 - Decision logic table
 - RACI charting
- **Understanding** the project business case

Project requirements definition

- ❑ One of the major issues in starting the project is getting good requirements!
- ❑ Project requirements are the further breakdown of the client's deliverables that are described in detail.



Project requirements definition

❑ This process cannot be done in a vacuum, and the requirements collecting process is mostly the client's or shareholder's responsibility.

❑ It is the responsibility of the PM to facilitate this requirements collecting process and there are many techniques (or combination of) for doing this.



Workshop

- ❑ The PM could have designed workshops with the stakeholders and subject matter experts to gather the detailed requirements, which usually enhance user participation, expediting development and improving the quality of the specifications.



Workshop

- ❑ These workshops have a set of detailed agenda to eliminate uncertainties between parties and help improve communication between all parties.

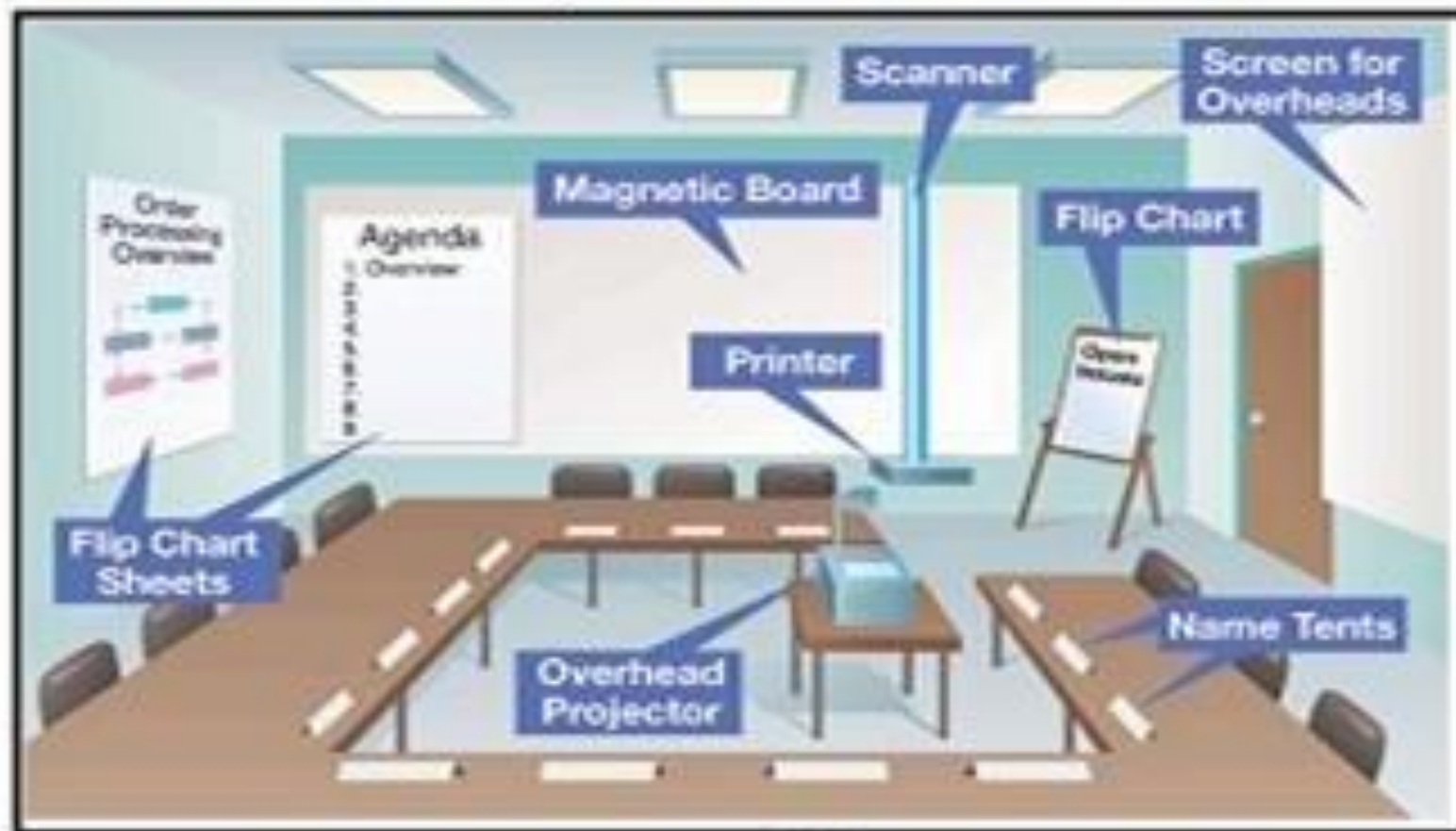


Workshop

- ❑ A popular workshop process is joint application design (JAD), which is a group meeting-based process for requirements collection
- ❑ JAD is usually more effective in small, clearly defined projects and less effective in large complex projects.



- Special type of group meeting
- Reduced time for requirements collection



Brainstorming

- ❑ A requirement gathering is a group brainstorming exercise that needs to be facilitated by the PM.
- ❑ The group consists mostly of the clients or shareholders.



Brainstorming

IDEO U

Rules of Brainstorming



Defer Judgment



Encourage Wild Ideas



Build on the Ideas of Others



Stay Focused on the Topic



One Conversation at a Time



Be Visual



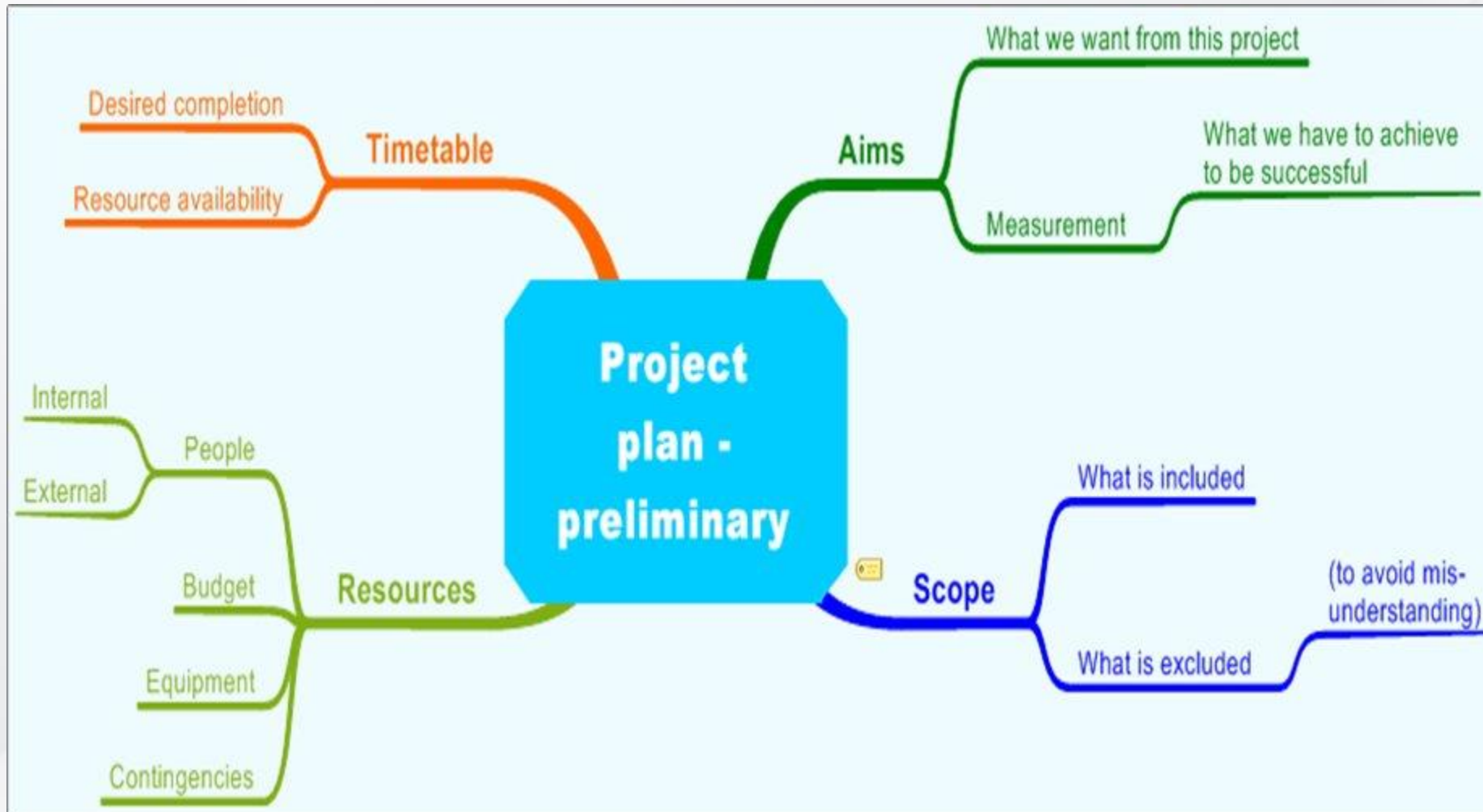
Go for Quantity

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Brainstorming

- ❑ It is always smart if the PM sends surveys along with the project's charter to key stakeholders to list their requirements or have individual interviews with the key stakeholders before the brainstorming session(s) begins to save time and have a more effective meeting.

Brainstorming



Brainstorming

Project Charter

A Project Charter is a living document for an improvement team that outlines the presenting problem, the target and the boundaries of a process improvement effort.



Problem Statement

The problem captured in the form of a measurement



Business Case

The business reasons for doing the project



Goal Statement

The target of the process measurement



Timeline

When each project phase will be completed



Scope

What's in and what's out of the project



Team Members

The people who will participate in the project



Brainstorming

□ Brainstorming should also include the areas of assumptions, constraints, and potential risks.

□ As for risk identification, the group could look at risks from past projects.



Brainstorming

❖ **The following are some techniques that could be used during the brainstorming session:**

- A. Brown paper
- B. Process chart

A- Brown paper

- ❑ Brown paper is a form of flow-charting used to capture a complete process for evaluation (e.g., finding ways to streamline the system)
- ❑ Including highlights of key activities, interfaces, documentation, data sources, strengths, and problems.



A- Brown paper

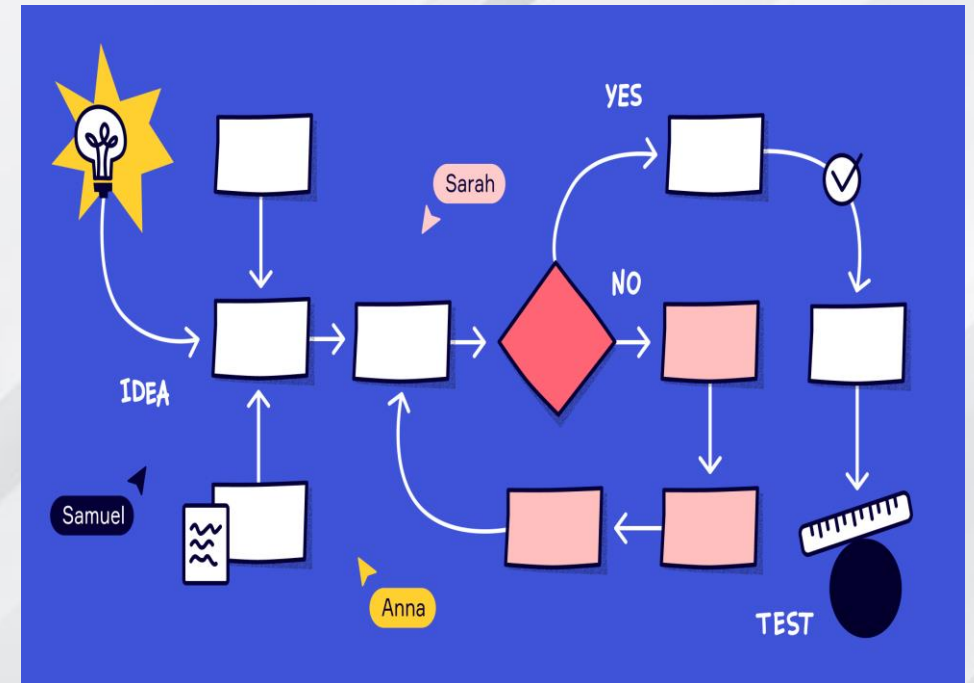
- ❑ Brown papers are generally used in the “as-is” and “to-be” model definition phases of a project.
- ❑ They can also be used to develop “should-be” and “could-be” models for evaluation.

A- Brown paper (Advantage)

- ❑ It is important to gather the right people to develop a model of the process or system under evaluation.
- ❑ Another advantage in having the users involved in this exercise is that you usually will get “buy in” and support from them on changing the process.
- ❑ A feeling of ownership is important to users!

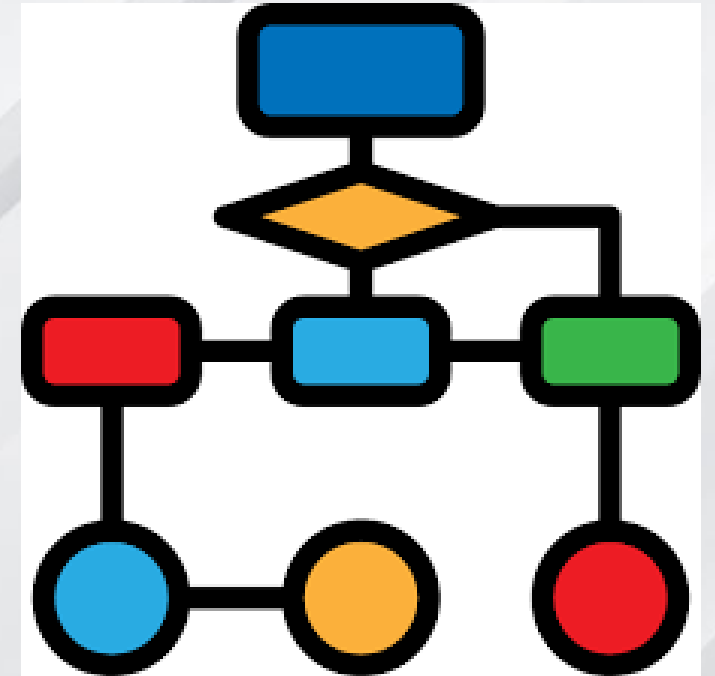
B- Process chart

❑ If you want to learn in detail what happens in a situation involving a document, request, material, or even the actions of a person, consider using a process chart.



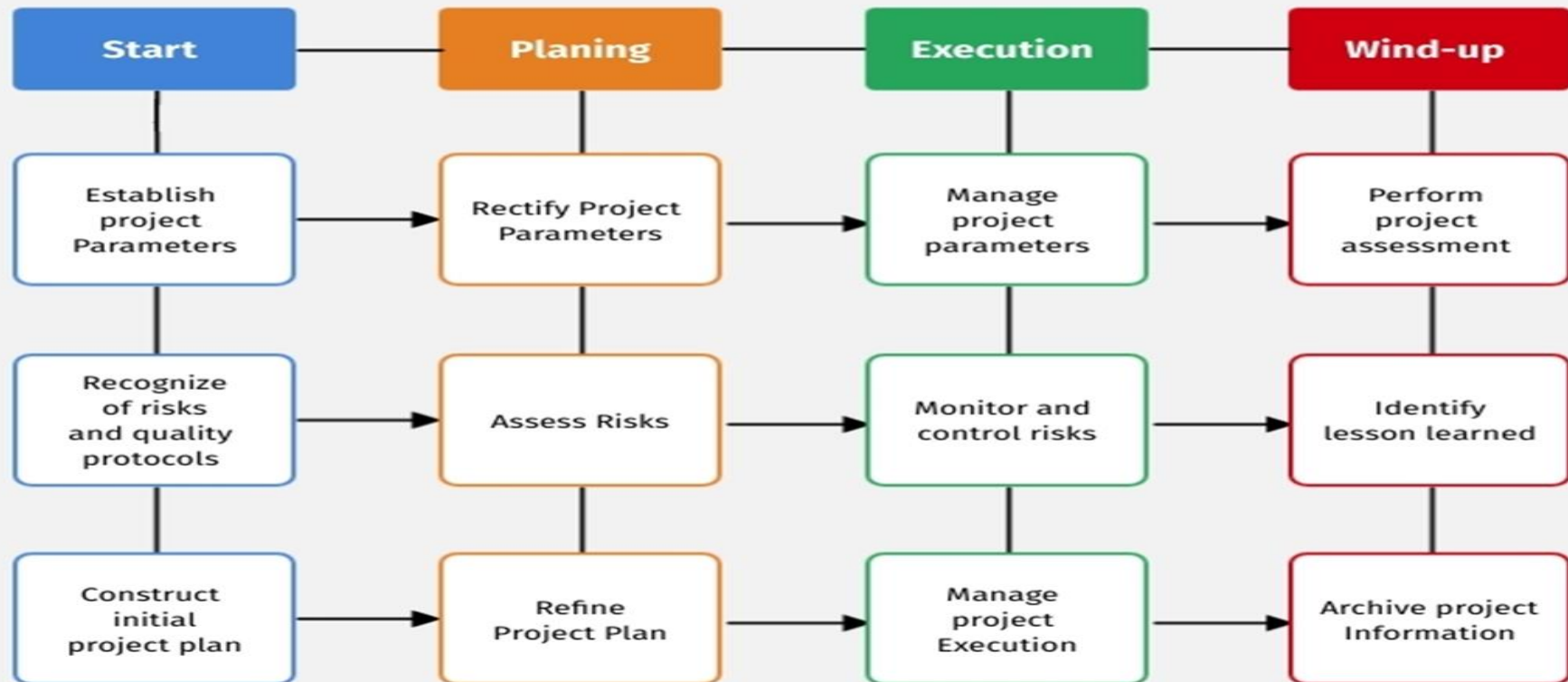
B- Process chart

- ❑ The process chart documents the detailed steps of the flow and categorizes the type of action taken.



B- Process chart

PROJECT MANAGEMENT



B- Process chart

- ❑ The Process Flow chart provides a visual representation of the steps in a process.
- ❑ Flow charts are also referred to as Process Mapping or Flow Diagrams.

B- Process chart

❑ Constructing a flow chart is often one of the first activities of a process improvement effort, because of the following benefits:

- Gives everyone a clear understanding of the process
- Helps to identify non-value-added operations
- Facilitates teamwork and communication
- Keeps everyone on the same page

B- Process chart

- ❑ With this information, you can analyze the process for potential improvements.
- ❑ To add value, you should try to reduce a complex process to its lowest common denominator to a series of simple steps to save time and reduce costs.

B- Process chart

❑ There are many symbols used to construct a process chart; the more common symbols are shown below:

Symbol	Name	Function
	Start/end	An oval represents a start or end point
	Arrows	A line is a connector that shows relationships between the representative shapes
	Input/Output	A parallelogram represents input or output
	Process	A rectangle represents a process
	Decision	A diamond indicates a decision

B- Process chart

	Operation	When something is changed or created
	Transportation	When something is moved
	Inspection	When something is verified or checked
	Delay	When something waits
	Storage	When something is kept

Figure 2.1 Process chart symbols. (Shade the appropriate symbol with a connector.)

B- Process chart (Example ۲)

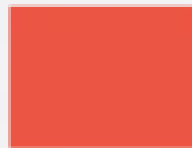
❑ There are many other symbols used to construct a process chart;



Beginning
or End



Decision



Activities



Delay



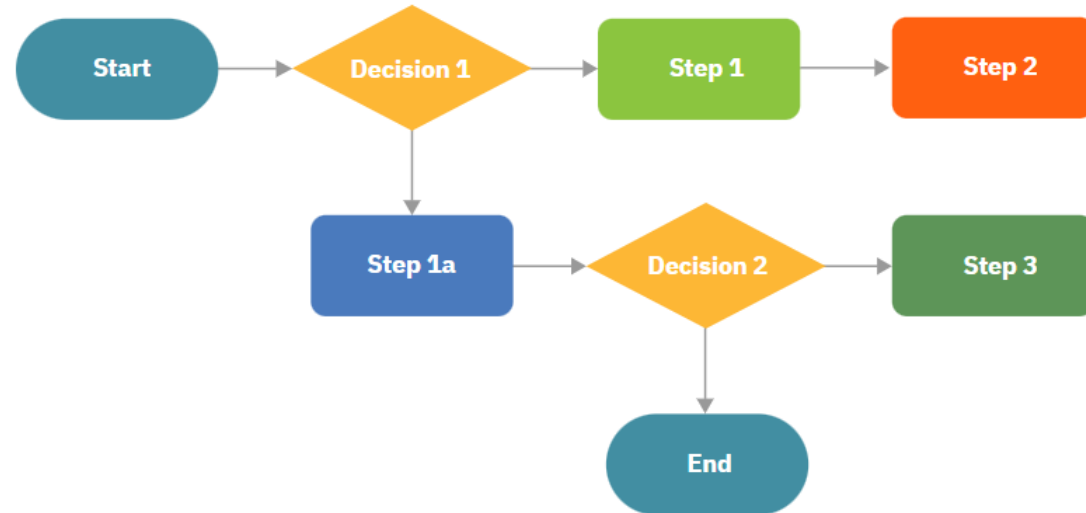
Process Flow
Direction



Document

B- Process chart (Example ۲)

❑ The following is an example of a very simple flow chart for the process



Decision logic table

- ❑ A decision logic table (DLT) is a documentation technique that can display an entire situation visually, with all alternatives shown side by side.
- ❑ If you do not use a DLT, you may miss some alternatives that you never thought of which could sink your project.



Decision logic table

- ❑ A decision table lists the various values for all the factors that influence some aspect of a system's behavior and indicates the expected system actions in response to each combination of factors.



Decision logic table

❑ The following describes the characteristics of a DLT, which increases team communication:

- a) Displays all the elements of a problem.
- b) Shows all the conditions affecting the solution.
- c) Reveals all the relationships that exist among the defined conditions.
- d) Indicates which action is appropriate for each set of circumstances.
- e) Illustrates the IF (condition) and THEN (conclusion or action) concept.

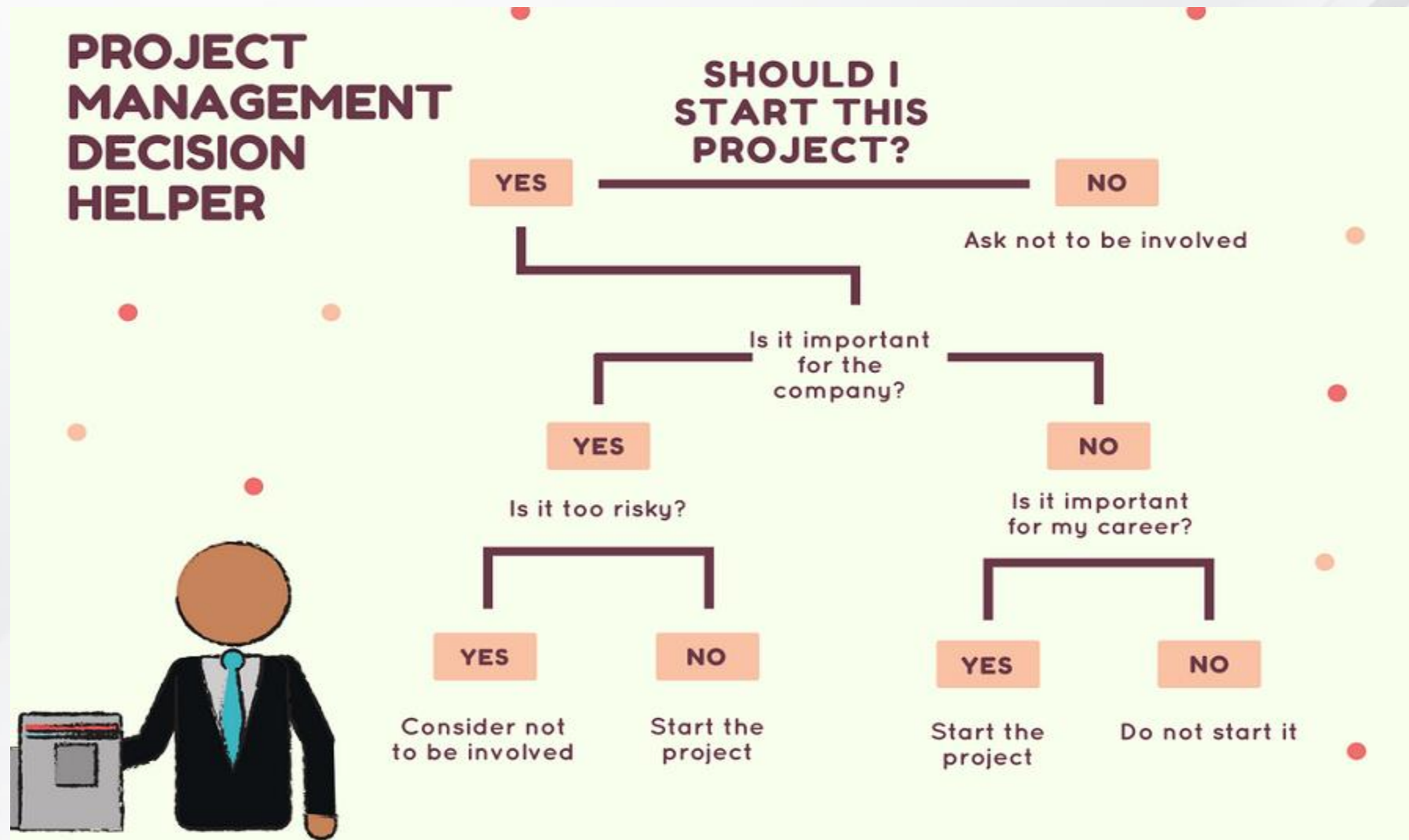


Decision logic table

- ❑ These factors can be shown either as statements with possible answers of true or false, as questions with possible answers of yes or no, or as conditions that can have two or more possible values.



Decision Tree (Example)



RACI charting

- ❑ Responsible, Accountable, Consult and Inform (RACI) charting is an effective means of analyzing and assigning roles and responsibilities.
- ❑ It correlates functional roles or individuals to their level of participation in an activity by assigning codes for responsibility, accountability, and communication interfaces.

RACI charting

❑ Establishing participation for each activity, for all roles, by assigning codes as described below:

- **R (responsible)**—The individual working on the activity (the doer)
- **A (accountable)**—The individual with yes/no authority; approval or veto power (Note: If two or more A's exist, this could be a sign of problems.)
- **C (consult)**—The individual must be consulted prior to action; two-way communication occurs
- **I (inform)**—The individual receives one-way communication and will use the information or take subsequent action

RACI charting

R

Responsible — Person working on activity

A

Accountable — Person with decision authority

C

Consult — Key stakeholder who should be included in decision or work activity

I

Inform — Needs to know of decision or action

RACI charting

Project Acme	Person 1	Person 2	Person 3	Person 4
Deliverable 1	Responsible	Accountable	Consulted	Informed
Deliverable 2	Accountable	Consulted	Informed	Responsible
Activity 1	Consulted	Informed	Responsible	Accountable
Activity 2	Accountable	Consulted	Informed	Responsible

RACI charting

- It is a quick means of bringing redundancies and misunderstandings to light, so that better communication can occur.

	 FREDDO	 SAM	 GANDALF	 ARWEN	 EOWYN
Decide on what to do with ring	C	I	A	C	R
Create Fellowship	R	C	A	C	R
Get the ring to Mount Doom	R	C	A	C	I
Distract and defeat enemies	I	R	C	R	I

Traditional RACI charting

□ Steps to complete a chart include (Traditional RACI Matrix):

- Selecting a business process to be analyzed.
- Listing all of the activities associated with that process in the lefthand column of the chart.
- Identifying all functional roles associated with the process and listing them in the top row on the chart.

RACI charting

❑ Step 2: Identify Project Tasks

- ❑ Review the project and break it down into clear tasks and deliverables.
- ❑ Put these down the left-hand column of your chart.

	 FRODO	 SAM	 GANDALF	 ARAGORN	 ELROND
Decide on what to do with ring					
Create Fellowship					
Get the ring to Mount Doom					
Distract and defeat enemies					

RACI charting

☐ Step 3: Assign The RACI To Each Role And Task

- ☐ Work through each task and think about the different roles and what they should be responsible for.
- ☐ Every task or deliverable should have Responsible and Accountable at least.
- ☐ Make sure there is only one role or name assigned to Accountable—this is really important.
- ☐ Think carefully about who should be Consulted whilst the task is ongoing, and who should be Informed once the task is complete.

	 FRODO	 SAM	 GANDALF	 ARAGORN	 ELROND
Decide on what to do with ring					
Create Fellowship					
Get the ring to Mount Doom					
Distract and defeat enemies					

RACI charting

- ❑ Step 4: Agree on This With Your Team
- ❑ Step 5: Agree on This With The Core Project Stakeholders
- ❑ Step 6: Make It Useful Throughout The Life Of The Project

	 FRODO	 SAM	 GANDALF	 ARAGORN	 ELROND
Decide on what to do with ring	C	I	A	C	R
Create Fellowship	R	C	A	C	R
Get the ring to Mount Doom	R	C	A	C	I
Distract and defeat enemies	I	R	C	R	I

Understanding the project business case

- ❑ From many recent studies, the major reason for project failures is not the specifics of what went wrong, but rather the lack of procedures, methodology, and standards for managing the project.
- ❑ The PM who is asked to manage a project with no methodology, standards, procedures, and processes will have a difficult time keeping the project under control and has a high probability of being unsuccessful.

Understanding the project business case

❑ Also keep in mind that technical oriented projects have unusually high degrees of uncertainty for the following reasons:

- ❖ Technology is changing every 6–12 months—new programming languages, new interface mechanisms, hardware platforms, tools, and version compatibility issues
- ❖ Immature methodologies

Understanding the project business case

- ❖ Resource turnover is high—new teams for each project
- ❖ No standard benchmarks for abilities/skill levels of resources
- ❖ Dependencies on customer for good requirements and project plan task completions
- ❖ Fast-changing business environment

Understanding the project business case

- ❖ Unfortunately, most projects have no linkage to corporate strategy (i.e., a set of short- and long-range goals), which remains revolutionary thinking in many corporations today.
- ❖ So, in ranking a new project request, you should ask: does this project have any linkage to your corporate strategy? If it does, there is a high probability that you want to execute this project.
- ❖ Also, if the new project request has nothing to do with your corporate strategy, there is a much lower probability that you would execute the project.

Understanding the project business case

- ❖ Going this way shows maturity in your project management process and adds more overall long-term value to your organization.
- ❖ Another advantage of linking projects to your corporate strategy is having more executive support in gaining resources and needed budget monies.

In summary, projects need to have more of a business focus that is aligned to strategic business goals!

Conclusion

- The goal of Project Management is to deliver an Information System that is acceptable to Users and is developed on time and within budget
- A good methodology encompasses standard policies, processes, and procedures that incorporate a suite of tools and techniques to help guide the process through its life cycle in an efficient, consistent, and repeatable manner.
- Project requirements are the further breakdown of the client's deliverables that are described in detail.
- This process cannot be done in a vacuum, and the requirements' collecting process is mostly the client's or shareholder's responsibility.
- It is the responsibility of the PM to facilitate this requirements collecting process and there are many techniques (or combination of) for doing this.
- Projects need to have more of a business focus that is aligned to strategic business goals!



Thank You