Biases and Validity

Introduction

Games user researchers studies need to be valid and ecologically sound.

In other words: does the test measure what it is supposed to measure and are the results in tune with a real-world situation?

These two dimensions will be referred to as **'validity**'

Introduction

Validity of a test depends essentially on its goals, the hypothesis, and the type of gathered data.

Two user tests with very similar experimental conditions may not share the same level of validity.

Poor validity = results will be misleading or useless.

Things that could hurt the validity of your test

List of main biases and external events that could affect the validity of a test.

Around the test:

1. Recruitment
2. Language
3. Rewards
4. Test Room Set-up
5. Priming effect
6. Hardware

During the test:

1. Social Pressure and Social Desirability Bias
2. Instructions Bias
3. Players' influence on players
4. Sessions' length and breaks
5. Bugs and crashes

UX Research Framework

User Research on Development Cycle

User research can, and should, be <u>applied at all stages of game development</u>.

Two key reasons to apply different user research methods throughout game development:

- First, so that developers can get **<u>feedback regularly</u>** throughout development;
- And second, <u>each method offers a **different lens**</u> on what is being evaluated.

Lenses are just as important as the methods themselves, and help to explain the **strengths and weaknesses** of each method.

These lenses were structured as a **five-layer model of game evaluation.**

Five-layer model: F2P game evaluation
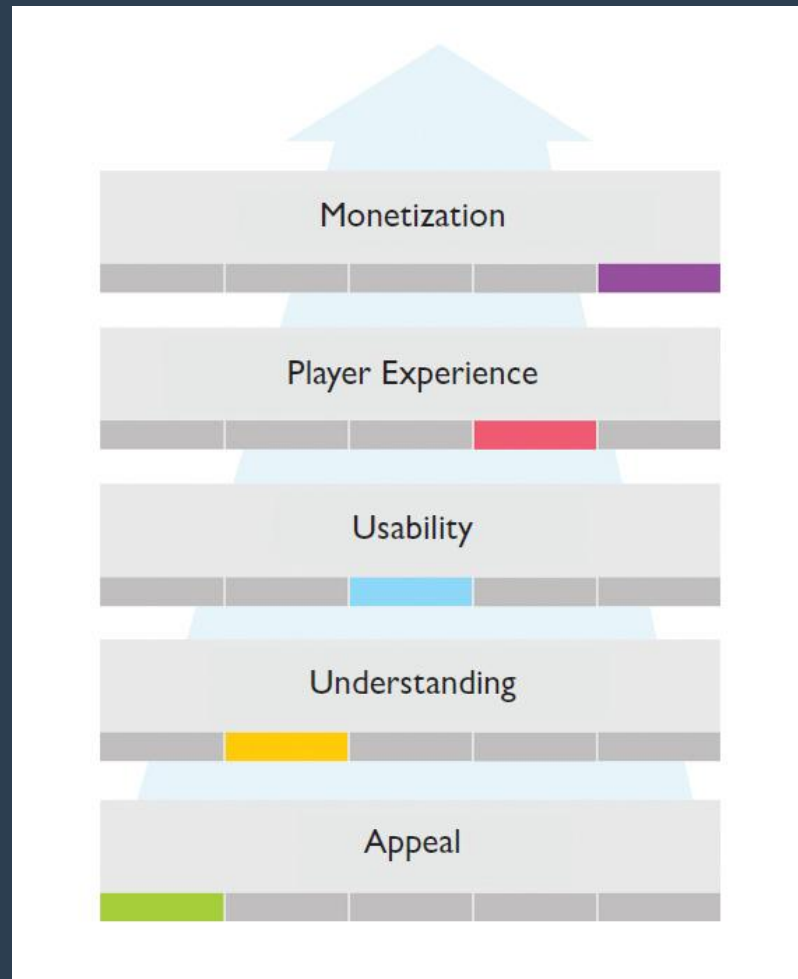
Methods and Lenses

Each user research method is at its **most efficient** when it is **used at a specific point in time** to **answer specific questions**.

Methods are mapped onto the following key game development phases:

• **Concept**: generation of game ideas, identifying audiences and platforms
• **Prototype/Design**: exploring game ideas, designs, and prototypes
• **Production**: iterative development from prototype to full game
• **Soft launch/Launch**: release to public (limited or otherwise), analytics data typically available

Methods and Lenses

Methods and Lenses

1.Concept test

Concept test: What is it? Why should you do it?

A concept test is a method which aims to answer questions such as:

- Which art style do players prefer?
- Which features would players prefer?
- Why do players play games in a certain genre?
- Why did players make/not make IAPs (In-App Purchases)?
- What do players expect a certain object to do?

Concept test: When is it used?

Often conducted towards the **very beginning** of game development;

you want to understand players' general attitudes towards the style of game that is being made, and their perceptions of **early artwork, game setting and potential features** (among other aspects)**.**

Typical Assets required include:

- concept art
- mock-up of store images and copy
- story (text)
- previous games or competitors' games.
- concept video

Concept test: How do you do it?

Questions asked are <u>often subjective</u>, therefore you need a reasonable sample size to draw any meaningful conclusions.

Two main approaches: Individual responses using a **<u>questionnaire</u>**, or a **<u>focus-group</u>**, if group discussion is more appropriate.

Methods and Lenses

2. UX competitor analysis

UX competitor analysis: What is it? Why should you do it?

What do your competitors do well and where could they improve? identifying both **good and bad UX** implementations from games which you will be competing against.

Understand ***why*** those games are doing well, so those principles can be factored into your own game design, and also where they are weak, as these are opportunities for **your game to offer a better experience.**

It is **not** about **copying game design features,** but rather the **UX principles** upon which the features are built.

UX competitor analysis: What is it? Why should you do it?

A competitor analysis is a method which aims to answer questions such as these:

• Which game has the best onboarding experience? And why?
• What is the best way of doing a push notification? (important for retention)
• What is the best way to present a 'for sale' item in the store?
• What is the best way to signal to the player that the game has more depth in future levels?

UX competitor analysis: When is it used?

A competitor analysis is <u>most effective if used at the **concept stage**</u>, as you want to base some of your own design decisions on the findings from this analysis.

It can contribute to **<u>reducing development time</u>, <u>project spending, and</u> <u>risk</u>**, while also increasing the **player experience**.

Typical Assets required:

• List of competitors' games. If it is a sequel, it could also be previous games in the series.

Project timeline

	Concept Test	UX Competitor Analysis	Collaborative Design	Usability Expert Analysis	Usability Playtest	Large-scale Playtest	Engagement Diaries	Analytics-driven Playtest
Monetization	▢	▢						
Player Experience		▢						
Usability		▢						
Understanding		▢						
Appeal	▢							

Methods and Lenses

3. Usability expert analysis

Usability expert analysis: What is it? Why should you do it?

<u>Before putting your game in front of real players</u>, it is advisable to ensure that as many potential barriers to enjoyment are identified and removed as possible.

Ideally, real players should be informing you about issues which were previously unknown, not getting caught up on issues which could have been removed early in development.

Usability expert analysis: When is it used?

Either during the **design phase** (on wireframes) or during **production** (once an early prototype is ready).

The main purpose is to identify and remove any issues before playtesting with real users.

Typical Assets required:

• UI mock-ups (lo-fi/hi-fi mock-ups of UI and user flow): could be physical sketches or made with software (Photoshop, Sketch, etc.)
• Prototypes: most likely to be on the core mechanic of the game but could be on any other segment also

Methods and Lenses

4. Usability playtest

Usability playtest: What is it? Why should you do it?

A usability playtest should typically be used to answer questions such as:

• Are the controls suitable for the target audience?
• Will users navigate through the game the way that was intended (user flow)?
• Are we onboarding players effectively?
• Are players able to make an IAP?

Usability playtest: When is it used?

A usability playtest could be conducted as soon as a prototype is ready. The playtest could be run on a core game mechanic, or perhaps later on the game's tutorial.

Typical Assets required:

• A playable build

Usability playtest: How do you do it?

Real players are recruited, normally six is a reasonable balance between reliable results and cost/time.

Session times are usually one hour and split into:

- 40 minutes of play;
- 15 minutes of interview;
- with five minutes for signing non-disclosure agreements and briefing the player.

Usability playtest: How do you do it?

After the briefing, the player is left alone with the game;

Two user researchers would observe from a remote room.

All video is recorded and streamed to the client if necessary. Each researcher makes their own notes on the player's behaviour, which can be compared later.

Questions asked during the interview are structured around questions from the developers and also with the intention of exploring what caused the players to behave as they did.

Project timeline → (Concept Test, UX Competitor Analysis, Collaborative Design, Usability Expert Analysis, Usability Playtest, Large-scale Playtest, Engagement Diaries, Analytics-driven Playtest)

Rows: Monetization, Player Experience, Usability, Understanding, Appeal

Methods and Lenses

5. Large-scale playtest

Large-scale playtest: What is it? Why should you do it?

Are players enjoying the designed experience of your game?

This is the core question that a large-scale playtest is intended to answer.
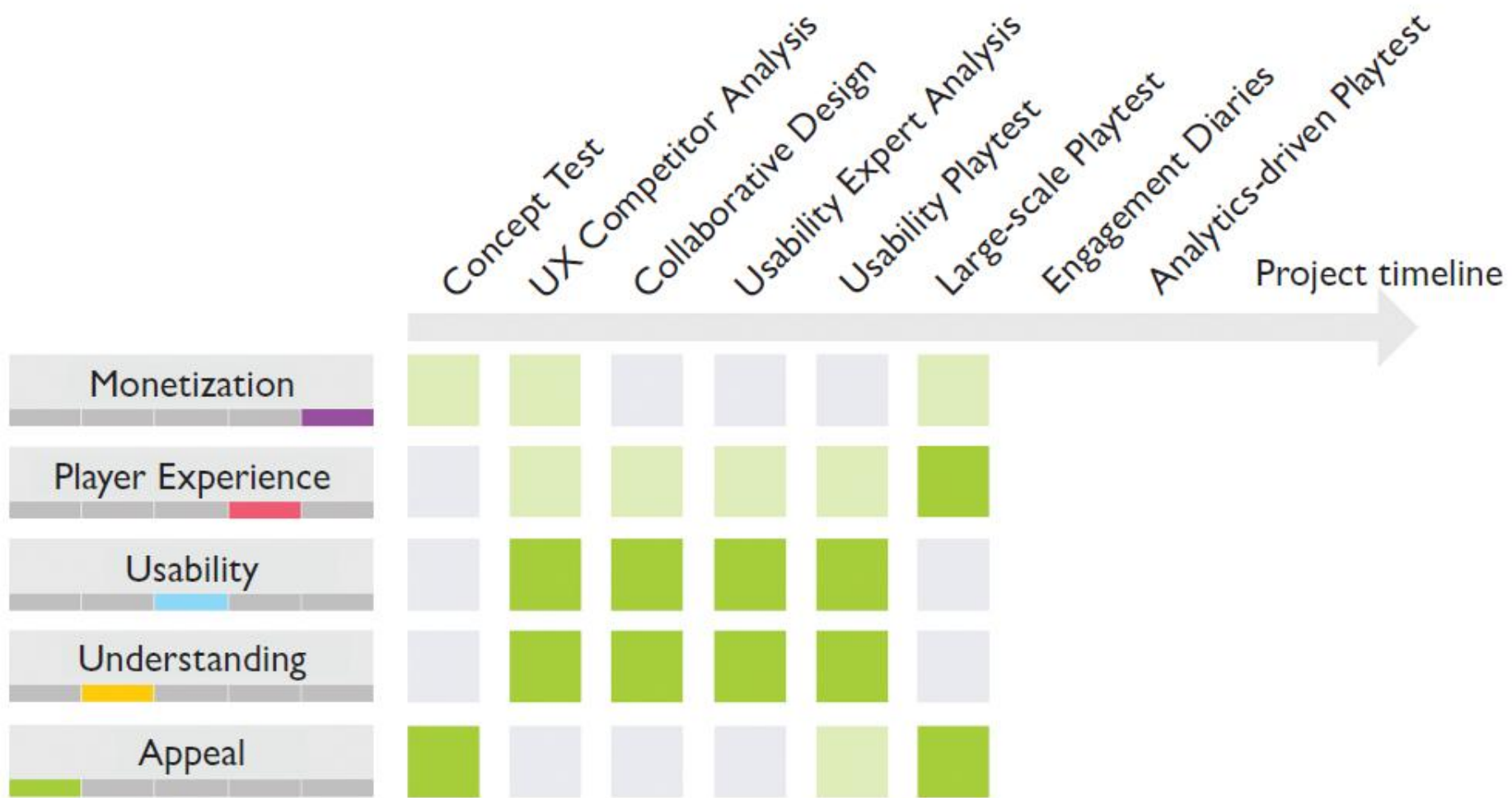
Large-scale playtest: When is it used?

A large-scale playtest is typically conducted during the latter half of production.

All usability issues should ideally have been **removed:** The focus is now on assessing the player experience.

Typical Assets required:

• A playable build complete with as many features as possible; polish is **not required**.

Project timeline →

	Concept Test	UX Competitor Analysis	Collaborative Design	Usability Expert Analysis	Usability Playtest	Large-scale Playtest	Engagement Diaries	Analytics-driven Playtest
Monetization								
Player Experience								
Usability								
Understanding								
Appeal								

Methods and Lenses

6. Engagement diaries

Engagement diaries: What is it? Why should you do it?

A diary study method is a longitudinal approach to assessing specific aspects of a game over longer periods.

Ideal for F2P games, as developers are keen not only on the early experience but also on the longer-term retention issues.

Retention figures in F2P games would typically be assessed on Days 1, 7, and 30, and although analytics will capture the raw numbers, they will not explain what is the cause of the figures.

Engagement diaries: What is it? Why should you do it?

A longitudinal diary can be thought of as an <u>ideal complement to analytics</u>:

Metrics can identify **<u>where the problem is</u>** and diary studies can help explain **<u>why the issue is happening</u>**.