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Department of MCA

Topic: **AGILE Stakeholders and challenges**

Course	Unit I	Elective
23CAE718 AGILE SOFTWARE DEVELOPMENT	AGILE – Stakeholders and challenges	**II Semester / I MCA**

AGILE Stakeholders and challenges

Stakeholders

In Agile, **stakeholders** are individuals or groups who have an interest in the outcome of the project and who may be impacted by the product being developed. They can come from various backgrounds and roles, but their primary importance is in providing valuable input, feedback, and requirements to ensure the product delivers value.

AGILE Stakeholders and challenges

Stakeholders and challenges

AGILE Stakeholders and challenges

AGILE Stakeholders

1. Product Owner

2. Scrum Master

3. Development Team

4. Customers

5. Business Owners

6. Users

7. External Stakeholders

8. Subject Matter Experts (SMEs)

9. Regulators or Compliance Authorities

AGILE Stakeholders and challenges

AGILE Stakeholders

1. Product Owner

Role: The Product Owner (PO) is the primary representative of the customer or end-users. They are responsible for defining and prioritizing the work in the Product Backlog, ensuring the product meets business needs, and acting as the liaison between the development team and external stakeholders.
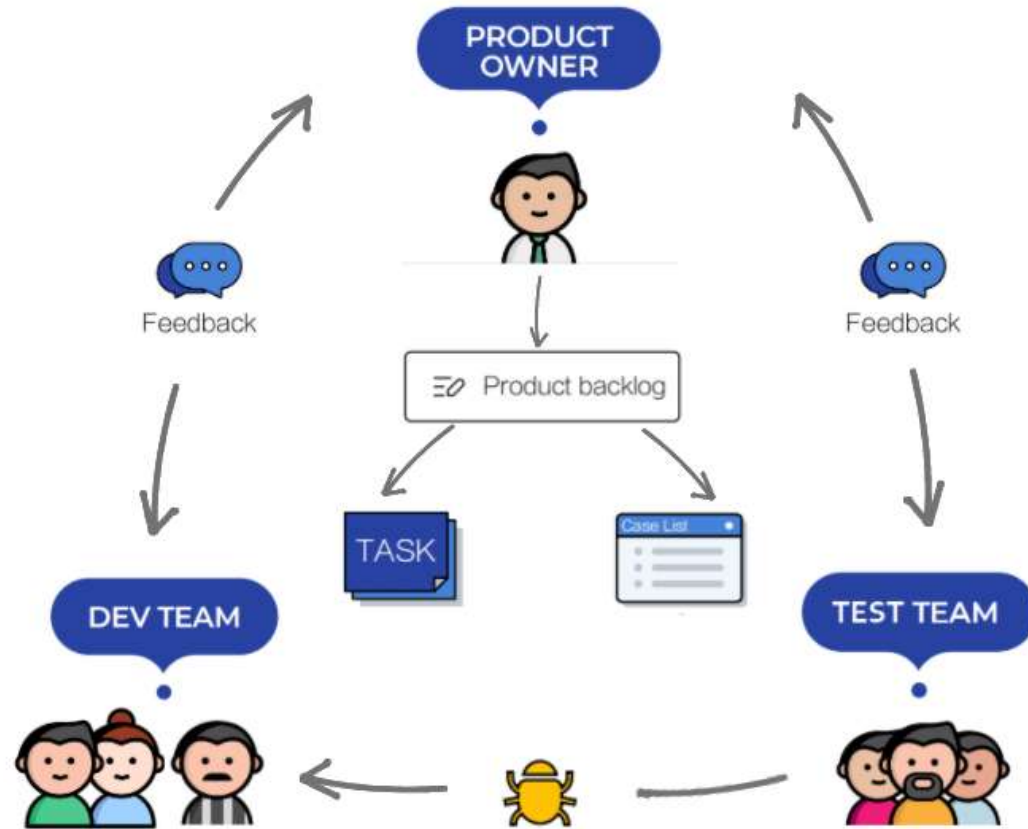
Key Responsibilities:

Ensuring the backlog is clear and well-prioritized.

Gathering and understanding stakeholder needs.

Providing feedback on deliverables.

Making decisions on product features and releases.

AGILE Stakeholders and challenges

AGILE Stakeholders

1.   Product Owner

AGILE Stakeholders and challenges

AGILE Stakeholders

2. Scrum Master

Role: The Scrum Master is not directly a stakeholder in the traditional sense, but they are an important facilitator and coach for the Agile team. They ensure the team adheres to Agile practices, removes impediments, and fosters a productive work environment.

Key Responsibilities:

  Helping the team improve their Agile practices.

  Shielding the team from external interruptions.

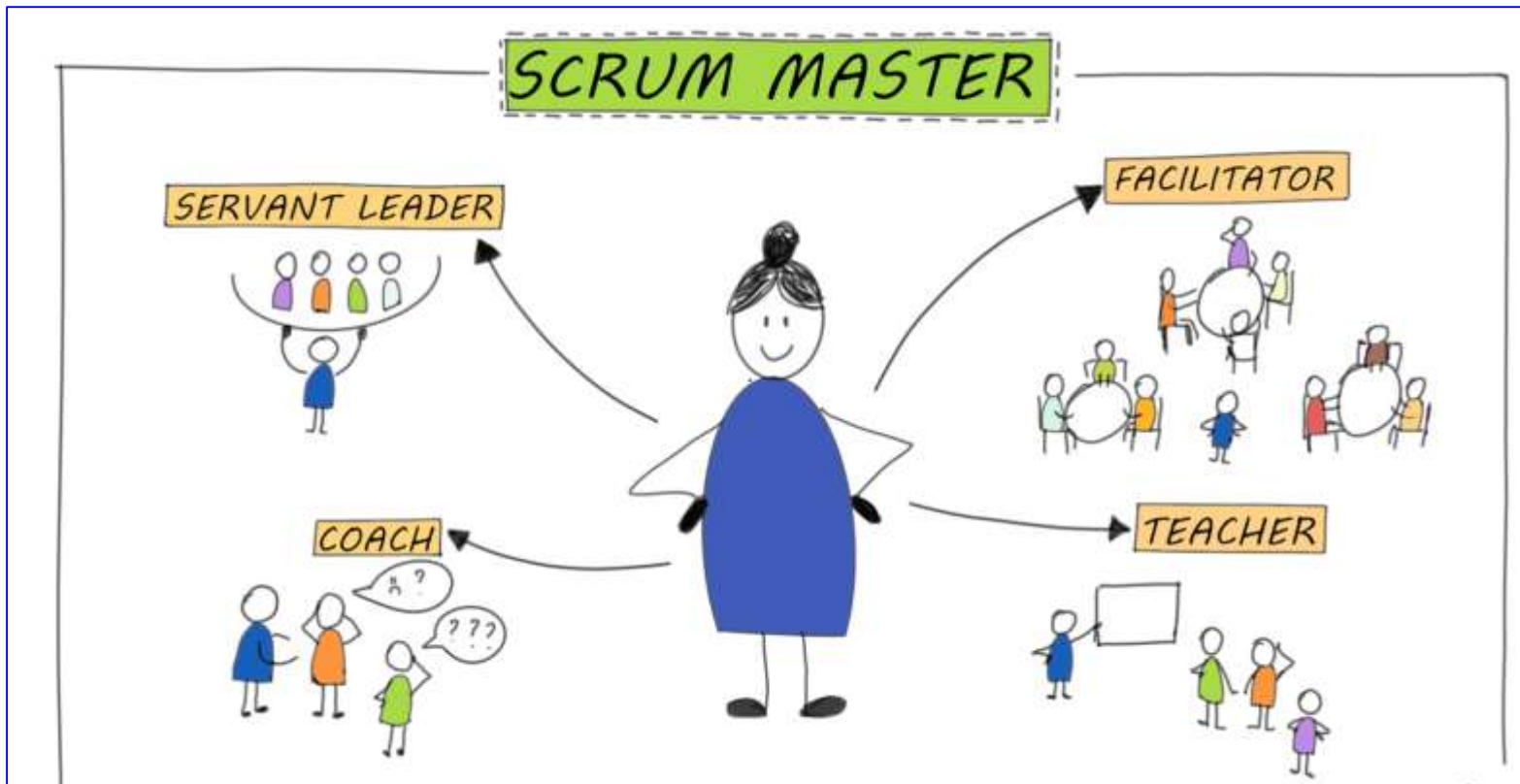 Facilitating team ceremonies (e.g., Sprint Planning, Retrospectives).

  Supporting the Product Owner and team in managing stakeholder communication.

AGILE Stakeholders and challenges

AGILE Stakeholders

2. Scrum Master

AGILE Stakeholders and challenges

AGILE Stakeholders

3. Development Team

Role: The Development Team is responsible for designing, developing, and delivering the product increment. They work directly on the tasks in the Sprint Backlog.

Key Responsibilities:

Completing tasks and delivering high-quality work.

Collaborating with the Product Owner for clarification of requirements.
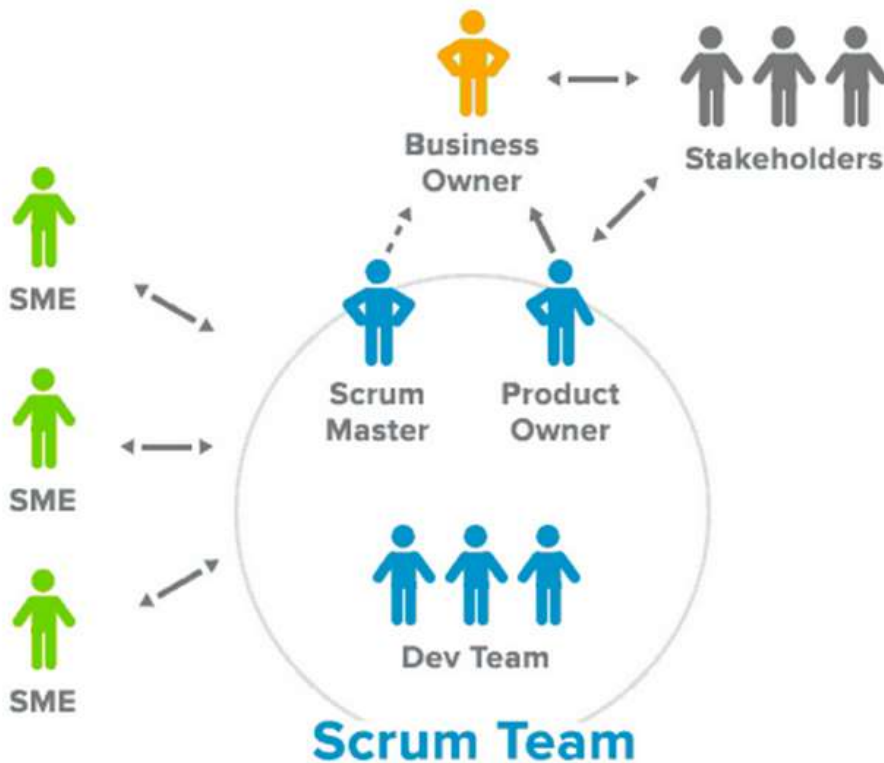
Actively participating in Scrum ceremonies.

Providing estimates and feedback on feasibility and timelines.

AGILE Stakeholders and challenges

AGILE Stakeholders

3. Development Team

AGILE Stakeholders and challenges

AGILE Stakeholders

4. Customers

Role: Customers are the end users of the product. They provide valuable input on the product's features, usability, and value. In some cases, customers could also be internal stakeholders (like employees using an internal product).

Key Responsibilities:

Giving feedback on product functionality and quality.
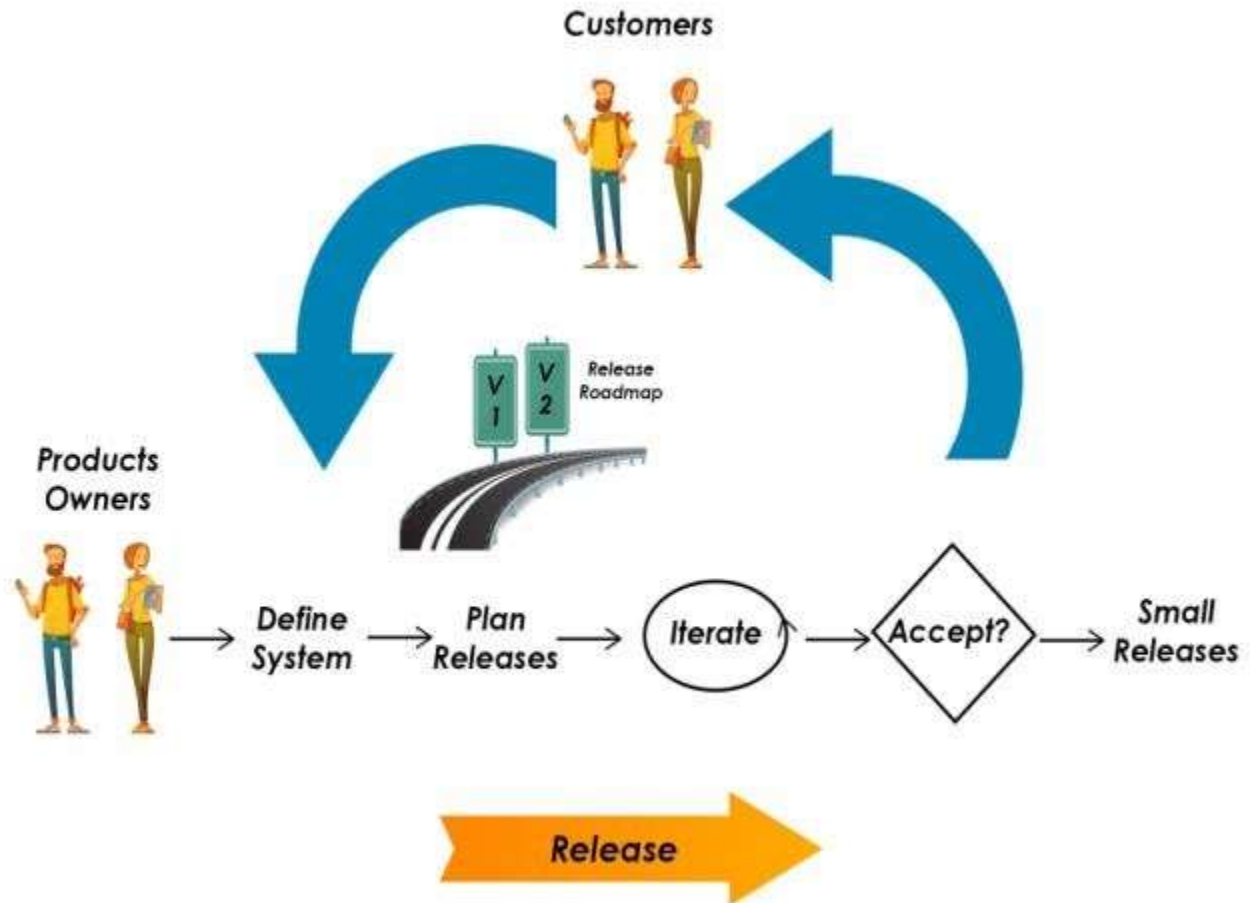
Participating in user testing, surveys, or reviews.

Providing clarity on business needs and priorities.

AGILE Stakeholders and challenges

AGILE Stakeholders

4. Customers

AGILE Stakeholders and challenges

AGILE Stakeholders

5. Business Owners

Role: Business Owners are typically senior executives or leaders who oversee the strategic direction of the project or product. They make key decisions that impact the project's success and alignment with business goals.

Key Responsibilities:

Ensuring the product aligns with business goals.

Supporting the Product Owner with funding, resources, and high-level decisions.

Giving the go-ahead for important project milestones or pivots.

AGILE Stakeholders and challenges

AGILE Stakeholders

5. Business Owners

AGILE Stakeholders and challenges

AGILE Stakeholders

6. Users

Role: Users are the people who will ultimately use the product or service, which can be employees, customers, or external users. They can be considered a subgroup of customers, with specific input regarding how the product will function for them.

Key Responsibilities:

Providing feedback on user experience and usability.

Participating in user acceptance testing or early-stage beta testing.

Ensuring the product meets their functional and technical needs.

AGILE Stakeholders and challenges

AGILE Stakeholders

6. Users

AGILE Stakeholders and challenges

AGILE Stakeholders

7. External Stakeholders

Role: These are any other individuals, groups, or organizations outside the Agile team that have an interest in the outcome of the product. This could include regulatory bodies, suppliers, partners, or investors.

Key Responsibilities:

Providing external feedback or requirements.

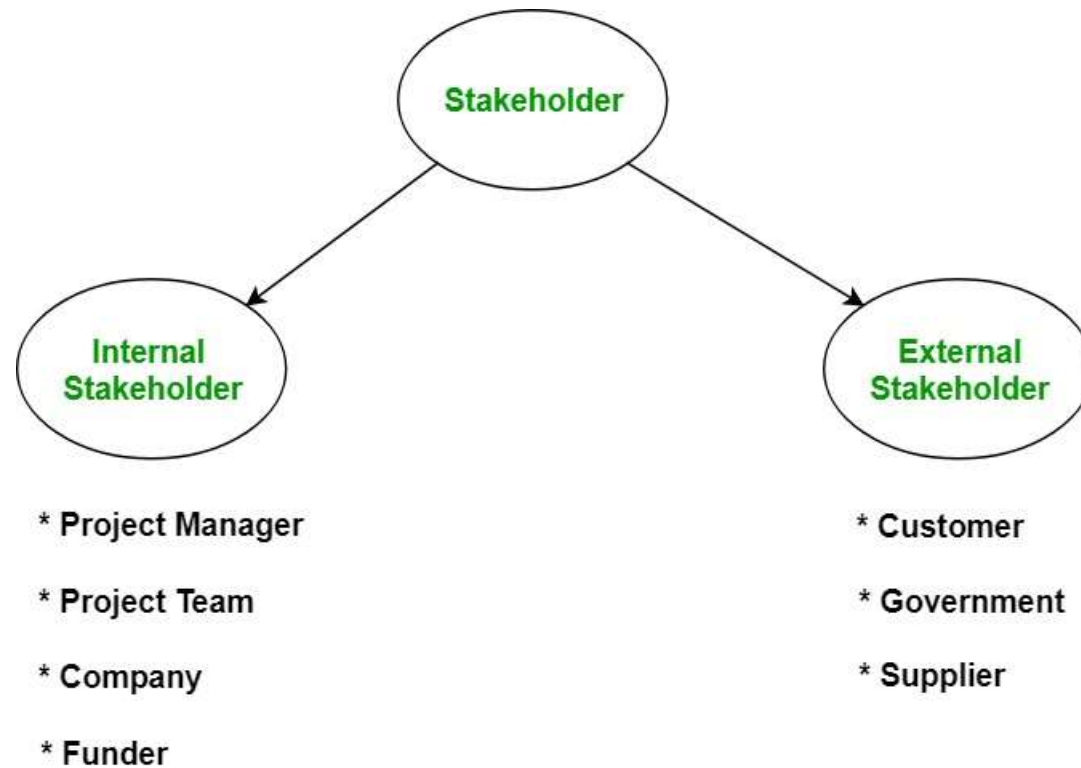Offering insights on industry standards or regulations.

Ensuring the product meets external constraints or criteria.

AGILE Stakeholders and challenges

AGILE Stakeholders

7. External Stakeholders

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AGILE Stakeholders and challenges

AGILE Stakeholders

8. Subject Matter Experts (SMEs)

Role: These are people with deep expertise in specific areas (e.g., technical, legal, marketing) who can offer guidance to the team when specific expertise is needed.

Key Responsibilities:

Offering insights and advice on specialized topics.

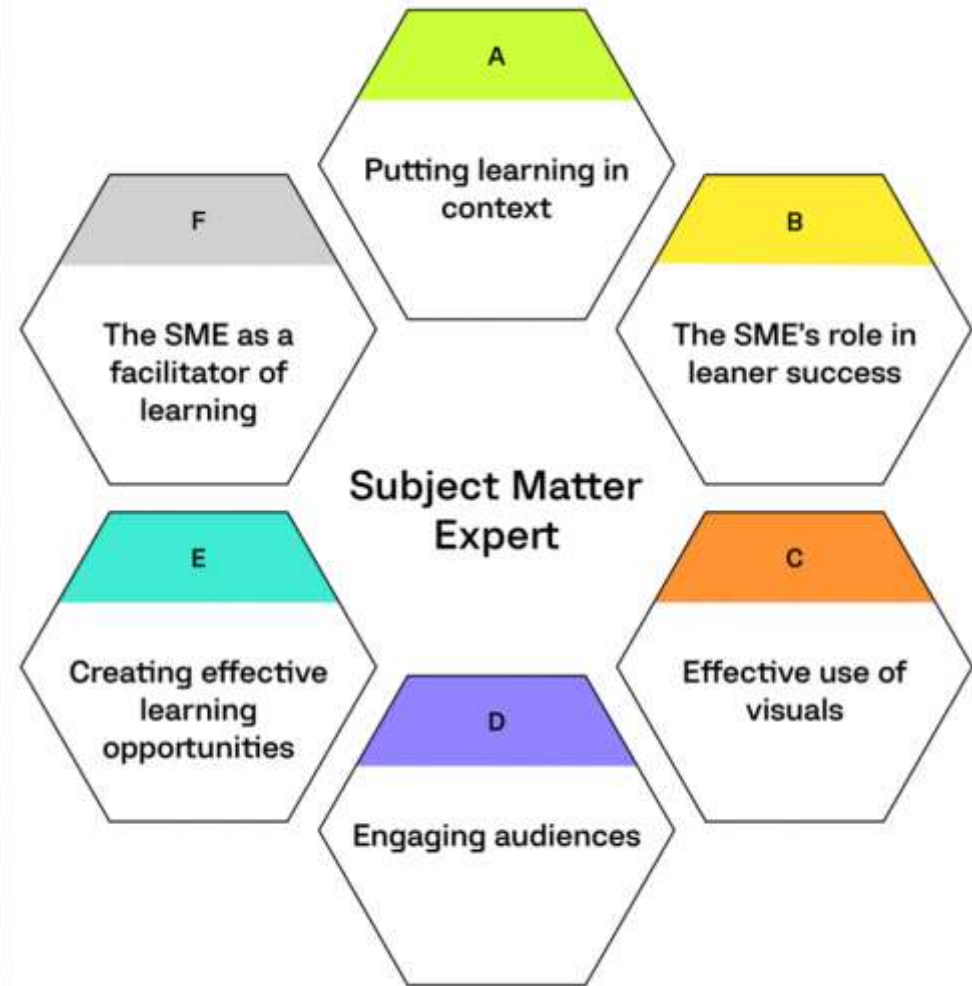Helping resolve complex technical or business-related issues.

Reviewing the product's alignment with specific domain needs.

AGILE Stakeholders and challenges

AGILE Stakeholders

8. Subject Matter Experts (SMEs)

AGILE Stakeholders and challenges

AGILE Stakeholders

9. Regulators or Compliance Authorities

Role: In certain industries (e.g., healthcare, finance), regulators may be key stakeholders ensuring that the product meets legal, security, or compliance standards.

Key Responsibilities:

Ensuring the product complies with laws and regulations.

Providing feedback or requirements related to compliance issues.

Effective Stakeholder Engagement:
To ensure the success of an Agile project, it's crucial to engage stakeholders early and often. Their feedback should be integrated into the Product Backlog and the development process. Regular communication, transparency, and involving stakeholders in key Agile ceremonies (e.g., Sprint Reviews, Backlog Refinement) helps in aligning expectations and improving product quality.

AGILE Stakeholders and challenges

AGILE Stakeholders

9. Regulators or Compliance Authorities

Agile Teams and Compliance

Regulatory Compliance (62%)

Organizational Compliance (20%)

i.e. PCI, FDA, BASEL II

i.e. CMMI, ISO 900x

67% of agile delivery teams face either regulatory or organizational compliance

Source: Ambysoft.com/surveys/agileAtScale2016.html

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AGILE Stakeholders and challenges

Key Stakeholders in Agile Product Development

What are key stakeholders?

In an Agile project, stakeholders can be classified as either internal or external. Internal stakeholders have a direct relationship with the project and are interested in its outcomes.

On the other hand, external stakeholders may not work directly with the project team and may not be aware of the product being developed but will still be impacted by its outcomes in the future.

The key to effective work in Agile is an interaction between all people who affect or are affected by the project. Stakeholders should be deeply involved in the software development process to distribute responsibilities and achieve the needed project results.

AGILE Stakeholders and challenges

The main Stakeholders in Agile: who are they?

In [Agile development](#) stakeholders can be represented by a wide range of

people interested in project results:

✓ People funding the project;

✓ Business Managers and Business Architects;

✓ Data Architects and Database Administrators;

✓ Portfolio and Project Managers;

✓ Direct and indirect Users;

✓ Account and Sales Managers;

✓ Developers' team including Engineers, Designers and PM/BA, etc.

AGILE Stakeholders and challenges

The main Stakeholders in Agile: who are they?

Effective Ways for Stakeholder Management in Agile

AGILE Stakeholders and challenges

Project Sponsors

Project Sponsors are people that have an interest primarily in the success of the project rather than in its development process. They are usually called external stakeholders. Sponsors allocate the needful finances to the project according to the scope and expected results (that is, of course, if they believe in its success). They can also offer an alternative for the cost overruns.

Product Owner

Product Owner is the core stakeholder from the client's side. Product Owner participates in story mapping activities and specifies tasks. He should share his **vision of the ongoing project, set goals and business strategy.** He keeps backlogs clear so that the team can understand what to do and why.

AGILE Stakeholders and challenges

Development Team

In the Agile approach, a developers' team works in sprints. After every finished sprint, the team discusses what is done and what is to be done. Software developers should be involved in discussing the development backlogs from the start. It makes the software development process efficient. The engineering team may also include Team Leads, Designers and Testers. The most important role of developers as stakeholders is timely software delivery and estimation. The quality estimation provides a clear vision of the whole development process, scope of work and resources needed.

Project Manager and Business Analyst

The Project Manager handles planning, organization and control of activities following the estimated deadlines. He should know all the necessary information about the project: requirements, scope, goals. In Agile projects, PM is related to internal stakeholders as he participates in the development process. He communicates with external ones and links them with the developers' team. Business Analysts make predictions to understand the budget and the time that should be spent on the project. They work on detailed requirements and create project decomposition.

AGILE Stakeholders and challenges

End user

Your target audience is an essential link to the success of your project. That is why it is useful to engage end users in testing MVP or product beta-version to receive the initial feedback. Users' feedback allows reviewing the work done and improve user experience. You may also test your project with different focus groups and analyze received feedback.

High stakeholder engagement and understanding project roles are necessary for developing quality software solutions. In Time & Material and Dedicated Team models of cooperation, Exposit works using Agile methodology. We can adapt to your specific process according to your needs for the most productive collaboration.

Stakeholders and challenges
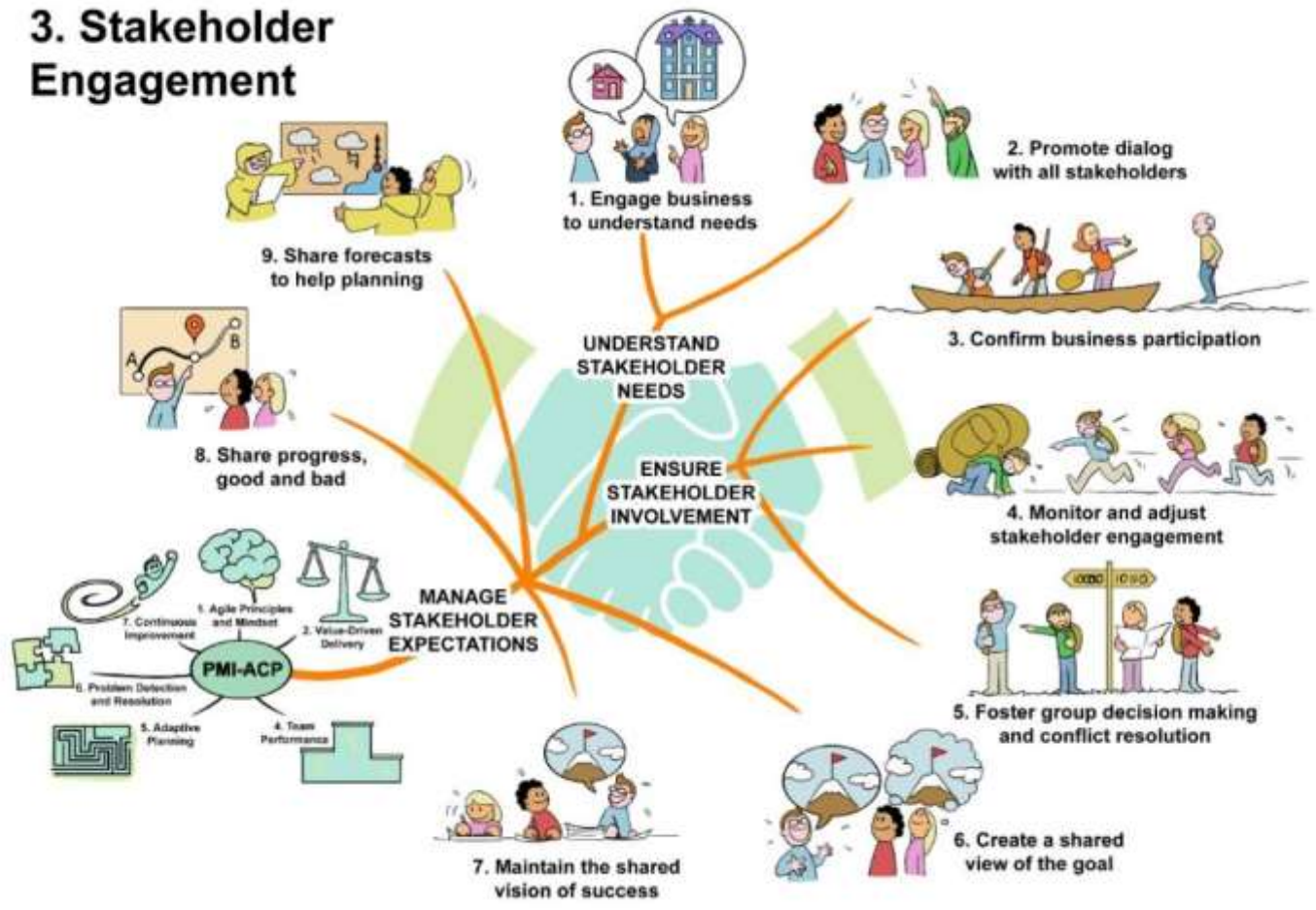
Identify stakeholders in Agile

Identify the ones applicable for your case

Stakeholders differ from case to case – especially key ones – so you need to perform stakeholder analysis to select yours.

Step 1: Identify. To identify your project's stakeholders, start with listing every individual and group who is impacted by your project's outcome and has an interest in its success.

Step 2: Analyze. Name your stakeholders' needs and goals, and identify what brings business value to each of them.

Step 3. Prioritize. Create a stakeholder map (we explain later how to do it) to pick the ones who have the biggest interest and influence.

Agile stakeholders management plan

STAKEHOLDERS

ROLE OF STAKEHOLDERS IN AGILE DEVELOPMENT

What is the role of stakeholders in Agile development?

Key stakeholders **stay on guard of creating a product that helps to achieve strategic outcomes**, so communicating with them allows teams to avoid unnecessary rework.

Close cooperation with stakeholders helps to build the prototype and the product in accordance with the client's requirements and meet the business needs.

The Agile methodology emphasizes the importance of increased collaboration with stakeholders throughout the project lifecycle, as well as maintaining clear and stable communication lines.

Since the **business needs may change throughout the project, Agile promotes the need for iterations with feedback from stakeholders**, especially during sprint reviews when the team demonstrates the development progress.

ROLE OF STAKEHOLDERS IN AGILE DEVELOPMENT

Why is stakeholder participation important?

The voice of stakeholders is crucial while making decisions since they're the most important **source of requirements**. Lack of effective communication with stakeholders ends up with waste resources and inability to achieve strategic goals.

Collaboration with stakeholders should **increase transparency and provide clarity.**

Benefits of close collaboration with stakeholders

Collaboration with stakeholders means a **huge reduction of risk**. If they are actively involved in the process and often give feedback, they add value and increase the team's productivity.

Collaborating and engaging stakeholders ultimately **saves time and money**, improving the chances of finishing a project on time and within budget. Surprises and roadblocks are eliminated early.

Direct communication with stakeholders provides **new insights into a product**. It's good to hear from various angles and different perspectives. It allows the team to make more informed decisions, and risks can be identified before they become threats.

Plus, a collaborative approach helps to build trust.

Stakeholder identification – analysis and setting priorities

Stakeholder analysis

Stakeholder analysis is the process of identifying the project's stakeholders, deciphering their level of involvement, participation, influence, and interest, and dividing them into groups.

Step 1: Identify your stakeholders

Start with thinking about all the people who are affected by your project, who have power over it, who influence it in some ways, and who have an interest in its success.

You can ask yourself the following questions:

Who may be affected by the decisions we make?

Who has a personal interest in our project's success?

Who can help us to shape a better product?

Do we have any clients or sponsors?

Do we need to consult with the legal department?

Who has the ability to slow down your product development?

You also can identify stakeholders by looking at existing documentation and organizing workshops.

Stakeholder identification – analysis and setting priorities

Step 2: Analyze and seek for understanding

Once your comprehensive list of the stakeholders is prepared, **think about their requirements, goals, and needs**. You're building a foundation for your communication plan and selecting stakeholders who require the most attention.

Understand their preferences:

- How will the project affect them?
- What are their expectations?
- Understand what motivates them?
- Discover what annoys them?

Analyze if there can be any conflicts within stakeholders in your group and prepare to manage them.

A **stakeholder canvas** is a tool that can help you to perform the analysis of stakeholders – acknowledge their roles, goals, needs, and requirements.

You can extend your canvas with pains and gains, issues, and topics for engagement, ability and reasons to engage.

Stakeholder identification – analysis and setting priorities

Stakeholder Canvas

	Who are they?	What is their main goal?	What is their main barrier to achieving this goal?
Digital marketer	Works for our company and promotes our products	They want to better understand who will be using the product to plan the promotion and communication strategy	They have very general assumptions about who their users are, and no clear associations between who they are, what they need. They need to understand users to be able to promote our product and reach the right audience.

Stakeholder identification – analysis and setting priorities

Step 3: Prioritize – the matrix of influence

Prioritizing stakeholders allows you to **understand their strategic objectives better and establish processes needed to obtain the needed outcomes**.

Among all the stakeholders you identified, there are ones who have the power to block your action, ones who are interested in your progress, and ones who don't care so much about all that.

Prioritizing stakeholders is based on their role, influence, interest, and availability.

You can prioritize them by creating a stakeholder map, also called the matrix of influence or a power/interest grid. The matrix of influence **compares stakeholders' level of authority with their need for active involvement**.

The stakeholder map – a power/interest grid

The stakeholder map allows teams to select the most important stakeholders and serves as a basis for the communication plan.

The goal is to put all of the stakeholders on a grid and divide them based on the power they have over the product and the interest they have in being updated about your progress.

While creating your map, remember to place stakeholders where they actually are, not where they would like to be.
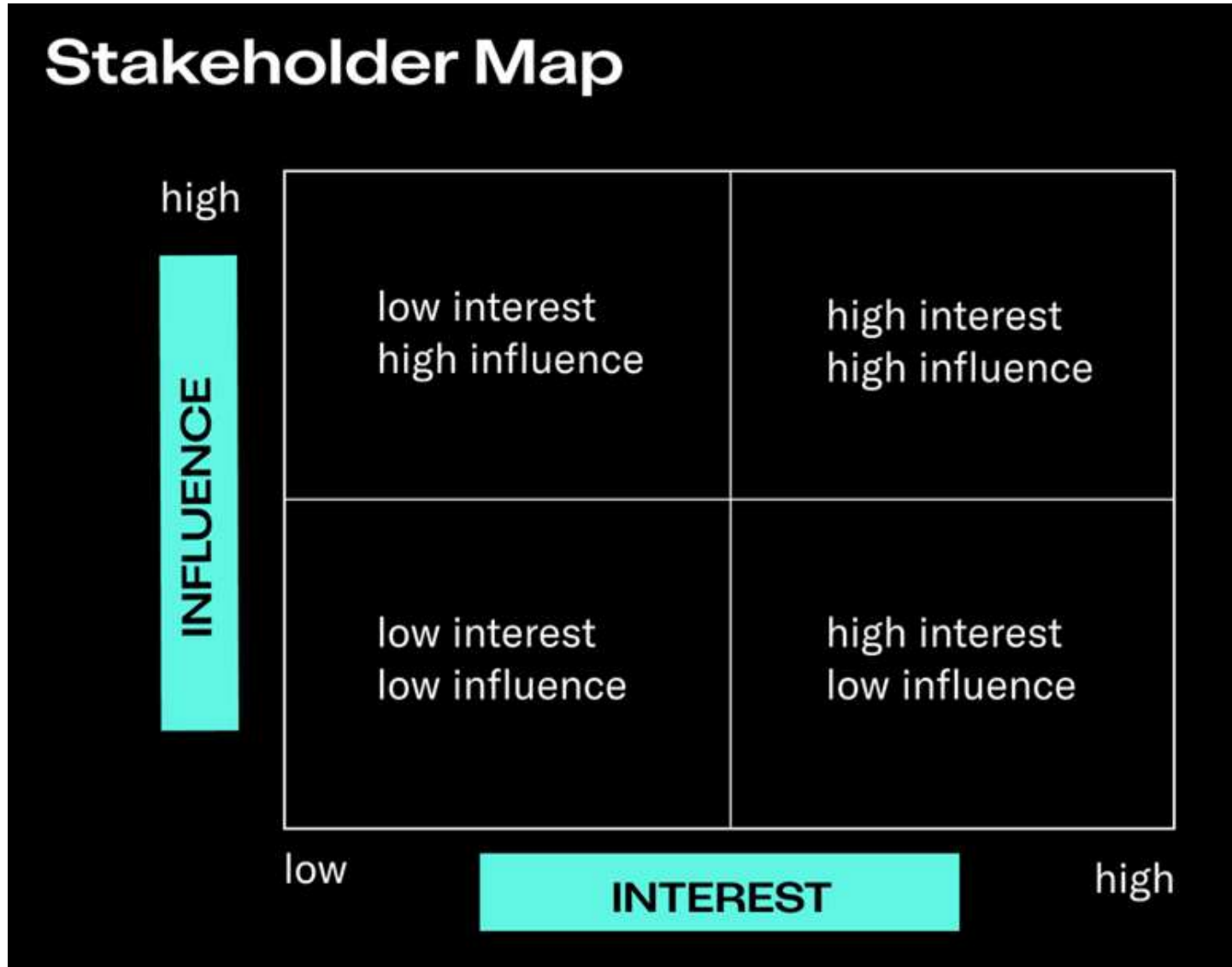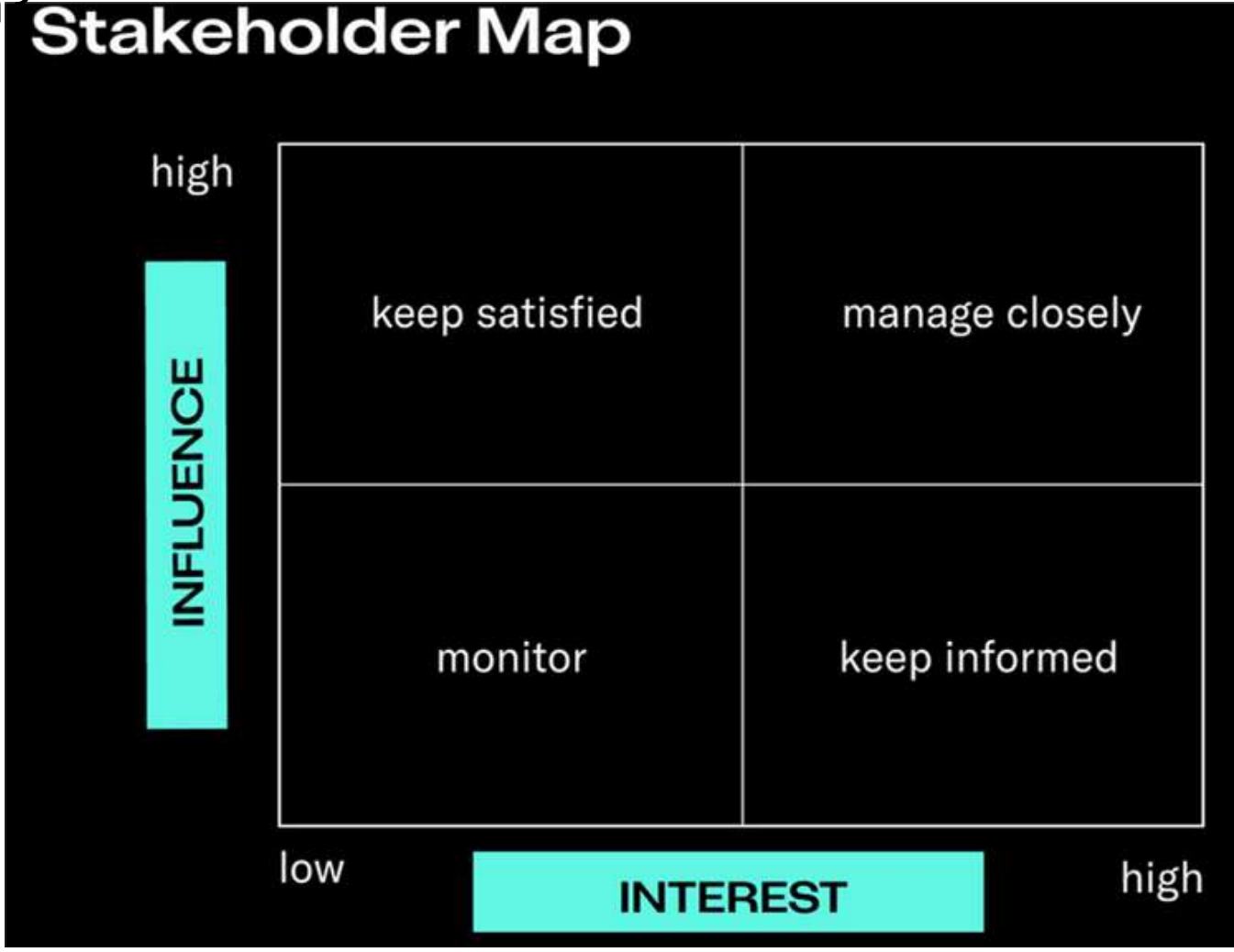
Stakeholder identification – analysis and setting priorities

How does it translate to a communication plan?

Stakeholder identification – analysis and setting priorities

High power/high interest – these are the significant decision-making authorities, like business owners. They have the biggest impact on your project. You need to **carefully manage their expectations and needs**.

High power/low interest – you need to do what's needed to keep them satisfied, but they are not interested in being actively engaged (maybe because of the low availability). They need to be **kept in the loop** and satisfied.

Low power/high interest – they have little influence on the project but may be impacted by it. Efficient ways of communicating with those stakeholders include **email updates or presentations**. These people can be helpful with details about the project. Talking to them will ensure you no issues are present.

Low power/low interest – you need to **monitor** those guys, because their position on the grid may change with time, but essentially they don't expect to be involved and don't overwhelm them with extensive communication.

Stakeholder identification – analysis and setting priorities

Step 4: Make time to reevaluate your assumptions

After finishing your stakeholder map, plan to… reevaluate it.

You need a systematic approach to identify and prioritize stakeholders, because they may change over time, as well as their communication and engagement needs.

At the beginning of a project, you often aren't able to tell specifically who you'll be working with and what are their needs and expectations. That's why it's a good practice to **reassess your assumptions from time to time**.

Step 5: Assign responsibility – who manages stakeholders in Agile teams?

In Scrum, the Product Owner is accountable for managing stakeholders and customers. They remain accountable, however, they can delegate the responsibility to someone else. Among other roles responsible for managing stakeholders are: Project Manager, Delivery Manager, Business Analyst.

Golden principles of stakeholder communication

Agile stakeholder communication and engagement plan

How to create a project communication plan?

Building your communication plan, you need to consider the ongoing communication needs of your stakeholders.

On the basis of your stakeholder map, analyze:

- how they would like to be communicated with,
- what they want to be kept informed about,
- how often they would like to be updated.

Always remember to think about the purpose of your communications.

Take into account various means of communication:

- sprint reviews,
- daily scrums,
- stakeholder retrospectives,
- emails,
- video recordings,
- communicators,
- interactive dashboards.

Agile stakeholder communication and engagement plan

Communication should **always offer value** for a stakeholder. Focus on what a particular stakeholder requires, and remember that those requirements can change depending on the phase of a project. You need to check regularly if the needs of key stakeholders didn't change.

Avoid giving too much information and informing about things irrelevant for the particular person.

You need to communicate in an understandable way, clearly, **free from jargon**.

There are various mediums for communication, like calls, emails, interactive dashboards, video recordings, team meetings. You need to **match a particular medium for each stakeholder according to their preference**.

Use project management software that allows for easy communication and makes it **easy for stakeholders to find information**.

Stakeholder communication

How to improve stakeholder communication?

You can improve your communication with stakeholders by:
including them in project planning,
encouraging stakeholders to participate actively in meetings and provide feedback,
keeping the meetings concise,
showing your results (preferably in an interactive way),
responding to every message from each stakeholder.

Increasing stakeholder engagement

High stakeholder engagement is crucial from the early stages of product development and by involving them in key moments you will benefit from their input and perspective.
Who engages stakeholders in a development team?
In a Scrum development team, the **Product Owner or Project Manager** typically engages stakeholders. However, in various mixed teams, these responsibilities may also lie on the Business Analyst, Delivery Manager or Account Manager's side.

Stakeholder sprint review

Why key stakeholders should attend every sprint review
The sprint review is a powerful meeting to engage stakeholders in a project development lifecycle. During the meeting, they can see the newest release, and often interact with the software. It's a great moment to **give feedback about the work done and propose ideas for the next priorities**.
Involving stakeholders into sprint reviews makes it easier to **check if everything is going in the right direction**, meaning, to meet the business goals of the project.

Stakeholder Engagement

How a Scrum team can engage stakeholders better

Involve stakeholders early and establish a precedent that their involvement is natural and important. **Ask them questions** and **seek their perspective**.

Invite stakeholders for priority discussions and **make them a part of the decision-making process and planning**.

Encourage stakeholders to give feedback during sprint reviews. Reassure them that their opinion is important.

Engage stakeholders during the project discovery phase. **Discovery workshops** are a very important stage when the team gathers information about the project to understand its goals and priorities. It's a phase when stakeholders' engagement is irreplaceable since they can help you understand the business objectives of the project.

Barriers and challenges to involving stakeholders in
AGILE SOFTWARE DEVELOPMENT

Barriers and challenges to involving stakeholders in agile processes

Access to information and tooling – some stakeholders are short on time and prefer to check how the project is doing on their own when others prefer to be informed about all issues through in-person conversations. A **blend of in-person meetings and asynchronous ways** of communication may be the answer here, however, consult the means with each stakeholder.

Cultural obstacles – they include differences in culture of organization and society, which influences communication, values, tolerance of change. You need to **allow for the differences**, maintaining open communication is key.

Linguistic obstacles – there can be barriers in understanding specific terminology used by specialists. You need to be **respectful** regarding the fact that not everything will be equally understood by everyone.

Boundaries between various departments – in some companies various departments are divided between one another with strong boundaries, which makes communication with internal stakeholders difficult. According to the BizDevOps approach, to **provide a frictionless flow of knowledge**, you need to get rid of those hubs. Take care of a communication flow between the stakeholders from various departments in your organization to make sure you have all the data to make informed decisions.

Barriers and challenges to involving stakeholders in
AGILE SOFTWARE DEVELOPMENT

Open and honest communication which recognizes and respects differences is a solution to these obstacles.

To sum up – appreciate the practical value of transparency

A communication plan with established procedures (means and frequency) and tools allows to **maintain transparency, keep stakeholders informed, and make desired adjustments on time**.

That, on the other hand, increases the guarantee of delivering the product on time and within budget, and meeting all the crucial business objectives.

To be transparent with your stakeholders, follow the whole stakeholder management process from identification to solid communication and engagement plan, considering the preferences of each person.

AGILE - Common Challenges in Stakeholder Engagement

Common Challenges in Stakeholder Engagement

Stakeholders don't come or participate fully in the Sprint Review

How to overcome this challenge

Frequent, iterative stakeholder feedback is a critical part of Scrum. This feedback helps:
Keep the concept of creating customer value top-of-mind for the Scrum Team
Validate the assumptions that the Scrum Team made about user needs and any tradeoffs they made during the Sprint
Reduce risk by uncovering issues or problems early and often
Limit the likelihood that the Scrum Team goes in the wrong direction while trying to solve customer problems
When stakeholders don't participate in Sprint Reviews, the entire Scrum Team, especially the Product Owner, should ask for stakeholder input in order to improve the product.

AGILE - Common Challenges in Stakeholder Engagement

Stakeholders don't understand their roles and responsibilities while engaging with the Scrum Team

How to overcome this challenge

If this is the case, help improve the stakeholders' understanding of Scrum and its empirical nature by helping them to realize the importance that they play in delivering better products to market. At the same time, the Scrum Team needs to understand that the Sprint Review is not their only time to get stakeholder input. They can engage and learn as needed to help refine Product Backlog items and capture more detailed expectations. Building a stronger relationship between the Scrum Team and stakeholders overall can help to drive long-term collaboration. At least for the first few Sprint Reviews, start by explaining the goal of a Sprint Review and the important role that everyone plays in it.

AGILE - Common Challenges in Stakeholder Engagement

Stakeholders demand that their PBI be added or ordered higher in the Product Backlog

How to overcome this challenge

The Product Owner is accountable for Product Backlog management, including ordering the Product Backlog items (PBIs). Centralizing this accountability on one person increases focus, streamlines decision-making and increases the likelihood that the most valuable feedback, rather than the ideas of the most forceful stakeholders, are taken into account.

Scrum entrusts this accountability to the Product Owner and it's the Product Owner's responsibility to push back on forceful stakeholders as needed. Saying "no'' may be difficult, but necessary in certain situations. This disagreement on priorities also opens an opportunity for the Product Owner to have a conversation around how the suggestion supports the Product Goal. When stakeholders are uncompromising and insist that their suggestion is what customers want, the Product Owner must learn more about the root of the stakeholder's insistence and determine for themselves whether the suggestion has merit.

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AGILE - Common Challenges in Stakeholder Engagement

Stakeholders ask for a concrete release date with a list of features that will be included at that time

How to overcome this challenge

It's not surprising that stakeholders are eager to receive the product and want to know when to expect it. However, when solving complex problems using an empirical process, we are iteratively building our way to the solution, learning along the way and don't know precisely when we'll be done. We simply don't have all the answers yet! That said, it's possible to help the stakeholders feel more comfortable by reminding them that Scrum focuses on delivering customer value early and often, has well-defined goals and provides the opportunity for them to inspect progress during the Sprint Reviews.

In addition, it's possible to help them visualize the progress being made by sharing forecasts and a product roadmap. It must be made clear that the only thing the Scrum Team can provide is an estimate, since they do not know what issues or feedback they may encounter as they do their work.

References

Text Books

1. Ken Schawber, Mike Beedle, "Agile Software Development with Scrum", International Edition, Pearson.

2. Robert C. Martin, "Agile Software Development, Principles, Patterns and Practices", First International Edition, Prentice Hall.

Web Resources

❑ https://www.scrum.org/resources/common-challenges-stakeholder-engagement

❑ https://brainhub.eu/library/agile-stakeholders-management

❑ https://www.exposit.com/blog/key-stakeholders-agile-product-development/

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