Project Management Principles

Teresa Lawrence, PhD, PMP, CSM
Exhale

1

Objectives

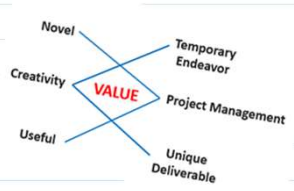
- Build the skill set, tool set, and mind set of creative leadership and project management competencies
- Strengthen collaborations to establish new respite programs for caregivers of the elderly
- Equip participants to apply CPS and PM principles to lead the project proposal process in support of new respite programs for caregivers of the elderly
- Increase team synergy and performance and to foster a work climate that draws maximum potential from each team member - FourSight

2

In your breakout room, share a little about how "projects" are managed in your organization.

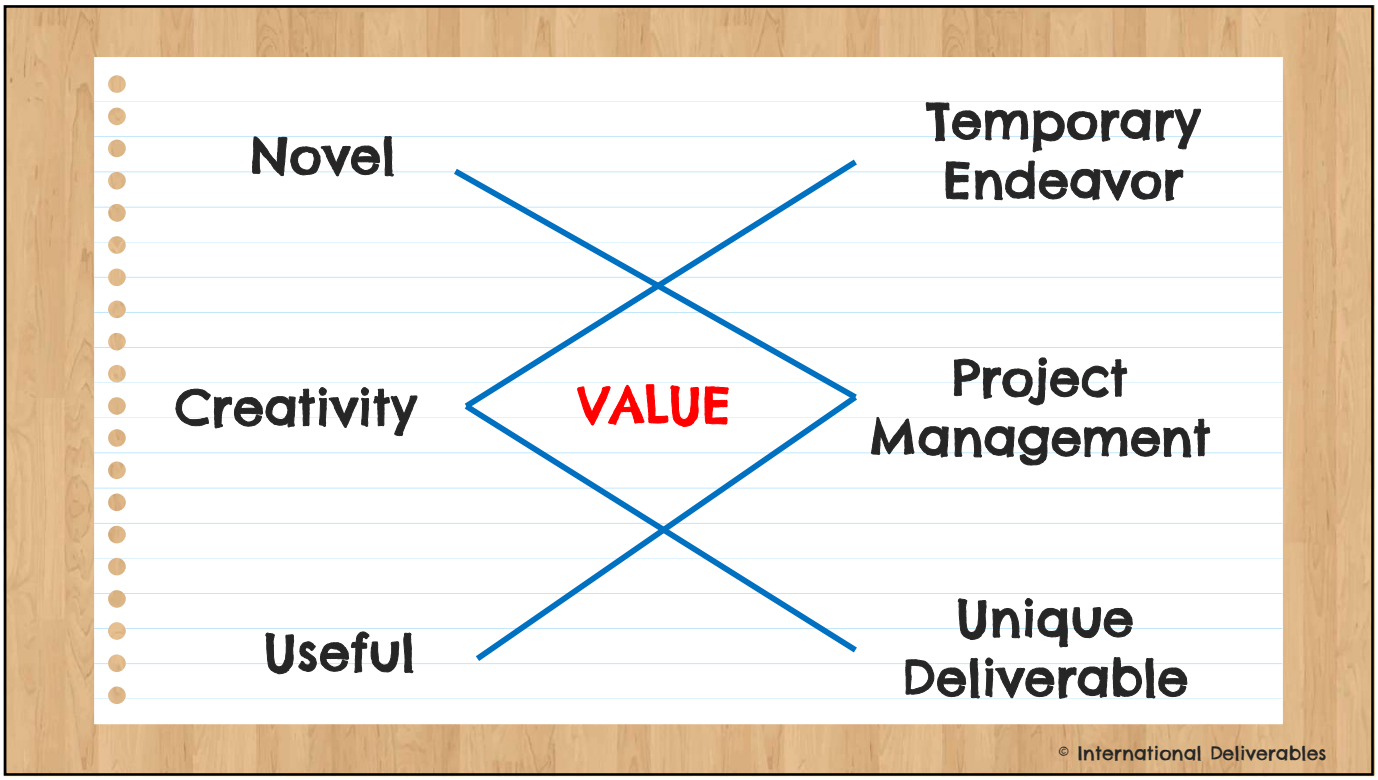
3

Agenda

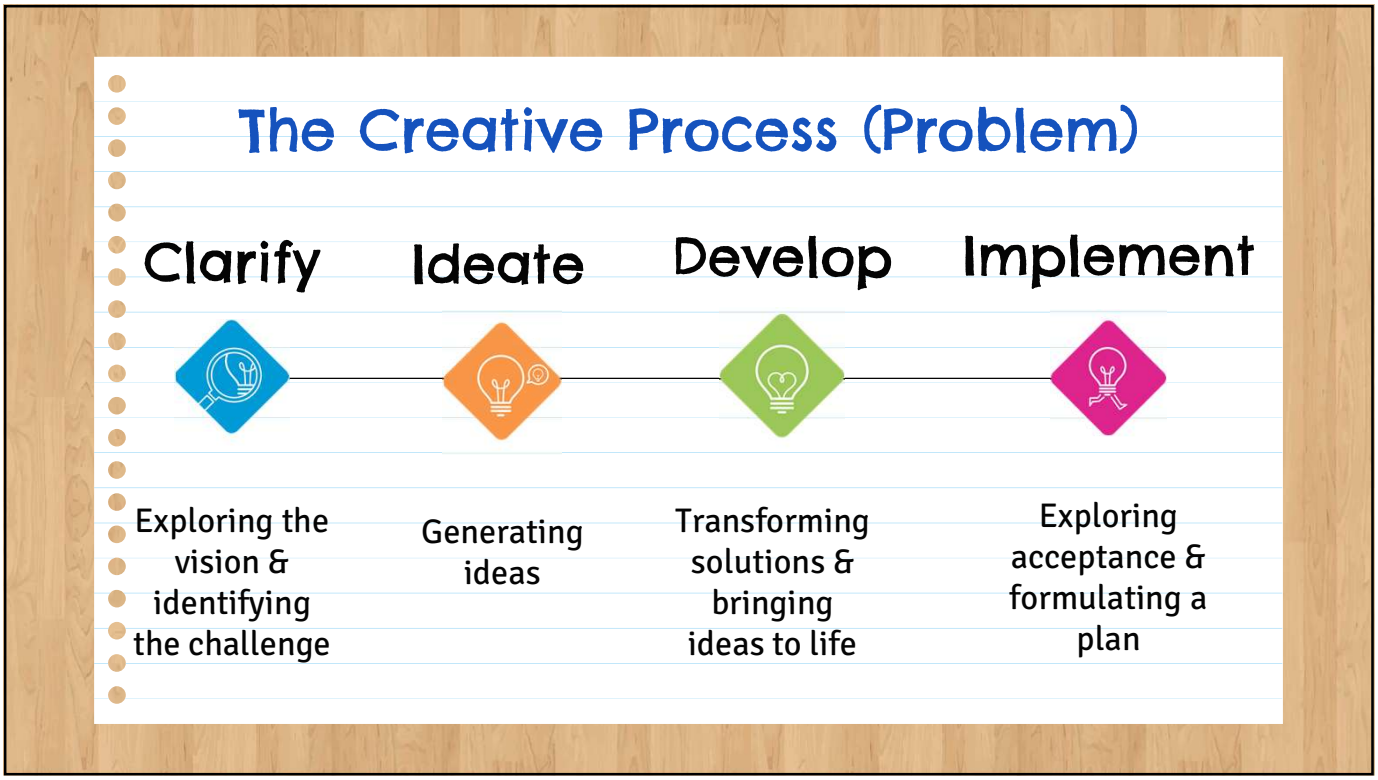


- A case for the intersection
- Project Management principles
- Applications to the proposal and new program idea
- Questions to consider

4


Novel
Temporary Endeavor
Creativity
VALUE
Project Management
Useful
Unique Deliverable
© International Deliverables

5


The Creative Process (Problem)
Clarify
Ideate
Develop
Implement
Exploring the vision & identifying the challenge
Generating ideas
Transforming solutions & bringing ideas to life
Exploring acceptance & formulating a plan

6

TOOLS...and TECHNIQUES

CLARIFY

Vision Boarding
WIBNI
Creative Questions

DEVELOP

PPCO
Paired Comparison
Card Sort

Dynamic Balance

IDEATE

Brainstorming
Brainwriting
Forced Connections
Word Dance
Excursion
Scamper

IMPLEMENT

Assisters/Resisters
Sequencing

Highlighting

7

Project: A temporary endeavor undertaken to create a unique product, service or result.

– PMI

Proposal

New respite program

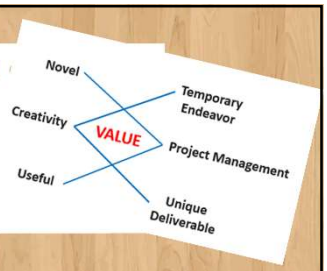
8

Process Groups & Knowledge Areas

Initiating	Integration	Resources
Planning	Scope	Communications
Executing	Schedule	Risk
Monitor & Controlling	Cost	Procurement
Closing	Quality	Stakeholder

9

Overarching Questions



- In what ways might this apply to your proposal?
- How might this shape your new respite program idea?
- How to use divergent and convergent thinking?
- How might you apply the CPS thinking tools?
- In what ways does this new information build on your current practices?
- What might be all the ways to apply this new information?

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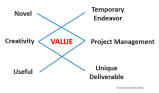
The Intersection



The *World Economic Forum* identified **complex problem solving** as the #1 required workplace skill, **critical thinking** as #2 and **creativity** as #3, all by 2020.

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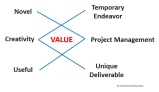
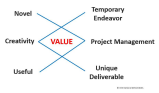
The Intersection



A survey by consulting giant *McKinsey & Co.* found that nearly 60% of senior executives said building a strong **project management** discipline is a top-three priority for their companies.

12

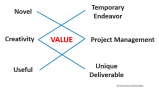
The Intersection



In a 2018 article published by *PMI®*, veteran project managers were encouraged to sign up for courses on **creative** and **innovative** thinking in order to change their perspective on traditional **project management**.

13

The Intersection



In the 20th *CEO Survey* from 2017, 67% of industry leaders saw **creativity** and **innovation** as very important to their organizations.

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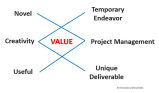
The Intersection



In their 3rd global survey on the current state of project management, *PricewaterhouseCoopers* found that providing project management training contributed to an increase in business performance in project scope, quality, stakeholder satisfaction, business benefits and business growth.

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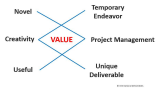
The Intersection



In 2010 the IBM Institute for Business Value conducted a study of 1500 CEO's world-wide in 60 countries and 22 industries. Those CEO's deemed creativity as the single most important leadership competency.

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One versus Two

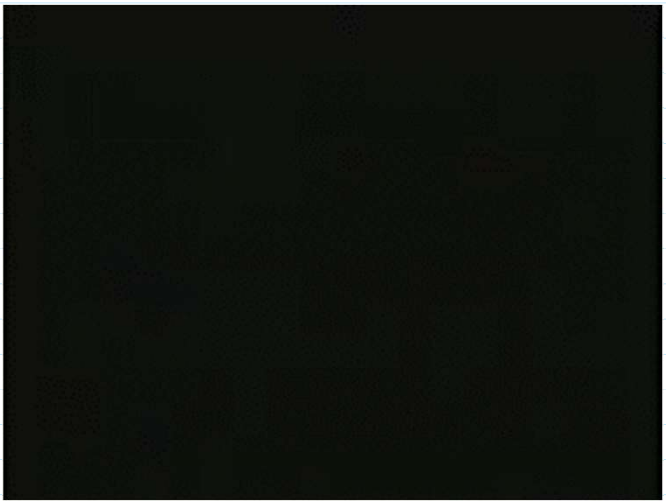
- Watch the two videos.
- In your groups, compare how the two videos represent how projects might be completed.
- What generalizations and insights might you make?

17

One versus Two

18

One versus Two



19

One versus Two

- Watch the two videos.
- In your groups, compare how the two videos represent how projects might be completed.
- What generalizations and insights might you make?

20

Where are projects found?

In every industry

21

Process Groups & Knowledge Areas

Initiating
Planning
Executing
Monitor & Controlling
Closing

Integration
Scope
Schedule
Cost
Quality

Resources
Communications
Risk
Procurement
Stakeholder

22

Estimates

Highly accurate…time consuming and labor intensive.

Analogus (Top Down)

Using actual information from a similar activity on this or another project.

Parametric

Using historical information on linear or scalable activities.

T-Shirt Sizing

Three-Point Estimates

Estimating averages of worst-case (P), best-case (O) and most realistic (R) estimates.

Bottom Up

Using a separate estimate for each activity and aggregating up.

23

Organizational Process Assets (OPAs)

The plans, templates, processes, policies, procedures, lessons learned and knowledge base specific to, developed and adopted by, and used by, the organization.

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Organizational Process Assets (OPAs)

Reporting systems, project templates, resources used, correspondence, file-naming conventions, PM plans and project document, registers, lessons learned.

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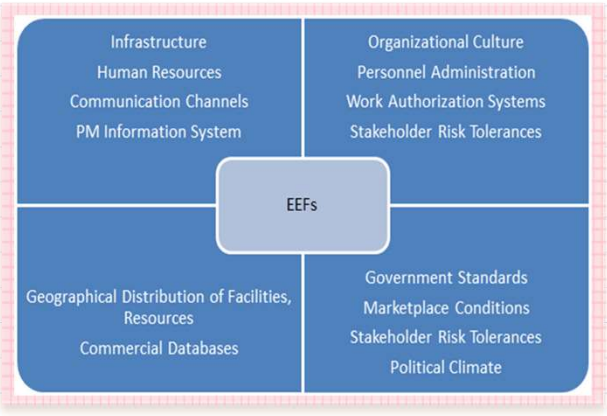
Enterprise Environmental Factors (EEFs)

The internal, external, tangible, intangible factors influencing the project…conditions outside the control of the project team.



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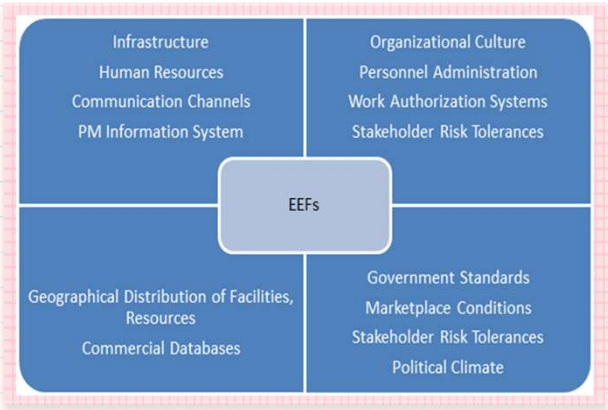
Enterprise Environmental Factors (EEFs)

- Government rules and regulations, structure, culture, geographic location of the organization, available technology and resources.



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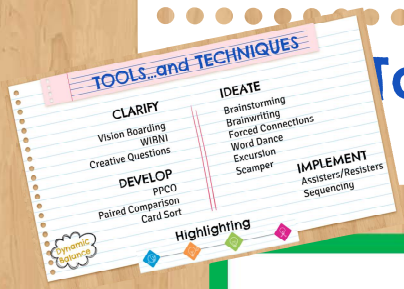


Tools & Techniques Output (ITTOs)

What do I need before I can....

Inputs

What will I have when I am done.. What am I trying to achieve....

Tools and Techniques

Outputs

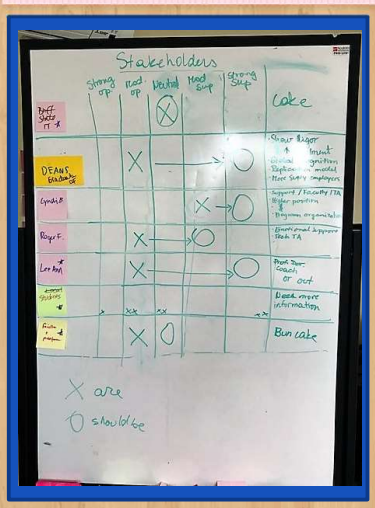
What is the best/most appropriate tool or technique I should use...

28

In Practice

What is the best/most appropriate tool or technique I should use...

What do I need before I can....



Stakeholder Register

Project Manager	Anthony Daskes			Project Phase	Initiation	
Role	**Contact**	**Category**	**Interest**	**Influence**	**Expectations**	**Comms requirements**
Sponsor	Phone: +61 4834467651 Email: john.matthew@gmail.com	Internal	●●●	●●●	User friendly and responsive UI across handheld device, tablet or desktop	Video Conference and Email
Project Lead	Phone: +61 4785739580 Email: luke.wilson@gmail.com	Internal	●●●	○●●	Project to be delivered on time within budget	Email and Telephone
Product Manager	Phone: +91 9923535534 Email: deepak.patel@gmail.com	Internal	○●●	○○●	Clear Requirements and timely completion of documentation	Email and Telephone
PMO	Phone: +65 8542533152 Email: suzie.barker@gmail.com	Internal	○●●	○○●	Project to be delivered on time within budget Timely approvals to be obtained	Email and Telephone
Dev Manager	Phone: +44 5871512134 Email: thomas.atkins@gmail.com	Internal	○●●	○●●	Develop responsive UI	Email and Telephone
QA Manager	Phone: +91 9852425634 Email: disha.sharma@gmail.com	Internal	○●●	○●●	UI is responsive No quality issues Branding is maintained	Email and Telephone
Infrastructure Team Lead	Phone: +61 4854665621 Email: jim.arthur@gmail.com	Internal	○●●	○○●	Changes should not affect the uptime of the system No memory spikes	Email and Telephone

What will I have when I am done.. What am I trying to achieve....

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Process Groups & Knowledge Areas

- Initiating
- Planning
- Executing
- Monitor & Controlling
- Closing

- Integration
- Scope
- Schedule
- Cost
- Quality

- Resources
- Communications
- Risk
- Procurement
- Stakeholder

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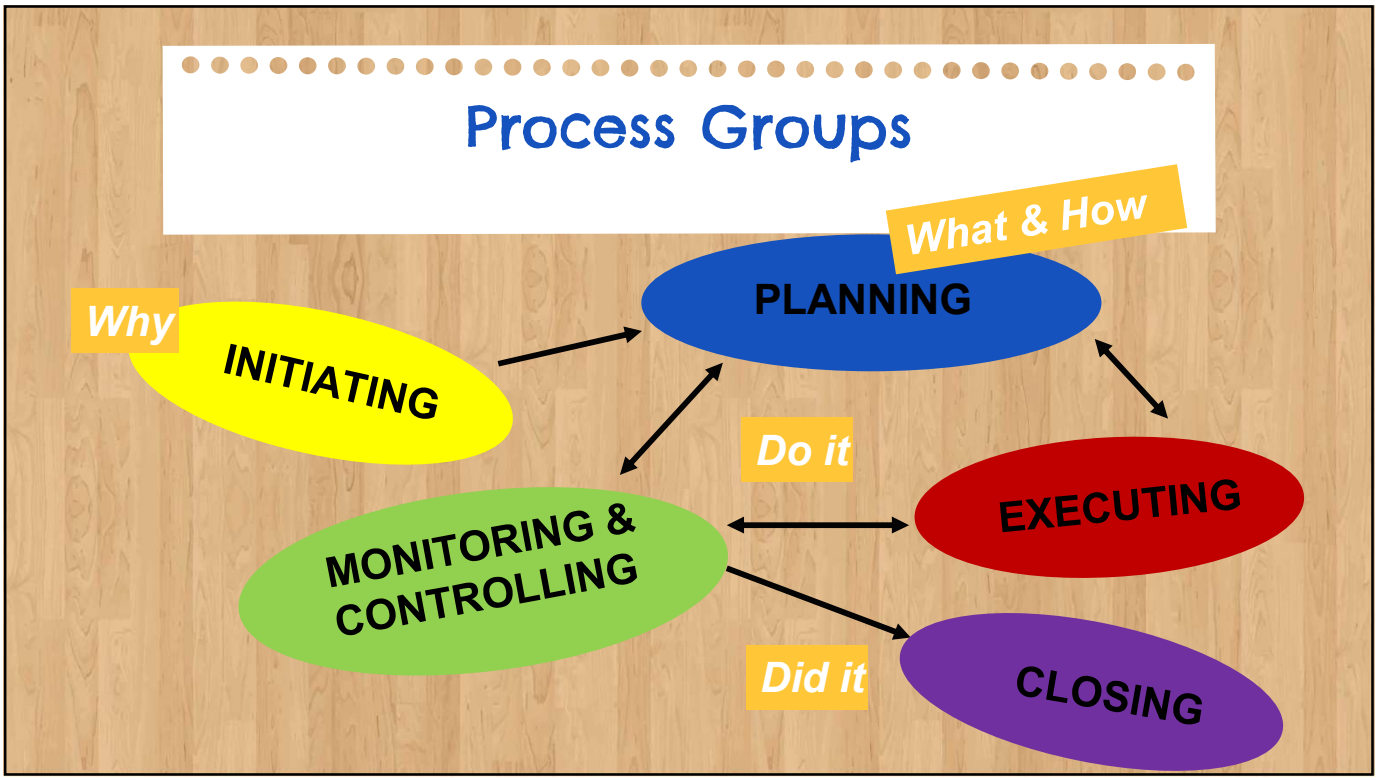

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Process Groups

- Initiating: Visioning and authorizing the project
- Planning: Defining and refining project objectives
- Executing: Coordinating people and resources to carry out the project
- Controlling: Ensuring objectives are met and adjusting when needed
- Closing: Formulizing the acceptance and closure of the project

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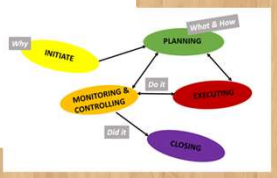
Knowledge Areas



Cover the 10 core components of projects
Provide a framework
Not every project will employ all the knowledge areas
When considered and applied in practice across the process groups, project success increases

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Process Groups & Knowledge Areas

Initiating
Planning
Executing
Monitor & Controlling
Closing

Integration
Scope
Schedule
Cost
Quality

Resources
Communications
Risk
Procurement
Stakeholder

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Knowledge Areas

- Integration Management is the coordination of all elements of a project - tasks, resources, stakeholders, managing conflicts between different aspects of a project and making adjustments and trade-offs between competing requests and evaluating resources.
- Scope Management ensures a project's scope is accurately defined and mapped. Did we build the right thing?
- Schedule Management is the listing of activities, deliverables, and milestones within a project.

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Knowledge Areas

- Cost Management is the process of estimating, allocating, and controlling project costs.
- Quality Management is the degree to which the project fulfills requirements and satisfies the needs for which it was undertaken…Did we build the thing right?
- Resource Management identifies, acquires, and manages the resources needed for the successful completion of a project.
- Communication Management is a collection of processes that help make sure the right messages are sent, received, and understood by the right people.

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Knowledge Areas

- Risk Management works to increase the probability and/or impact of positive risks and to decrease the probability/impact of negative risks in a project.
- Procurement Management supports the purchase and acquisition of products, services or results needed from outside the project team.
- Stakeholder Management is the process by which systematically identify stakeholders; analyze their needs and expectations; and plan and implement various tasks to engage with them.

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Tasks/activities/processes that hold the whole project together.

Project Integration Managment

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Integration Management

- Outlining the project: Charter
- Coordinating the tasks that hold the whole project together
- Doing the work
- Managing the working
- Monitoring the work
- Adjusting
- Incorporating adjustments to the plan and work

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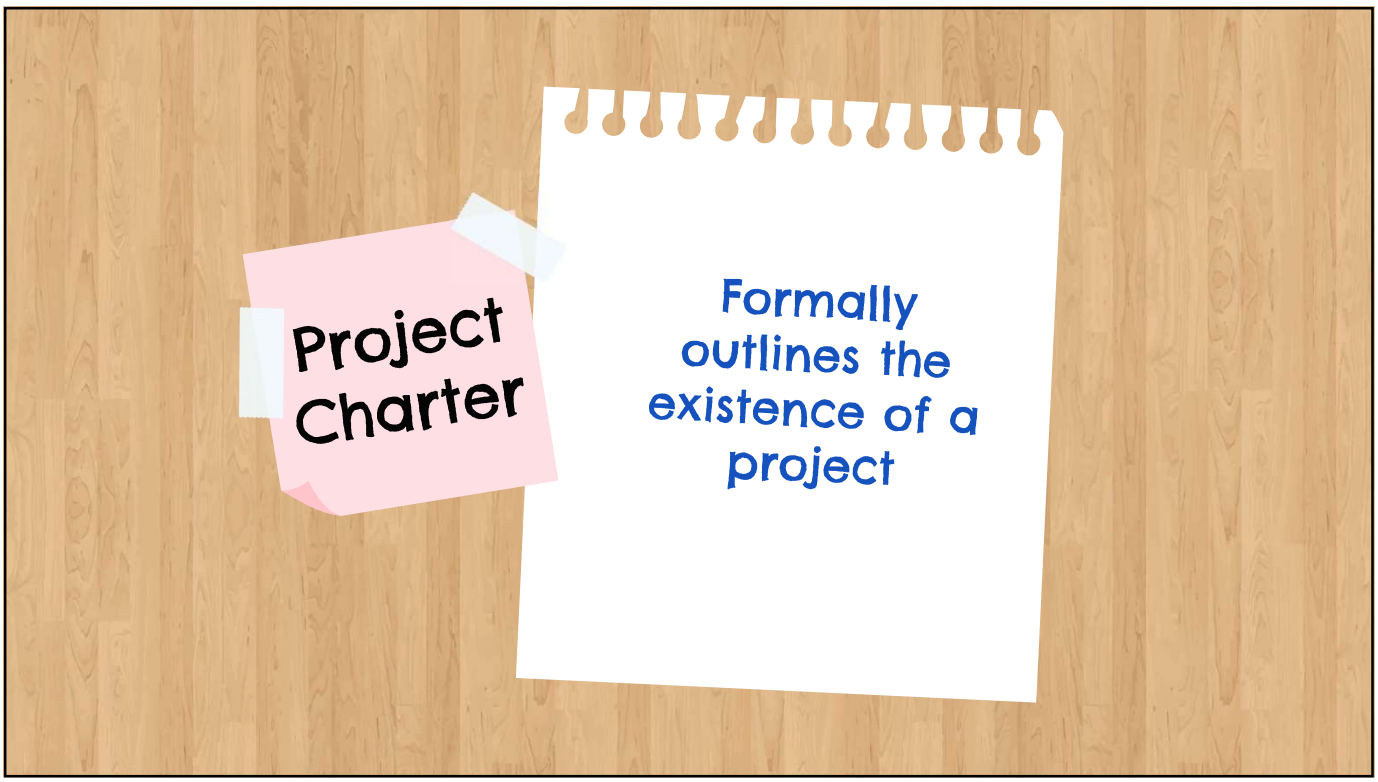

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Project Charter

- A high-level description of project deliverables and outlines project goals.
- It is an official document, which authorizes the project and gives project managers the authority to use all the available resources for the project. No charter, no project.
- In addition to describing the goals and deliverables, project charter also defines the key project stakeholders.
- The project charter provides a summary of the project and provides a shared understanding of the project.

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Charter: A Project Roadmap

- Business need - Context…why the need and what's the rationale?
- Project Sponsor - Who is the lead and has authority to embark on this pilot?
- Project name - What are we calling this new respite project?
- 10K Scope - What will you create?
- 10K Cost - What budget information can you provide?
- 10K Timeline - What are the proposed start and end dates and milestones?
- 10K Risk - Any anticipated issues or known concerns?
- Assumptions - With whom will you collaborate?
- Project Success - How will you assess success of the pilot?

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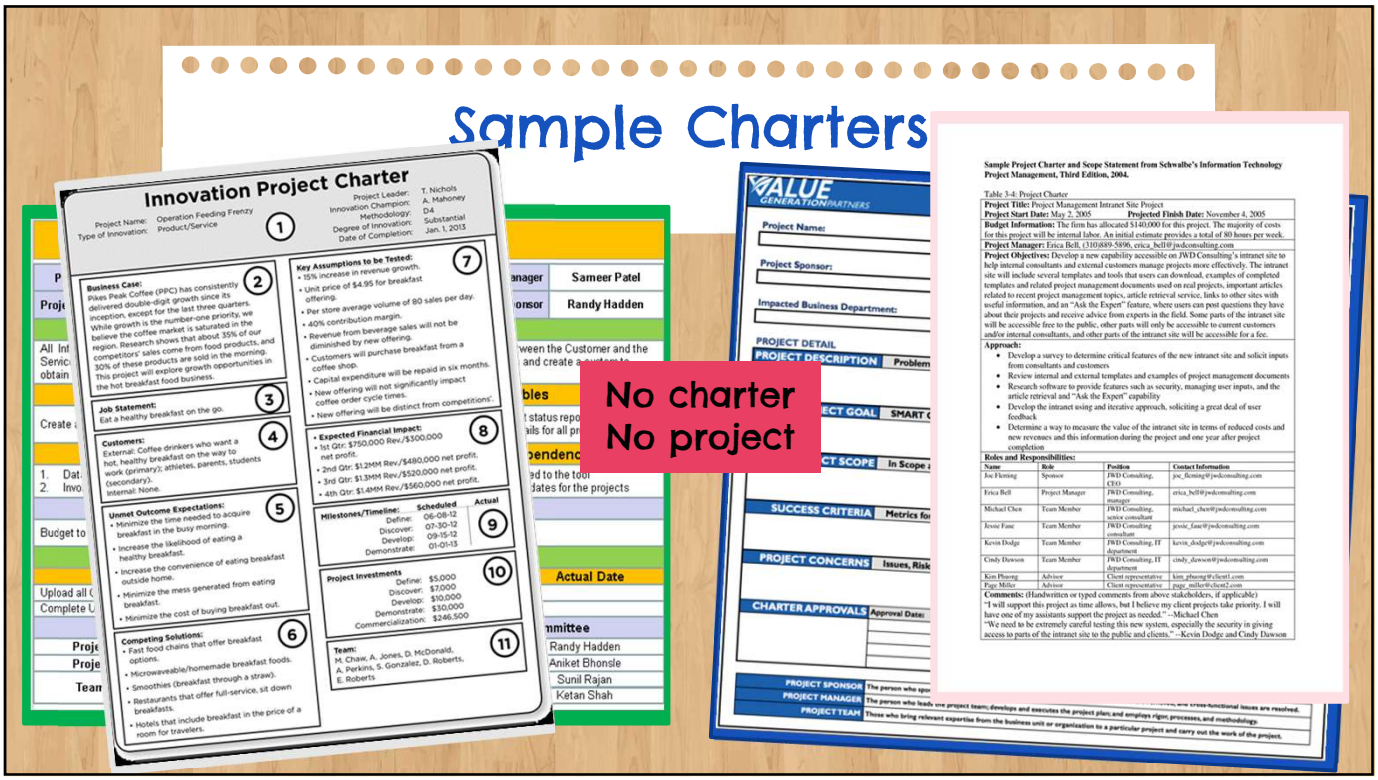
Sample Charters
Innovation Project Charter
No charter
No project
Sample Project Charter and Scope Statement from Schwalbe's Information Technology Project Management, Third Edition, 2004.
VALUE GENERATION PARTNERS
PROJECT DETAIL
PROJECT DESCRIPTION
SUCCESS CRITERIA
PROJECT CONCERNS
CHARTER APPROVALS

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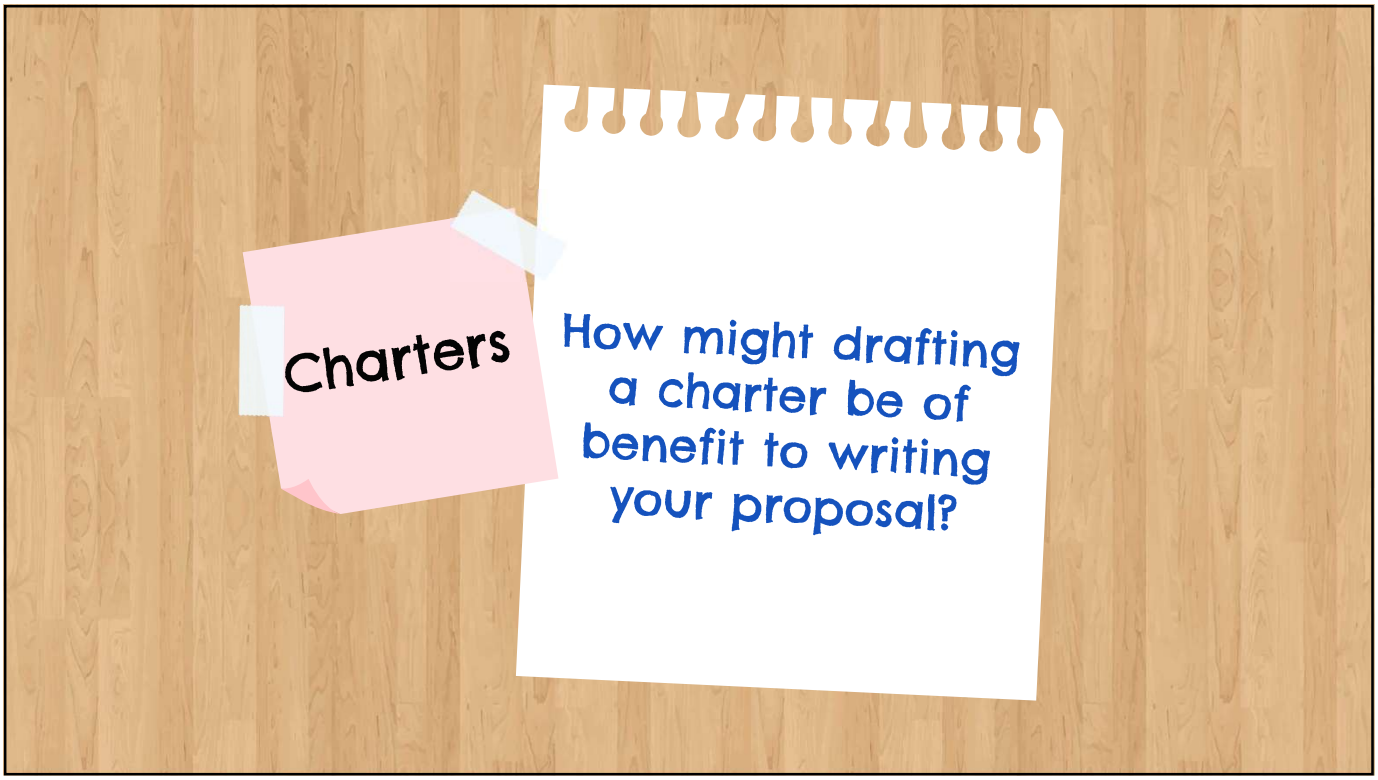
Charters
How might drafting a charter be of benefit to writing your proposal?

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Integration Management

- What might be all the ways to monitor progress along the way both in the proposal submission and pilot project implementation?
- How might you decide what changes to the pilot project are acceptable?
- There will be learning along the way that could be of assistance to you and/or other in future work and endeavors. What considerations will you give to capturing and sharing these insights?
- What existing practices might leverage and/or employ in your proposal and program implementation?

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Stakeholder Management

Knowing who the stakeholders are and actively managing their expectations.

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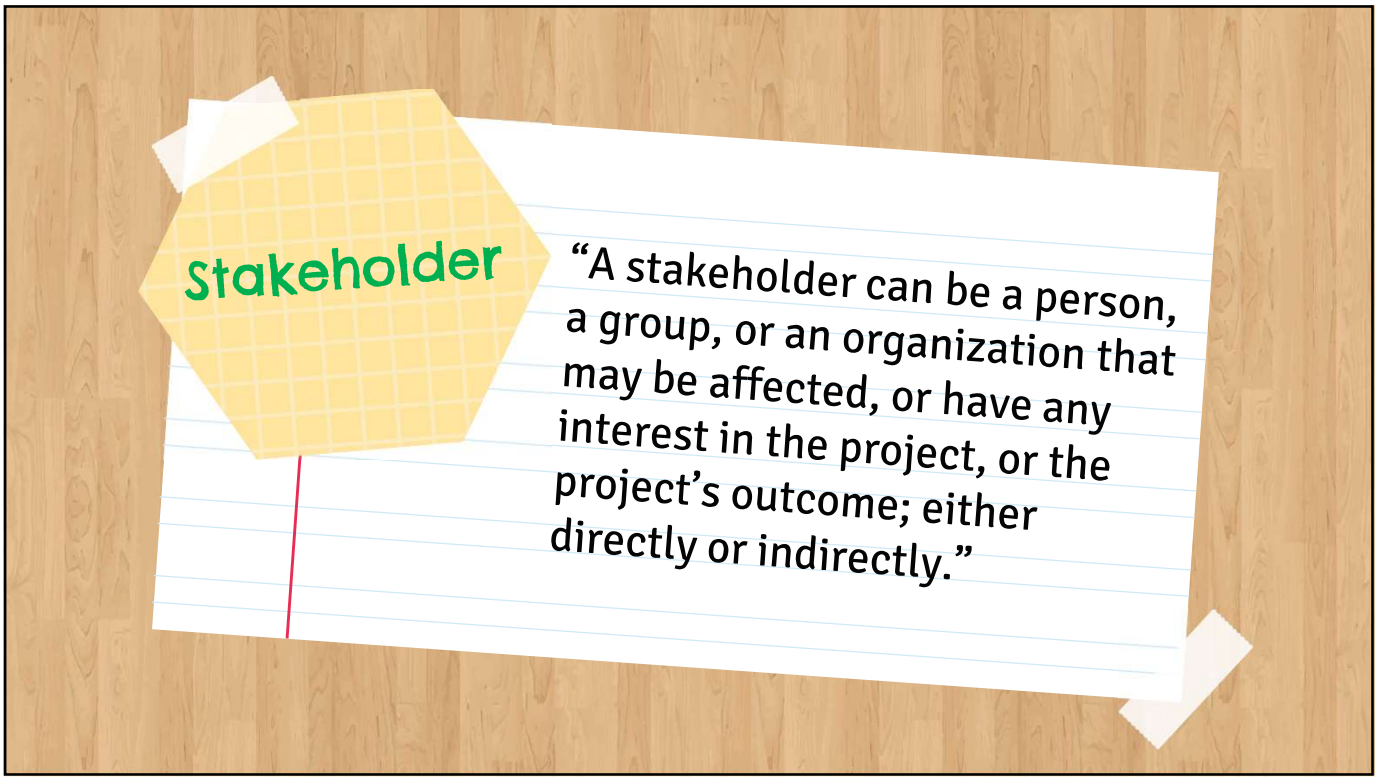
Stakeholder
"A stakeholder can be a person, a group, or an organization that may be affected, or have any interest in the project, or the project's outcome; either directly or indirectly."

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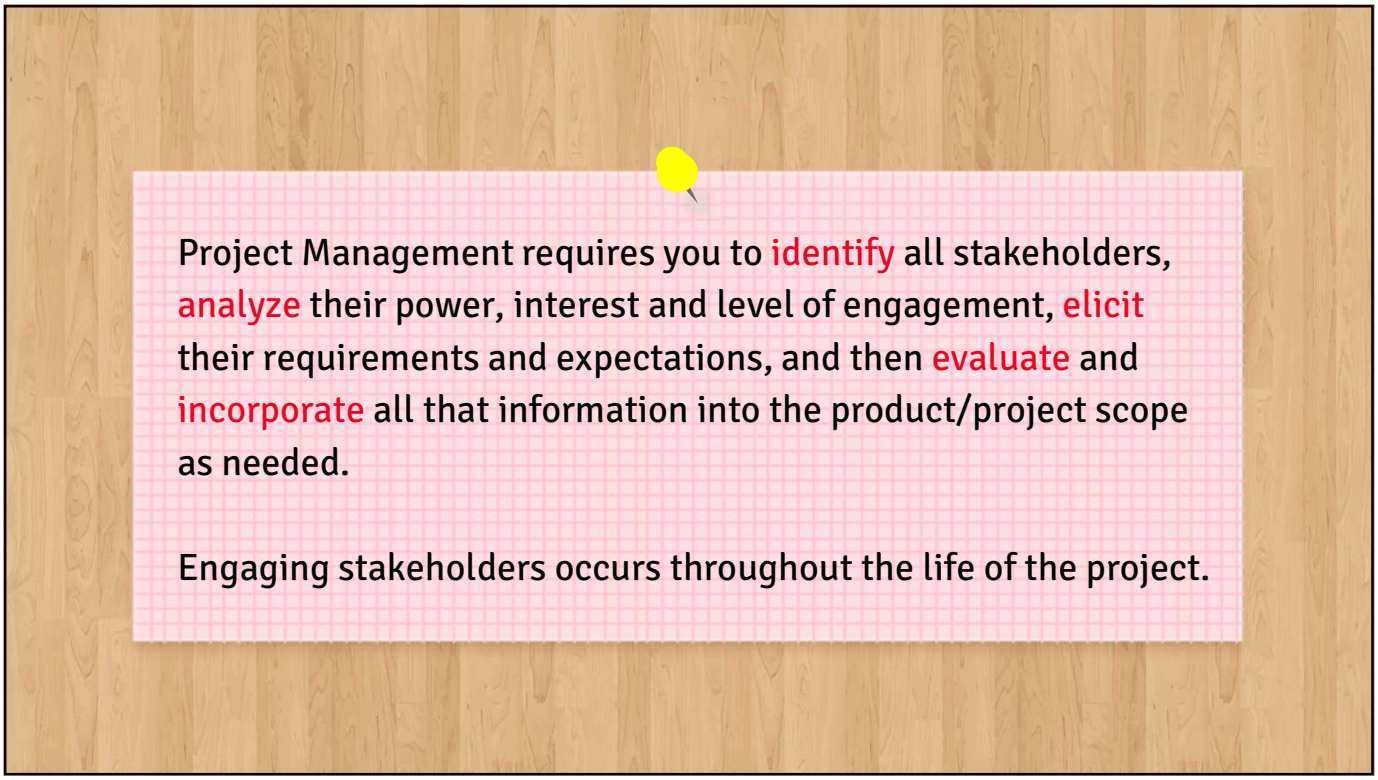
Project Management requires you to identify all stakeholders, analyze their power, interest and level of engagement, elicit their requirements and expectations, and then evaluate and incorporate all that information into the product/project scope as needed.
Engaging stakeholders occurs throughout the life of the project.

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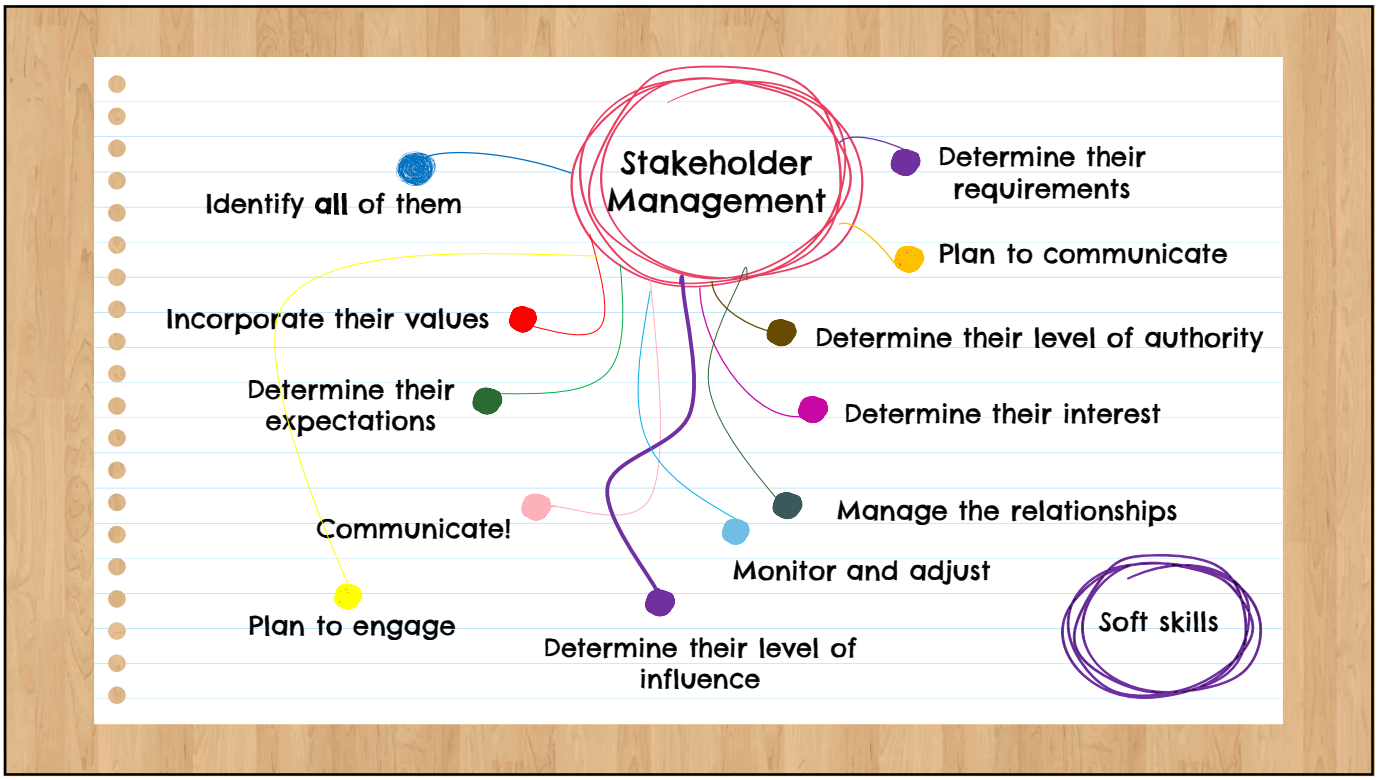
Stakeholder Management
Identify all of them
Determine their requirements
Plan to communicate
Incorporate their values
Determine their level of authority
Determine their expectations
Determine their interest
Manage the relationships
Communicate!
Monitor and adjust
Plan to engage
Determine their level of influence
Soft skills

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WMBAT ways to identify all stakeholders?

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Stakeholder Analysis: Power/Interest

Grouping identified stakeholders based on their level of power and interest in the project's outcome

Influence/Power of Stakeholder

HIGH POWER/LOW INTEREST

Contains the stakeholders that have a high influence/power, but have low interest in the project.

HIGH POWER/HIGH INTEREST

Contains the stakeholders that have a high influence/power, and have a high interest in the project.

LOW POWER/LOW INTEREST

Contains the stakeholders that have little influence/power, and have a low interest in the project.

LOW POWER/HIGH INTEREST

Contains the stakeholders that have little influence/power, but have a high interest in the project.

Interest of Stakeholder

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Stakeholder Analysis: Power/Interest

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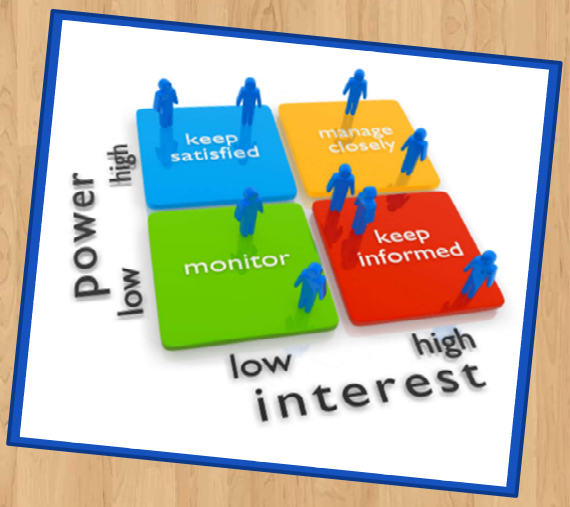
Interest of Stakeholder



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Stakeholder Analysis: Power/Interest

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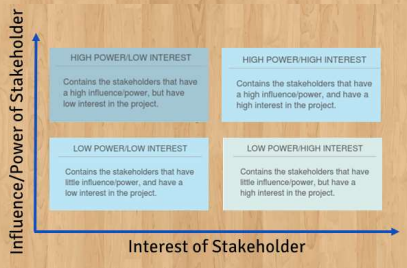

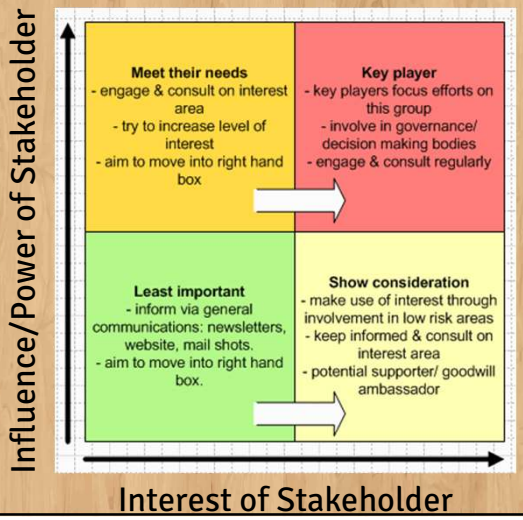

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Stakeholder Analysis - Engagement Levels

C : Current engagement
D : Desired engagement

Stakeholder	Unaware	Resistant	Neutral	Supportive	Leading
Stakeholder 1	C →			D	
Stakeholder 2			C	D	
Stakeholder 3				D C	

H2, HM, WMBAT, IWW might the team members positively influence stakeholders?

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Stakeholder Analysis – Salience Model

Salience

The quality of being particularly noticeable or important; prominence.

Power

Is the ability a project stakeholder has to influence the outcome of an organization, deliverables, or a project.

Legitimacy

Is the authority level of involvement project stakeholders have on a project.

Urgency

Is the time expected by project stakeholders for responses to their expectations.

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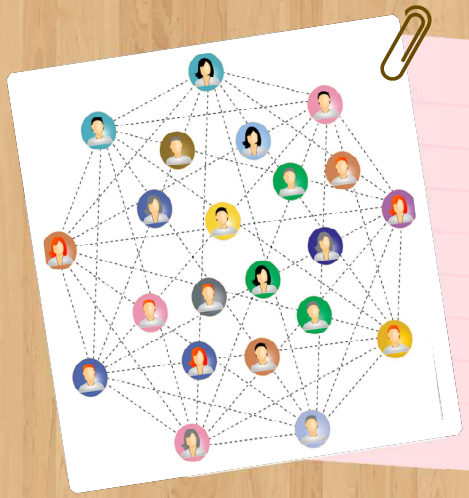

WMBAT ways to classify *all* stakeholders?

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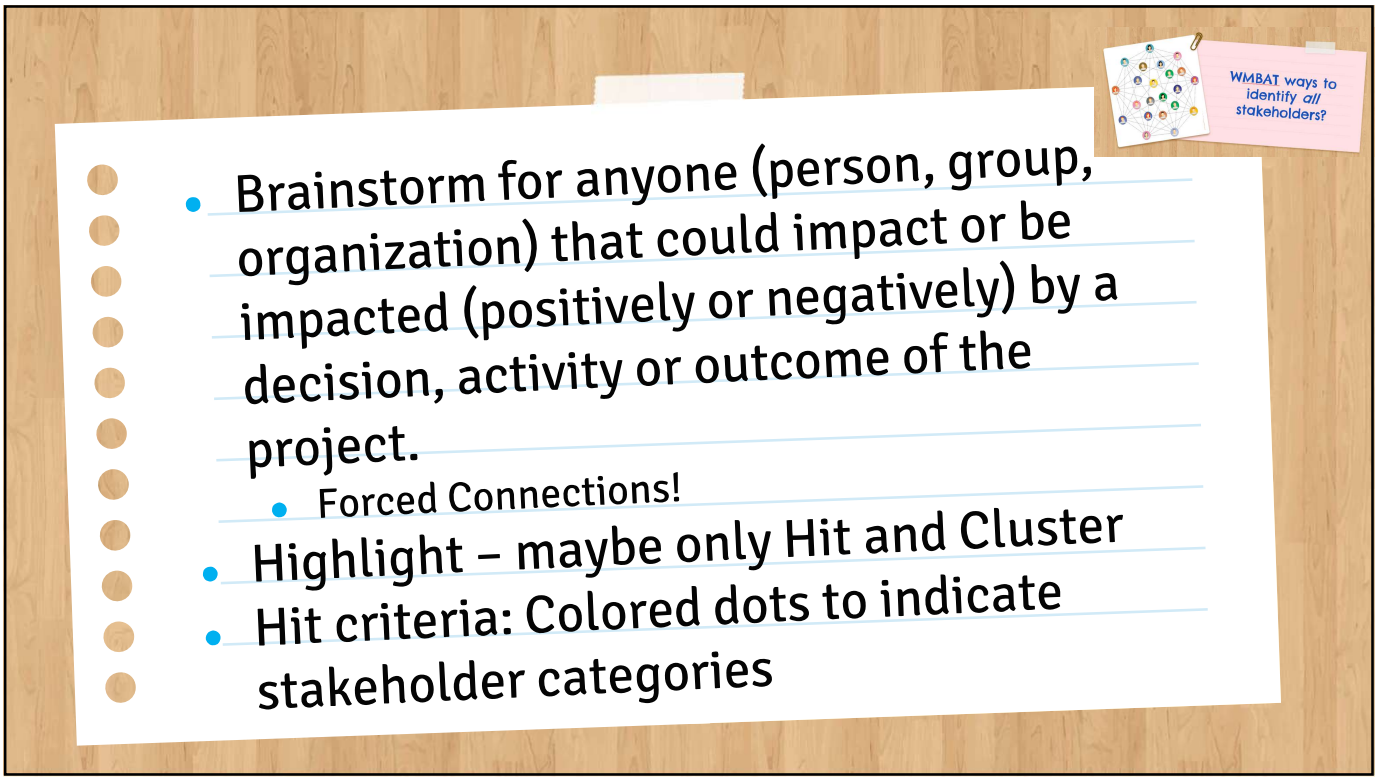
WMBAT ways to identify all stakeholders?
Brainstorm for anyone (person, group, organization) that could impact or be impacted (positively or negatively) by a decision, activity or outcome of the project.
Forced Connections!
Highlight – maybe only Hit and Cluster
Hit criteria: Colored dots to indicate stakeholder categories

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Stakeholder Register
The Stakeholder register is a document that identifies, assesses and classifies the stakeholders of the project. It is also a document that provides information used to plan different ways on how to engage the stakeholders.
The stakeholder register is often subjected to many updates. The changes of updates may include the identification of new stakeholders or if registered stakeholders are no longer impacted in or involved in the project.

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Stakeholder Register

Stakeholder Register

Project Manager	Anthony Daukes			Project Phase	Initiation	
Role	**Contact**	**Category**	**Interest**	**Influence**	**Expectations**	**Comms requirements**
Sponsor	Phone: +61 4834467651 Email: john.matthew@gmail.com	Internal	●●●	●●●	User friendly and responsive UI across handheld device, tablet or desktop	Video Conference and Emai
Project Lead	Phone: +61 4785739580 Email: luke.wilson@gmail.com	Internal	●●●	○●●	Project to be delivered on time within budget	Email and Telephone
Product Manager	Phone: +91 9923535534 Email: deepak.patel@gmail.com	Internal	○●●	○○●	Clear Requirements and timely completion of documentation	Email and Telephone
PMO	Phone: +65 8542533152 Email: suzie.barker@gmail.com	Internal	○●●	○○●	Project to be delivered on time within budget Timely approvals to be obtained	Email and Telephone
Dev Manager	Phone: +44 5871512134 Email: thomas.atkins@gmail.com	Internal	○●●	○●●	Develop responsive UI	Email and Telephone
QA Manager	Phone: +91 9852425634 Email: disha.sharma@gmail.com	Internal	○●●	○●●	UI is responsive No quality issues Branding is maintained	Email and Telephone
Infrastructure Team Lead	Phone: +61 4854665621 Email: jim.arthur@gmail.com	Internal	○●●	○○●	Changes should not affect the uptime of the system No memory spikes	Email and Telephone

Stakeholder register identifies all stakeholders, impact of decisions and includes strategy to manage communication and expectations.

59

Stakeholder Register

Name	Title	Department/ Business Unit	Contact Details	Requirements	Expectations	Influence Level (Low to High)

60

Stakeholder Register

Stakeholder Management Register

Name	Title	Project Role	Importance	Influence	Score	Major Concerns	Relationship Owner
					0		
					0		
					0		

Name - The name of the stakeholder
Title - The stakeholder's job title
Project Role - The role that they have on the project. Examples include sponsor, customer, resource owner, etc
Importance - How important is the stakeholder? This is an expression of power over the project - can they drive change, cancel it, approve budgets, etc. This generally relates to formal authority in the organization. This is set up to accept whole numbers from 1 (low) to 5 (high).
Influence - How influential is the stakeholder and how influential is the project for the stakeholder? This is an expression of what the project means to the stakeholder. Do they have a strong interest in the outcome of the project and / or have they got the ability to influence the outcome? This generally relates more to informal authority. This is set up to accept whole numbers from 1 (low) to 5 (high).
Score - This field is calculated based on multiplying the previous two fields together. Higher values are shaded red with the colour moving through orange and yellow to green for low values. This provides an approximate prioritization, though this should be validated.
Major Concerns - The major areas / items of concern to the stakeholder - why do they care?
Relationship Owner - The member of the project team designated to manage the relationship with the stakeholder. For higher priority stakeholder relationships this hsould be the project manager.

61

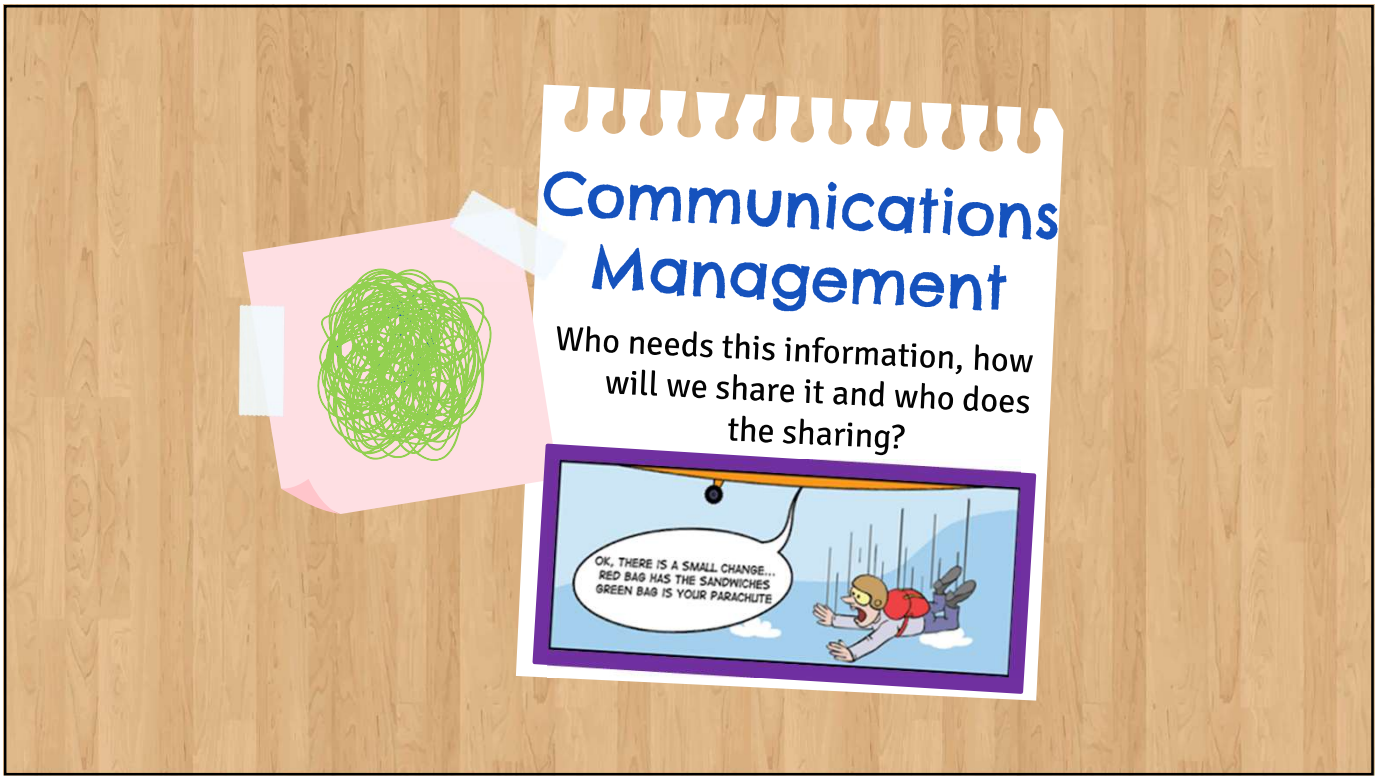
Plan, Manage and Monitor Stakeholders

- Strategizing the approach for the balance of the project
- How the project impacts stakeholders
- How will the project team interact with stakeholders
- How will the project team involve stakeholders in making decisions about the project
- How will the team manage stakeholder expectations
- How will the team ensure stakeholders are satisfied
- Identifying any change requests
- Highly connected to Communications Management

62

What might be all the respite needs in your community?
How might you go about engaging stakeholders throughout your program planning and implementation?

63


Communications Management
Who needs this information, how will we share it and who does the sharing?
OK, THERE IS A SMALL CHANGE... RED BAG HAS THE SANDWICHES GREEN BAG IS YOUR PARACHUTE

64

All the measurable data gathered, all the clearly defined activities and all the estimates will mean absolutely nothing if they do not communicate accurate information to the correct people at the correct time.

– Some PM Guru

65

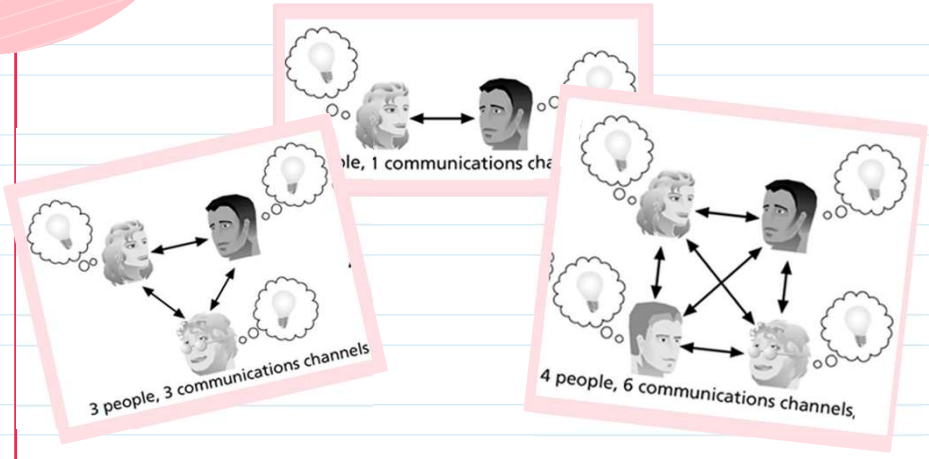
Communication Management

- Determining who needs what information, who will share it with them and how
- Setting up a communications plan and maintaining the necessary lines of communication within the team and across stakeholders
- Strategizing communications for project and stakeholder needs
- Identifying the number of communication channels
- Determining communication methods

66

Communication Channels

A way to analyze and calculate all the possible paths (channels) of communication on a project.

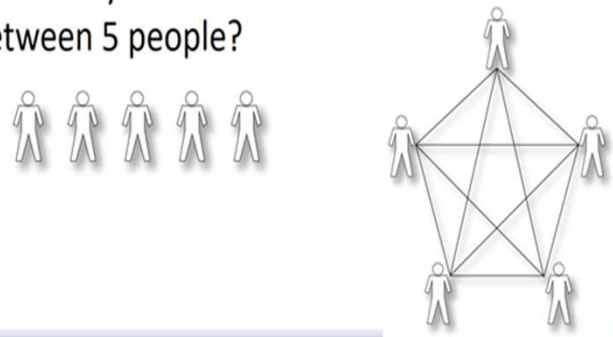


67

Communication Channels

A way to analyze and calculate all the possible paths (channels) of communication on a project.

How many channels of communication exist between 5 people?



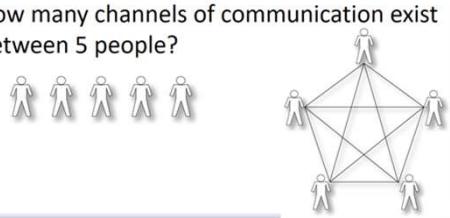
68

Communication Channels

Communication channels grow exponentially not linearly as stakeholders are added!

n x (n-1) ÷ 2
5 x (5-1) ÷ 2
5 x 4 ÷ 2 = 10

How many channels of communication exist between 5 people?



# of Communication Channels = N(N-1)/2

Where N = # of Stakeholders

69

Communication Channels

Communication channels grow exponentially not linearly as stakeholders are added!

WHAT IF WE ADDED TWO MORE PEOPLE?

# of Communication Channels = N(N-1)/2

Where N = # of Stakeholders

70

Communication Channels

Communication channels grow exponentially not linearly as stakeholders are added!

n x (n-1) ÷ 2
7 x (7-1) ÷ 2
7 x 6 ÷ 2 = 21

# of Communication Channels = N(N-1)/2

Where N = # of Stakeholders

71

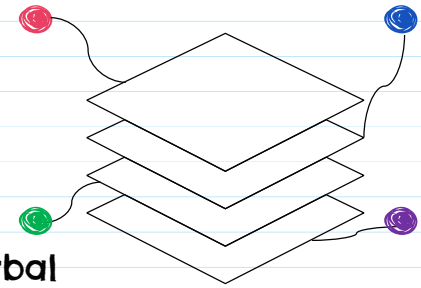
What might be the highest number of stakeholders you will have on your proposal team? What about involved in your program?

Communication Channels

72

Communication Methods

Formal Written
Examples include project charter, project plans, legal documents, contracts



Informal Written
Examples include emails, memo, sticky notes

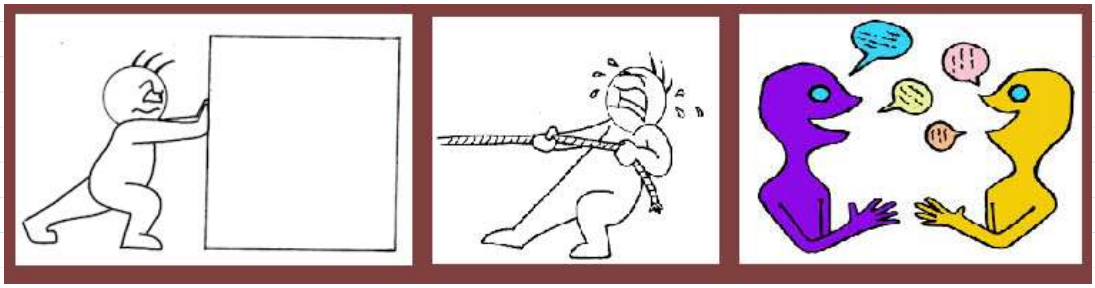
Informal Verbal
Examples include meetings, phone calls, conversations, planning sessions

Formal Verbal
Examples include presentations, prepared speeches

73

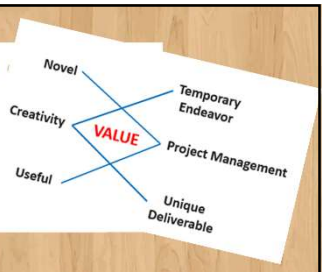
Communication Methods

PUSH	PULL	INTERACTIIVE
"TO", no formal confirmation of receipt – email blast, mailings, voice mail, press releases	"GET", no formal confirmation of receipt – post on a website, intranet sites, e-learning	"EXCHANGE", formal confirmation of receipt – meeting, phone call, video conference



74

Overarching Questions

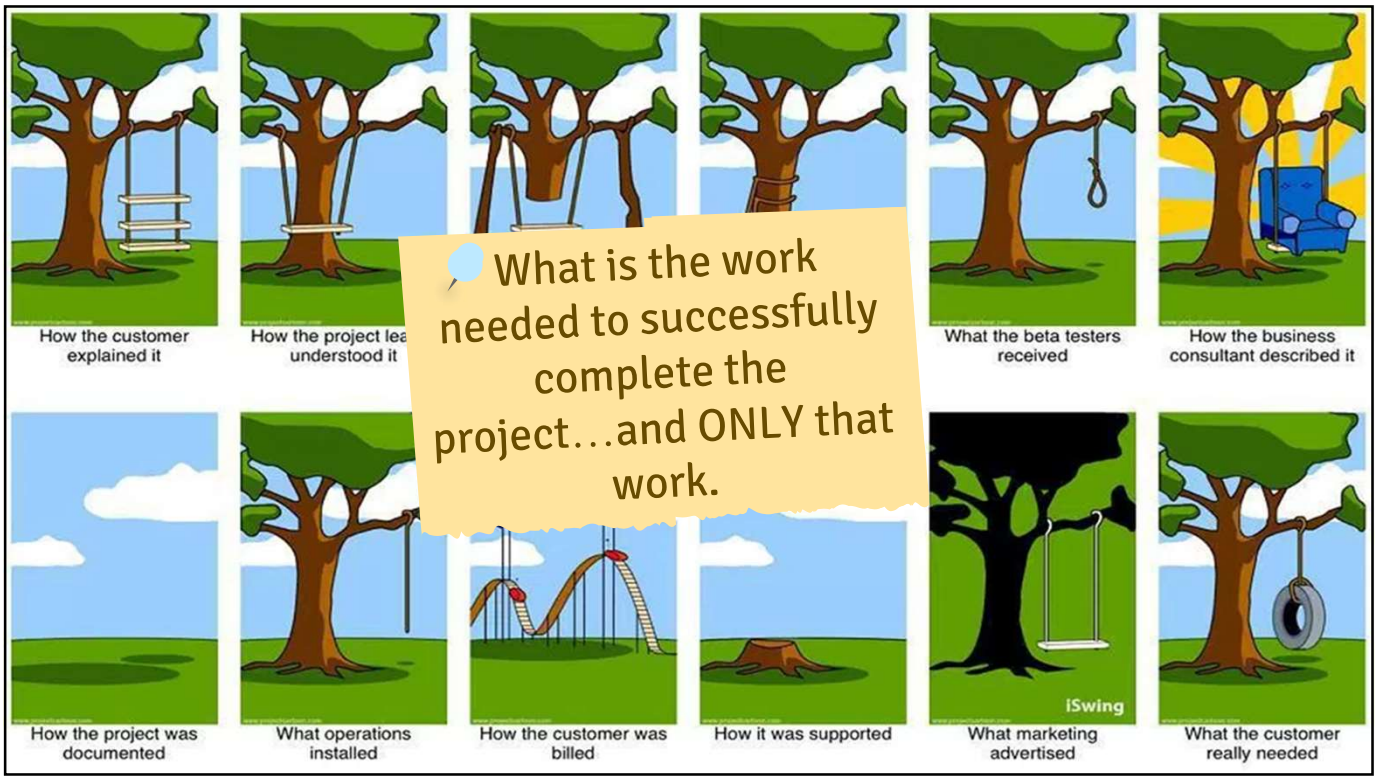


- In what ways might this apply to your proposal?
- How might this shape your new respite program idea?
- How to use divergent and convergent thinking?
- How might you apply the CPS thinking tools?
- In what ways does this new information build on your current practices?
- What might be all the ways to apply this new information?

75

Scope Management

76



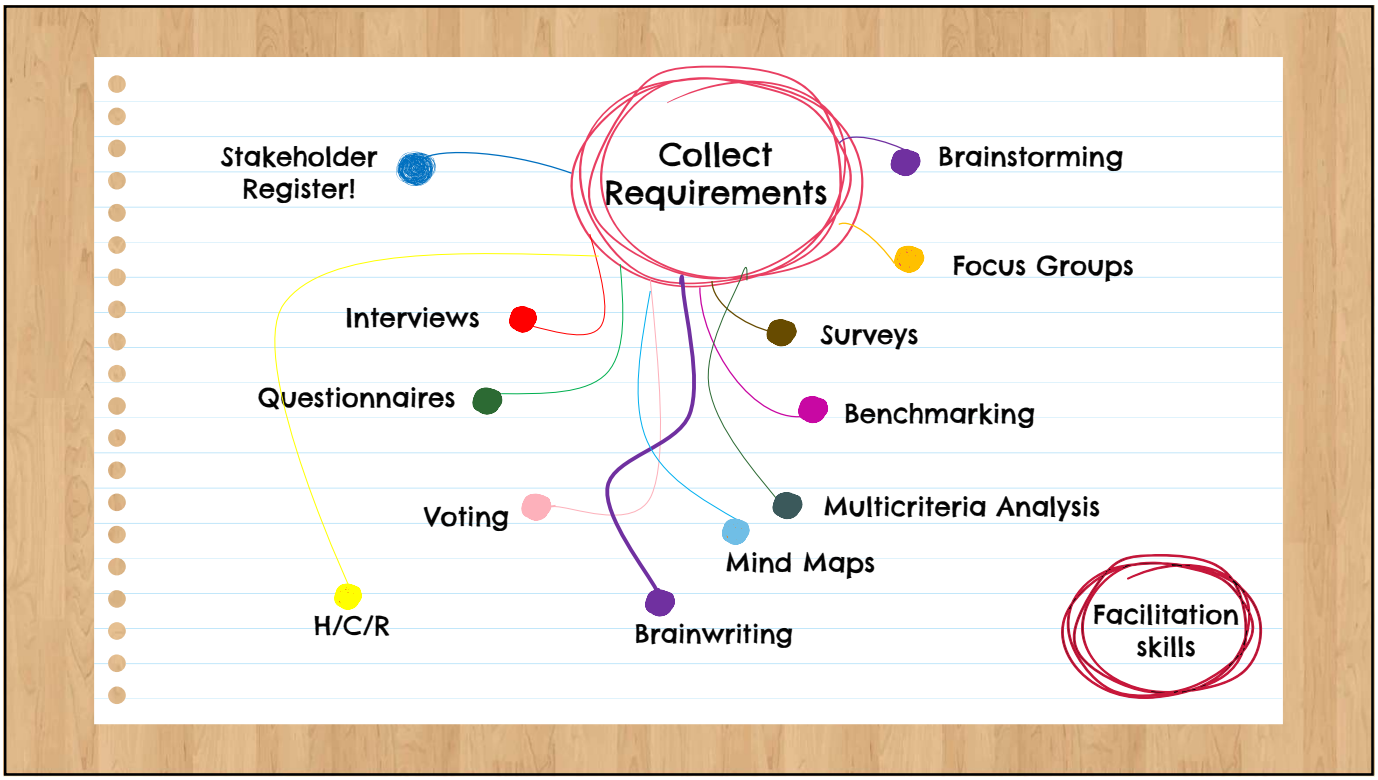
77

Scope Management

- Outlining the work and deliverables that will be required to complete the project
- Collecting stakeholders' requirements and expectations*
- Defining success criteria
- Breaking the scope down into manageable components
- What are the specifications of the new program idea?
- What do we need to do to "pull off" establishing this new idea?

*HOW MIGHT WE DO THAT?

78


Collect Requirements
Stakeholder Register!
Brainstorming
Focus Groups
Interviews
Surveys
Questionnaires
Benchmarking
Voting
Multicriteria Analysis
Mind Maps
H/C/R
Brainwriting
Facilitation skills

79

Brainstorming, Brainwriting, H/C/R

80

Favorite Collect Requirements Example

81

Work Breakdown Structure (WBS)

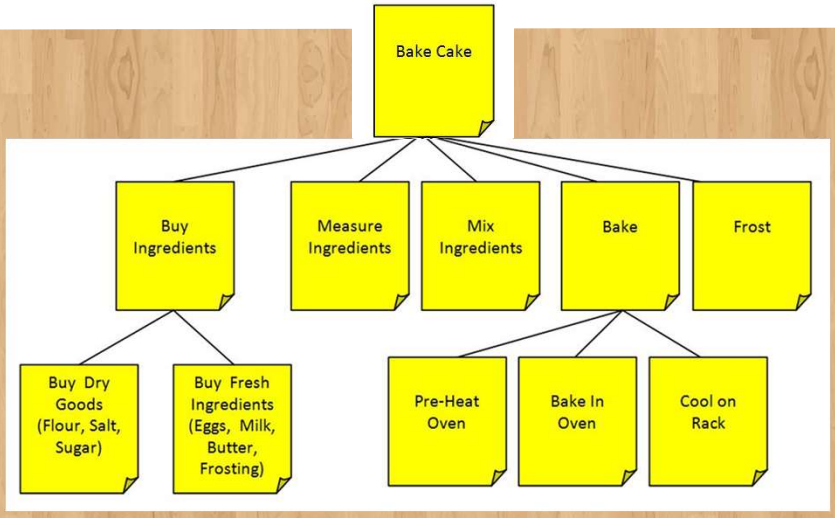
A Work Breakdown Structure (WBS) is a deliverable-oriented hierarchical decomposition of the work to be executed by the project team to accomplish the project objectives and create the required deliverables.

The WBS contains 100% of all the work in the project

82

Work Breakdown Structure (WBS)

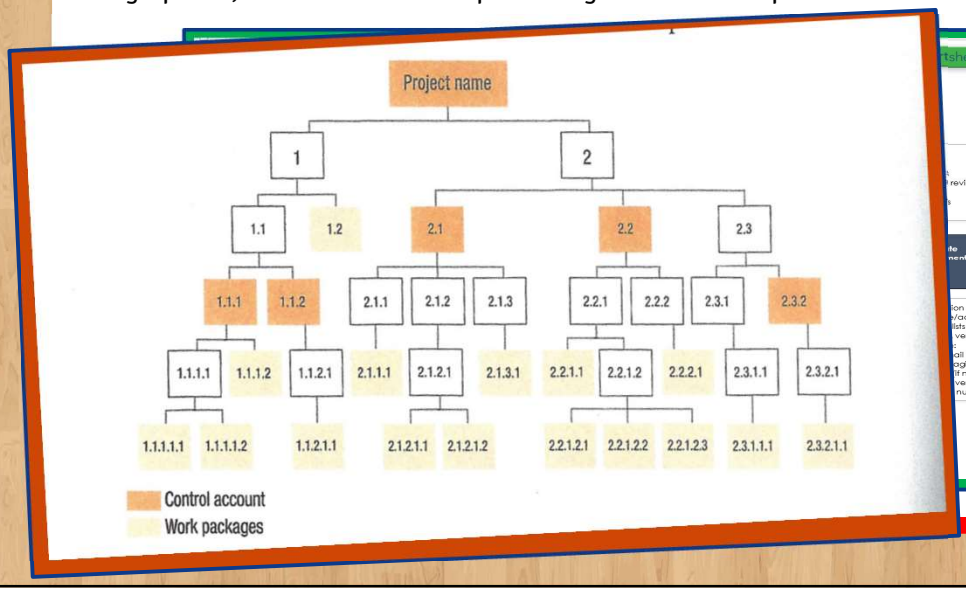
A graphical, hierarchical chart representing the work to be performed on the project



83

Work Breakdown Structure (WBS)

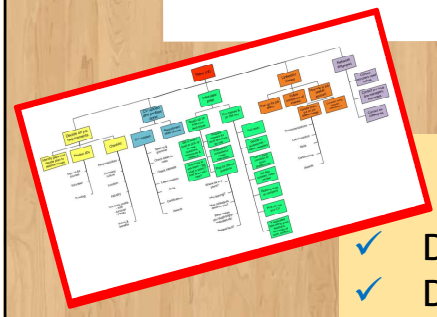
A graphical, hierarchical chart representing the work to be performed on the project



84

Work Breakdown Structure (WBS)

A graphical, hierarchical chart representing the work to be performed on the project



- ✓ Diverge for all activities/tasks
- ✓ Diverge/converge the headers
- ✓ Converge to select tasks for placement under headers

85

Scope Change vs Scope Creep

Scope change and scope creep are not the same. They each refer to *modifying the original requirements, specifications, or objectives*.

However, the difference is this:

✓ Scope change is achieved through a defined process – is controlled

✓ Scope creep happens without a plan – is controlling

- Develop a clear project vision
- Determine project priorities
- Formally define the project's requirements
- Create a detailed schedule with major milestones
- Develop a process to manage scope changes – approved and not approved

If a change or modification to the scope is approved by all parties, it is not seen as scope creep.

86

How might your team decide what is IN and OUT of your repsite program idea?

87

Resource Management

88

Resource Management

"Resources"
Human
Materials
Equipment
Supplies
Anything needed to complete the project

Creating recognition and reward systems

Improving the competencies of team members

Clear roles and responsibilities

What and how many resources are required when?

How much will all these resources cost?

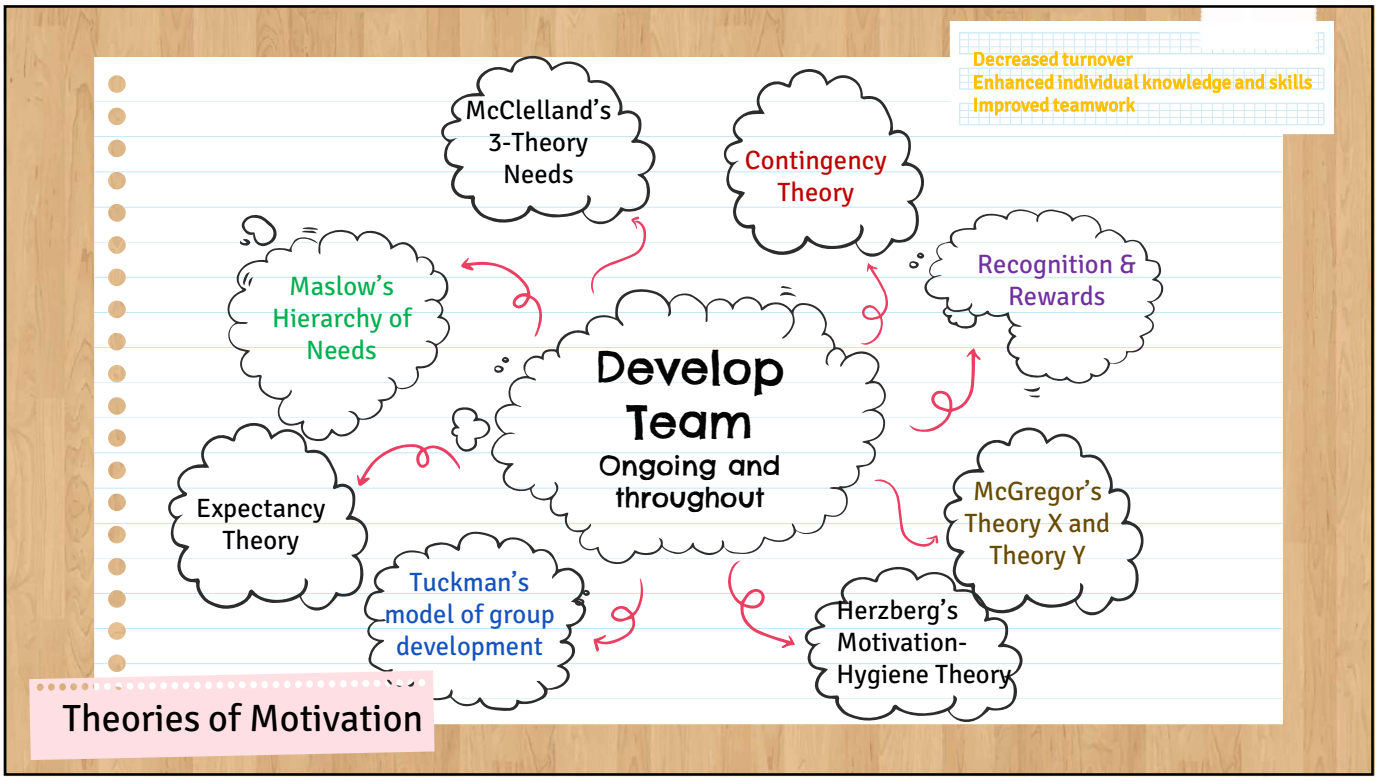
Are resources available or do they need to be acquired (procured)?

89

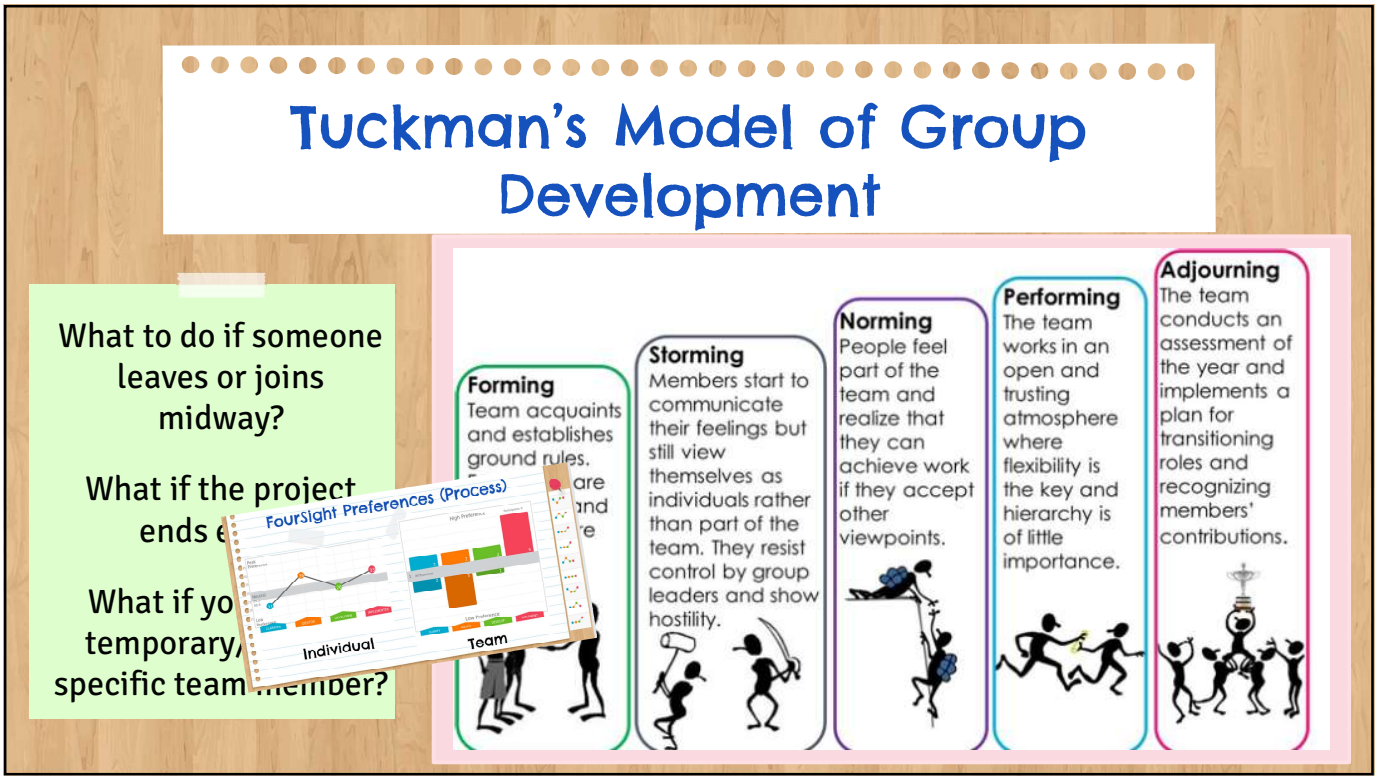
Resource Management

- Focusing on resources used to complete the project including human capital and any equipment/supplies that will be used to complete tasks
- Managing, leading and developing the team
- Estimating time needed for each resource (human and supply)
- Assigning personnel responsible for project deliverables – Responsibility Matrix

90

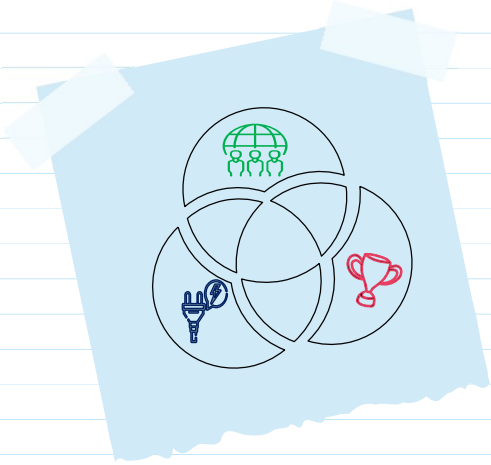

Decreased turnover
Enhanced individual knowledge and skills
Improved teamwork
McClelland's 3-Theory Needs
Contingency Theory
Maslow's Hierarchy of Needs
Recognition & Rewards
Develop Team
Ongoing and throughout
Expectancy Theory
McGregor's Theory X and Theory Y
Tuckman's model of group development
Herzberg's Motivation-Hygiene Theory
Theories of Motivation

91


Tuckman's Model of Group Development
What to do if someone leaves or joins midway?
What if the project ends e
What if yo
temporary
specific team member?
FourSight Preferences (Process)
Individual
Team
Forming
Team acquaints and establishes ground rules.
Storming
Members start to communicate their feelings but still view themselves as individuals rather than part of the team. They resist control by group leaders and show hostility.
Norming
People feel part of the team and realize that they can achieve work if they accept other viewpoints.
Performing
The team works in an open and trusting atmosphere where flexibility is the key and hierarchy is of little importance.
Adjourning
The team conducts an assessment of the year and implements a plan for transitioning roles and recognizing members' contributions.

92

McClelland's 3-Theory Needs:



Need for Affliation

Refers to the need for warm and close relationships with others. Work best when cooperating with others.

Need for Power

Refers to an individual's concern for making an impact on others, influencing others, making an impact. Let them lead

Need for Achievement

Refers to an individual's concern for excellence, competition, challenging goals, persistence and overcoming difficulties. They like recognition.

93

Thinking about the work ahead to complete a proposal and realize your new program, what might be all the work you need to do to invest, develop and motivate your team for the work?

94

Responsibility Matrix Charts - RACI

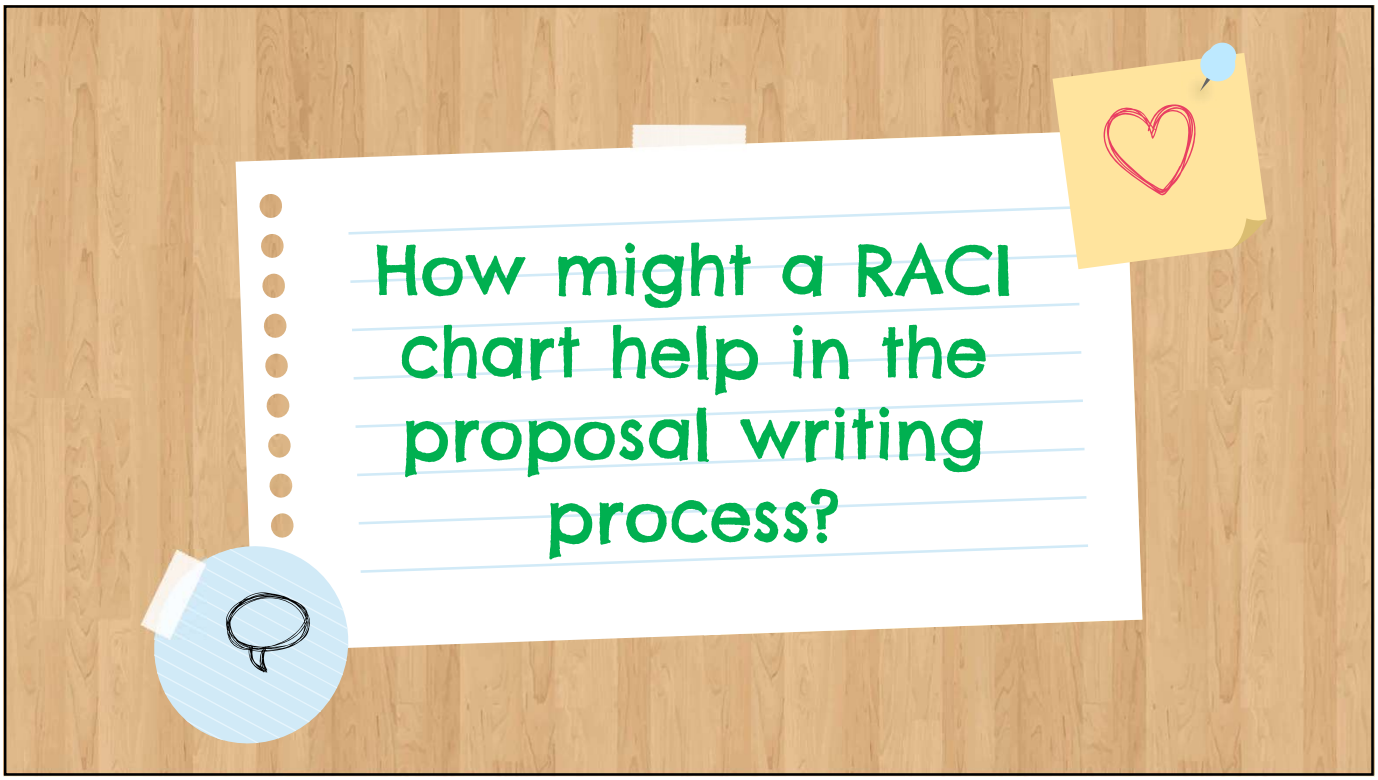
Responsible: Doing The Task
This person actions the task or deliverable. They are responsible for getting the work done. It can be more than one person, try to minimize the amount of people involved.
Accountable: Owning The Task
This person or role is responsible for the overall completion of the task or deliverable. They won't get the work done but are responsible for making sure it's finalized.
Consulted: Assisting
This person, role or group will provide information useful to completing the task or deliverable.
Informed: Keeping Aware
These people or groups will be kept up to date on the task or deliverable as they might be affected by the outcome of the task or deliverable.

95

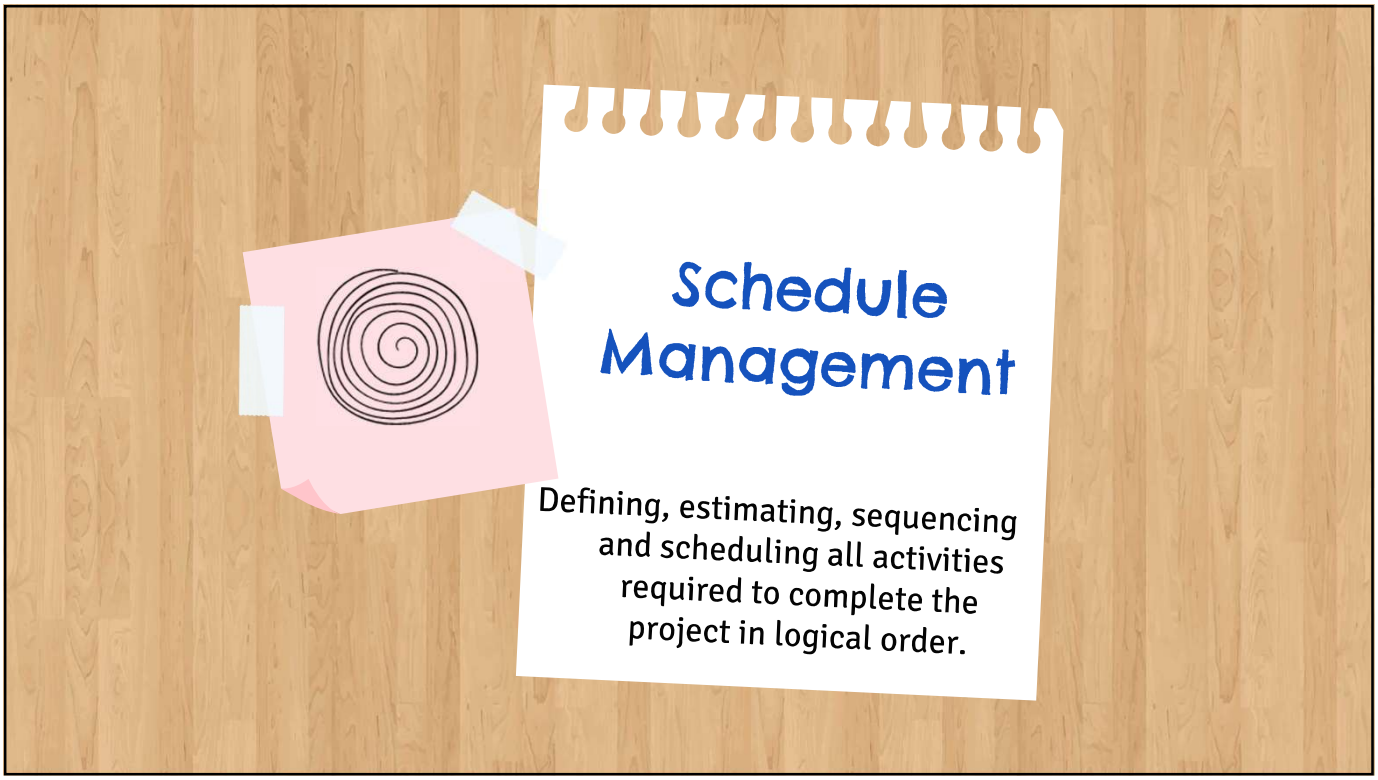
Responsibility Matrix Charts - RACI

	Mom	Dad	Sarah	Jeffrey
Pack suitcases	A	R	R	R
Fuel car	R	A	I	I
Load beach toys	C	A	R	R
Cabin reservation	A	R	C	I
Book flight	A	R	I	I

96


How might a RACI chart help in the proposal writing process?

97

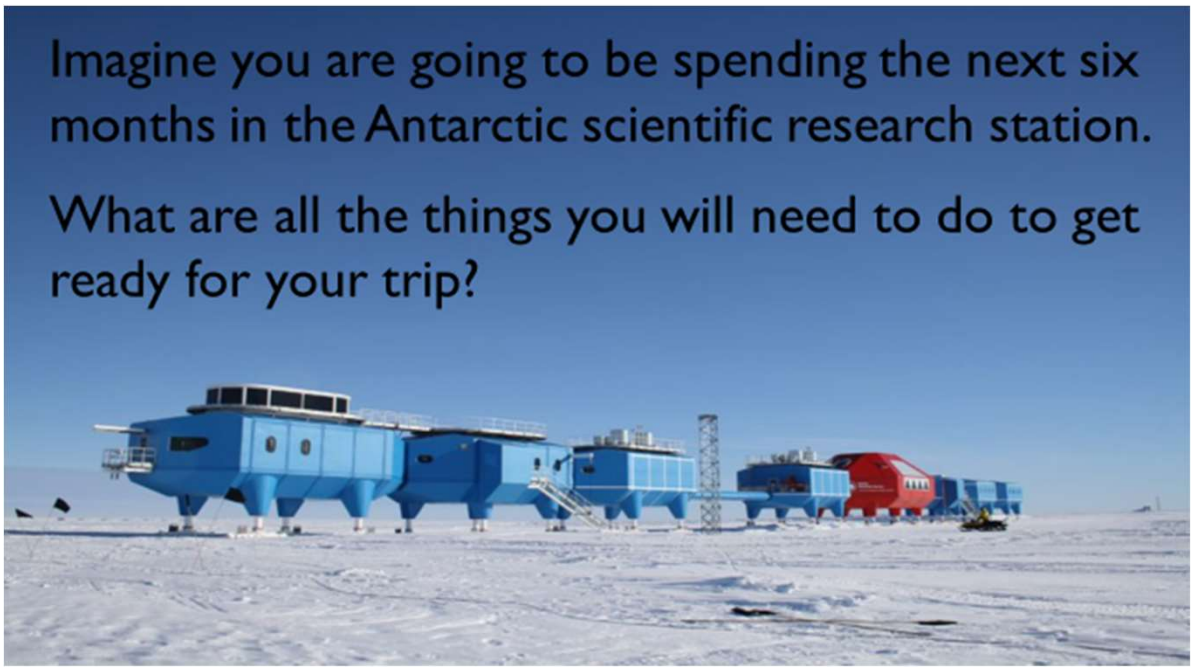

Schedule Management
Defining, estimating, sequencing and scheduling all activities required to complete the project in logical order.

98

Schedule Managment

- Dividing the project into tasks, which are scheduled with start dates and deadlines
- Sequencing Activities - Determining the order and dependencies between the activities
- Estimating Activity Durations - Estimating the required time to perform each activity
- Developing the Schedule - Once the duration of each activity, (and the resources are known to complete it) the schedule can be developed

99



100

Sequence Activities

Sequencing the project activities in the order in which they will be completed.

Identifying relationships (dependencies) among project activities AND the logical sequence of work to obtain the greatest efficiency given all project constraints.

101

Dependencies

Project dependencies are schedule dependencies…the schedule of one task or activity is dependent on another one.

Mandatory (hard logic)

Unavoidable, inherent to the work

Discretionary (preferred, preferential or soft logic)

Best practice

External

Non project activities outside project team's control

Internal

Project activities inside project team's control

102

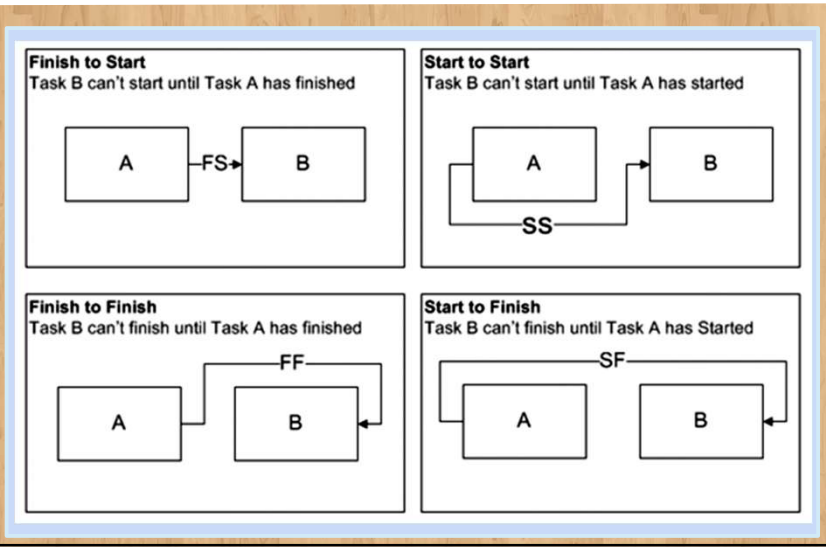
Dependencies

103

Logical Dependencies

Washing, drying and waxing a car (95%)

Ending at the same time – Thanksgiving dinner



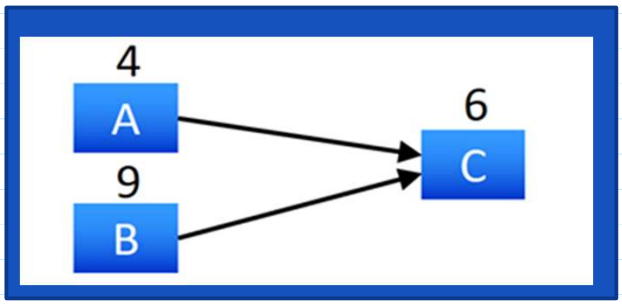
Election and election results

Cramming for an exam (Rarely…if ever)

104

Project Network Diagrams

Activity on Node/Precedence Diagramming Method (PDM) orders schedule activities (represented as rectangular nodes) and depicts activity, duration, path and relationships.



Arrows represent dependency

Activity: A, B, C
Network Paths: A-C & B-C
Activity Duration: A=4, B=9, C=6

105

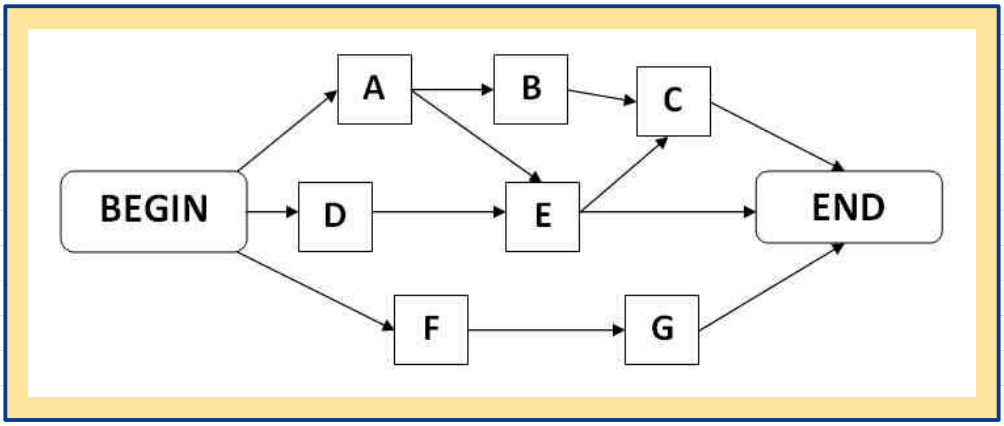
Network Diagrams

- Help justify time estimates for the project
- Aid in efficiently planning, organizing, and controlling the project
- Identify opportunities to compress the schedule in planning and throughout the life of the project
- Show interdependencies of all activities, and there by identify riskier activities
- Show workflow to the team will know what activities need to happen in a specific sequence
- Show project progress

106

Sequence Activities

Network Diagram: A graphical representation of your project schedule.



107

Get it done!

What's being done?	Who will do it?	By when?	Support/ Report?
Short Term Actions	• •	• •	• •
Intermediate Actions	• •	• •	• •
Long Term Actions	• •	• •	• •

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Sequencing – Schedule and Timelines

Timeline

September - December			
Action To Be Done	Who Will Do It	By When	Report/ Support
Increase participation at SA and Parent Centers	SYB, AED, BPS, PD, CBOS, Vendors	9/1 and beyond	SYB, BPS, CBO, AED, PD, Vendors
Create 1-2 page data summary to use to educate public, school admins, etc.	Comm team	9/1	CS Planning Team
Develop strategies to increase students, teacher, community engagement	Principals, CSD, Site, facilitator	9/1 and beyond	Anibal, principals, CS, SI
MOUs for Sept - Dec	CBOs, BPS	9/1 and beyond	CBOs, BPS, ZLs
Mobil health clinic and legal services	Esther, principals	9/1 and beyond	Brianna, Esther, principals Erica
SAT Prep	CSN (HS), principals, CBO, instructors	Dec	Principals
Review Budget	BPS, CBO, CSNs, principals	9/1 and beyond	Principals, CBOs, BPS
Increase parental engagement/onboard parents	PD, BPS, CSN, SF	9/1 and beyond	PD, Erica
Attend 1st day school meetings	CSN, ZL, PD, site facilitators	9/6 and beyond	Principals
Visit community school in another community	CSN, ZL, PD, site facilitators	11/1	Tanya,
Attend SBMT Mtngs	CSN, SF	9/1	ZL, principals
Best practice guide implementation	Tanya, Anibal	9/15	CS planning team
Get community members involved	All	9/1 and beyond	CS planning team
Open SA	CSN, CBO	9/6 and beyond	CSN, CBO, ZL, principals, Erica, Anibal, Tanya
Open ELT	CBO, CSN, principals	Oct 16	Tara
Align what is happening in school with after school programs and Saturday Academy	All	Now and ongoing	CS planning team
Perform staff/partner evaluations	SYB & all orgs	Quarterly, annually	Org Leads
Cross-zone communications	ZL	Bi-monthly	Tanya, Anibal
Order supplies	CBOs, CSNs, site facilitator	Monthly, start 9/1	CBO, BPS, ZL
Smart sheet	CBOs, CSNs, site facilitator	Monthly, start 9/1	CBO, BPS, ZL
Create new funding sources for school	All	Ongoing	All
CS Conference	Planning team	Nov - Oct	Planning team
Invite partners to visit CS for their meetings	Principals, Anibal, Tanya, PD, ZL	9/1 and beyond	Planning team
Incorporate PTO/PTA into planning SA	PD	9/1 and beyond	BPS
Complete fall field trip request	CSN, CBO	9/30	BOS, CBO
Semi-annual PD for vendors	CBO, CSN, BPS	Bi-annual	BPS, CBO
Create community need survey	Planning team	11/1	Planning team
Family Appreciation Dinner	CSNs, Gellenina, OPFE	Quarterly, annually	OPFE, Erica
East Zone Champion Events	EZ, CSNs, CBOs	9/1 and beyond	ZL Principal
SAIG Groups	CSNs	9/1	Principals
Dental van visit	CSNs	10/1	Erica, Brianna
Single Mom's Club	Gellenina, OPFE, CSNs	Quarterly	OPFE, Erica
Community fair based on zones	ZL, CSNs	9/1 and quarterly	Erica
January - March			
Action To Be Done	Who Will Do It	By When	Report/ Support
Prepare for parent summit	Gellenina, Ramona	1/1	OFPC
Complete spring field trip request	CSN, Site facilitator	1/31	CBO, BPS
Prepare for RFP	SY, BPO	1/1	BPS
Take care of garden	CSN, principals, engineers	3/1	Principals, CBOs
Advocacy	CS Team	1/26 (Albany)	Legislators, CS coalition
Spend down budget	CSN, principals, engineers	2/1	BPS
Culminating events, EZ Champion	EZ, CSN, ZL	3/30	Principals
Annual Report Developed	Communication team	7/1	Tanya, Anibal
Perform internal school/student surveys	CSNs	3/30	Esther, ZL
Start planning 2020/2021 school year	CS, Planning team	3/30	Planning team, Principals
Improve participation	Principals, Nat (7) Partners, ALL	1/1 - 6/30	Erica, Brianna
April - June			
Action To Be Done	Who Will Do It	By When	Report/ Support
Perform evaluations	Supervisors	6/30	HR Dept.
Inventory Completion	CSN, Site facilitator	6/15	Principals, BPS, CBO
Reflection of 2019/2020 Program	All	6/30	All
Have key data points available	CSN, SF	4/15	Erica
End of year celebration	School day afterschool SA, CSN, SF	May - June	Principal, ZL, CBO
Quarterly and end of year partner update	Anibal, Tanya, Team	Quarterly	Community Partners
Submit semester Engagement Report	PD, CSN	Monthly	Erica, OPFE
Culminating Activity Completion	CSNs, CBO, Principals	6/30	Principals, Erica
Standardize wall surveys @ all CS Saturday Academy	SF	Monthly	ZL

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Cost Management

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Cost Management

- ✓ What cost (and resources) are incurred
- ✓ When are they incurred
- ✓ Close connection to Schedule Management
- ✓ More accurate estimate is from the bottom up

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Cost Management

Forecasting the cost of each step of a project and even including budgeting for mishaps or compensating for any foreseeable obstacles

Considering the cost of the human and physical resources

Estimating costs of each activity to complete the project

The ideal sequence is to plan SCOPE, SCHEDULE, RESOURCE then COST

For increased precision, estimate costs from each activity in the WBS and roll up to the project level

The project budget is comprised of all the activities in the WBS

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Foundational Terms

Variable vs. Fixed Costs	Direct vs. Indirect Costs	Life-Cycle Costing	Sunk Costs	Value Engineering
VC: A cost that varies depending on project consumption. **FC**: A cost that remains constant throughout the project.	**DC**: Expense directly billed to the project. **IDC**: Expense that is shared by or allocated to multiple projects or operations.	Total cost of ownership over entire life of project: Purchase Costs + Operation Costs + Shutdown Costs	Expense already spent by the project that is not recoverable.	Designing every aspect of a project to obtain maximum value.

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Estimate Costs

Each schedule activity is analyzed to evaluate activity time and resource estimates associated with them …and a cost estimate is produced.

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Estimates

Highly accurate…time consuming and labor intensive.

Analogus (Top Down)

Using actual information from a similar activity on this or another project.

Parametric

Using historical information on linear or scalable activities.

T-Shirt Sizing

Three-Point Estimates

Estimating averages of worst-case (P), best-case (O), and most realistic (R) estimates.

Bottom Up

Using a separate estimate for each activity and aggregating up.

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Advantages of Top-Down (Analogous) Estimating	Disadvantages of Top-Down (Analogous) Estimating
Quick	Less accurate
Activities do not need to be identified	Estimates reflect a limited amount of information about the project or key deliverables
Less costly to create	Requires considerable experience
Overall project costs will be capped for project analogous estimating	Difficult for projects with uncertainty or without similar projects to reference

How much leeway are you giving yourself with the estimates?

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Advantages of Bottom-Up Estimating	Disadvantages of Bottom-Up Estimating
More accurate	Takes time and money (resources)
Gains buy-in from the team because the team creates estimates	Tendency for padding estimates
Based on a detailed project and deliverables analysis	Requires that the project is well defined and well understood
Provides a basis for control and management	Requires time to break project deliverables into work packages and activities

How much leeway are you giving yourself with the estimates?

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Risk Management

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A **risk** is "an identified uncertain event or condition that, if it occurs, has a positive or negative effect on a project's objectives."

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Risk Management

- Identifying and understanding what risks or **uncertainties** exist in the project
- Determining which uncertainties may be good (opportunities) or bad (threats) to the project
- Analyzing and determine which uncertainties require a planned response
- Planning response approaches and defining what triggers a response
- Monitoring for risk occurrences
- Uncertain events must be identified and analyzed prior to planning responses
- Proactive

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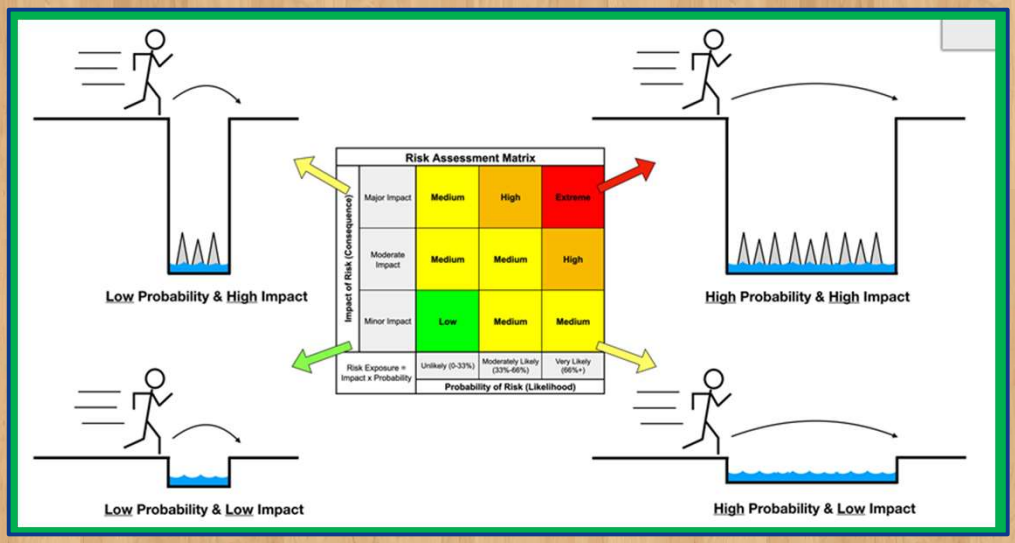
Risk Management



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Risk Management

Risk

Qualitative Analysis

"Triage"/Subjective

Risks are ranked and prioritized for likelihood and impact…**severity**

Quantitative Analysis

Objective

The effects of risk are evaluated in terms of cost overruns, scope, resource consumption, and schedule delays…**value**

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Qualitative Risk Analysis

- Identifying threats (or opportunities), how likely they are to happen, and the potential impacts if they do
- Helps to reduce levels of uncertainty and to focus on high priority risks
- Helps ensure time and resources are spent on the right risk areas

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Qualify Risk – Likelihood/Priority

Likelihood \ Impact	Negligible	Minor	Moderate	Significant	Severe
Very Likely	Low Med	Medium	Med Hi	High	High
Likely	Low	Low Med	Medium	Med Hi	High
Possible	Low	Low Med	Medium	Med Hi	Med Hi
Unlikely	Low	Low Med	Low Med	Medium	Med Hi
Very Unlikely	Low	Low	Low Med	Medium	Medium

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Quantitative Risk Analysis

- Which risk events warrant a response
- A projected value is assigned to quantify each risk that has been ranked (cost and/or time)
- Any value that exceeds the risk tolerance levels needs a risk response

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Quantify Risk

Ask yourself:

If this risk occurred, what will it cost us? What is the impact on schedule, cost and scope…and quality?

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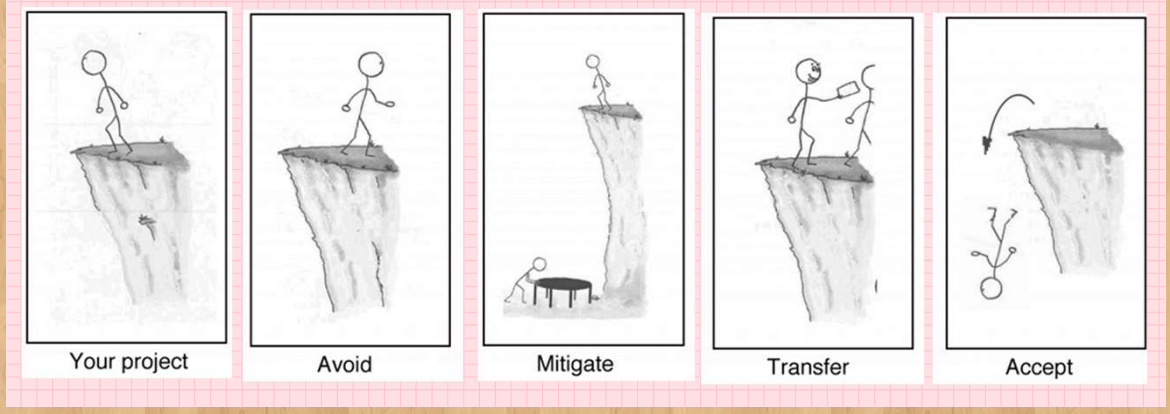
Plan Risk Responses



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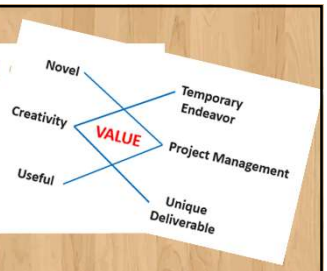
Overarching Questions



- In what ways might this apply to your proposal?
- How might this shape your new respite program idea?
- How to use divergent and convergent thinking?
- How might you apply the CPS thinking tools?
- In what ways does this new information build on your current practices?
- What might be all the ways to apply this new information?

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Procurement Management includes the establishment and maintenance of relationships with vendors/others to obtain goods, serivces, or scope from outside the organization.

– PMI

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Procurement Management

- ✓ Buyer – seller relationship
- ✓ Focuses on applying the best contract strategy for the project situation
- ✓ Necessary steps to prepare purchase documents and select from among proposals
- ✓ Monitoring contracts
- ✓ Formal communication and highly ridged

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Procurement Management

Roles

Buyer

The organization or party purchasing (procuring) the goods or services from a seller

Seller

The organization or party providing or delivering the goods or services to the buyer.

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Procurement Documents

RFI Request For Information	EOI / ROI Request For Information or Registration Of Interest	RFP / RFO Request For Proposal or Request For Offer	RFT Request For Tender	RFQ Request For Quotation
• Purchaser does not have sufficient information to write a detailed request • Purchaser is not necessarily committed to buying • Likely to involve a further request before a final decision.	• Similar to an RFI • Often used as a screening or shortlisting tool • Purchaser is not necessarily committed to buying • Likely to involve a further request before a final decision.	• Purchaser seeks solutions-based submissions to meet their needs • Possibly no clear specification • Greater flexibility than an RFT • Suited to professional services.	• Purchaser has clearly defined criteria or specification • Judged on both price and qualitative factors • Purchaser is committed to buying.	• Purchaser has clearly defined criteria or specification • Judged primarily or solely on price • Purchaser is committed to buying.

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Contract

A mutually binding agreement that obligates the seller to provide the specified product or service or result and obligates the buyer to pay for it.

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Contract Types and Risks

Fixed Price Contracts
Seller provides material and time at a fixed price to the buyer
Good for well defined statement of work
Seller has bulk of risk

Time and Materials
Seller charges the buyer for time worked and material
Good when there is not a well-defined statement of work
Buyer has bulk of risk

Cost Reimbursable
Seller passes all allowable costs back to the buyer and receives an additional fee for value-added
Cost Plus Fixed Fee
Cost Plus Incentive Fee
Risk is shared

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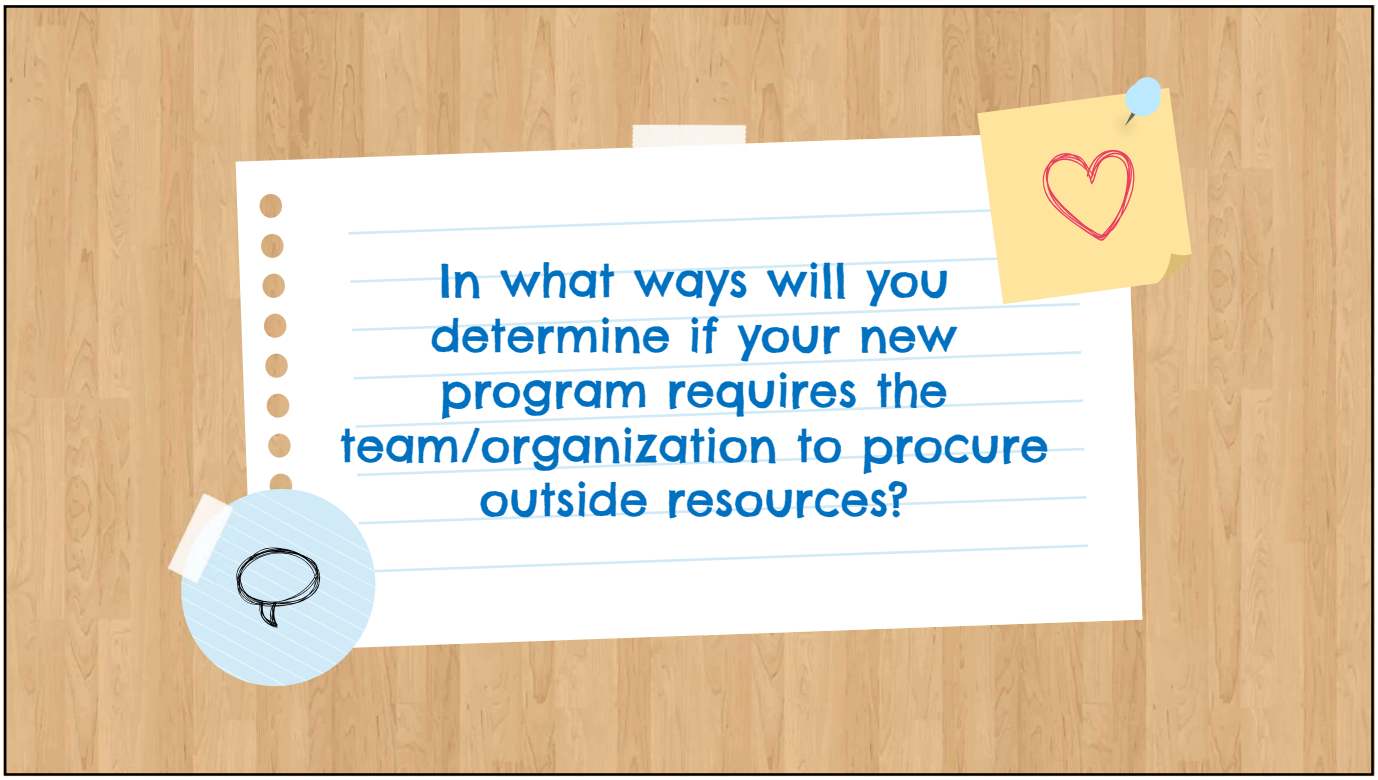
In what ways will you determine if your new program requires the team/organization to procure outside resources?

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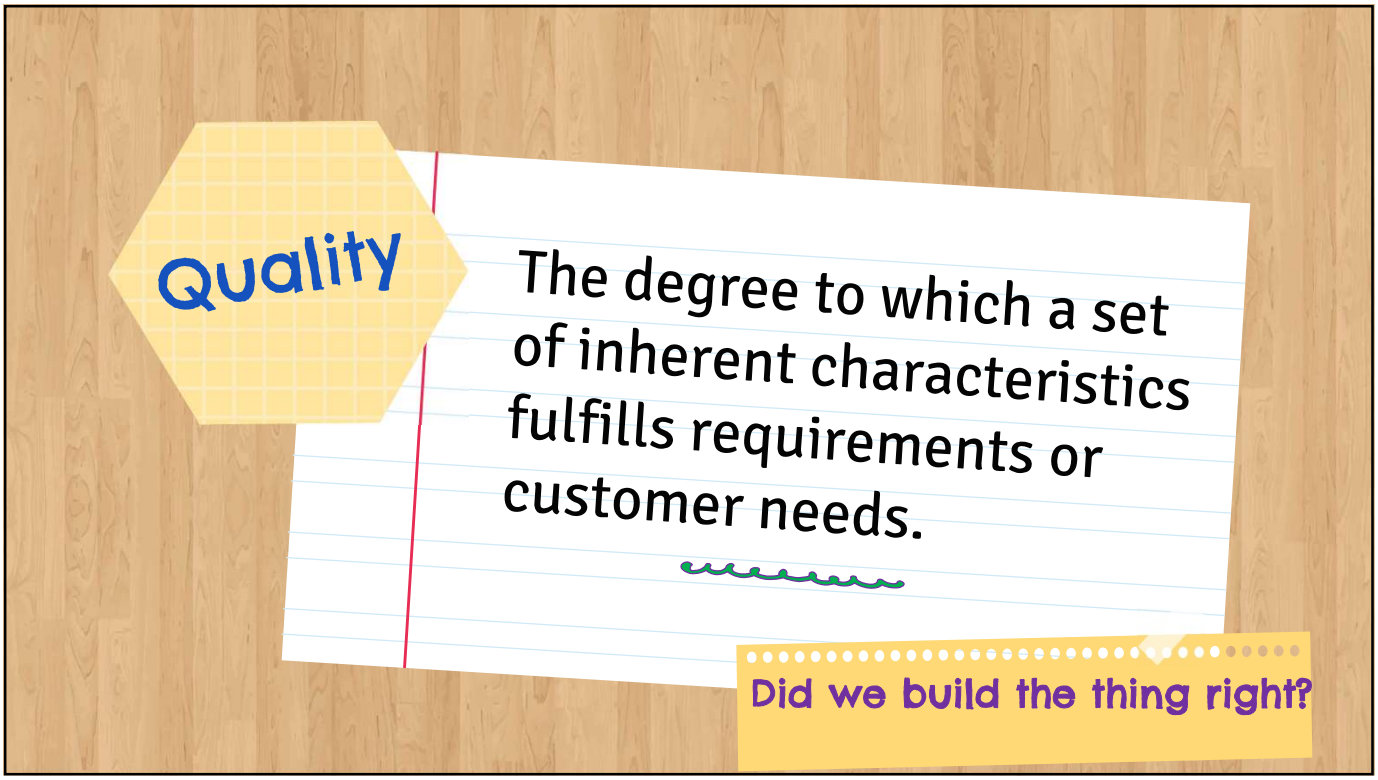
Quality
The degree to which a set of inherent characteristics fulfills requirements or customer needs.
Did we build the thing right?

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Quality Management

- Determining the degree to which the project (program) fulfills requirements and satisfies the needs for which it was undertaken…*Did we build the thing right*?
- Committing to continuously improving processes - However small, no matter who

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Quality Management

Planned in
Planned for

Quality

Product

End result – deliverable

Process

How things are getting carried out

Are the walls the right color?
Are there paint splatters on the floor?

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Quality

What might be all the criteria you could use to determine if you "built your program right"? How might you prioritize identified criteria?

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How might the information presented today strengthen the quality of your proposal and increase the success of new program proposals?

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QUESTIONS?

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Taking It Home
New
Interesting
Useful
Intriguing
Potential uses
Applications

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Thank You!
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NYS WBE
2019 SBA Home-Based Business of the Year

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