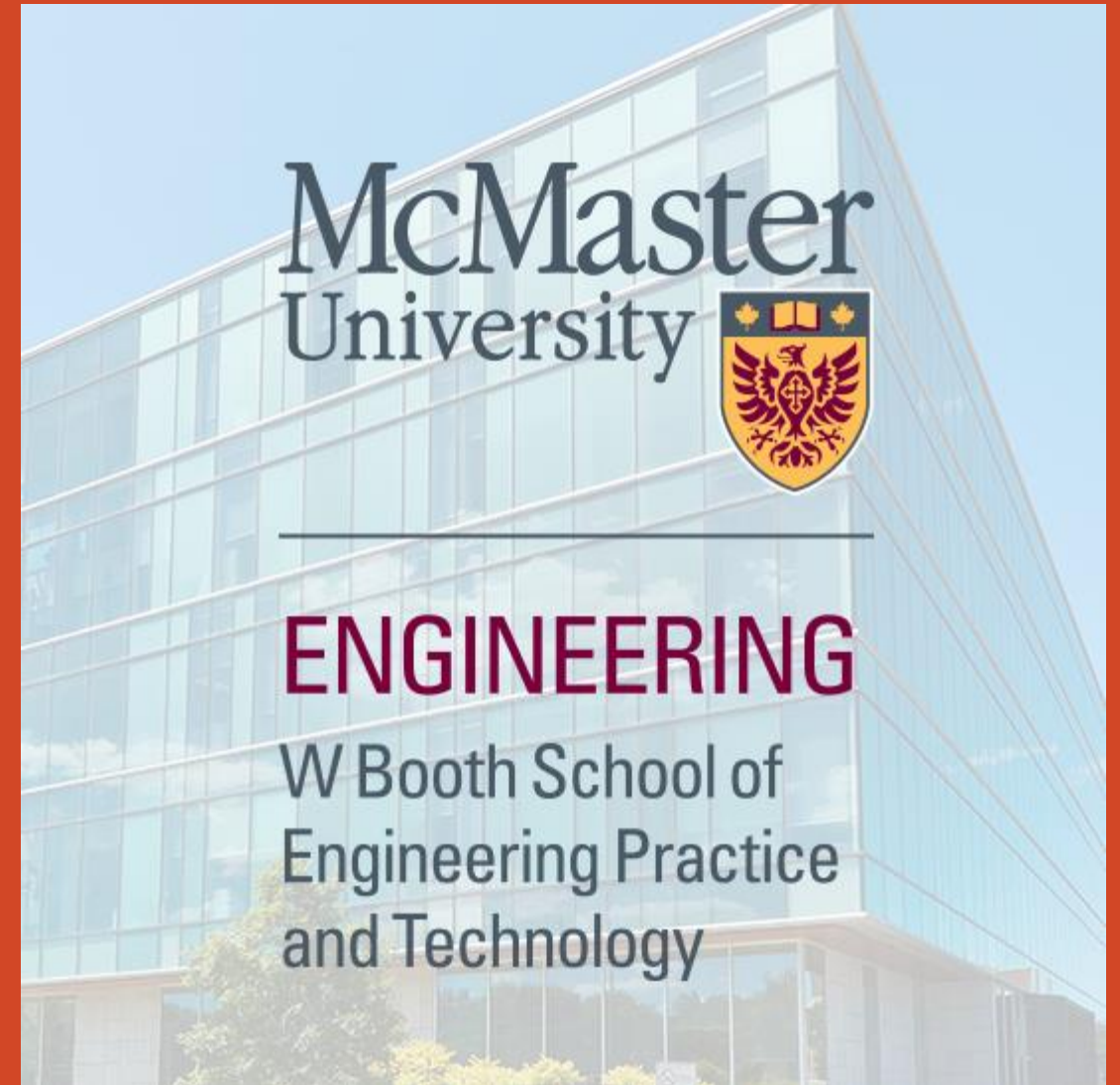# Practical Project Management for Today's Business Environment

Week 2: Project Initiation and Feasibility Analysis

Dr. Mikhail Hanna, PhD, PMP, PMI-RMP

Agenda

Defining Project Objectives, Scope, and Stakeholders

Feasibility Studies and Business Case Development

Initiating Projects in Different Industries

Project Charter in Different Industries

Group Exercise: Draft Project Charter

Assignment Kickoff: Group Assignment 1

Conclusion and Q&A

Defining Project Objectives, Scope, and Stakeholders

Project Objectives

Definition: Project objectives are the specific goals that the project aims to achieve. They should be **SMART**: Specific, Measurable, Achievable, Relevant, and Time-bound.

- *Example 1*: A company aims to reduce production costs by 10% in 12 months through automation.

- *Example 2*: A software development team aims to launch a new mobile app that increases user engagement by 30% within six months.

Importance of Objectives:

- Clear objectives provide direction and enable success measurement.

- Objectives help stakeholders understand the expected outcomes and align project efforts accordingly.

SMART Marketing Objectives

Specific
Is the detail in the information sufficient to pinpoint problems or opportunities? Is the objective sufficiently detailed to measure real world problems and opportunities?

Measurable
Can a quantitative or qualitative attribute be applied to create a metric?

Actionable
Can the information be used to improve performance? If the objective doesn't change behaviour in staff to help them improve performance, there is little point in it!

Relevant
Can the information be applied to the specific problem faced by the marketer?

Time-bound
Can the objective be set for different time periods as targets to review against?

Examples of Objectives

SCOPE

Definition: The scope of a project defines the boundaries, deliverables, and specific features of what will and will not be included.

- **Example 1:** In a construction project, the scope includes building a new office, completing the infrastructure, but excludes interior decoration.

- **Example 2:** For a software project, the scope may include developing the user interface and backend system but exclude advanced AI features.

Key Components of Scope:

- **Deliverables**: Tangible products or outcomes expected from the project.

- **Exclusions**: What is explicitly excluded from the project to avoid scope creep.

- **Constraints**: Any limitations on project scope, such as budget or time.

Scope Creep: The risk of unplanned changes or additions to a project's scope, leading to increased costs and extended timelines.
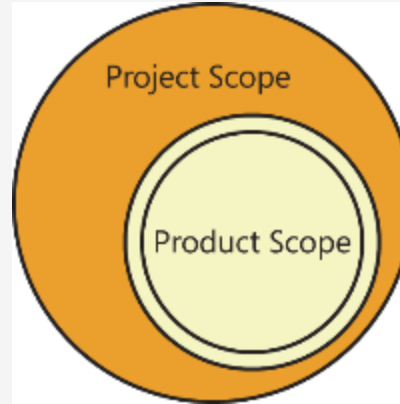
- Example: In an IT project, adding more features without adjusting the timeline or budget leads to project delays.
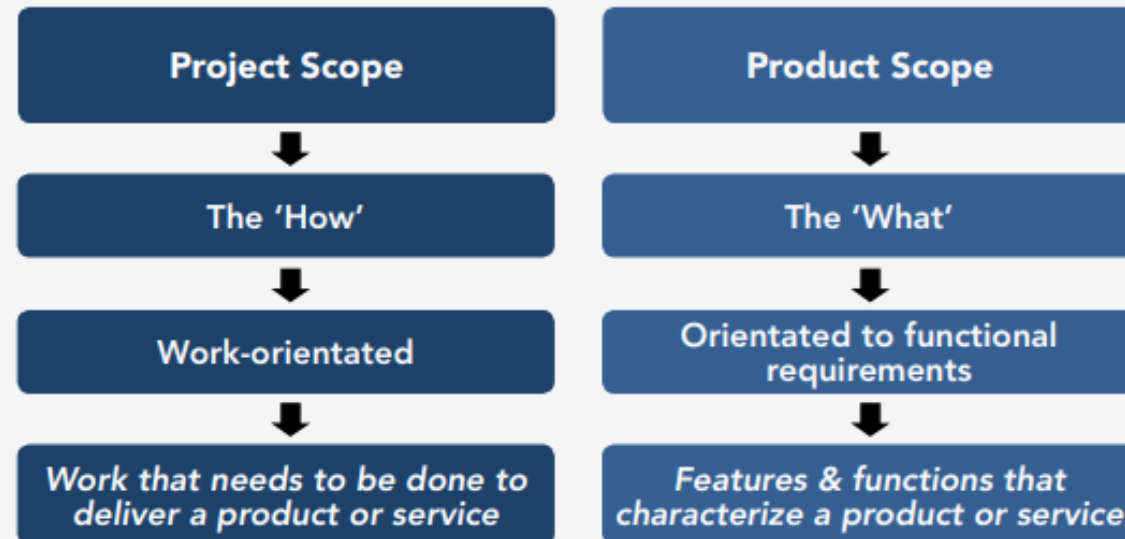
SCOPE: Project Vs Product

PROJECT SCOPE

Work performed to deliver a product, service, or result with the specified features and functions.

PRODUCT SCOPE

Features and functions that characterize a product.

Project Scope	Product Scope
⬇	⬇
The 'How'	The 'What'
⬇	⬇
Work-orientated	Orientated to functional requirements
⬇	⬇
Work that needs to be done to deliver a product or service	Features & functions that characterize a product or service

Scoping Process

Defining Scope—an exercise → Fact Finding → Documenting → Gaining Agreement

Stakeholder Groups

- **External**
  - Focus on own needs
    - Project Sponsors
    - End Users
- **Internal**
  - Under Project Manager's Control
    - Project Team Members
    - Champion Changes

Keep to Original Scope to avoid
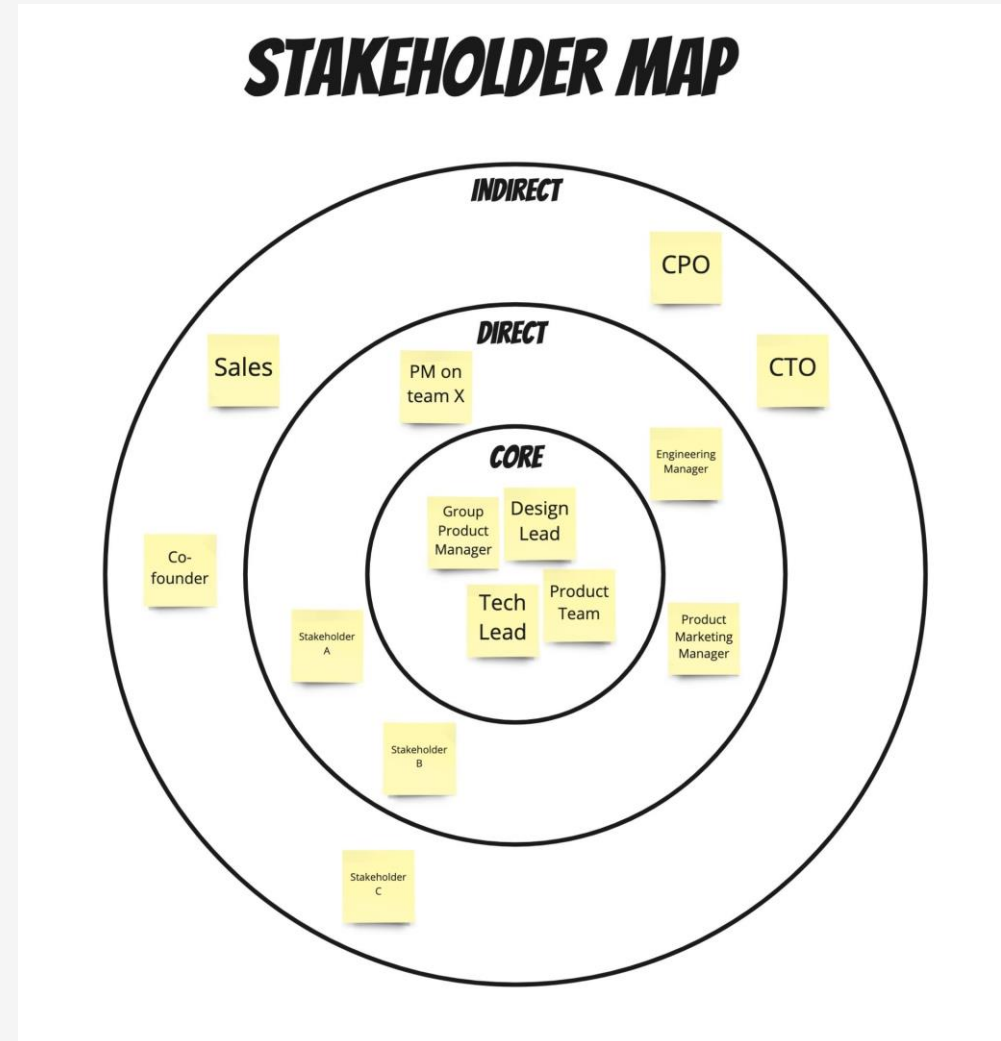
- 'Gold Plating' ↔ 'Scope Creep'

Stakeholders

Definition: Stakeholders are individuals or groups that have an interest in the project's success or are affected by its outcome.

- **Example 1:** For a hospital construction project, stakeholders include the healthcare providers, local government, contractors, and the community.

- **Example 2:** In a product launch, stakeholders may include customers, the marketing team, and investors.

Stakeholder Identification and Engagement:

- **Stakeholder Matrix:** A tool to categorize stakeholders based on their influence and interest in the project.

  - **Example**: High influence, high interest stakeholders (e.g., investors) should be closely managed, while low influence, low interest stakeholders (e.g., the general public) require minimal attention.

Engagement Strategies: Keeping stakeholders informed and engaged throughout the project lifecycle to manage expectations and gain support.

STAKEHOLDER MAP

INDIRECT

DIRECT

CORE

CPO

Sales

CTO

PM on team X

Engineering Manager

Group Product Manager

Design Lead

Co-founder

Tech Lead

Product Team

Product Marketing Manager

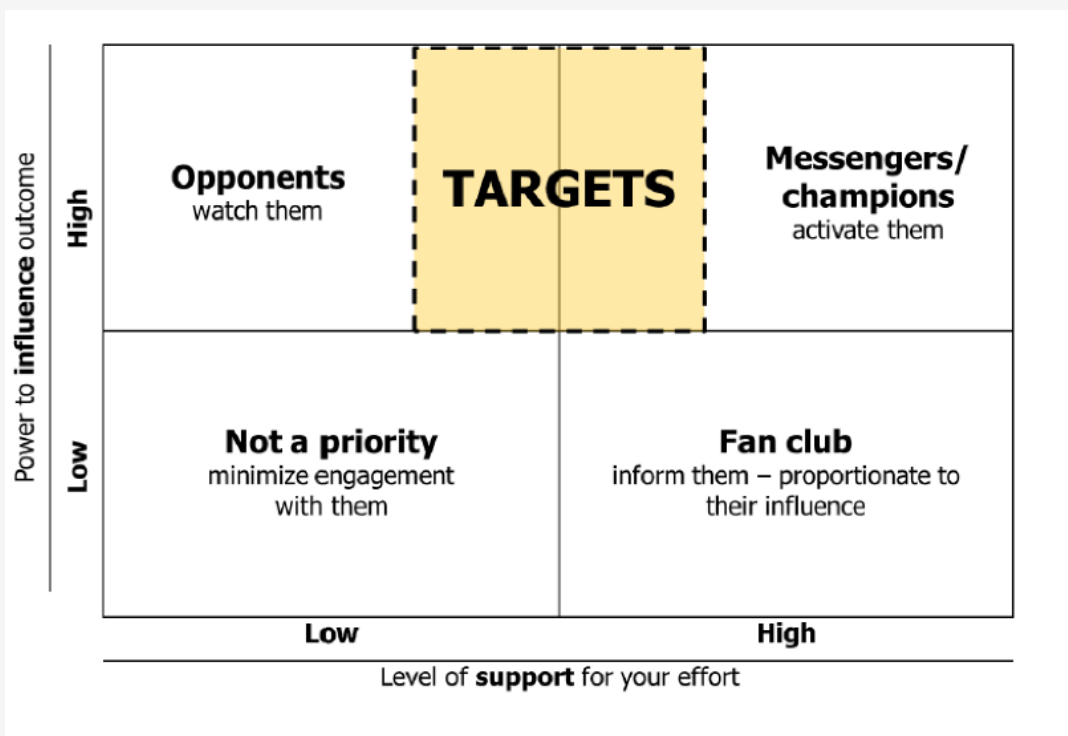Stakeholder A

Stakeholder B

Stakeholder C

Power vs. Interest Matrix

1. Decide the topic under discussion (e.g. a new initiative, a workshop, a product line, a business division)

2. Explain the four quadrants on the matrix:

   1. **High power – High interest**: Who are the people that we should actively engage with? Who are the decision makers that have the biggest impact on the topic?

   2. **High power – Low Interest**: Who should we actively consult? Who are the people with great power, but with little time to dedicate to the topic?

   3. **Low power – High interest**: Who should we invite and maintain a close relationship with? Who are the people very interested in the topic, but that have low power?

   4. **Low power – Low interest:** Who should we keep informed? Although we will not spend time and energy with excessive communication.

3. Ask everyone to list the stakeholders and place them on the four areas

4. Clustering and group conversation
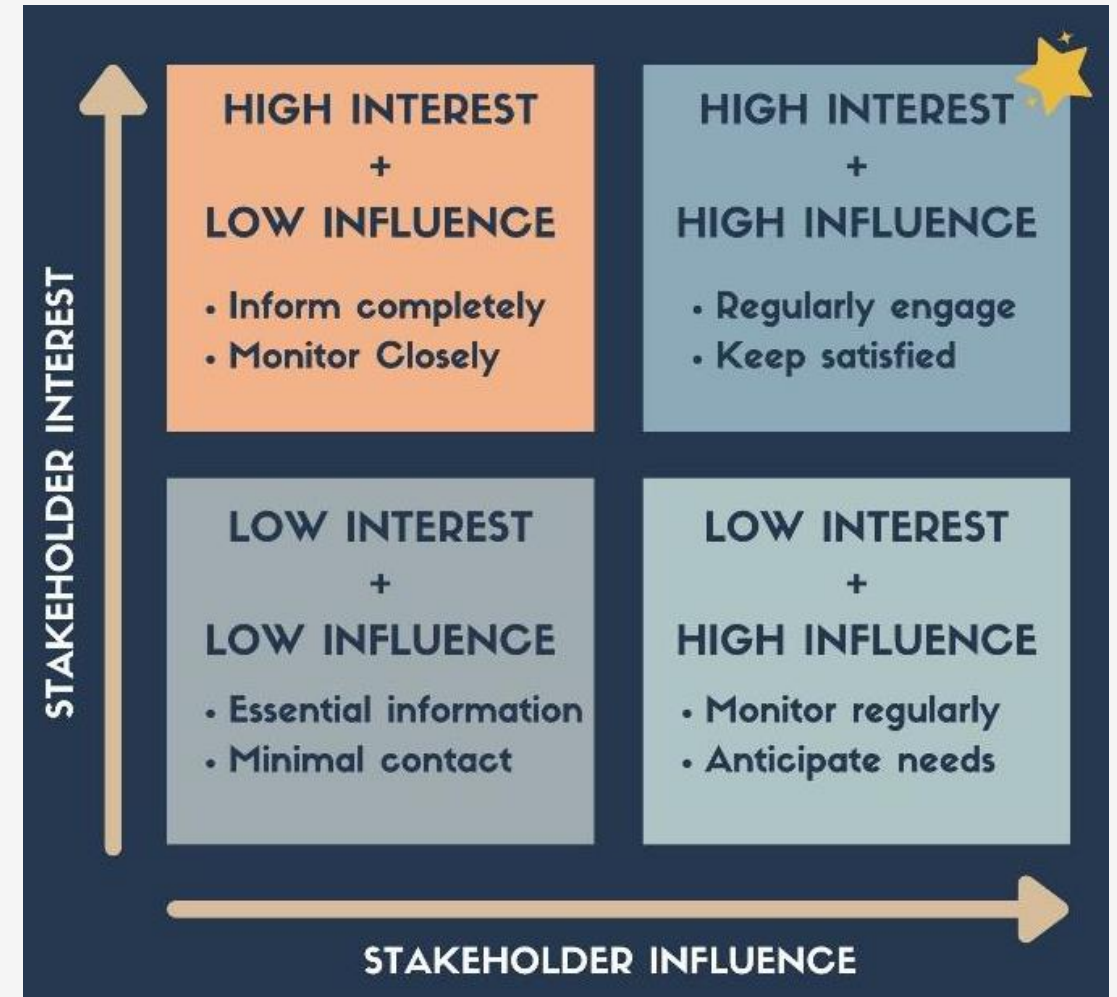
Stakeholder Tools

Stakeholder Register

Stakeholder Name	Contact information	Project Role	Project Requirements	Project Concerns	Impact and Influence Scores
Mary Pulaski	(123) 1234567 mpulaski@hmail.com	Sponsor	Compelling UI, fast and responsive	Delays, cost over runs, poor reacti	●●● ■■■
Libby Kipling	(123) 2345678 lkippling@hmail.com	Project Manager	Completion to scope, schedule, budget & q	Tech viability, Disappointed Sp	●●● ■■□
Jeff Harris	(123) 3456789 jharris@hmail.com	Product Manager	Fully functional app with all high priority	Ready for trade show, slower tha	●●● ■■■
Mitchel O'Keath	(123) 4567890 mokeath@hmail.com	PMO Representative	Alignment with IS strategy, integration	Citizen dev. risks, dependencies on	●○○ ■□□
Sanjiv Patel	(123) 5678901 sapatel@hmail.com	Steering Committee Mbr	Competitive advantage, ROI	Industry reception, costs	●○○ ■■■
Joe Corbitt	(123) 6789012 cuttiepie@hmail.com	Development Team Member	Delight the users, gain team lead exper	Team skills, lack of Xcor experien	●●○ ■□□

# Feasibility Study and Business Case

What is a Feasibility Study

Definition: A feasibility study assesses the viability of a project based on various factors such as market demand, technical capabilities, financial implications, and operational feasibility.

- **Example 1:** Before launching a new product, a company conducts a feasibility study to determine whether there's enough market demand, and whether production is financially and technically feasible.

- **Example 2:** For a renewable energy project, a feasibility study examines whether the technology is mature enough and whether the regulatory environment supports such projects.
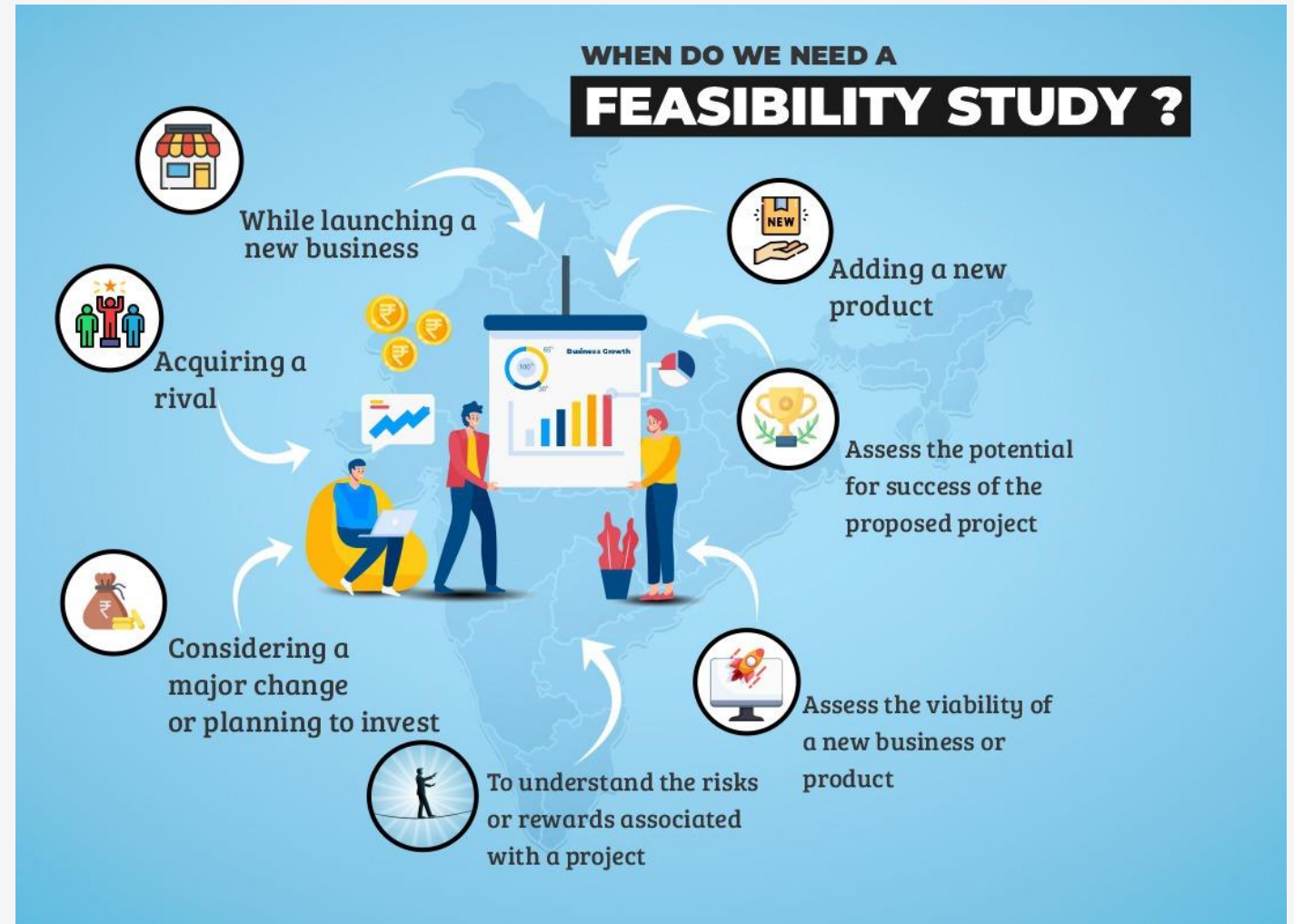
Types of Feasibility Studies

Market Feasibility:

- **Definition:** Evaluates the demand for the project's product or service and the competitive landscape.

- **Example:** A startup developing an eco-friendly water bottle conducts market research to determine demand and competition from established brands.

Technical Feasibility:

- **Definition:** Assesses whether the technical resources, such as hardware, software, or specialized skills, are available to execute the project.

- **Example:** A software company plans to launch a virtual reality app but must assess if the necessary VR technology is advanced enough and available at scale.

Financial Feasibility:

- **Definition**: Examines whether the project is financially viable, including the costs and expected returns.

- **Example**: A retail chain looks into opening a new store and assesses if the investment can yield a profitable return given its projected foot traffic and sales.

Operational Feasibility:

- **Definition**: Determines whether the organization has the resources and capacity to support the project.

- **Example:** A small business assesses if they can maintain the operational requirements to support a subscription-based service model.

Business Case

Definition: A business case is a document that provides justification for undertaking a project by outlining its benefits, costs, and risks, and presenting a solution for a business problem.

- **Example 1**: A business case justifies the need for a new Customer Relationship Management (CRM) system to streamline sales and improve customer satisfaction.

- **Example 2**: A startup develops a business case to secure investor funding, explaining why their product is positioned to disrupt an existing market.

Components of a Business Case

Executive Summary: A brief overview of the project, including key objectives, timelines, and financial benefits.

- **Example**: A one-page summary detailing the expected benefits of a new marketing software that will increase client acquisition rates.

Problem Statement: Describes the issue or opportunity the project seeks to address.

- **Example**: A logistics company experiences delays in shipping due to outdated tracking systems, necessitating a project to implement a new logistics platform.

Proposed Solution: Outlines how the project will solve the problem or seize the opportunity.

- **Example**: The logistics company proposes implementing a new real-time tracking system with GPS integration to reduce delays.

Cost-Benefit Analysis: Compares the estimated project costs against the expected benefits.

- **Example**: The new system will cost $100,000 but will save $200,000 annually by reducing late shipments and improving customer satisfaction.

Risk Analysis: Identifies risks and mitigation strategies.

- **Example**: The risk of vendor delays in providing software updates is mitigated by contracting with a vendor known for reliable service and offering performance-based payment terms.

Project Charter

What is a Project Charter

Definition: A project charter is a formal document that authorizes the existence of a project and provides the project manager with the authority to use organizational resources for project activities. It outlines the project's key objectives, scope, stakeholders, and risks.

Why it's Important:

- Provides a clear project foundation.

- Aligns stakeholders on the project's purpose and goals.

- Acts as a formal approval for the project to proceed.

Real-Life Example:

- **Construction Industry:** A project charter for a new office building includes the objectives (build a 10-story office), scope (construct the building shell and core), and the key stakeholders (owners, contractors, local authorities).

- **Tech Industry:** A project charter for a mobile app outlines the app's purpose (increase user engagement by 20%), timeline (launch in six months), and constraints (budget and platform compatibility).

Components of a Project Charter

1. Project Purpose or Justification

- **Definition:** The reason why the project is being undertaken.

- **Example:** A retail company is expanding due to increased demand, necessitating a new logistics center to manage the load.

2. Measurable Project Objectives and Success Criteria

- **Definition:** Objectives must be clear, measurable, and aligned with overall business goals.

- **Example:** "Reduce customer service response time by 40% in 12 months."

3. Project Scope

- **Definition:** Defines the boundaries of the project, including deliverables and exclusions.

- **Example:** A project to develop a new CRM system may include the development of customer tracking features but exclude marketing automation tools.

4. High-Level Requirements

- **Definition:** Lists the key requirements that the project must meet to be considered successful.

- **Example:** For a software project, the high-level requirements may include a responsive design, mobile compatibility, and integration with existing systems.

5. High-Level Project Risks

- **Definition:** Identifies the most significant risks that could affect the project's success.

- **Example:** "Delays in hardware delivery could impact the schedule by two weeks."

6. Summary Milestone Schedule

- **Definition:** An overview of the key project milestones and their expected completion dates.

- **Example:** "Phase 1 (requirements gathering) to be completed by November 1, 2024."

Components of a Project Charter

7. Budget Summary

- **Definition:** Provides an estimated cost of the project based on high-level planning.

- **Example:** "The initial budget estimate is $1 million, with a 10% contingency."

8. Stakeholder Identification

- **Definition:** A list of key stakeholders and their roles in the project.

- **Example:** "Project Sponsor: CFO, Project Manager: IT Director, Key Stakeholders: Marketing and Sales departments."

9. Project Approval

- **Definition:** Sign-off section where the project sponsor formally authorizes the project.

- **Example:** The project sponsor signs the charter to give the project the green light.

Project Charter Template

PROJECT TITLE	Employee and Rewards recognition Application	DESCRIPTION	Automate and simplify rewards and recognition program with easy-to-use and customizable cloud-based solution.

BUSINESS NEED / CORE TEAM MEMBERS / KEY STAKEHOLDERS

BUSINESS NEED	CORE TEAM MEMBERS		KEY STAKEHOLDERS	
	Name	Role	Name	Role
Build a cost-effective rewards and recognition program that is scalable, customizable, and meets your company's goals.				
Improve organization ability to attract and recruit high quality talent and compete in the Market	Mark Tim	Project Manager	Microsoft	Sponsor
Component of healthy Workplace	Vijay Kshyap	Team Leader	Investors	Shareholders
Element of Performance Management	Neelam	Business Analyst	Users	Users
Overall create healthy workplace and retention of quality talent	Nina	Graphic Designer		

OBJECTIVES

To create a friendly environment and healthy place where resources would enjoy working in the organiztion and maintain lon term professional relationship
To recognize resource for their commendable and high quality service amd commitment
Automate and simplify your rewards and recognition program with our easy-to-use and customizable cloud-based solution.

GOALS / SUMMARY PROJECT STATUS

GOALS	SUMMARY PROJECT STATUS	
The goal of the project is to retain and hire high quality resources. Set standards for employees so they have concrete goals to reach and encourahe resources to set goals that are Specific, Measurable, Attainable, Relevant and Timely – that provides employees a clear path to follow and gives their supervisors established metrics to measure progress.	Project Start Date:	2021-04-15
	Project Completion Date:	2021-09-15
	Overall process Impacts:	New Customizations or Changes
	Potential Financial Budget:	$100,000,000

SCOPE / OPPORTUNITY / MILESTONES

SCOPE	OPPORTUNTY	MILESTONES	STATUS	DUE	DONE
The scope is to create a new Employee and Rewards recognition full fledged Application where user and supervisor measure their respective progress	Currently, Microsoft employee recognition portal doesn't help to measure progress neither encourages high quality resources. Micorsoft forsees an opportunity to improve their HR processeses so that they can attract the best talent available in the Market	Requirement Gathering	In Progress	2021-04-17	NA
		Current Business Process Analysis	In Progress	2021-04-26	NA
		Project Presentation	Not Started	2021-06-25	NA
		Future Business innovations	Not Started	2021-07-25	NA
		Performance Analysis	Not Started	2021-08-04	NA
		Final Application Delivery	Not Started	2021-09-09	NA

CONSTRAINTS / ASSUMPTIONS

CONSTRAINTS	ASSUMPTIONS
1) Time Constraint 2) Budget Constraint 3) Resource Constraint	1) We assume that the above estimation is based on the consideration that would be no major changes 2) We assume resources be available as required else there would be delay in overall deliveries 3) We assume stakeholders active participation else there would be a delay in deliveries

DELIVERABLES

1) Wireframes and prototype explaining the flow of the applications
2) Deliverables will be pushed every 3-4 weeks
3) Licences and plugin required will be provided by Sponsor
4) Hosting services will be pruchased and provided by the client
5) IT Department will test new security and privacy settings.

SPONSOR NAME	SIGN & DATE
MATTHEW WATSON	

Samples

1. https://pub-ottawa.escribemeetings.com/filestream.ashx?DocumentId=97600

2. https://www.owensound.ca/media/z11kgj2r/project-charter-1b2-project-management-and-change-management-templates-and-practices.pdf

3. https://toolboxrenewal.utoronto.ca/wp-content/uploads/2016/07/Project-Charter.pdf

4. https://joinup.ec.europa.eu/sites/default/files/inline-files/Project%20Charter%20FOSSA%202%20v1.7_0.pdf

Initiating Projects in Different Industries

Projects in Different Industries

Construction Industry:

•**Project Initiation:** Focuses heavily on regulatory compliance, site preparation, permits, and aligning stakeholders like contractors, government agencies, and environmental bodies.

- **Example:** Initiating the construction of a new bridge requires securing government permits, conducting an environmental impact assessment, and coordinating with engineers and local authorities.

Software Development Industry:

•**Project Initiation:** Often begins with defining the product vision, conducting market research, and building prototypes to test with early adopters.

- **Example:** Initiating the development of a fitness app involves gathering user requirements, selecting a development platform, and building a minimum viable product (MVP).

R&D Projects:

•**Project Initiation:** Focuses on innovation and experimentation, with unclear outcomes. Often milestone-driven with a focus on research goals rather than tangible deliverables.

- **Example:** A pharmaceutical company initiates a drug development project by setting research milestones and conducting preclinical trials to ensure safety.

Startups:

•**Project Initiation:** Centers on identifying a market gap, securing funding, and creating an MVP that can be quickly tested in the market.

- **Example:** A tech startup initiates a project by securing seed funding and developing an MVP for a FinTech platform that streamlines small business accounting.

Best Practices

Construction Industry:

- **Best Practices:** Emphasize regulatory compliance, permits, and coordination with subcontractors.

- **Example:** Initiating a new infrastructure project involves securing government permits and coordinating with engineering firms and environmental bodies.

Software Development Industry:

- **Best Practices:** Focus on clear requirement gathering and agile processes.

- **Example:** A software project may begin with creating user personas and holding sprint planning sessions.

Healthcare Industry:

- **Best Practices:** Ensure that patient safety and compliance with medical standards are prioritized.

- **Example:** A hospital IT project to implement a new patient record system must comply with data protection laws and ensure that the system is user-friendly for healthcare providers.

Group Exercise – Draft Project Charter

Develop a Draft Project Charter

Objective: work in groups to draft a simplified project charter for a hypothetical project

Scenario 1: Tech Startup

- **Context:** A startup aims to develop a mobile app for personalized fitness tracking.
- **Key Objectives:** Develop an app that integrates with wearable devices and provides real-time fitness data.
- **Scope:** Build an MVP with core tracking and analytics features, excluding advanced AI functionalities for the first phase.
- **Risks:** Potential delays in app store approval and integration issues with certain wearable devices.

Scenario 2: Food Delivery Startup

- **Context:** A startup wants to launch a meal kit delivery service targeting health-conscious consumers.
- **Key Objectives:** Deliver meal kits tailored to dietary preferences with a subscription model.
- **Scope:** Focus on local deliveries and a limited menu in the initial phase.
- **Risks:** Supply chain disruptions due to fresh ingredients and fluctuating customer demand.

Deliverables:
- Draft a 1-2 page project charter including:
  - Project objectives
  - Scope
  - Key stakeholders
  - High-level risks
  - Milestone schedule

Group Assignment Kick Off

Overview

Objective:

Collaborate as a group to develop a project plan for a product launch in a chosen industry (construction, software development, or R&D). The project plan must incorporate traditional (Waterfall) and Agile methodologies.

Deliverables:

- Project scope statement

- Project schedule (Gantt chart or sprint planning)

- Budget estimation

- Risk management plan

- Stakeholder communication plan

Submission Date: October 18, 2024

Individual Assignment Kick Off

Overview

Objective:

Develop a risk management plan for a construction or software development project. Identify potential risks, analyze their impact, and propose mitigation strategies.

Deliverables:

- 2-page written risk management plan

Submission Date: October 07, 2024

Conclusion and Q&A

- Project Initiation: Define objectives, scope, and stakeholders clearly.

- Feasibility Studies: Assess all aspects before committing resources.

- Business Cases: A well-justified business case is key to securing stakeholder buy-in.

- Project Charter: Serves as a key document to formally initiate a project and align stakeholders.

- Best Practices: Vary across industries but include defining clear objectives, engaging stakeholders early, and managing risks.

- Group Exercise: Hands-on experience in developing a project charter, helping reinforce today's learnings.

Reference Links

Project Management Institute (PMI) - Charter Development Guidelines:
https://www.pmi.org/

Harvard Business Review - How to Write a Project Charter: https://hbr.org/

PMBOK Guide 7th Edition: https://www.pmi.org/pmbok-guide-standards/foundational/pmbok

Real-World Examples of Project Charters:
https://www.projectsmart.co.uk/project-charter-template.php