

### **AUDIENCE REPORT**

**EXAMPLE** 



# WE COMBINED PSYCHOMETRIC METHODS AND A WEB APP TO COLLECT MOTIVATION DATA FROM OVER 300,000 GAMERS



#### **Scale Development**

We used established psychometric techniques and data from 30,000 gamers to identify key gaming motivations and create a reliable assessment tool.



#### **Online Profile Tool**

We created an online app where gamers can fill out a 5-minute survey and receive a personalized report of their gaming motivations that they can then share on social media.



#### **Our Data Set**

Using our online app, we have collected the demographic and motivation data from over 300,000 gamers worldwide along with their favorite genres and game titles.

#### Our Expertise in Gamer Motivation Research

For over a decade, Nick Yee and Nic Ducheneaut have been studying the motivations and behavior of gamers. They have over 40 peer-reviewed papers on gaming and virtual worlds. Nick Yee's paper on the motivations of online gamers has been cited over 1,400 times.

# OUR GAMER MOTIVATION MODEL REVEALED 6 KEY PAIRS OF MOTIVATIONS THAT DIFFERENTIATE PLAYERS FROM EACH OTHER













Action "Boom!"	<b>Social</b> "Let's Play Together"	<b>Mastery</b> "Let Me Think"	Achievement "I Want More"	<b>Immersion</b> "Once Upon a Time"	Creativity "What If?"
Destruction Guns. Explosives. Chaos. Mayhem.	Competition Duels. Matches. High on Ranking.	Challenge Practice. High Difficulty. Challenges.	Completion Get All Collectibles. Complete All Missions.	Fantasy Being someone else, somewhere else.	Design Expression. Customization.
Excitement Fast-Paced. Action. Surprises. Thrills.	Community Being on Team. Chatting. Interacting.	Strategy Thinking Ahead. Making Decisions.	Power Powerful Character. Powerful Equipment.	Story Elaborate plots. Interesting characters.	Discovery Explore. Tinker. Experiment.

#### **AUDIENCE REPORT EXAMPLE**

#### Gender

Female: 96% / Male: 4%

Overwhelmingly female

#### • Age

o Median: 39.5

Much older than average

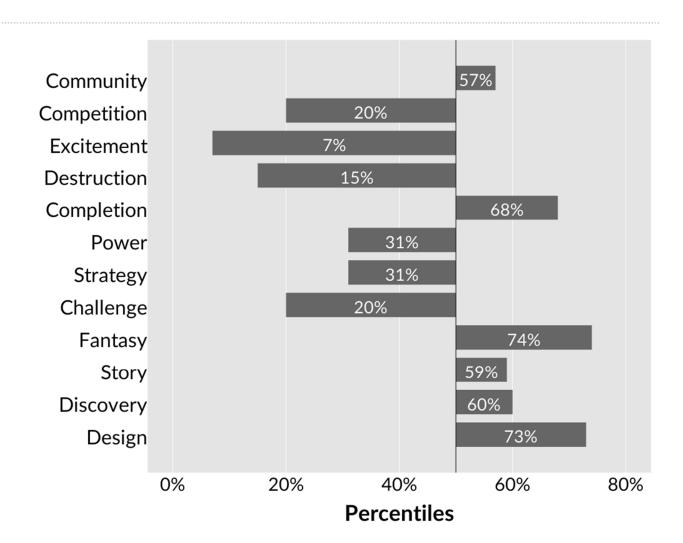
#### Gamer Type

o Casual: 50% / Core: 50% / Hardcore: 0%

Has a high proportion of casual gamers

#### Gaming Frequency

- Typical number of days per week where they play games for more than 30 minutes
- o 0-1 day: 12%
- o 2-3 days: 27%
- o 4-5 days: 19%
- o 6-7 days: 42%



#### **Motivation Profile**

- Is most interested in Fantasy (being someone else, somewhere else) and Design (experiment, tinker, explore).
- Is least interested in Excitement (fast-paced, thrilling, surprises) and Destruction (guns, chaos, mayhem).

#### POPULAR GAMES EXAMPLE

Game	Score
Rust	23.88
ARK: Survival Evolved	9.27
Garry's Mod	6.48
Smite	4.92
Warframe	4.35
Left 4 Dead (series)	4.21
Gears of War (series)	4.04
Unreal Tournament (series)	3.96
Star Wars Galaxies	3.90

Game	Score
Payday 2	3.75
CS: GO	3.37
Minecraft	2.57
Command & Conquer (series)	2.39
Team Fortress 2	2.37
Terraria	2.35
Heroes of the Storm	2.11
Halo 3	2.08
Dota 2	1.89

QF Score: An odds ratio calculated by dividing the frequency of games in the audience sample by the baseline frequency.

This adjustment is necessary because the same highly popular games tend to be mentioned by every sub-group (e.g., World of Warcraft). By accounting for the baseline popularity, we can filter out this base rate bias and identify the most disproportionately popular games within the sub-group.

Thus, a QF Score of 2 would mean that this audience mentions a game as a favorite at twice the baseline frequency.

#### **UNPOPULAR GAMES EXAMPLE**

Game	Score
DotA (series)	0.2
Counter-Strike: Global Offensive	0.23
Warframe	0.23
Metal Gear Solid 3: Snake Eater	0.25
Europa Universalis IV	0.27
Dark Souls II	0.3
Dark Souls (series)	0.34
Metal Gear Solid (series)	0.37
Crusader Kings II	0.38
Half-Life 2	0.39

Game	Score
X-COM (series)	0.4
StarCraft II: Wings of Liberty	0.41
Monster Hunter (series)	0.42
Dota 2	0.48
Metal Gear Solid V: The Phantom Pain	0.48
Red Dead Redemption	0.48
Planescape: Torment	0.49
Final Fantasy VIII	0.5
Team Fortress 2	0.5
Shin Megami Tensei: Persona 4	0.51

Conversely, we can identify the games that are disproportionately unpopular within this audience—i.e., games that are often mentioned in the full dataset that have very low occurrence within this sample.

Thus, a score of 0.5 means this game is mentioned only half as frequently as in the full dataset.

These games exemplify the motivations and mechanics that this audience generally stays away from.

Together with the popular games list, this table is helpful in painting a more concrete picture of the design opportunity space for this audience.



## **APPENDIX**

**DETAILS OF SAMPLE & FACTORS** 

#### HOW WE CREATED THE MOTIVATION MODEL

#### **Literature Review**

Underlying inventory items were generated based on a literature review of models and frameworks used in academia and industry. These include:

- Intuition/Observational models (e.g., Bartle's Player Types)
- Theory-driven models (e.g., PENS based on Self-Determination Theory)
- Factor analytic models (e.g., Sherry's Uses & Gratifications Model).

#### **Factor Analysis**

Factor analysis provides an empirical method for understanding how gaming preferences cluster together—which motivations are related and which motivations are relatively independent.

#### **Data Collection & Model Iteration**

We created an online app that allows gamers to take a 5-minute survey and receive a personalized motivation profile. We used factor analysis to iterate on inventory items until stable factors emerged and multiple high-loading inventory items were identified for each factor.

#### **Validity**

The assessment tool used for these motivations has high internal reliability (Cronbach's Alpha of .75 or higher), high test-retest reliability (r = .73), and correlates moderately well with theoretically-aligned personality traits on the Big 5 (a standardized personality assessment model used broadly in psychology research). See slide "Scale Validity/Reliability" for details.

#### **SAMPLE NOTES**

#### 283,384 gamers (unique IP addresses)

- Gender: 80% Male / 19% Female / 1% Non-Binary
- Age: Median = 25, Range = 13-80
- Gamer Type: Casual 11% / Core 68% / Hardcore 21%

#### Gamers recruited via Gamer Motivation Profile

- Participants took a 5-minute survey to receive a customized report of their gaming motivations, and then could share their profile via social media.
- No other incentive (financial or otherwise) was provided to respondents.
- ~80% of our gamers were recruited via social media sharing of the gaming motivation profiles.

#### Geographic distribution

• United States (125k), Canada (14.8k), United Kingdom (13.9k), Brazil (9.4k), Australia (8.5k), Italy (7.2k), Poland (6.8k), Indonesia (6.6k), Denmark (5.8k), Philippines (5k), Germany (4.9k), Sweden (4.4k), France (3.6k), Singapore (3.6k), Netherlands (3.1k), Spain (2.4k), Turkey (2.3k), Malaysia (2.2k), Russia (2.2k), Chile (2.0k), Norway (1.9k) ...

#### **DETAIL ACTION CLUSTER**

#### Destruction Excitement Gamers who score high on this Gamers who score high on this component are agents of chaos and destruction. They love having many tools at their disposal to blow things up adrenaline rush. They want to be and cause relentless mayhem. They enjoy games with lots of guns and explosives.

They gravitate towards titles like Call of Duty and Battlefield. And if they accidentally find themselves in games like The Sims, they are the ones who figure out innovative ways to get their Sims killed.

component enjoy games that are **fast**paced, intense, and provide a constant surprised. They want gameplay that is full of action and thrills, and rewards them for rapid reaction times.

While this style of gameplay can be found in first-person shooters like *Halo*, it can also be found in games like Street Fighter and Injustice, as well as energetic platformers like BIT.TRIP RUNNER.



#### **DETAIL SOCIAL CLUSTER**

#### Competition

Gamers who score high on this component enjoy competing with other players, often in <u>duels, matches, or</u> team-vs-team scenarios.

Competitive gameplay can be found in titles like *Starcraft*, *League of Legends*, or the PvP Battlegrounds in *World of Warcraft*. But competition isn't always overtly combative; competitive players may care about being acknowledged as the best healer in a guild, or having a high ranking/level on a Facebook farming game relative to their friends.

#### Community

Gamers who score high on Community enjoy socializing and collaborating with other people while gaming. They like chatting and grouping up with other players.

This might be playing *Portal 2* with a friend, playing *Mario Kart* at a party, or being part of a large guild/clan in an online game. They enjoy being part of a team working towards a common goal. For them, games are an integral part of maintaining their social network.



#### **DETAIL MASTERY CLUSTER**

#### Challenge

Gamers who score high on Challenge enjoy playing games that rely heavily on skill and ability. They are persistent and take the time to practice and hone their gameplay so they can take on the most difficult missions and bosses that the game can offer.

These gamers play at the highest difficulty settings and don't mind failing missions repeatedly in games like *Dark Souls* because they know it's the only way they'll master the game. They want gameplay that constantly challenges them.

#### Strategy

Gamers who score high on this component enjoy games that require careful decision-making and planning. They like to think through their options and likely outcomes. These may be decisions related to balancing resources and competing goals, managing foreign diplomacy, or finding optimal long-term strategies.

They tend to enjoy both the tactical combat in games like XCOM or Fire Emblem, as well as seeing their carefully-devised plans come to fruition in games like Civilization, Cities: Skylines, or Europa Universalis.



#### **DETAIL ACHIEVEMENT CLUSTER**

# Completion

Gamers with high Completion scores want to <u>finish everything the game has</u> to offer. They try to complete every mission, find every collectible, and discover every hidden location.

For some players, this may mean completing every listed achievement or unlocking every possible character/move in a game. For gamers who score high on Design, this may mean collecting costumes and mounts in games like *World of Warcraft*.

#### Power

Gamers who score high on this component strive for power in the context of the game world. They want to become as powerful as possible, seeking out the tools and equipment needed to make this happen.

This may mean maxing stats or acquiring the most powerful weapons. Power and Completion often together, but some players enjoy collecting cosmetic items without caring about power, and some players prefer attaining power through strategic optimization rather than grinding.



#### **DETAIL IMMERSION CLUSTER**

# Fantasy Gamers who score high on Fantasy want their gaming experiences to allow them to become someone else, somewhere else. They enjoy the sense of being immersed in an alter ego in a Story Gamers who score high on Story want games with elaborate storylines and a cast of multidimensional characters with interesting back-stories and personalities.

These gamers enjoy games like *Skyrim*, *Fallout*, and *Mass Effect* for their fully imagined alternate settings.

believable alternate world, and enjoy

exploring a game world just for the

sake of exploring it.

They take the time to delve into the back-stories of characters in games like *Dragon Age* and *Mass Effect*, and enjoy the elaborate and thoughtful narratives in games like *The Last of Us* and *BioShock*. Gamers who score low on Story tend to find dialogue and quest descriptions to be distracting and skip through them if possible.



#### **DETAIL CREATIVITY CLUSTER**

# Gamers who score high on Discovery are constantly asking "What if?" For them, game worlds are fascinating their

In an MMO, they might swim out to the edge of the ocean to see what happens. In *MineCraft*, they might experiment with whether crafting outcomes differ by the time of day or proximity to zombies. They "play" games in the broadest sense of the word, often in ways not intended or imagined by the game's developers.

contraptions to open up and tinker

with.

#### Design

Gamers who score high on this component want to <u>actively express</u>
<u>their individuality</u> in the game worlds they find themselves in.

In games like *Mass Effect*, they put a lot of time and effort in the character creation process. In city-building games or space strategy games, they take the time to design and customize exactly how their city or spaceships look. To this end, they prefer games that provide the tools and assets necessary to make this possible and easy to do.



