





Beyond Requirements: Analysis with an Agile Mindset











derstanding Context

Chapter 11. Understanding Stakeholders

INTRODUCTION

I have heard it said, and have probably said it many times myself, that IT projects would be so much easier if people weren't involved. That's not the case—people are involved, and they are the most important aspect of the projects. The main purpose of IT projects is to change the work people do or the way in which they do it, so it makes sense to figure out how best to work with them.

This chapter describes some techniques that are helpful for understanding the people you are working with. The first two techniques are useful for understanding the people whose needs you are trying to satisfy-better known as stakeholder analysis. The other two techniques in this chapter will help you better understand the people who are actually going to use the solution you deliver; let's call this user analysis.



Stakeholder Analysis

What do I mean by "stakeholders"? Remember the BABOK version 3 definition of stakeholder: a group or individual with a relationship to the change or the solution. That's a pretty broad definition that includes, well, just about everyone who has anything to do with a solution. In this book I focus on a subset of that group with the needs that a solution is trying to satisfy—in other words, project sponsors, subject matter experts, users, regulators, service providers, and anyone else who could impact or is impacted by the solution. Keep in mind that these can be people from both business and IT areas. Technology people have needs, too, and can often provide a different perspective on possible solutions. For example, IT support often has different interactions with end users than the rest of IT and may have some very helpful insight with respect to problems that end users face.

So stakeholder analysis is the act of understanding those stakeholders better, usually with the goal of figuring out the best way to communicate, engage, and work with them. The two techniques I cover here are ways to guide the conversation about your stakeholders on the way to establishing a plan for working with them.

- The stakeholder map takes a look at the relative influence and interest of your stakeholders so you can decide how to engage them.
- The commitment scale guides a conversation about how much your stakeholders support your project. This discussion provides ideas on how to engage them and what type of change activities you need to conduct to get the stakeholder support you need.

User Analysis

A special subset of stakeholders is the people who are actually going to use the solution you deliver—your users, for lack of a better term. User analysis helps you understand who uses your solution, what they can do, and the environment in which they use it. You can use that information to guide design decisions and structure permissions so that people can do what they are supposed to and can't do what they aren't supposed to. The two techniques I describe here help to structure conversations around those ideas and persist information going forward.

- User modeling structures a conversation about the user roles involved with your solution in order to arrive at a consistent list that can be used to organize work and identify functionality gaps.
- Personas help the team understand the context in which the solution's users work, which helps guide design decisions.



STAKEHOLDER MAP

What It Is

The stakeholder map is a technique commonly used for stakeholder analysis. Using the stakeholder map to guide conversations helps a team understand who the stakeholders for the project are, understand key characteristics about those stakeholders, and identify plans for engaging the stakeholders on an ongoing basis.

Primary outcomes from a stakeholder map include

- A comprehensive list of the stakeholders involved with the project
- An understanding of how to interact with those stakeholders

An Example

Figure 11.1 is an example stakeholder map for the commission system replacement project. Note that the rest of the team (aside from Arthur) did not put themselves on the map. Had they done so, they would ideally all fit in the upper right quadrant—high influence, high interest.

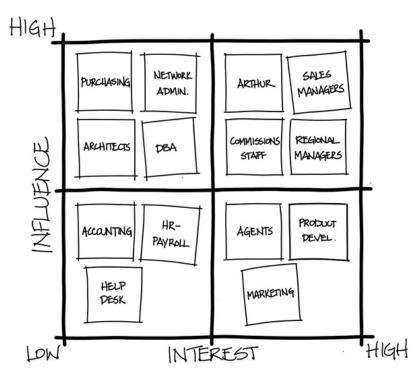


Figure 11.1 Stakeholder map for commission system

When to Use It

Stakeholder maps are appropriate in all situations; however, the extent to which you use one depends on whether the current initiative involves new stakeholders or a group the team has been working with for quite a while. New stakeholders will generally prompt more rigorous and intentional map creation.



Why Use It

By explicitly discussing stakeholders using a stakeholder map, the team reduces the chance that they have forgotten someone who is impacted by or who can impact a project. The team also stands a better chance of having effective and efficient interactions with their stakeholders.

How to Use It

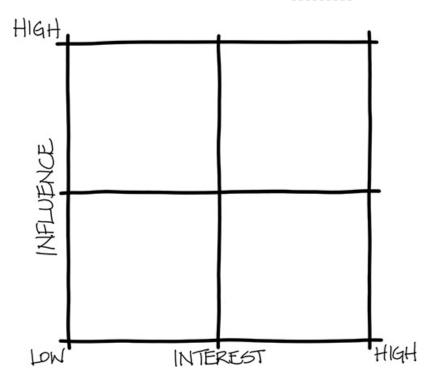
1. Generate a list of stakeholders.

Gather the team together, provide them with sticky notes, and encourage them to think of as many stakeholders as they can. You may want to do some affinity grouping of the identified stakeholders before moving to the next step so you can remove duplicates and arrive at a manageable number of stakeholders.

2. Map the stakeholders based on their characteristics.

There are a variety of different sets of characteristics that can be used to understand your stakeholders, but they typically represent some variation on the influence of the stakeholder (often referred to as their power) and the interest of the stakeholder.

Create a two-by-two matrix with one axis representing influence and one axis representing interest. An example is shown in Figure 11.2.



 $\textbf{Figure 11.2} \ \textit{Blank stakeholder map}$

3. Establish plans for engagement based on the characteristics.

Each quadrant provides guidance on how to engage the stakeholders with those characteristics. The team considers which quadrant the stakeholder was placed in and establishes the corresponding approach to engagement (see Figure 11.3).



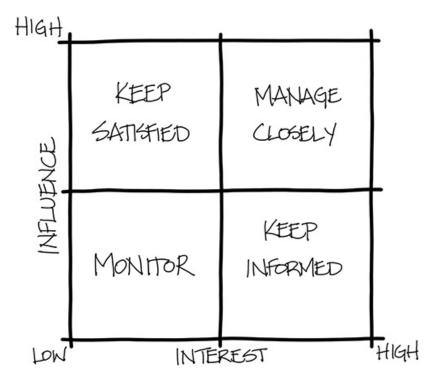


Figure 11.3 Stakeholder map with actions

Low Influence/Low Interest—Monitor

These stakeholders are usually only partially impacted by the solution. An example from the commission system (Chapter 8) is accounting. General information is sufficient for these stakeholders, and it may be appropriate just to let them know where information is available and leave it up them to decide if they are going to take advantage of it. It can be helpful to keep an eye on these stakeholders to make sure that their interest or influence does not change throughout the course of the project.

Low Influence/High Interest—Keep Informed

Stakeholders with these characteristics are a very good source of detailed information about your project, so it's important to understand their needs and solicit their input. Stay aware of their perspective on the project; if they feel their concerns are not being addressed, they may engage more influential people. Some subject matter experts and end users are often in this quadrant. In the case of the commission system, agents fit into this category because they have a high interest in the commission system working properly (else they may not get paid), but their influence is limited because the main focus of the project is determining how the process runs.



High Influence/Low Interest-Keep Satisfied

This group usually contains people with an important position in the organization who are not directly related to the project. In the commission system case, purchasing, the architects, the DBAs, and the network admins fall into this category because even though they are not directly involved with the project, they can exert a great deal of influence on it. Your team should engage with stakeholders in this group to understand and satisfy their needs when they are in alignment with the overall goal of the project. It also often pays to consult with these stakeholders on critical issues, but not on every single decision. You may also consider whether the project would benefit from having these stakeholders be more interested in the project.

High Influence/High Interest-Manage Closely

Teams should fully engage the stakeholders who fall into this category, which usually includes sponsors and highly influential subject matter experts. Whenever possible, these stakeholders should be explicitly part of the team.

Caveats and Considerations

Discussions using a stakeholder map should definitely be held at the beginning of the effort, but it's just as important to revisit the map on a regular basis, especially if there are changes in the business environment or project goals, or major new insights that could change stakeholders' interest in a project. Any change in organization structure is also a good reason to revisit the analysis, because it may drive changes in stakeholder influence.

Often, the best way to gauge stakeholder interest is to talk with them directly about their perspectives on the project. Determining their influence can be a little trickier, as individual stakeholders may have inflated perceptions of their own influence. Those discussions are best held within the core project team.

Additional Resources

Gamestorming. "Stakeholder Analysis." www.gamestorming.com/gamesfor-design/stakeholder-analysis/ (http://www.gamestorming.com/games-for-design/stakeholder-analysis/).

MindTools. "Stakeholder Analysis."
www.mindtools.com/pages/article/newPPM_07.htm
(http://www.mindtools.com/pages/article/newPPM_07.htm).

Note: These two resources describe the same activity with two major differences. The Gamestorming article provides more detail on how to do stakeholder analysis in a highly collaborative manner, and the axes are switched between the two approaches. But both approaches provide a means of understanding your stakeholders to establish communication plans for them.



COMMITMENT SCALE

What It Is

The <u>commitment scale</u> is a stakeholder analysis technique. This technique gauges the current level of stakeholder commitment to a project, as well as what level of commitment is needed to ensure the project's success.

An Example

After the commission system team created their stakeholder map, they also thought it would be a good idea to discuss the commitment of the various groups to the project. Figure 11.4 shows the resulting scale that they came up with.

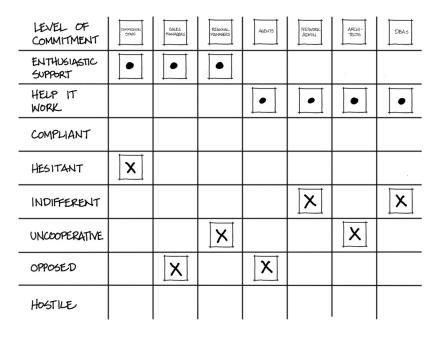


Figure 11.4 Commission system commitment scale

When to Use It

The commitment scale is most applicable when a team is starting a new project that does not have clear, unanimous support from all stakeholders or on projects that are introducing significant organizational change. It may also be helpful when a team is working with a set of stakeholders with whom they have not worked before.

It's a good idea for the team to have a discussion surrounding the commitment scale when they are first getting started (during iteration zero, for example) so they can establish their plans for engaging with stakeholders early on.

Why Use It

The commitment scale is best suited to guiding team conversations about how they will interact with their stakeholders. Members of the team may have various assumptions about some stakeholders' impressions of the project. This technique provides a means of getting those assumptions out in the open and helps the team determine a course of action to increase support for their project.



How to Use It

1. Gather the team together and explain that you need to discuss how you will work with the various stakeholders.

2. Draw a chart on the whiteboard as shown in Figure 11.5.

LEVEL OF COMMITMENT				
ENTHUSIASTIC SUPPORT				
HELP IT WORK				
COMPLIANT				
HESITANT				
INDIFFERENT				
UNCOOPERATIVE				
OPPOSED		_		
HOSTILE				

 $\textbf{Figure 11.5} \ \textit{Blank commitment scale}$

Here are the definitions of the various levels of commitment:

Enthusiastic support: Will work hard to make it happen

Help it work: Will lend appropriate support to implement the solution

Compliant: Will do the minimum acceptable and will try to lower the standard

Hesitant: Holds some reservations; won't volunteer

Indifferent: Won't help; won't hurt

Uncooperative: Will have to be prodded

Opposed: Will openly state opposition to the solution and act on that opposition

Hostile: Will block implementation of the solution at all costs

- 3. Identify the key stakeholders the team needs to discuss. Start with groups, but the team may identify some influential individuals who need to be discussed separately.
- **4.** For each stakeholder, discuss as a team the stakeholder's current level of commitment and where the stakeholder needs to be in order for the project to succeed. It's helpful to use sticky notes to represent current and desired levels of commitment, because the perspective of the team may change frequently throughout the discussion. See the example above.



5. After identifying the current and desired levels of commitment, identify the actions needed to move the stakeholder from the current commitment level to the desired level. These actions will influence how you engage with that stakeholder going forward.

Caveats and Considerations

Some people consider the nature of the information on the commitment scale to be controversial, so it's best to use the commitment scale to guide a conversation and determine action plans, but not necessarily persist the scale itself.

The information contained in the scale is not of the type that teams would directly ask their stakeholders. Because of this, teams using this technique as a discussion starter may find that most of their information comes from observation or discussions with people who have good insights into the various stakeholders such as the project sponsor.

The focus of this technique will be on stakeholders who are not already part of the team, but through this discussion the team may identify additional people they need to add to the team because those people need to be very supportive and engaged in the project.

Not every stakeholder needs to be brought all the way up to "enthusiastic support" in order for a project to be successful.

Additional Resource

Rath & Strong Management Consultants. *Rath & Strong's Six Sigma Pocket Guide*. Rath & Strong, 2000.

USER MODELING

What It Is

A user is anyone who receives value from a solution. Users include people who directly interact with the solution as well as those who do not directly interact with the solution but receive some value from it.

User modeling is a technique used to establish a commonly agreed-upon list of user roles for a solution. This list of user roles and their descriptions provides helpful context for user stories and other backlog items.

You can think of user modeling as one aspect of stakeholder analysis that is specifically focused on people interacting with a solution or receiving value from it.

An Example

The team working on the conference submission system modeled the user roles and used those user roles as an organizing concept for the story map. Following is a description of how we arrived at our list of users using the steps described previously. We did this as an exercise leading up to our creation of the backlog.



Brainstorm an Initial Set of Users

Each of us took a stack of index cards and wrote user roles on them, throwing each card into the middle of the table after we wrote it. This was to make sure that we didn't get hung up too much on specific user roles too early. We ended up generating the list of user roles shown in Figure 11.6. At this point, we also included systems and roles on the team because we weren't worried about filtering our thoughts yet. We figured those items might spark other user roles that should be included.

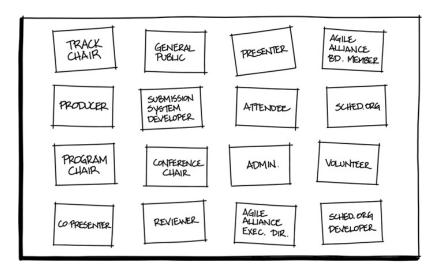
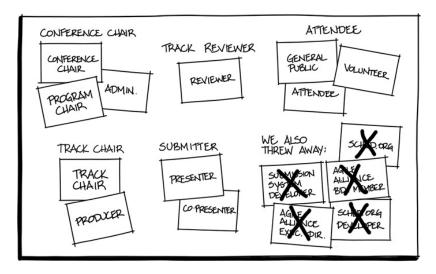


Figure 11.6 Conference submission system initial user roles

Organize and Consolidate the Users

Next, we organized the cards into groups that seemed to make sense, as shown in Figure 11.7.



 $\textbf{Figure 11.7} \ Conference \ submission \ system \ consolidated \ user \ roles$

We also threw the following cards away:

- Submission system developer
- · Agile Alliance executive director
- Agile Alliance board member
- Sched.org



· Sched.org developer

The reason? For the purpose of user stories, we don't want the people who are actually building the solution to be one of the user roles. Generally, if they are going to use the solution, they'll be filling some other role. We only want to include people who are expecting an outcome from the solution in the user roles. If there is another system involved, it's because there is someone who is accomplishing something as a result of that interface. Finally, we didn't include the executive director and board member because when those folks use the solution, they would fill an existing role.

Refine the User Roles

Finally, we put together the short descriptions shown in <u>Table 11.1</u> for each user role so that we had a shared understanding of the characteristics of each user.

User Role	Description	
Chair	Has overall responsibility for the conference program. The chair also acts as the administrator for the confere submission system.	
Track chair	Has responsibility for selecting sessions for a given track in the program. Provides a final track recommendation to the chair. Also coordinates the review committee for his or her assigned track.	
Track reviewer	Reviews submissions for one or more tracks and provides input on which sessions should be included in that track as well as provides feedback to the presenter on improvements to the session.	
Submitter	Submits sessions to be included in the program and if selected will be the main presenter of the session. Can submit and edit his or her own sessions as well as respond to feedback posted to the session.	
Attendee	General viewer of the submission information who may or may not attend the conference. Can view some session proposal information.	

Table 11.1 User Roles and Descriptions

When to Use It

User modeling is especially helpful when working on solutions with a significant amount of user interaction and where there are different types of users who are able to perform different activities or access different functionality.

It's generally best to do user modeling when first starting work on a solution. The discussions that occur during user modeling help to establish the range of potential users and can provide needed context. User modeling discussions can also provide some very helpful information for establishing scope. If your team is using one of the familiar formats for user stories, the list generated by user modeling provides selections for the "as a \dots " portion of those stories.

Why Use It

Consistent definition and use of user roles in user stories reduces confusion and helps to ensure that all cases are covered. The output of user modeling can also help with gap analysis.



If there are any user stories that have a user role that was not identified during user modeling, it could mean several things:

- There is a user role you forgot (new user).
- That user story is really not part of the effort (actual scope creep).
- You have the wrong user role in the user story.

If there are user roles without an associated user story, that raises different possibilities:

- You haven't gotten to that user role yet.
- You are missing user stories.
- You have identified an extraneous user role.

How to Use It

There are three primary steps in user modeling.

1. Brainstorm an initial set of users.

Gather your team and ask them to write any users that come to mind on index cards (or sticky notes) and put them on a table (or wall). Don't judge any of the suggested user roles at this point.

2. Organize and consolidate the users into user roles.

As a team, organize the cards into similar categories using whatever arrangement rules seem appropriate.

- Arrange the groups of cards spatially to indicate similar and overlapping users.
- Remove cards that represent users who are not relevant to the solution. This includes users who are not impacted by the solution, or whose roles do not have any relation to the goal of the IT project. They could also be users whom you have explicitly removed from the scope of the project.
- Create a header card for each grouping that represents a user role for the solution.

3. Refine the user roles.

Once you have settled on a list from the brainstorm, look it over and determine if any user roles seem to be missing. It may help to think of the kinds of user roles to "harden" the solution against:

- Abusers: Think of people who may try to abuse the system and features to prevent these abuses.
- Nonadopters: Think of people who will resist using the system and whether there are any features worth adding that may encourage them to



use it.

When the team thinks they have identified all user roles, prepare a brief description of each user role so that the team will have a shared understanding of the characteristics of users. Your team may decide to create some lightweight personas as a way of structuring the descriptions.

Caveats and Considerations

User roles should not be specific people but groups of people; for example, instead of "Fred" it should be "Claims Administrator." If your team chooses to use personas, you may see names showing up in the persona descriptions.

User roles should always represent people, not other systems. If there is a need for an interface between the solution and some other system, someone is receiving value from that interface. Represent those people with a user role. Remember, you are modeling user roles to identify the key roles that gain value from or can accomplish something with the solution. The intention of identifying user roles is not to identify all the external agents that interact with a solution (in which case identifying systems would be useful).

When creating user roles it may be helpful to think about what permissions they may have in the solution. Your user base may have many different titles that can do the same thing, such as Junior Claims Administrator, Senior Claims Administrator, and Claims Administrator First Class. In this case all of those users could be represented by the same user role. On the other hand, if there are people with similar titles who do different things—Claims Processor, Claims Entry, Claims Adjudicator—each of those may be represented by a different user role with different permissions.

You'll generally want to include as many of the team members as possible in the user modeling activity. They may have some perspective that the rest of the group does not, and the discussions that go into deciding what to ultimately call the users and how to group them together provide a great deal of information that's helpful later in the project, during define, build, and test activities.

Additional Resources

Cohn, Mike. *User Stories Applied: For Agile Software Development*. Addison-Wesley, 2004, Chapter 3, "User Role Modeling."

Patton, Jeff. "Personas, Profiles, Actors, & Roles: Modeling Users to Target Successful Product Design."

http://agileproductdesign.com/presentations/user_modeling/index.html (http://agileproductdesign.com/presentations/user_modeling/index.html).



PERSONA

What It Is

<u>Personas</u> define a typical user of a solution. They are helpful for understanding the context in which user roles use the solution to help guide design decisions. Personas originated from Alan Cooper's work on usercentered design.

An Example

Figure 11.8 is an example persona for the conference submission system.



REED THE REVIEWER

"REVIEWING SESSIONS IS A GREAT WAY FOR ME TO SEE WHAT PEOPLE ARE TALKING ABOUT & WHAT I MIGHT WANT TO HEAR MORE ABOUT."

\Box	AGILE PRACTITIONER
	REVIEWS ON A SOLELY VOLUNTEER BASIS IN HIS SPAPE TIME
口	LIKES TO REVIEW AS MANY SESSIONS AS POSSIBLE, SO DOESN'T WASTE TIME WITH PARTIALLY FILLED OUT PROPOSALS, OF LOOKING AT SESSIONS HE HAS ALREADY REVIEWED THAT HAVE NOT CHANGED
口	LIKES TO KNOW WHEN NEW SESSIONS ARE POSTED
□	FINDS VALUE IN BACK & FORTH DISCUSSIONS WITH SUBMITTERS

 $\textbf{Figure 11.8} \ \textit{Reed the Reviewer persona}$

When to Use It

Personas are especially helpful when working on solutions with a significant amount of user interaction where the context in which those users work can greatly influence how they use the solution.



Personas are often a good technique to use in conjunction with user modeling.

Why Use It

Personas provide context for your users to help guide design decisions by providing a name, face, and story for each user role and helping team members understand the jobs users do and the environment in which they work. Personas do not have to be elaborate. A short description is sufficient. Keep them posted in the team space to remind team members who their users are.

When the team proposes various personas, they establish a shared understanding of who they are building the solution for. As a result, they're more likely to build a solution that more closely meets the users' needs.

How to Use It

Once you have identified the user roles that are relevant for your solution, create a persona for each. Jeff Patton suggests the following characteristics as helpful for a persona:

- Name
- · A role or job title
- · Quotes in the persona's language
- Relevant demographics
- Description that reveals goals, motivations, pain points
- Description of primary activities this user type will engage in

Following is one collaborative way to create personas. This approach is especially helpful for reducing the influence of loud voices in the room and to ensure that everyone on your team gets a chance to provide input.

- 1. Divide the team into small groups of three or four each.
- **2.** Place flip chart paper around the room, with each page representing one of the personas.
- **3.** Have each group start at a flip chart page and give them 20 minutes to create a draft persona.
- **4.** At the end of the 20 minutes, have the groups rotate clockwise, but have one person stay behind to describe what the previous group came up with. The groups then have five minutes to discuss and revise the persona.
- **5.** Repeat the rotations until the groups come back to their original persona.



Caveats and Considerations

The personas originally envisioned by Alan Cooper in describing usercentered design can be quite involved. My suggestion is to use the idea behind personas to provide simple yet helpful descriptions of the two or three key user roles. The goal is a bit of needed context for the team when making decisions about how to design and build the solution.

To be truly effective, the personas should be developed based on observations of people who fill those user roles in their actual environment.

Personas help prevent teams from designing solutions for themselves, which is important except when the team members building the solution are actually the main users.

Alliteration between the name of the persona and the role is frequently used (e.g., Reed the Reviewer, Sally the Submitter). It's not necessary, but it can help people remember whom they are talking about.

To make personas truly helpful, they should be publicly posted and available to the teams for reference when they are working on a specific story. It's a sign that the team has latched onto the personas when they ask, "What would Reed like in this situation?" instead of "What would a reviewer want in this situation?"

Additional Resources

Ambler, Scott. "Personas: An Agile Introduction." www.agilemodeling.com/artifacts/personas.htm (http://www.agilemodeling.com/artifacts/personas.htm).

Cooper, Alan. The Inmates Are Running the Asylum: Why High-Tech Products Drive Us Crazy and How to Restore the Sanity. Sams Publishing, 2004, Chapter 9.

Patton, Jeff. "Personas, Profiles, Actors, & Roles: Modeling Users to Target Successful Product Design."

http://agileproductdesign.com/presentations/user_modeling/index.html (http://agileproductdesign.com/presentations/user_modeling/index.html).

