ENGINEERING ENTREPRENEURSHIP AND IPR

Module 4

- **Prototype development Stakeholder engagement strategies**

Module 4 Syllabus

**Prototype development Stakeholder engagement strategies**

- Investors

- Partners

- Customers

- Advisors & Mentors

WHO IS A KEY STAKEHOLDER FOR YOUR ORGANISATION ?

- <u>Stakeholders are persons or groups</u> who are directly or indirectly <u>affected by an organization</u> or project as well as those who may have interests in a project or the <u>ability to influence its outcome</u>, either positively or negatively.

- Common stakeholder groups include employees, alumni, unions, customers, media, influencers, local and national government, industry associations, chambers of commerce, local community, partners, suppliers, contractors, investors or donors etc.

WHO IS A KEY STAKEHOLDER FOR YOUR ORGANISATION ?

- A stakeholder could be internal or external to your organization.

- Depending on the organization's area of business, there may be special interest groups either in favour or against the organization.
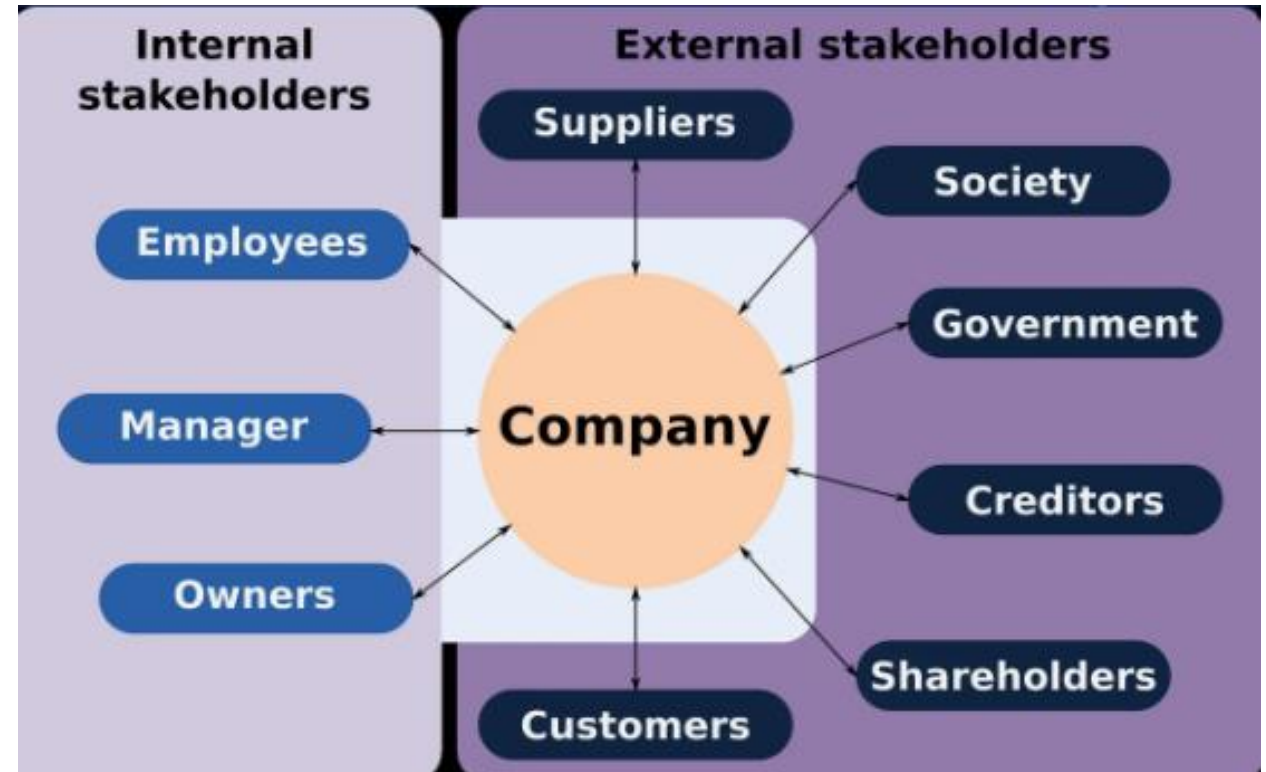
WHY IS STAKEHOLDER ENGAGEMENT CRUCIAL?

Stakeholder engagement refers to the process of connecting and communicating with stakeholders.

Current Trends/Data:

- According to recent studies, 86% of customers are willing to pay more for a product if they feel connected to the brand on a personal level.

- Employee engagement increases productivity by up to 21%, highlighting its importance in startup culture.

- In the startup ecosystem, investors value transparent communication, and 75% report that lack of communication affects their decision to support a startup.

FOR STARTUPS, EFFECTIVE STAKEHOLDER ENGAGEMENT MEANS FOSTERING A TRANSPARENT, TRUSTED, AND LOYAL RELATIONSHIP WITH THESE KEY GROUPS.

WHY IS STAKEHOLDER ENGAGEMENT CRUCIAL?

☑ Manages Expectations:

☑ Reduces Risks:

☑ Improves Decision Making:

☑ Proactively Considers Stakeholder Needs:

What are the building blocks of stakeholder engagement?

Stakeholder engagement is an umbrella term encompassing a range of activities and interactions over the life of a project. These can be divided into eight components as follows:

● Stakeholder Identification and Analysis

● Information Disclosure

● Stakeholder Consultation

● Negotiation and Partnerships

● Grievance Management

● Stakeholder Involvement in Project Monitoring

● Reporting to Stakeholders

● Management Functions

Investors

- An investor is any person or other entity (such as a firm or mutual fund) who <u>commits capital with the expectation of receiving financial returns</u>.

- <u>Investors rely on different financial instruments</u> to earn a rate of return and accomplish important financial objectives like building retirement savings, funding a college education, or merely accumulating additional wealth over time.

Type of Investors
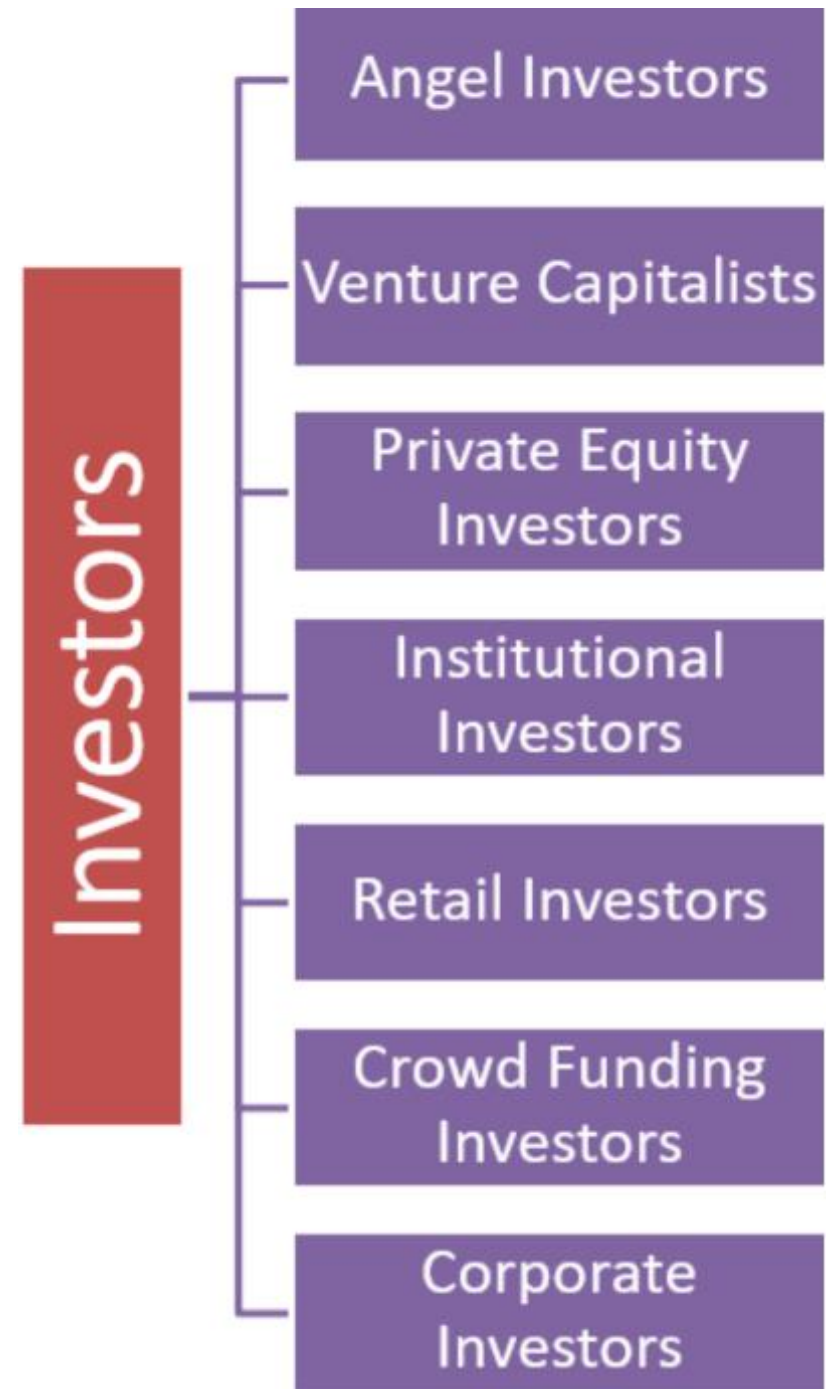
1. Angel investors

• An angel investor is a high-net-worth private individual who provides financial capital to a startup or entrepreneur. The capital is often provided in exchange for an equity stake in the company.

• <u>An angel investor typically provides capital in the early stages of a new business, when risk is high</u>. They often use excess cash on hand to allocate towards high-risk investments.

Example: Peter Thiel CEO of Paypal invested in Facebook and Airbnb.
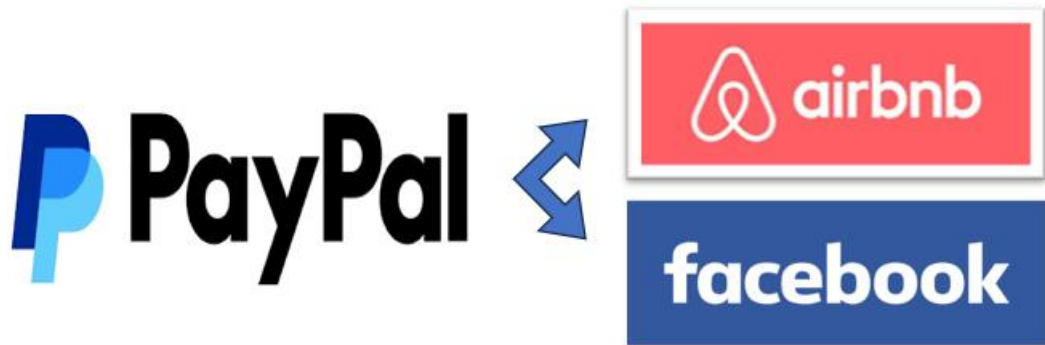
• In 2005, Theil invested in Airbnb.

• In 2004, Thiel invested $ 500,000 in facebook giving him 10.2% stake in the company.

2. Venture Capitalists (VCs)

• Professional groups or firms that manage <u>pooled funds from many investors</u> to invest in high-growth startups.

• <u>They usually invest larger amounts than angel investors and often seek significant control over company decisions</u> and may also provide guidance and resources.

Examples:

• **Sequoia Capital India**: A leading VC firm that has invested in companies like BYJU'S and Zomato

• **Accel India**: Another prominent VC firm with investments in Flipkart and Swiggy.

3. Private Equity Investors:

- <u>Invest in established companies that are not publicly traded</u>, often with the goal of restructuring or improving the business to increase its value.

- They typically invest large sums and may take a controlling interest in the company.

- **Examples:**

- **Blackstone Group**: A global private equity firm with significant investments in Indian companies like Mphasis and Essel Propack.

- **ChrysCapital**: An Indian private equity firm that has invested in companies such as HDFC Bank and Infosys

4. Institutional Investors:

• Include <u>entities like pension funds, insurance companies, and mutual funds</u> that invest large amounts of money in businesses.

• They often have a long-term investment horizon and <u>look for stable returns</u>.

Examples:

• **Life Insurance Corporation of India (LIC):** One of the largest institutional investors in India, holding significant stakes in various blue-chip companies.

5. **Retail Investors:**

• Individual investors who buy shares of publicly traded companies through stock exchanges.

• They can range from small-scale investors to those with substantial portfolios.

Examples:

• **Individual Investors**: Millions of individual investors participate in the Indian stock market through platforms like Zerodha and Groww.

• **Mutual Fund Investors**: Retail investors also invest in mutual funds managed by companies like HDFC Mutual Fund and ICICI Prudential Mutual Fund.

6. Crowdfunding Investors:

• Individuals who invest small amounts of money through online platforms to support a business or project.

• This type of investment is often used by startups and small businesses to raise funds from many people.

Examples:

• **Ketto**: A popular crowdfunding platform in India that allows individuals to invest in social and medical causes.

• **ImpactGuru**: Another crowdfunding platform that supports medical treatments, emergencies, and startups.

7. **Corporate Investors:**

• Large companies that invest in other businesses, often within the same industry, to gain strategic advantages.

• These investments can be in the form of equity stakes, joint ventures, or strategic partnerships.

Examples:

• **Reliance Industries**: Invests in various startups and companies to gain strategic advantages, such as its investment in Jio Platforms

• **Tata Group**: Through Tata Capital, the group invests in numerous sectors, including technology and healthcare

Investor engagement Strategies

- <u>Each type of investor brings different resources, expectations, and levels of involvement to a business.</u> Understanding these differences can help entrepreneurs choose the right type of investment for their needs.

- By focusing on <u>building trust, maintaining regular contact, managing expectations, and addressing investor concerns, businesses can cultivate strong investor relationships</u>.

Partners

- Partners are companies or individuals <u>who collaborate with another business to achieve a shared goal</u> often with a formal agreement outlining roles and responsibilities.

Partners that can help with prototype development

● **Suppliers/Vendors:** Their pivotal role within the supply chain makes them instrumental in shaping product quality, delivery timelines and helps to gather essential social and environmental impact data.

● **Big design firms**: Have a team of engineers and designers, and can help with the entire product development process.

● **Product development companies, Machine shops, Engineering firms etc** : Can help with prototype development.

● **Manufacturers**: Can make minor adjustments to existing products and provide samples. They are more interested in larger volume orders.

Customers

Customers are people or organisations that purchase goods or services from company.

Customers are involved in prototype development

1.Defining customers: Before prototyping, it's important to define who the customers are. This can be done by creating profiles of target users, their needs, and their desired outcomes.

2. Providing feedback: Customers can provide feedback on prototypes, which can help refine the product and ensure it meets their needs.

3. Participating in the process: Customers can actively participate in the prototyping process, which can help ensure the final product meets their requirements.

ADVISORS & MENTORS

- Mentors and advisors with a deep understanding of the process of launching and running a business can provide valuable advice on key issues such as business plans, marketing strategies, fundraising and customer acquisition.

-   They can also offer valuable insights into industry trends and potential investors.

-   They may also have access to an extensive personal network that could help entrepreneurs make important connections in the startup ecosystem.

-   Ultimately, having experienced mentors and advisors can increase the chances of achieving successful startup goals.

Advisors

- Experts who <u>provide strategies advice</u> and insights to a company, <u>often on a consulting basis</u>, without having direct operational control.

Types of Advisors

Core Functions of Prototype Development Advisor

1.Overseeing Prototype Design

Example: Guiding a team through the CAD design process for a new automotive part

Scenario: In this scenario, the advisor ensures that the prototype's design meets both the functional requirements and industry standards, optimizing the design for manufacturability and performance testing.

2. Prototyping and Material Selection

Example: Selecting materials and 3D printing techniques for a custom drone frame

Scenario: Here, the advisor evaluates various materials for their weight, strength, and cost-effectiveness, advising on the best 3D printing methods to achieve the desired balance between durability and lightweight design.

3.Testing and Evaluation

Example: Coordinating user testing sessions for a new mobile app interface

Scenario: The <u>advisor sets up testing protocols</u> to gather user feedback on the app's usability, identifying areas for improvement before the final product launch.

4. Quality Assurance and Compliance

Example: Ensuring a medical device prototype complies with FDA regulations

Scenario: In this critical role, <u>the advisor works closely with regulatory experts</u> to verify that the prototype meets all necessary health and safety standards, facilitating a smoother path to market approval.

Mentors

Individual with significant experience who provide guidance, support and coaching to help someone develop professionally.

Mentors have a more personal relationship with their mentees than advisors
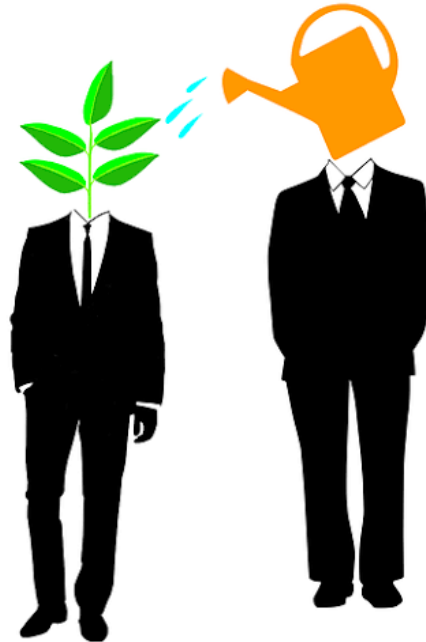
Importance of a Prototype Mentor

1. **Accelerating Learning Curve**

A prototype mentor brings years of experience. They've navigated through the prototyping, learned from their mistakes, and perfected their skills. By tapping into their knowledge, you can leapfrog the initial learning curve.

Example: Imagine you're developing a new medical device. Your mentor, a seasoned biomedical engineer, can share insights on materials, regulatory hurdles, and design trade-offs. Their guidance saves you months of trial and error.

2. Avoiding Pitfalls

<u>Prototyping involves countless decisions</u>: material selection, manufacturing processes, user interface design, and more. <u>A mentor helps you avoid common pitfalls</u>.

Example: You're building a smart home device. Your <u>mentor points out potential security vulnerabilities</u>, ensuring your prototype doesn't compromise user privacy.

3. Building Confidence

Prototyping can be daunting, especially when you're dealing with uncertainty. A mentor provides reassurance, validates your ideas, and boosts your confidence.

Example: As a student working on an AI-driven chatbot, you might doubt your approach. Your mentor's encouragement and constructive feedback keep you motivated.

4. Expanding Your Network

A prototype mentor opens doors. They <u>introduce you to industry experts, potential investors, and collaborators</u>.

Example: You're developing a sustainable packaging solution. Your mentor, well-connected in the packaging industry, introduces you to manufacturers and sustainability advocates.

5. Iterative Refinement

Prototypes rarely get it right on the first try. A mentor guides you through iterations, helping you refine your design, functionality, and user experience.

Example: Your wearable fitness tracker prototype receives mixed feedback. Your mentor suggests tweaking the sensor placement and improving battery life based on user trials.

6. Balancing Creativity and Feasibility

<u>Entrepreneurs often dream big, but feasibility matters</u>. A mentor helps you strike the right balance between innovation and practicality.

Example: You're designing a solar-powered drone. Your mentor encourages your vision while reminding you of weight constraints and energy efficiency challenges.

7. Navigating Uncertainty

Prototyping involves uncertainty—technical, financial, and market-related. A mentor provides a steady progress.

Example: Your startup aims to revolutionize urban mobility with an electric scooter. Your mentor advises on battery technology, scalability, and market trends.

ADVISORS Vs MENTORS

Mentors	Advisors
● Usually motivated by altruism as opposed to financial reward. A mentor is often a close friend who personally wants to see you grow and succeed. ● Typically, older than you; they use their accrued wisdom to provide guidance in both your personal and business life. ● Not on your payroll, and not formally employed by your startup	● Professionals that concentrate entirely on improving your business, as opposed to your personal developments. ● Corporate-minded people who focus solely on increasing the company's market share through product, team, and culture. ● Formally employed by the company.

THANK YOU