

PMI® Authorized Certified Associate in  
Project Management (CAPM)®  
Exam Prep Course

# Project Work and Delivery

Getting the Job Done



## In this Session:

- Managing risk
- Quality management
- Project controls and forecasting
- Project integration



# Engaging Stakeholders

# Key Stakeholder Management Processes



Identify  
stakeholders



Plan  
stakeholder  
engagement



Monitor and  
manage  
stakeholder  
engagement

IDENTIFY  
STAKEHOLDERS

PLAN  
STAKEHOLDER  
ENGAGEMENT

MONITOR/MANAGE  
STAKEHOLDER  
ENGAGEMENT



# Key Stakeholder Management Processes

## Identify stakeholders

During this process you'll create a stakeholder register and rate them for their positive or negative impact on the project. Such as, development team, sponsor, vendors, concert production crew, fans, press, marketing, etc.

## Plan stakeholder engagement

Develop a plan for keeping your stakeholder's engagement and involved. Such as, What is our plan to engage or at least monitor the reactions of each stakeholder group, like fans, our sponsors, the star talent, etc."

## Monitor and manage stakeholder engagement

"The process of actively engaging our stakeholder groups, for example, "asking for feedback after presenting our project status updates to the project sponsors."

# Stakeholder Register

Name	Title	Role	Interests	Power	Requirements	Expectations	Influence
Star talent							
Tickets! development team							
Tour sponsor							
Concert production crew							
Fans							
Press							
Marketing department							

STAKEHOLDER REGISTER

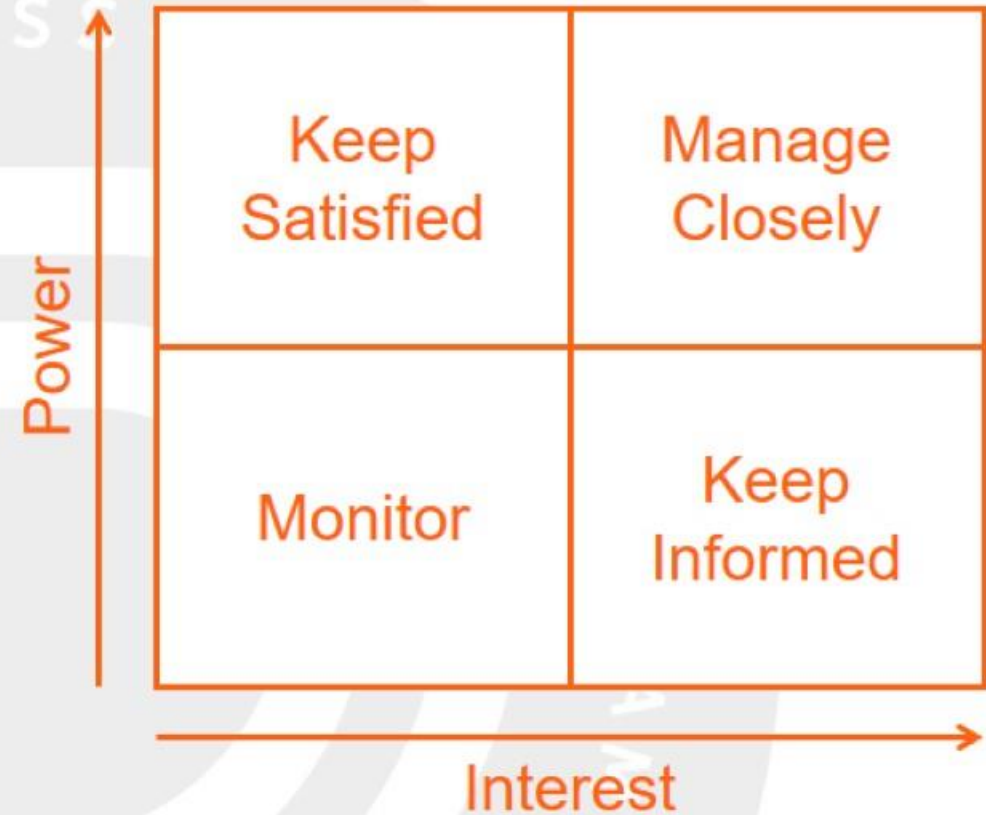
A project document that includes information about project stakeholders including an assessment and classification of project stakeholders.

# Power Interest Matrix

Categorize the stakeholders who have **increasing power and interest** in your project.

Two variables:

- **Power** on the y axis
- **Interest** on the x axis





# Power Interest Matrix Grids

## Manage Closely

- Stakeholders who have high power and a high level of interest in the project should be actively and closely managed throughout the project life cycle.

## Keep Satisfied

- Stakeholders with a high level of power and a low level of interest are important and must be satisfied. They can complicate the progress of the project by apparently minor reasons.

## Keep Informed

- Stakeholders who have low power, but high interest can play a vital role in creating influence, generating resistance, and spreading communication. They can often be very helpful in terms of offering details and ground-level insights, so it's important to keep them adequately informed and consulted.

## Monitor

- Stakeholders with a high level of power and a low level of interest are important and must be satisfied. While they require less attention, it's still important to monitor them for any changes in their position that could affect the project.



# Levels of Engagement



**Unaware:** The stakeholder does not know about the project or its benefits and other impacts and might even be unaware that it is indeed a stakeholder.



**Resistant:** The stakeholder is aware of the project, is resistant to the project objectives, and/or is resistant to the changes that the project introduces in its environment.



**Neutral:** The stakeholder is aware of the project and is neither resistant to nor supportive of the project objectives or impact.



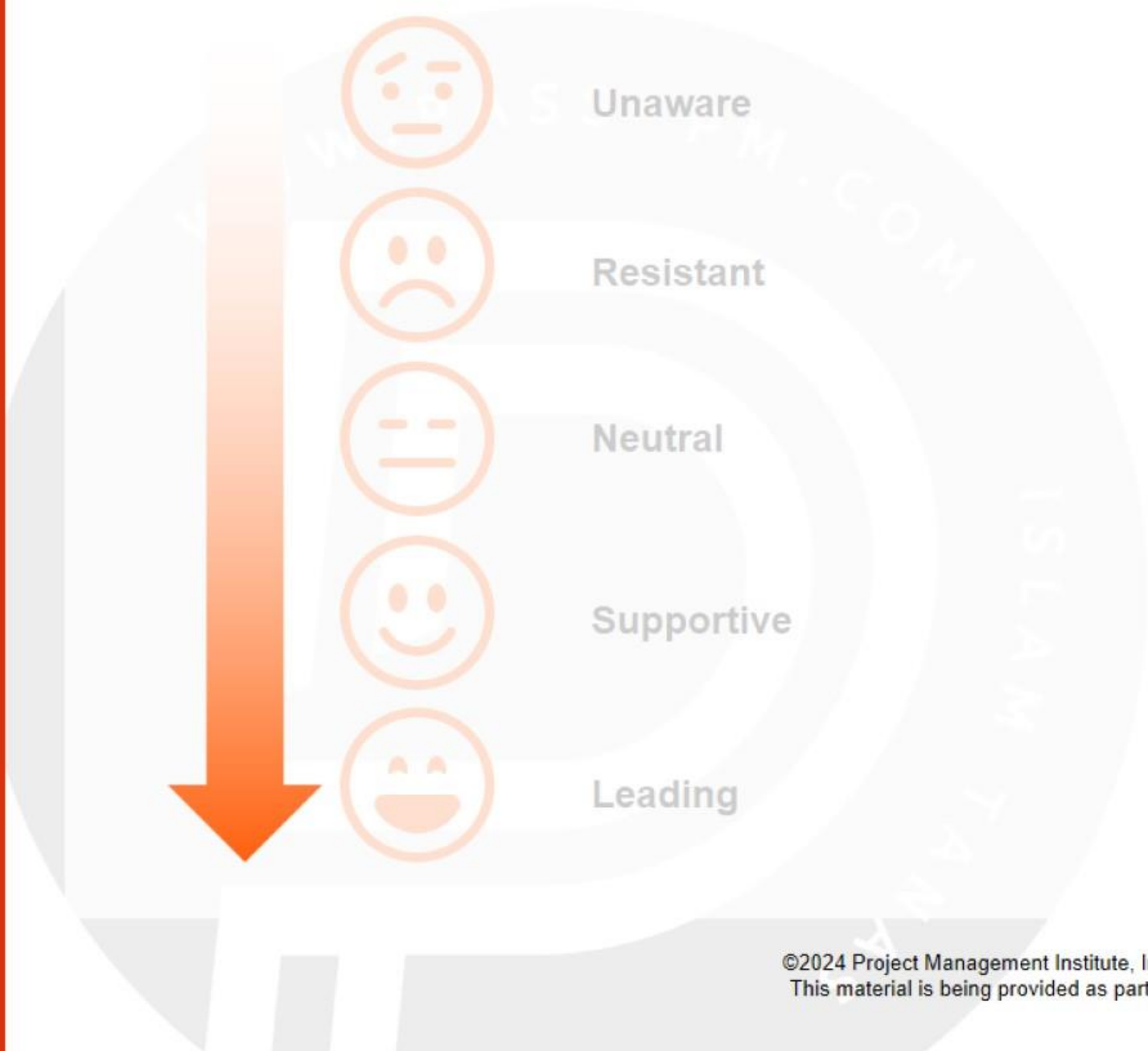
**Supportive:** The stakeholder is fully aware of the project and supports the changes and project outcome.



**Leading:** The stakeholder has the willing to be a champion and engage fully to ensure the success of the project.

# How Do You Move Stakeholders from Resistant to Supportive

Several strategies can be used to engage different stakeholders and move them from resistant to supportive.



# Stakeholder Engagement Assessment Matrix (SEAM)

Stakeholder Engagement Assessment Matrix (SEAM): A matrix that compares current and desired stakeholder engagement levels.

the goal is to move stakeholders from their current state to levels that are Supportive and Leading, where these stakeholders can be real assets to the project.

Name	Unaware	Resistant	Neutral	Supportive	Leading
Tom Dwyer				C	D
Jessica Houston			C	D	

Key:

C = Current level of engagement

D = Desired level of engagement



# Three Possible Solutions



Engaging



Incentivizing



Isolating





# Managing Project Communications

# Projects Frequently Fail Because of Poor Communication

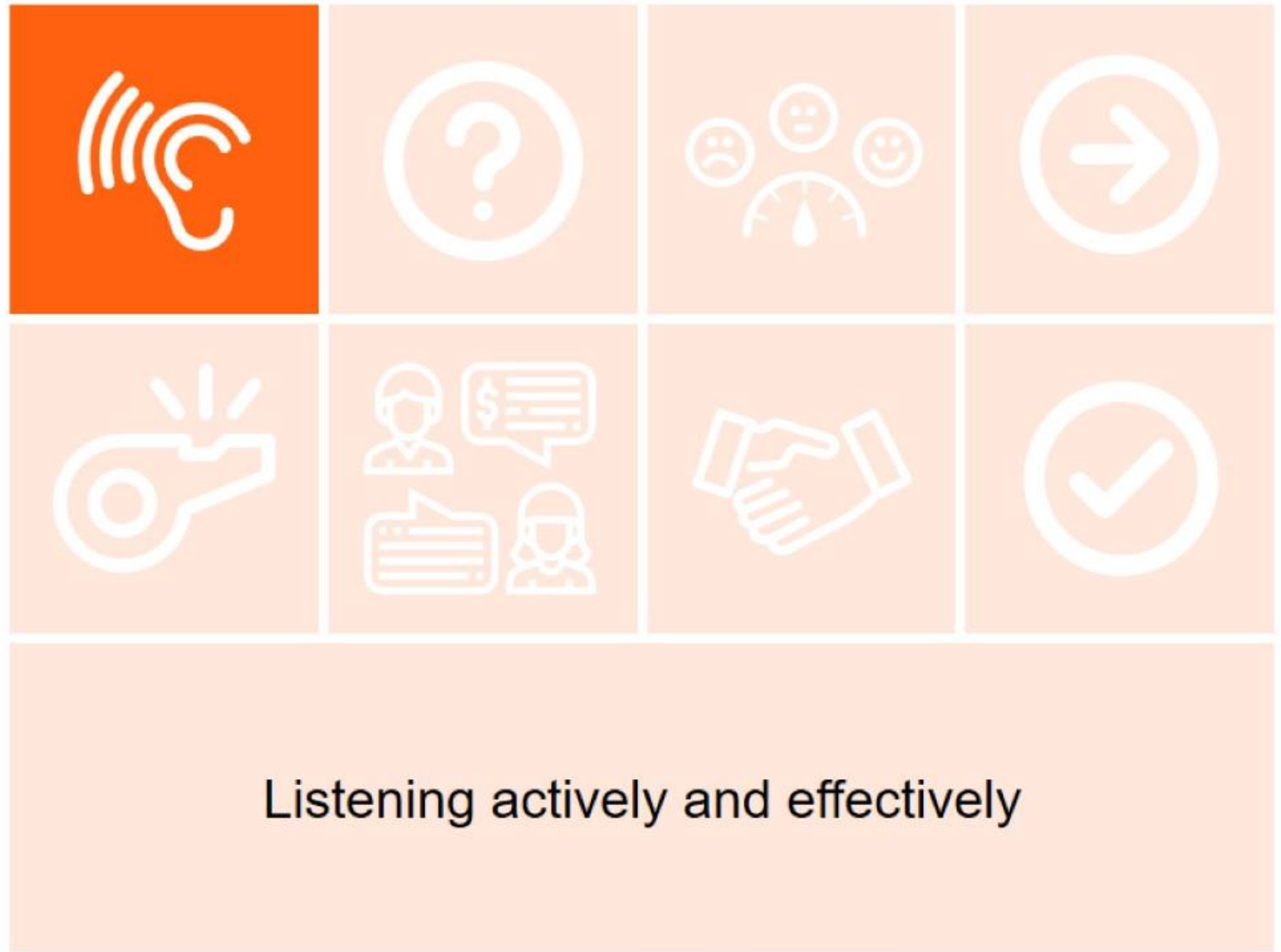


# Critical Communication Skills



*Project Management Institute,  
Inc. (2023). Process Groups: A  
Practice Guide.*

# Critical Communication Skills

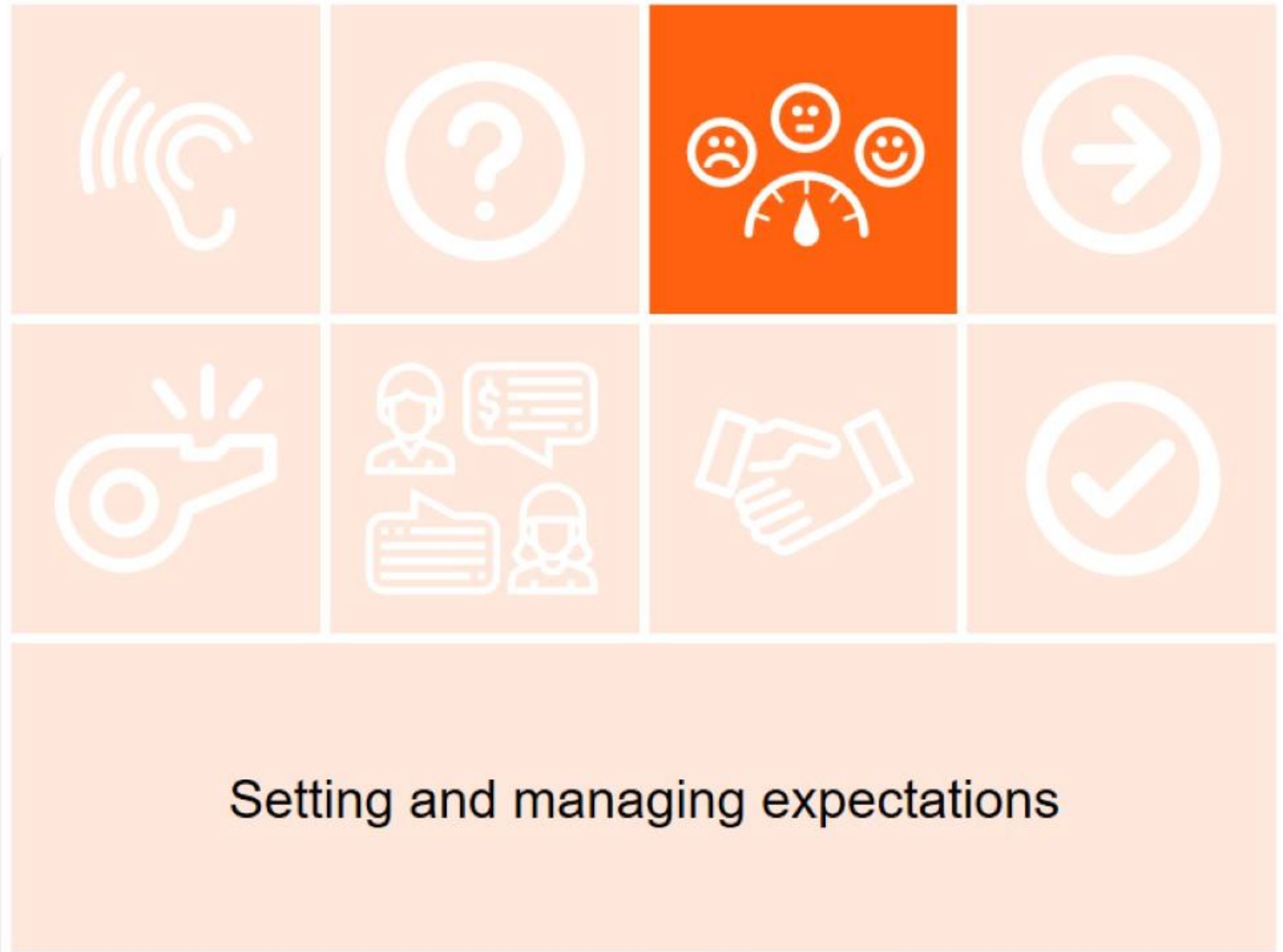




# Critical Communication Skills



# Critical Communication Skills



# Critical Communication Skills



Motivating to perform an action or provide encouragement or reassurance

# Critical Communication Skills



Coaching to improve performance  
and achieve desired results



# Critical Communication Skills



Negotiating to achieve mutually acceptable agreements between parties

# Critical Communication Skills



Resolving conflict  
to prevent disruptive impacts

# Critical Communication Skills



Summarizing, recapping,  
and identifying the next steps

# Processes Associated with Project Communication Management



Plan Communications Management



Manage Communications



Monitor Communications

Project Management Institute,  
Inc. (2023). *Process Groups: A  
Practice Guide*.



# Key Requirements for Effective Communication



Analyze communication needs of all stakeholders



Determine communication methods, channels, frequency, and level of detail for all stakeholders



Communicate project information and updates effectively



Confirm that communication is understood and feedback is received

# Which Group Does It Fit In?



Critical  
skill



Process



Key  
requirement

WWW.PASS-PM.COM

ISLAM  
TAN

# Which Group Does It Fit In?



WWW.PASS-PASS.COM



Motivating to perform an action  
or provide encouragement or reassurance



Critical  
skill



Process



Key  
requirement

# Which Group Does It Fit In?



Communicate project information and updates effectively



Critical skill



Process



Key requirement



# Which Group Does It Fit In?



## Plan Communications Management

Critical skill

Process

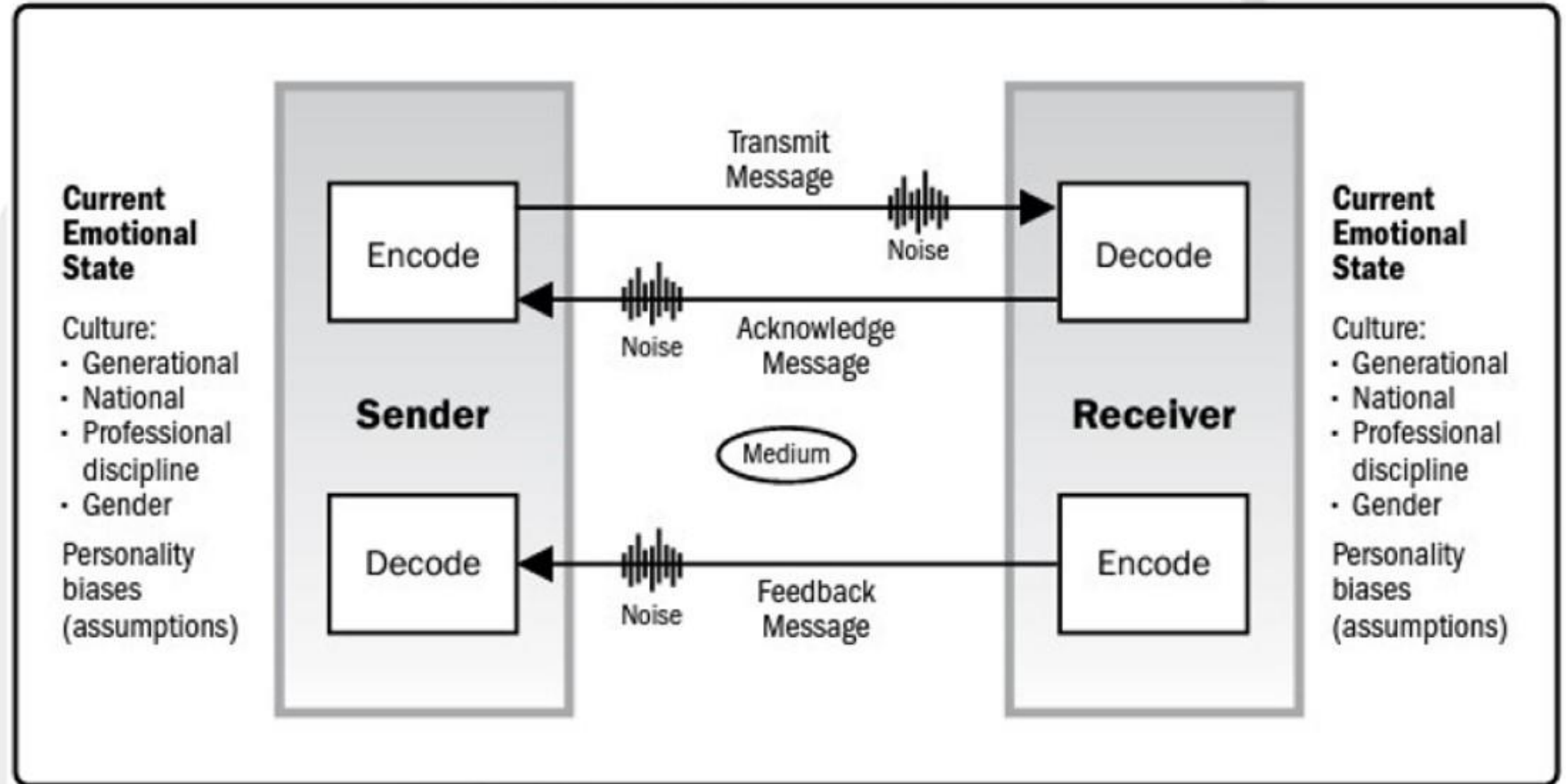
Key requirement

# Communication Model



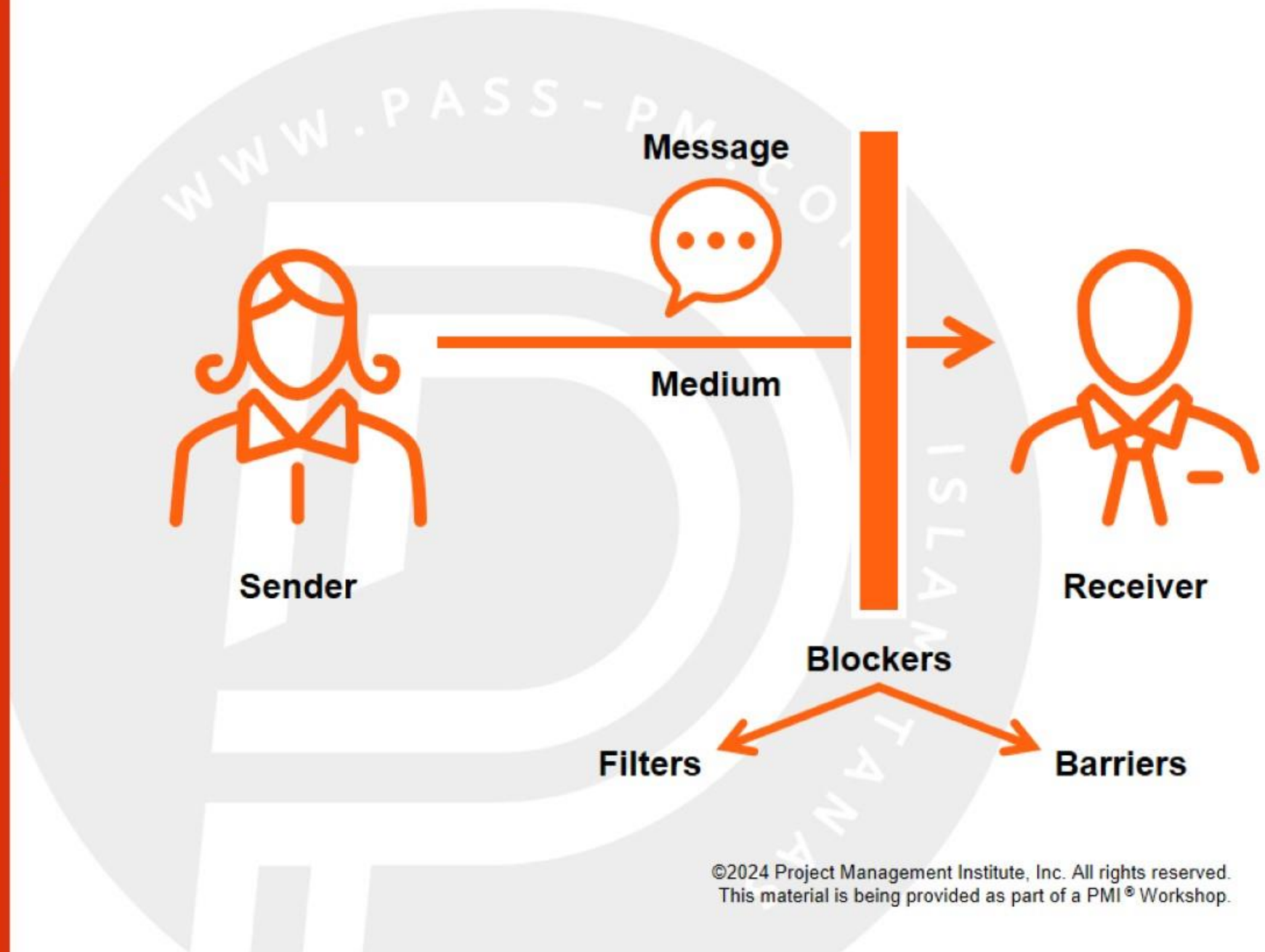
*Communication Model: A description, analogy, or schematic used to represent how the communication process will be performed for the project.*

## Cross-Cultural Communication Model



# Communication Blockers

A communication blocker can impede the flow of effective communication. As a project manager we might assume people read and understand the information we send in our project status reports.



# Communication Filters



Difference in **language**, **culture**, and **terminology**

**Psychological** and **sociological** differences

**Dysfunctional** emotional behaviors

Different **educational** backgrounds

**Traditions** (*the way it has always been done*)

**Talking past each other**



# Communication Barriers



Poor **internet** connection

A **resistant mindset**

Acceptance **misinformation** as fact

Interpersonal **conflict**

# Communication Methods



Communication Method	When Used
Formal written	Project charter, project plans, project reports, contracts
Formal verbal	Presentations, updates, and briefings
Informal written	Memos, emails, and notes
Informal verbal	Casual conversations

# Push or Pull?



**Push**

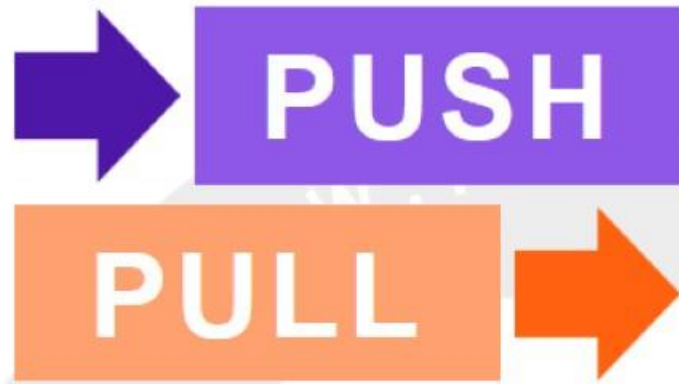
Use for high-priority information or high-priority stakeholders



**Pull**

Use for lower-priority information or lower-priority stakeholders

# Communication Methods



Interactive



**Push** — sender determines:

- Send an email
- Make a phone call

**Pull** — receiver determines:

- Post information on team board
- Store reference documents in electronic repository — e.g., SharePoint

- Conversation (speaking on the phone, virtual, in-person)
- Messaging
- Workshops/collaboration
- Whiteboarding



# Putting Together a Communications Management Plan

- The communications management plan is most often a part of the overall project plan, but it might also be a subsidiary plan, depending on the complexity of the project.
- Putting in the effort to create and follow a communications management plan will help to ensure project success.



# Answering Five Critical Questions

A communications management plan presents the what, why, whom, how, and when of project communications.



**What** is being communicated?



**Why** is it being communicated?



To **whom** is it being communicated?



**How** is it being communicated?



**When** is it being communicated?

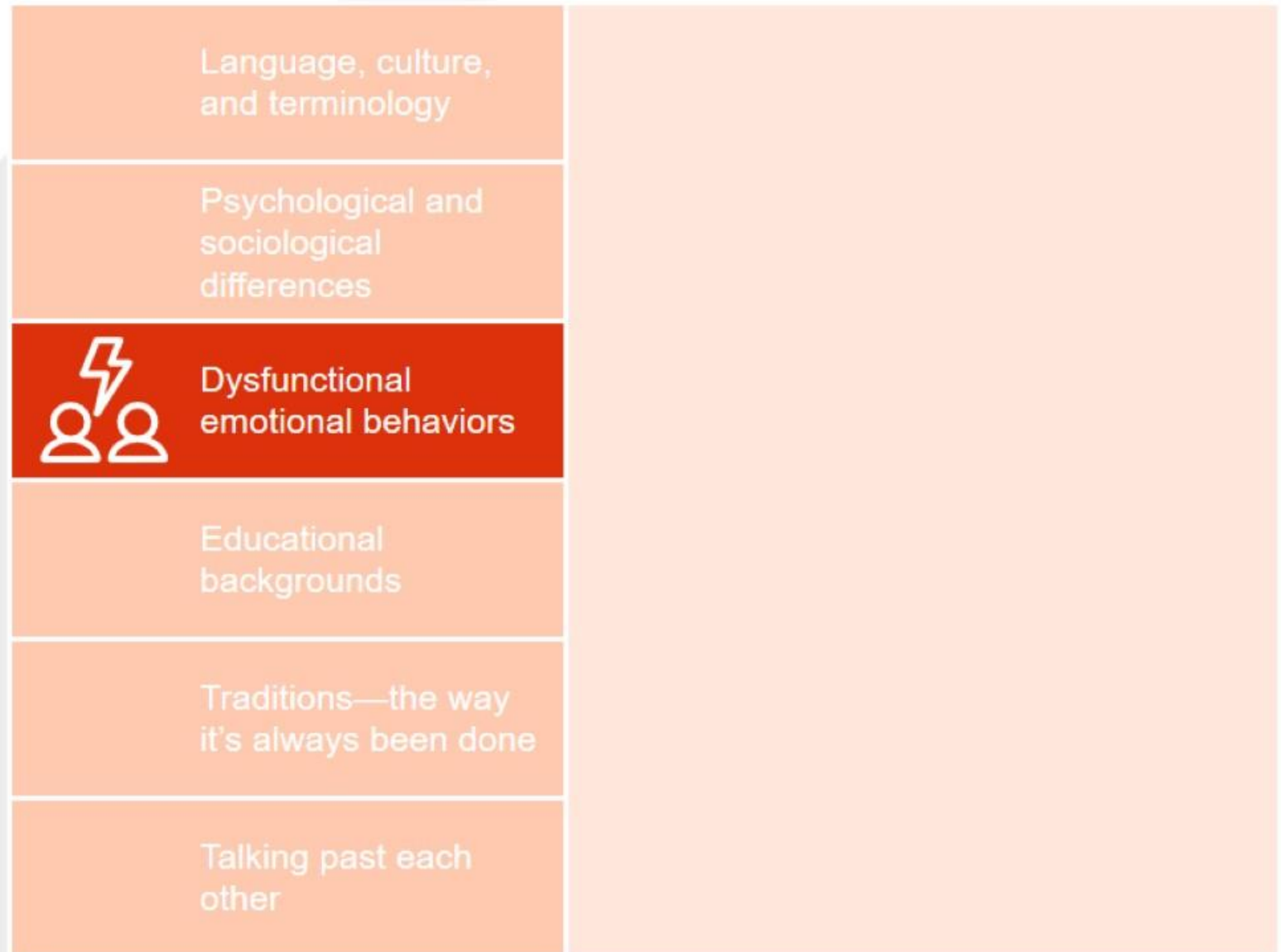


## Typical Contents

Communication is more than talking or sending project status reports; it involves brainstorming, meeting with key stakeholders, creating and communicating project document artifacts, checking for understanding, handling conflicts, engaging stakeholders, and more.

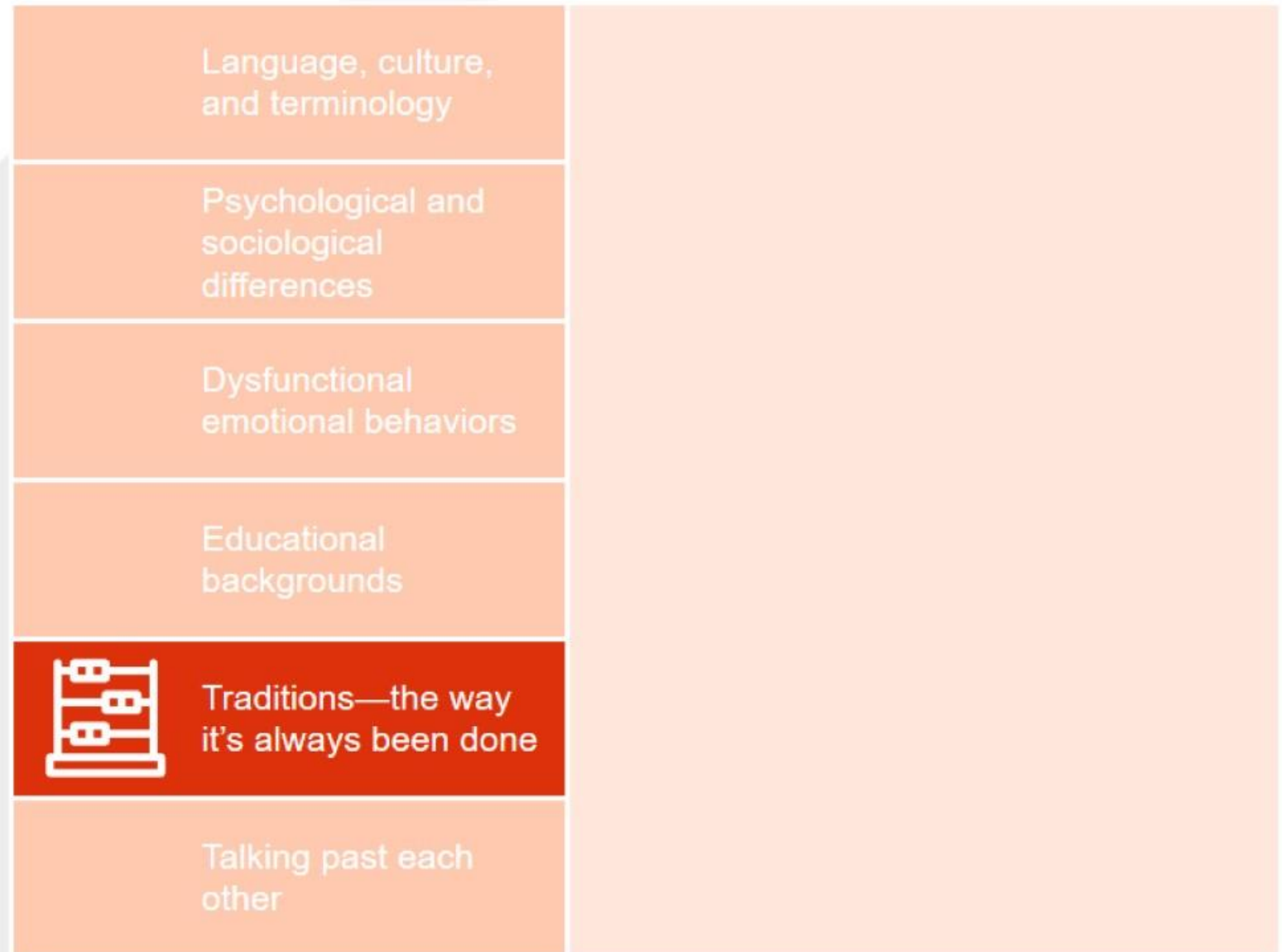
- ✓ List of process deliverables to be included in the project
- ✓ List of meetings required
- ✓ Communication requirements analysis
- ✓ Policies for communication
- ✓ Procedures and technologies to be used
- ✓ Escalation procedures
- ✓ Revision procedures
- ✓ Glossary
- ✓ Appendix

# Which Communication Filter Is It?





# Which Communication Filter Is It?



Language, culture,  
and terminology

Psychological and  
sociological  
differences

Dysfunctional  
emotional behaviors

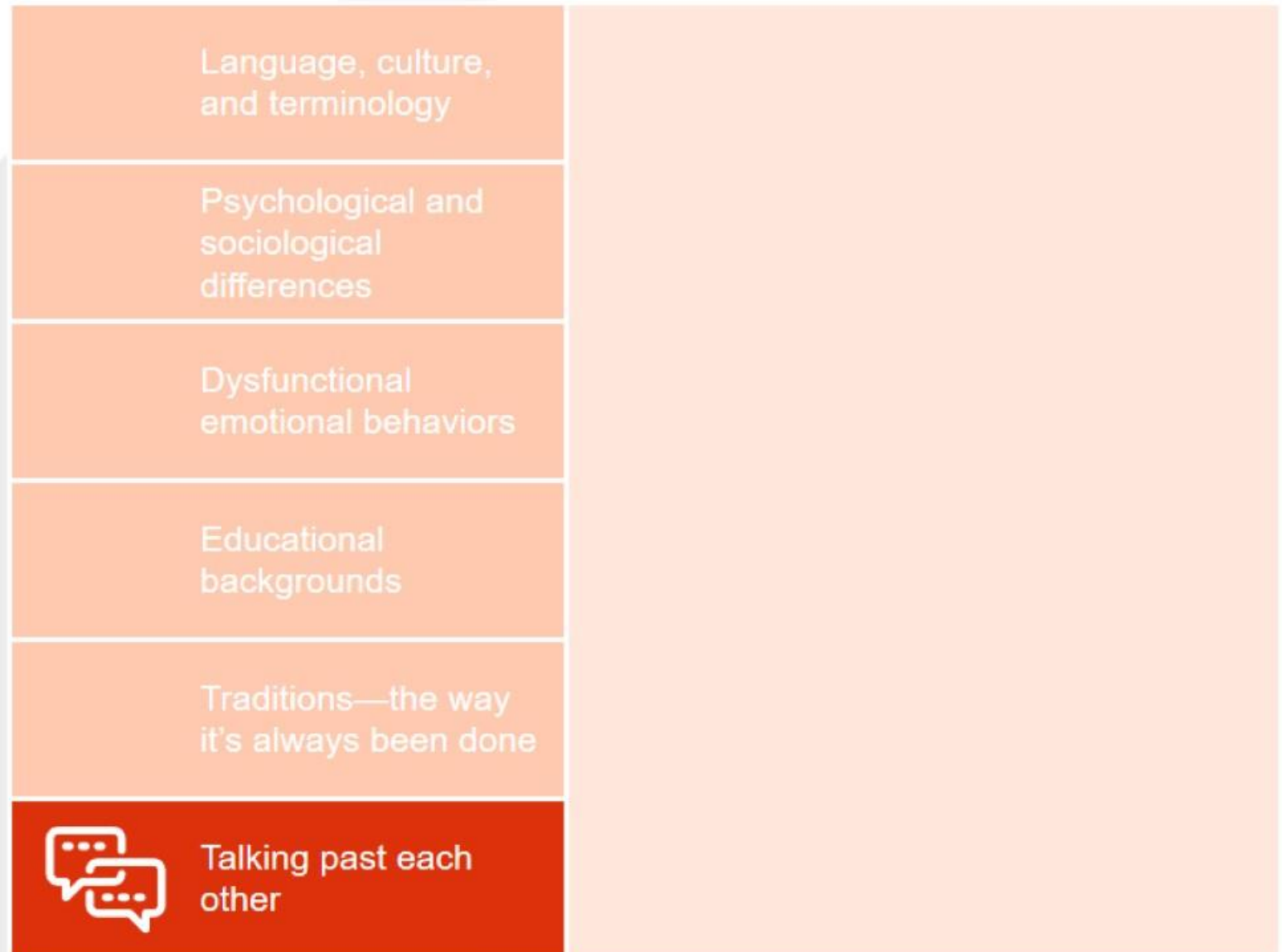
Educational  
backgrounds



Traditions—the way  
it's always been done

Talking past each  
other

# Which Communication Filter Is It?





# Managing Risk

# Processes Associated with Risk Management



Plan Risk Management



Identify Risks



Perform Qualitative Risk Analysis



Perform Quantitative Risk Analysis



Plan Risk Responses



Implement Risk Responses



Monitor Risks

*Project Management Institute.  
(2023). Process Groups: A  
Practice Guide.*



# Dealing with Threats

*A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Seventh Edition*



**Avoid**



**Transfer**



**Mitigate**



**Accept**



**Escalate**

After a set of risk responses has been developed, it should be reviewed to see whether the responses planned have created any **secondary risks**.

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AVOID

TRANSFER

MITIGATE

ACCEPT

ESCALATE

**AVOID**

You can avoid it. You avoid a risk by having your project team acts to eliminate it or to protect a project from the impact of a threat.

**TRANSFER**

You transfer risk by shifting ownership of a threat to another party to manage the risk or to bear the impact if it occurs. Like insurance

**MITIGATE**

When you mitigate a threat, you take action to reduce the its probability. Early mitigation action is usually more effective than repairing the damage after it occurs.

**ACCEPT**

That's what happens when your team acknowledges the existence of a threat but decides it's not worth doing anything about it.

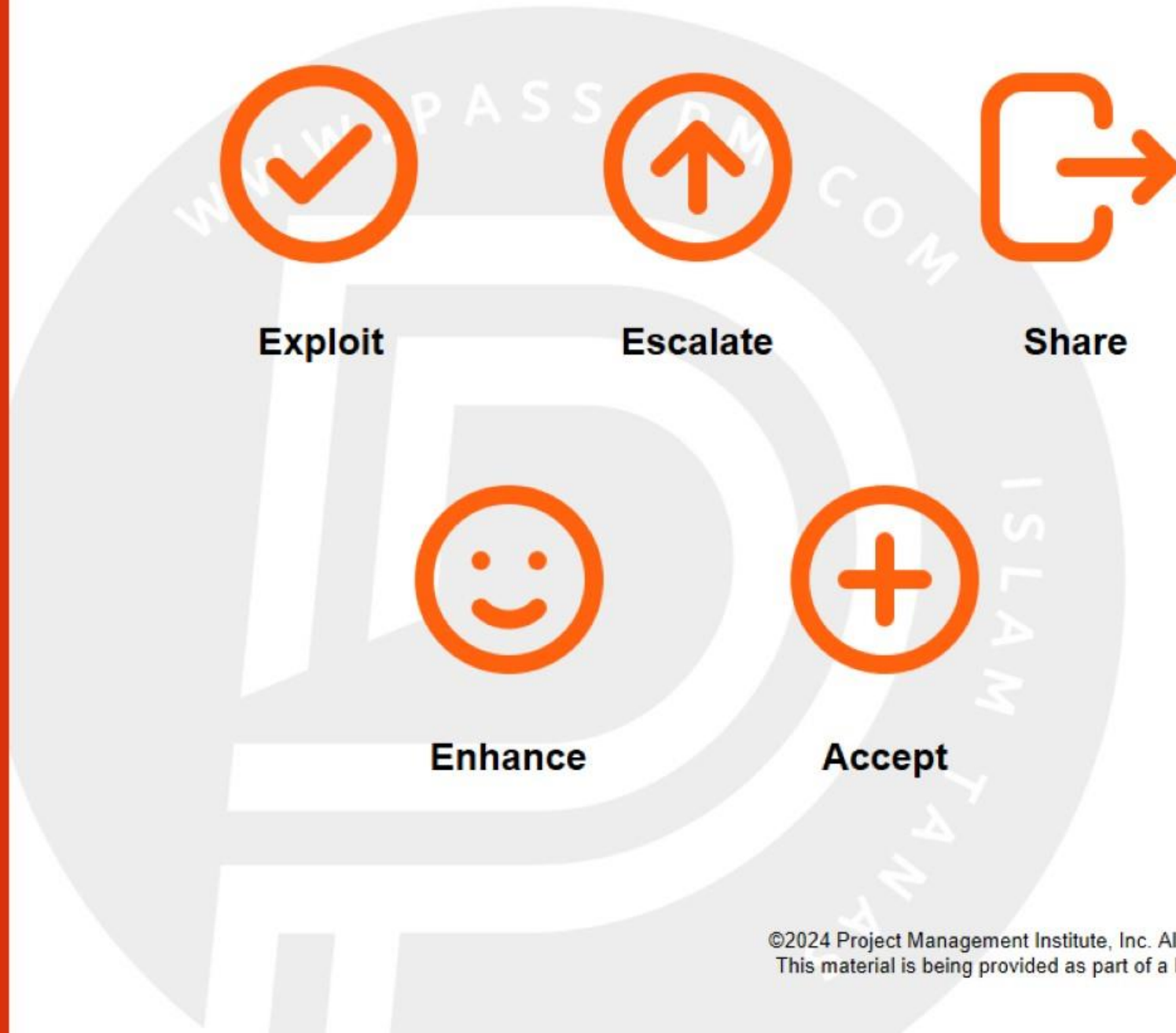
**ESCALATE**

Escalation is appropriate when your project team or project sponsor agrees that a threat is outside the scope of the project or that the proposed response would exceed your authority.

ISLAM

# Taking Advantage of Opportunities

*A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Seventh Edition*



- Exploit
- Escalate
- Share
- Enhance
- Accept



**Exploit**

When you exploit an opportunity, your project team acts to ensure it can extract all possible value from the opportunity.

**Escalate**

Escalation is appropriate when your project team or project sponsor agrees that a threat is outside the scope of the project or that the proposed response would exceed your authority.

**Share**

Sharing involves allocating either a portion or all of the ownership of an opportunity to the party that is best able to take advantage of the opportunity.

**Enhance**

This is when you and your team act to increase the probability of occurrence or impact of an opportunity.

**Accept**

As with threats, when you accept an opportunity, you acknowledge its existence, but don't make any plans to take advantage of it.

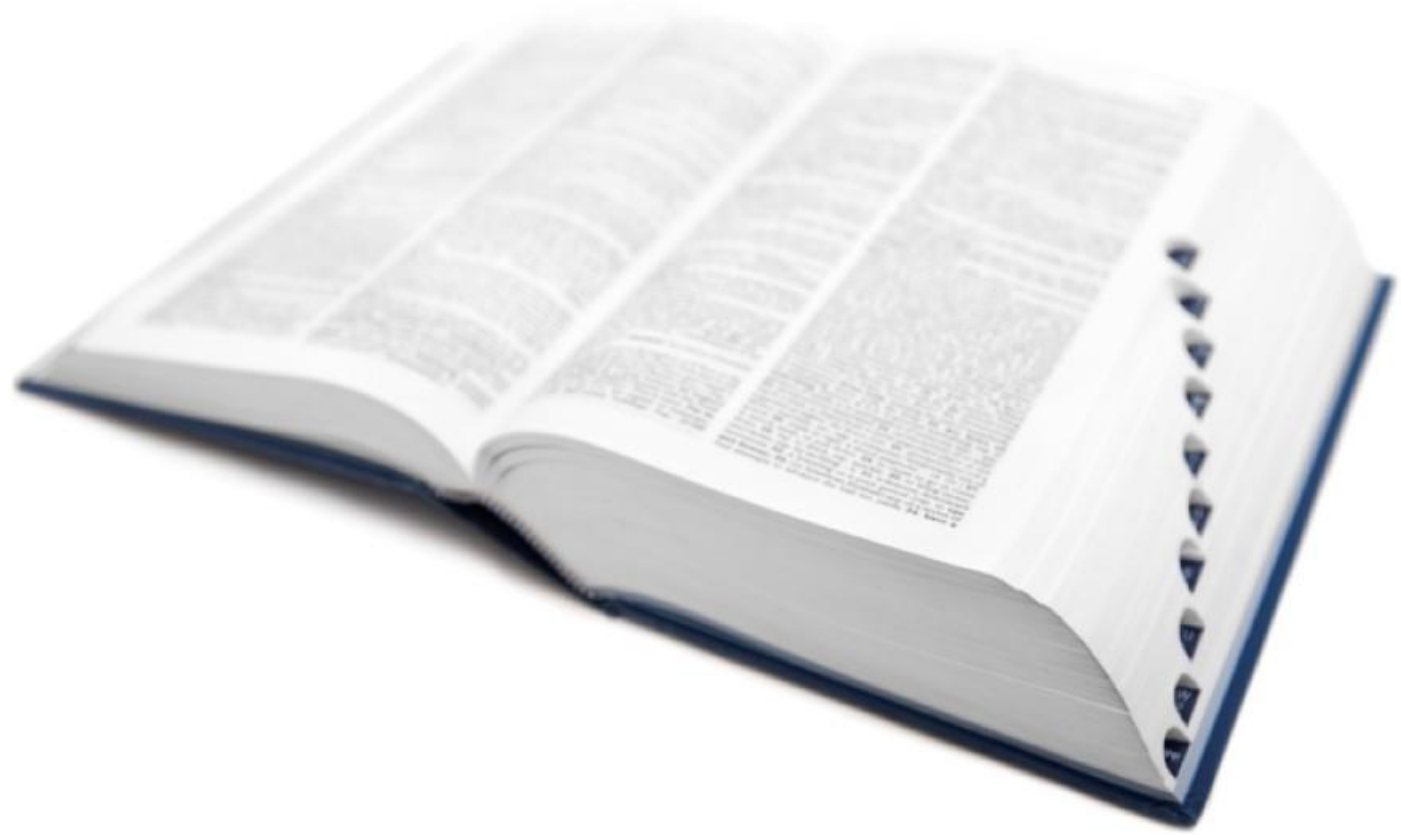




# Quality Management

# What Is Quality?

The degree to which a set of inherent characteristics fulfills requirements.



*A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Seventh Edition*

# Process Groups Associated with Quality Management

Project Management Institute.  
(2023). *Process Groups: A Practice Guide*.



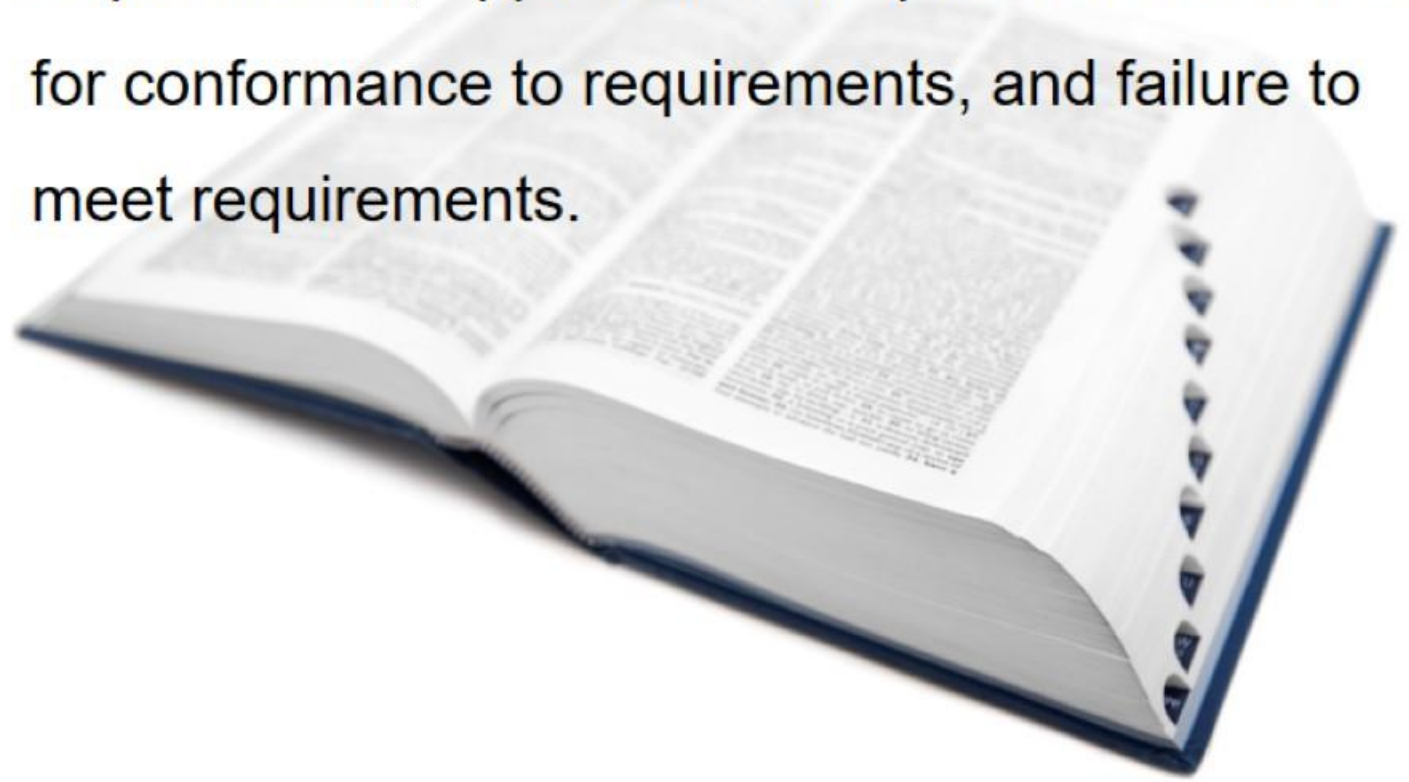
# What Is the Cost of Quality?



*A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Seventh Edition*



All costs incurred over the life of the product by investment in preventing nonconformance to requirements, appraisal of the product or service for conformance to requirements, and failure to meet requirements.





# Cost of Quality Methodology



**Prevention costs**



**Appraisal costs**



**Internal failure costs**

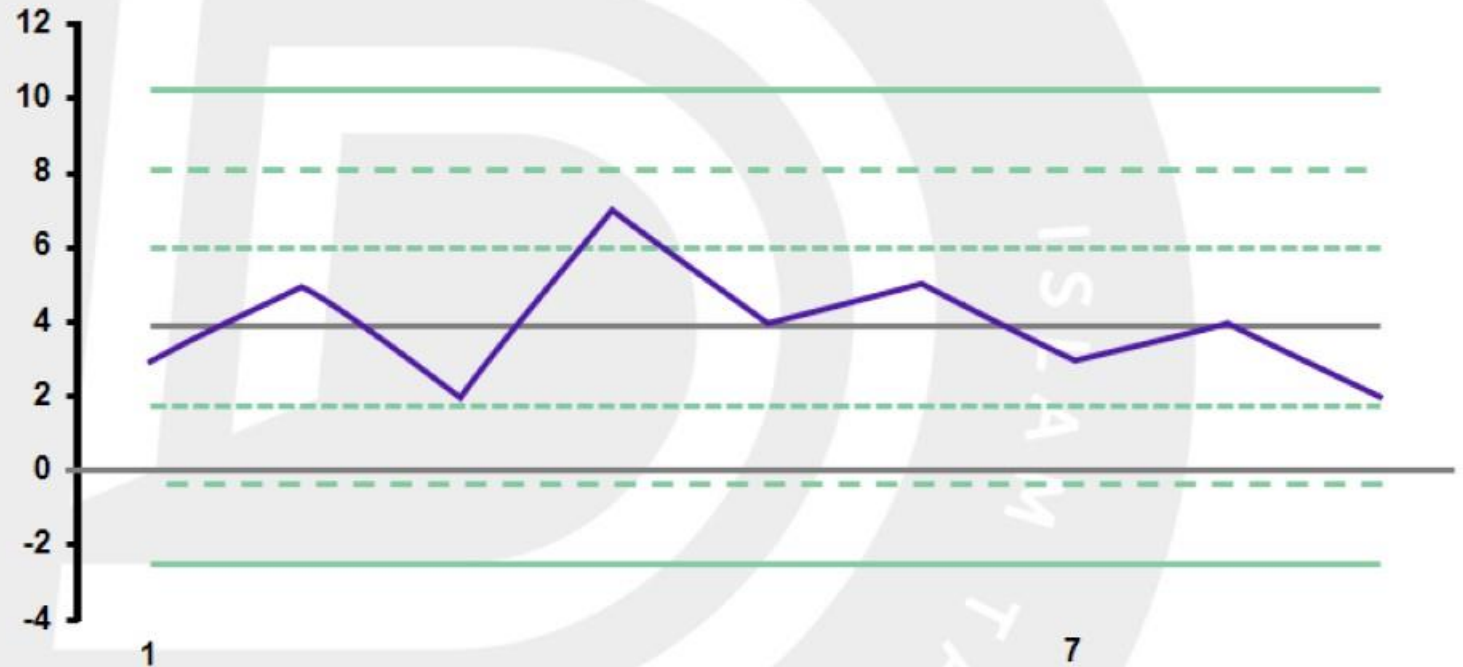


**External failure costs**

**NOTE**

# Control Charts

Week	1	2	3	4	5	6	7	8	9
Defects	3	5	2	7	4	5	3	4	2
Moving range	-	2	3	5	3	1	2	1	2





# Project Controls and Forecasting

# Earned Value Management (EVM) Tools

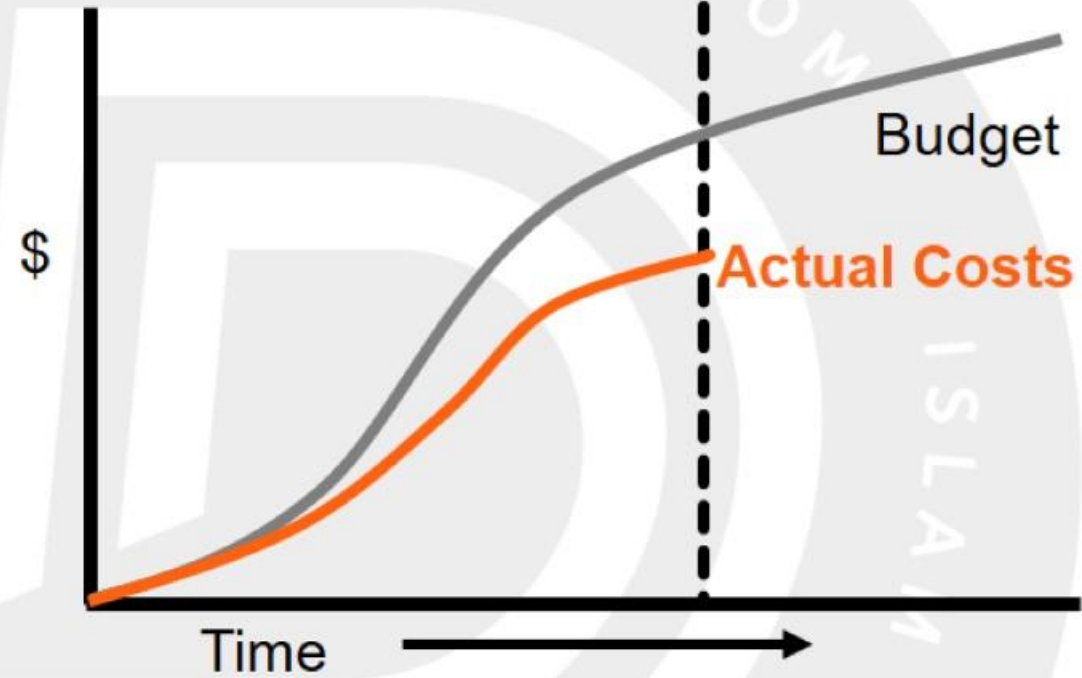




# Earned Value Analysis (EVA)

Total Budget

Time Now



# EVA Metrics: Planned Value and Earned Value

**Planned value** (PV) is the authorized budget assigned to scheduled work.

**Earned value** (EV) is the measure of work performed expressed in terms of the budget authorized for that work.

**Actual cost** (AC) is the realized cost incurred for the work performed on any activity during a specific time period.

Project Management Institute.  
(2022). *A Guide to the Project  
Management Body of  
Knowledge (PMBOK® Guide)* –  
Seventh Edition.

# EVA Metrics: Cost Variance

“The amount of budget deficit or surplus at a given point in time, expressed as the difference between the earned value and the actual cost.”

$$CV = EV - AC$$

Cost Variance = Earned Value - Actual Cost

Project Management Institute.  
(2022). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* – Seventh Edition.

# EVA Metrics: Schedule Variance

“A measure of schedule performance expressed as the difference between the earned value and the planned value.”

$$SV = EV - PV$$

Schedule Variance = Earned Value – Planned Value

A **positive SV** indicates your project is ahead of schedule;  
an **SV of zero** indicates your project is precisely on schedule;  
a **negative SV** indicates your project is behind schedule.

Project Management Institute.  
(2022). *A Guide to the Project  
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Knowledge (PMBOK® Guide)* –  
Seventh Edition.



# EVA Metrics: Cost Performance Index

“The cost performance index a measure of the cost efficiency of budgeted resources expressed as the ratio of earned value to actual cost.”

$$\text{CPI} = \text{EV} / \text{AC}$$

$$\text{Cost Performance Index} = \frac{\text{Earned Value}}{\text{Actual cost incurred}}$$

<1 Over budget      =1 On budget      >1 Under budget

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# EVA Metrics: Estimate at Completion

“The expected total cost of completing all work expressed as the sum of the actual cost to date and the estimate to complete.”

$$EAC = BAC / CPI$$

$$\text{Estimate at Completion} = \frac{\text{Budget at Completion}}{\text{Cost Performance Index}}$$

A measure of the cost efficiency of budgeted resources expressed as the ratio of earned value to actual cost.”

It represents the final project cost given the costs incurred to date and the expected costs to complete the project.

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# EVA Metrics: Estimate at Completion

Estimate at Completion (EAC) is the expected total cost of completing all work expressed as the sum of the actual cost to date and the estimate to complete.

$$EAC = \frac{BAC}{CPI}$$

$$CPI = \frac{EV}{AC}$$

# EVA Metrics: Estimate to Complete

Estimate to Complete (ETC) is the expected cost to finish all the remaining project work.

$$\text{ETC} = \text{EAC} - \text{AC}$$

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# EVA Metrics:

## Estimate to Complete

- The estimate to complete is the expected **cost to finish all the remaining project work**.
- Estimate to complete is **not the final overall expected project budget**; that's the estimate at completion—the formula we just went over.
- Instead, estimate to complete refers to the costs **from the present moment** until the **end of the project**; it **never** includes the project expenditures and actual cost prior to that moment.

Estimate to Complete (ETC) is the expected cost to finish all the remaining project work.

$$ETC = EAC - AC$$

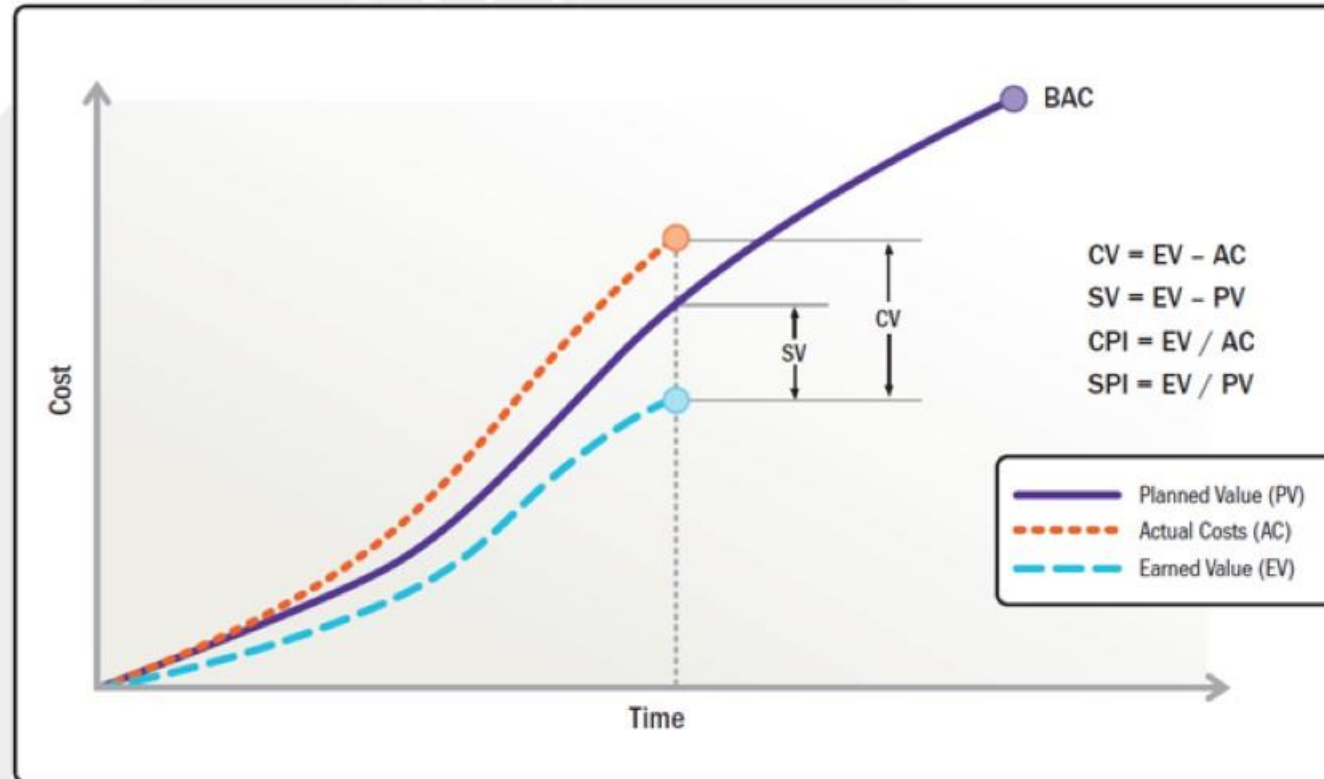
# EVA Metrics: Estimate to Complete

Variance at Completion (VAC) is a projection of the amount of budget deficit or surplus, expressed as the difference between the budget at completion and the estimate at completion.

$$VAC = BAC - EAC$$

*Project Management Institute.  
A Guide to the Project  
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# Putting These Three Together





# Project Integration



# Bringing It All Together

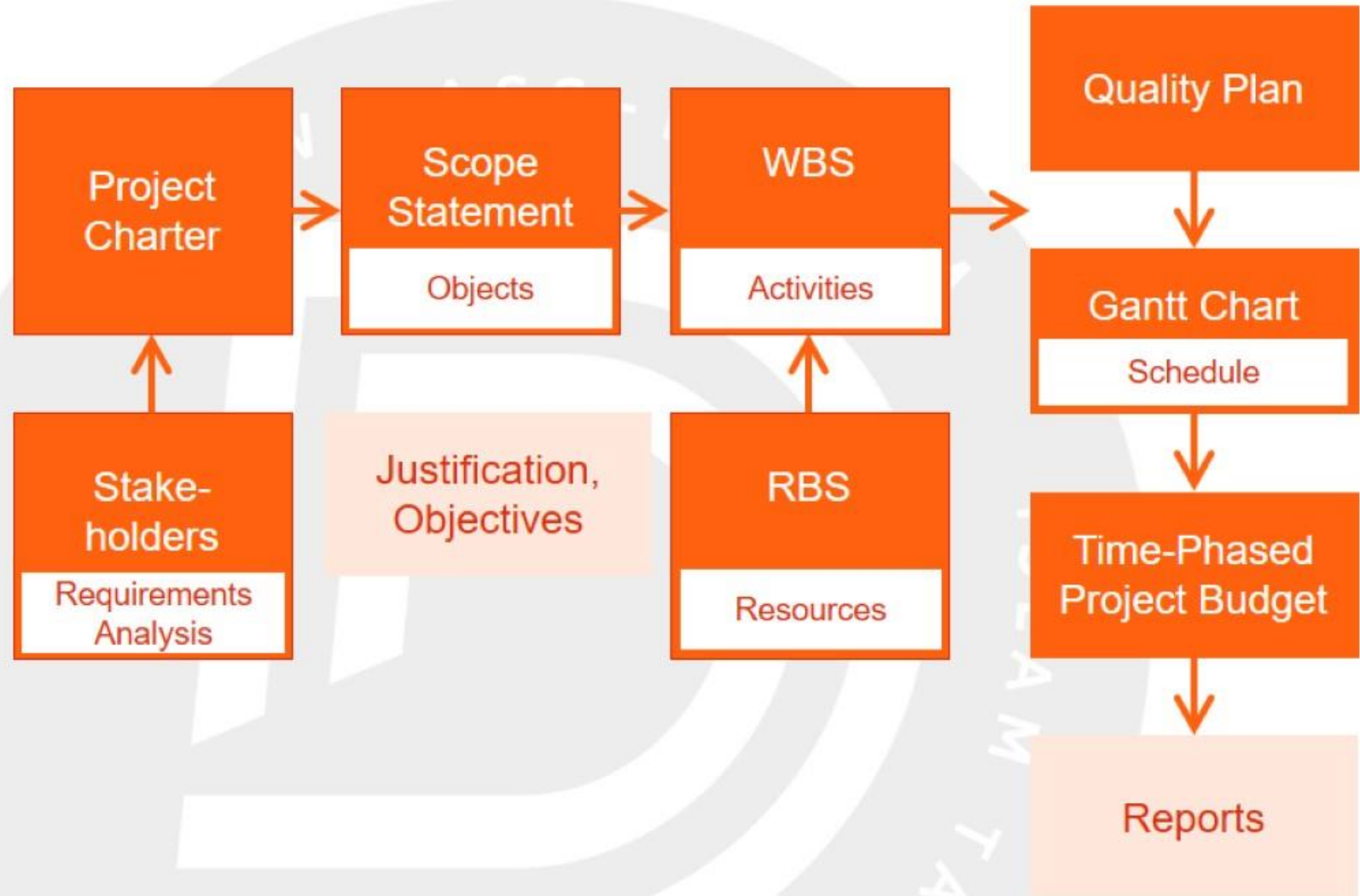
These processes don't exist **independently** of one another

Bringing them all together into a cohesive whole is what **project management** is all about

# Putting Together a Project Management Plan

- Determining an appropriate development methodology
- Integrating all project planning activities
- Executing the project with the required urgency
- Managing project changes
- Managing project artifacts
- Planning and managing project closure

# Project Integration





# Wrapping Up



# Summary

- Planning and managing procurement
- Engaging stakeholders
- Managing project communications
- Managing risk
- Quality management
- Project controls and forecasting
- Project integration



# Do I Already Know That?

## Question 1



Ensuring that stakeholders accept and are satisfied with the project deliverables is a part of which project performance domain?



1.

Development  
Approach and  
Life Cycle  
domain



2.

Stakeholder  
performance  
domain



3.

Project Work  
performance  
domain



4.

Project  
Delivery  
performance  
domain

## Question 2

A contract with a vendor includes a 5% decrease in contract payments for each week the project is delayed. Which approach to risk management are you using?



1.  
Accepting



2.  
Mitigating



3.  
Avoiding



4.  
Transferring



## Question 3



Which graph shows the behavior of a process over time and whether or not it is stable and within expectations?



1.

Risk register



2.

Gantt chart



3.

Control chart



4.

Ishikawa chart

# How Did You Do?



# Next: Adaptive Approaches

