

518 User Research & Personas

1. Define Stakeholders:

- a. People who are learning a board game for the first time
 - i. Adults
 - ii. Kids
 - iii. Those who aren't able to read that fast or well
- b. People who are re-learning a board game
- c. People who are teaching a board game
- d. People who are making a board game
 - i. Board Game Manufacturers
 - ii. Board Game art designers
 - iii. Board Game Designers
- e. Board Game house staff / owner
- f. Board Game Enthusiasts

2. Conduct Three User Research Methods:

- a. [Survey](#)
- b. **Description:**

A user survey "is a research method that collects quantitative and qualitative data about a user's experience with a product or service."

Purpose of conducting the questionnaire:

First of all, we wanted to find out about the people we were targeting, beginners and intermediate players of board games, favorite types of tabletop games, the average amount of time they spend on understanding the rules, and how they learn the rules. At the same time, we wanted to gain insight into what difficulties they faced while learning the rules and what factors could help them understand the rules better.

Results:

Based on the 43 responses we received, 88.3% of participants identified as beginners. Among them, strategy games and party games were the most popular categories. These responses indicate that beginners prefer board games that create a lively atmosphere and are mainly interested in playing with friends. When selecting a new board game, the most important factor for them is the number of players it supports, showing that they value the interaction between participants more than the game itself. Additionally, 97.7% of respondents reported learning the rules through family or friends, further supporting the idea that complex, intellectually demanding game mechanics are not a priority for beginners. However, when asked how long it took them to understand the rules, 54.8% indicated 10-20 minutes. Moreover, when asked about the complexity of learning the rules, more than eight times as many rated it as complex or very complex compared to simple or very simple. This suggests that for this group, even 10-20 minutes of rule comprehension can be a challenging and less enjoyable experience. When we asked what kinds of factors help you learn to

understand the rules, 86% of participants mentioned visual aids and 65% mentioned interactive tutorials. This shows that users actually want the learning process to be more fun and visual. In the final open-ended question, “Anything else you'd like to add about your board game experience?”, many participants also expressed the need for practice rounds, while others indicated that they preferred to understand the rules while playing. From this we can see that practice rounds are part of the onboarding experience of board games. At the same time, they would like to understand the rules in this kind of human interaction.

Insights:

- beginners prefer board games that create a lively atmosphere and are mainly interested in playing with friends.
- They value the interaction between participants more than the game itself.
- For beginners, even 10-20 minutes of rule comprehension can be a challenging and less enjoyable experience.
- Users actually want the learning process to be more fun and visual.
- Practice rounds are part of the onboarding experience of board games
- Users would like to understand the rules with human interaction.

Survey Results:

(https://docs.google.com/forms/d/1ITt8URuDrfmpBYMIJoiO_if9uVG5_Sn-y42pUM4xARw/edit#responses)

c. User Interviews

Description:

User Interviews are “a research method that involves talking to users of a product or service to learn about their needs, wants, and experiences.”

Purpose of user interviews:

We are using user interviews as a supplementary method to the questionnaire in order to find out user's more detailed attitudes and pain points on the onboarding experience of board games that was not possible to discover just by the questionnaire.

Findings:

Through the user interviews, we discovered how users are currently onboarding for a new board game. The most common way for onboarding is for users to learn the rules from friends or others they are playing the game with. They ask their friends to explain the game's rules and ask questions when any confusion arises. On the other hand, reading rule books is a less common way to learn a new board game.

In the existing onboarding experience, we identified two types of challenges users face when learning the rules of a new board game. The first challenge is that the rulebook doesn't have a clear information architecture so users tend to get lost in grabbing a logical flow of information. Another challenge is that they are still unfamiliar with what actions to take even after the first onboarding

process. When they start playing the board game, they still need to keep track of the rules since they don't fully memorize the rules and have to learn while playing which can be frustrating.

In response to those challenges, users shared with us an ideal solution to make the onboarding experience more fun. The first thing that they would like was to always have someone who is there to teach the rules or answer their questions. One of the participants feels that they hesitate to ask questions during the game. Another ideal scenario would be that the users are given opportunities to repeat practicing the game until they fully understand the rules through trial and error. [OC] Users don't want to make errors after they actually play the game with others. The other thing that users would like in an onboarding experience is audio and visual aids by technology. They believe that incorporating more interactive elements, with audio and visual feedback using technology like smartphones or video, can make onboarding more enjoyable than just reading instructions.

In addition, we found key insights regarding the social aspect of the board game. Users tend to care about how other players feel during the board game. They don't want to feel embarrassed when they don't understand the rules and cause tension in a group due to the unfamiliarity. In contrast, video games are a good option because they can be played by yourself and you don't have to care about others' feelings. A participant mentioned that they prefer simpler rules for board games because players can easily lose their interest if the rule is tedious.

i. Sources

1. [Link to the user interview recordings](#)
2. [Link to the affinity diagram](#)

d. Fly-on-the-wall observation

Description

Fly on the wall observation is a technique that allows us to collect data by directly observing and listening to events happening. It allows insights into interactions between people and other people as well as objects.

Purpose of using this research method

When it comes to understanding how people learn new board games, what better way to understand it than to see it happen in front of us in real-time? While we can gather a lot of information from asking structured questions in surveys and interviews, sometimes people aren't even aware of certain behaviors and actions they take, meaning it can only be communicated through seeing their actions.

So for this research method, we got three people to learn and play a board game while one of us observed and took notes. The game was one none of the participants had played before, meaning that they would all be learning it together at that moment.

Findings

The end result had some interesting takeaways. From the get-go, upon seeing a multiple-page rulebook, there was already a lack of motivation to continue to learn this game as there was so much text on the pages, and it wasn't clear where to start reading the rules. Something else that was noticed was that even though everyone was working to read the rules, there was only one rulebook, meaning they all had to cram together quite tight so everyone could get a proper view. Eventually, it seemed like one of the participants took on the role as the main rule learner to explain to the other participants. After a rough understanding of what was happening, they decided to start playing the game and figure out any questions as they came up.

The overall gameplay was quite smooth once this started. They referenced the rules as they had questions and continued the game when they felt like they understood what was happening. This seemed to work a lot better than their initial work to figure out the rules before playing.

However, something else noticed was that in this way of playing the game, a big mechanic was lost in their gameplay as it didn't affect the core mechanics of how they were playing the game. One participant questioned it at one moment, but since no one had the answer, they just kept going. It seemed like they figured out what was going on and would just continue it that way.

The method of just reading the rules and learning before playing doesn't seem to be practical in actual gameplay. People seem to just want to start playing and figure out as they go. However, in doing so, they might miss key components that may not affect how they're playing the game but are pivotal to how the game actually functions.

3. Define Design Requirements:

- a. The solution should be inclusive so everyone can play (friends, family, elderly, kids)
- b. The solution should make the onboarding process shorter and easier
- c. The solution should repeat until users understand the game enough to play by themselves
- d. The solution should have an interactive aspect as users don't want to just rely on reading a rule book.
- e. The solution should have someone/something that can answer questions whenever users have as they want to avoid situations where they are unfamiliar with what actions to take during the game.
- f. The solution should be able to teach the core mechanics of the game without needing the users to read the official rule book.


- g. The solution should allow everyone playing the game to learn the rules at the same time.
- h. The solution should be easily accessible to everyone including kids, elderly, and people with disabilities

4. Generate Personas:

<https://www.figma.com/design/gwZQNUZMAT5C5TAA7ZTK6j/Untitled?node-id=0-1&node-type=canvas&t=A65v6T15wMEzFMSP-0>

PERSONA

Secondary Persona



Jason
Busy Parent

Age: 37
Location: San Francisco
Industry: Tech

"By the time I'm done reading the instructions, the kids have to go to bed. We need something quicker so we can actually play the game together."

Jason is a marketing manager in a tech startup as well as a parent to two kids, age 10 and 8. He loves his kids but has to spend a lot of time in the office. But despite the business, he always looks forward to his weekly, family game night as well as the few moments he can see friends.

Goals for the system

- Guide his children to learn the board game quickly
- Spend less time learning how to play board games
- Enjoy the board game with family and friends without frustration
- Let his kids get interested in board games
- Encourage children to learn on their own
- Reduce screen time for his kids

Technical background



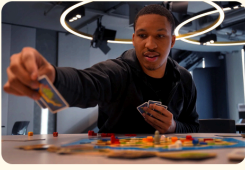
a.

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Amy Lee / Ko Motonage / George Zhang / Monica Zhang

PERSONA

Primary Persona



Ryan
Senior College Student

Age: 20
Location: Seattle
Major: Biology

"I love playing games with friends, but I always get stuck trying to figure out the rules and need my friends to show me how to play. If I had to figure out the rules by myself, I'd probably give up halfway through."

Ryan is a college student in his senior year. He likes to party and play board games with his friends, despite not having much board game experience. He genuinely enjoys them and thinks that they are a great way to have fun, but time after time he gets confused trying to read rule books. This leaves Ryan in a spot where he only plays games when his friends teach him.

Goals for the system

- Quickly finishing onboarding for new board game
- Enjoying the board game with friends
- Having fun with friends after school
- Being able to quickly check the rules while playing the game
- Reviewing the rules that were previously played
- Making sure everyone is clear for the rules before starting

Technical background



b.

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5. Refine the Design Question:

a. **New Design Question:**

How might we create a friendly and interesting onboarding experience for board game beginners?

b. ***Why we changed it:***

First, through user research, we identified our target users as board game beginners whose primary goal is to enjoy time with friends and prioritize social interaction over complex game mechanics. We also discovered that the challenge isn't just the time it takes to learn the rules—they also seek more engaging and interactive ways to learn.

Appendix

Survey Questions

Questionnaire

How would you describe your board game experience?

- Beginner
- Intermediate
- Advanced

George

How often do you play board games?

- Daily
- Weekly
- Monthly
- Rarely

Amy Lee

What types of board games do you enjoy?

- Abstract strategy games
- Cooperative games
- Dice games
- Party games
- Area control games
- Role-playing games
- Other (specify)

Amy Lee

What do you look for in a new board game? (check all that apply)

- Easy to learn
- Nice art
- # of people that can play
- Game length (time-wise)
- Type of game
- Highly rated
- Complex
- Cheap
- Other

George

What board game you played before (multiple choice)

- Catan
- Scythe
- 7 Wonders Duel
- Wavelength
- Codenames
- Carcassonne
- Mysterium
- Pandemic Legacy
- Cards Against Humanity
- Azul
- Other (text input)

monica22

What's the average time for understanding the rule of the chosen board games?

- Less than 10 minutes
- 10-20 minutes
- 20-30 minutes
- More than 30 minutes

Amy Lee

how do you learn how to play board game?

- from friends/family
- reading instruction
- watching youtube
- online guides or forums
- others

Ko Motonaga

How easy do you find it to learn new board game rules?

- 1 (Very Difficult)
- 2
- 3 (Neutral)
- 4
- 5 (Very Easy)

Amy Lee

What challenges do you face when learning a new board game?

- Complex Rules
- Boredom
- Lengthy Rules
- Lack of Visual Aids
- Difficulty Understanding Mechanics
- Other (specify)

Amy Lee

What would improve learning new rules more fun?

- Interactive tutorials
- Visual Aids
- Gamification Elements
- Group learning sessions
- Other (specify)

Ko Motonaga

Anything else you'd like to add about your board game experiences? (Free response)

George

Interview Questions

Interview

How would you describe your board game experience?

- Beginner
- Intermediate
- Advanced

George

How often do you play board games?

- Daily
- Weekly
- Monthly
- Rarely

Amy Lee

What types of board games do you enjoy?

Amy Lee

What do you look for in a new board game? (check all that apply)

George

What board game you played before

monkazz

What's the average time for understanding the rule of the chosen board games?

- Less than 10 minutes
- 10-20 minutes
- 20-30 minutes
- More than 30 minutes

Amy Lee

how do you learn how to play board game?

Ko Motonaga

How easy do you find it to learn new board game rules?

Amy Lee

What challenges do you face when learning a new board game?

Amy Lee

What would improve learning new rules more fun?

Ko Motonaga

Anything else you'd like to add about your board game experiences? (Free response)

George

Hues and Cues: Fly on the Wall Observation Notes

Opening: Taking out all the boards, cards, game pieces

Looking at the rulebook - complaining about how long the rulebook is

Person 1 is starting to read the rulebook to herself; others are silently reading
Everyone is silently reading.

Person 2 asks what is the board. Others clarify

Identifying the scoring frame

Silently reading the rulebook

Person 3 hopes someone can finish reading the rules before her so someone can explain it to her

Person 1 starts passing out the pieces: Person 3 green, Person 2 blue, Person 1 yellow

Looking at where to place the pieces on the score track

What is the cue giver? What is the role? Who wants to be one

Looking at who is the most colorful outfit. Decide on Person 1

She draws a card

Reading rules and seeing that cue giver gets passed around

What is a cue?

Reading about giving a one word cue for the first round "what is a cue?"

Cannot repeat a cue. Reading about how to give cues, what is allowed and what isn't.

Going through taking turn phase and clarifying what you can say as your cue

Person 1 says "Sky" as their first cue.

Reading through how guessing works now. Going in clockwise order, Person 3 goes first and puts a piece on the color she thinks is "sky".

Person 2 goes now and asks to speak. He talks through his process of how he chooses the the color he goes on.

Person 1 then reads out the rules for the second round. She then reads the additional rules and they talk about why you would choose to give up the second round.

They then find the scoring rules for the cue giver and for the player.

Person 3 then explains how scoring works with the scoring piece and how you get points for either being adjacent or within the square or right on the color.

They read that the second round it goes counterclockwise.

Person 2 goes first now and is asking for a hint

Person 1 gives "clear sky" as her cue for the second round

Person 2 guesses

Person 3 guesses

Person 1 then asks if she reveals the answer now. They go through the scoring rules about how to reveal the color with the scoring frame. They find her color and put the frame so the color is in the center.

They go through the scoring and Person 2 thinks he earns some points even though he doesn't. They clarify the points

They now talk about who won and how the gameplay is done in terms of who.

They talk about scoring again and how many points Person 1 gets because Person 3 has a piece within the scoring frame

Person 3 then becomes the cue giver

Person 3 makes a comment about how this is so hard as all the colors are hard to describe

Person 1 goes over the rules about how to give the cue

Person 3 gives the clue "barbie"

Person 2 is going first since he is clockwise and is going for barbie's blonde hair as his guess

Person 1 thinks Barbie is pink so she makes her guess over there

Person 3 asks about clarifying how to give cues and what she can say

Person 1 and Person 2 clarify for her

Person 3 says "blossom flower"

Person 2 says blossoms can be any color

Person 2 then gives his second guess this time in pink

Person 1 then gives her guess in the pink

Person 3 then puts the scoring frame with her color in the middle

They score the round

They play one last round with Person 2 as the cue giver

Person 2 says he sees 4 colors and asks if he can pick any one of them

Person 1 and Person 3 confirm

Person 2 asks if he can say a character's name for his cue

The others say yes

Person 2 says spongebob as his cue

They ask if it's one word or not

Person 3 makes a comment about feeling colorblind

Person 1 shares that sentiment and makes her guess in a yellow

Person 3 puts her piece close to Person 1's

Person 2 says he can only think of one word for this second round cue

Person 1 says that's fine

Person 2 says lemon

Person 3 goes first in counterclockwise order and makes her guess

Person 2 then wants to add another word and Person 3 takes her guess back

Person 2 says young lemon

Person 3 says she's even more confused now and then makes her guess

Person 1 asks if she can put it on the same spot, Person 3 says no and Person 1 makes her guess

Person 2 reveals the color and they score

They agree to end the game after this round