

PLAYER SEGMENT ANALYSIS

EXAMPLE REPORT

WE COMBINED PSYCHOMETRIC METHODS AND A WEB APP TO COLLECT **MOTIVATION DATA FROM OVER 400,000 GAMERS**



An Empirical Model

Our motivation model (next slide) was developed via established psychometric techniques, such as factor analysis—a statistical method that identifies how variables cluster together.



A Unique Data Set

Over 400,000 gamers worldwide have participated in our Gamer Motivation Profile, providing data on their motivations, demographics, and their favorite games.



Actionable Insights

Our data links game titles/franchises with demographic and motivation variables, allowing us to analyze the motivations of game audiences to produce data-driven insights.

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.

QUANTIC FOUNDRY'S **GAMER MOTIVATION MODEL** BASED ON DATA FROM OVER 400,000 VIDEO GAMERS REVEALED 6 KEY PAIRS OF MOTIVATIONS



Action “Boom!”	Social “Let’s Play Together”	Mastery “Let Me Think”	Achievement “I Want More”	Immersion “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.

Find detailed description of each motivation in the appendix at the end of this report.

AUDIENCE SAMPLE

For this player segment analysis, Quantic Foundry analyzed survey data from XXXX gamers from the following game titles and franchises:

- Game Title A
- Game Title B
- Game Franchise C
- Game Franchise D

We conducted cluster analysis on the audience data (both demographic and motivation variables) to identify distinct player segments within the audience.

See the Appendix for details on the clustering method, the data collection, and description of the motivations in our model.

Skirmisher



18%

Tactician



55%

World Designer



27%

Motto

“I enjoy the adrenaline rush of fast-paced team-based matches.”

“I am focused on leveling up and accumulating power. I like gameplay where thinking and planning are rewarded.”

“I want a piece of an immersive alternate world that I can customize and where I can express myself.”

Demographic Sketch

Almost entirely men in their late teens and early 20s, with a high proportion of hardcore gamers.

A balanced mix of men and women in their mid-20s, most of whom identify as core gamers and a few as hardcore gamers.

Mostly women in their late 30s, with a high proportion of casual gamers.

Primary Motivations

Competition + Community

Power + Strategy

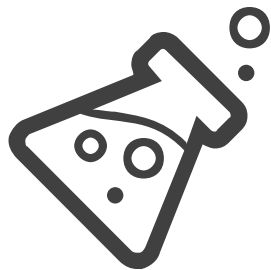
Design + Fantasy

Popular Games

Halo, Call of Duty,
Apex Legends

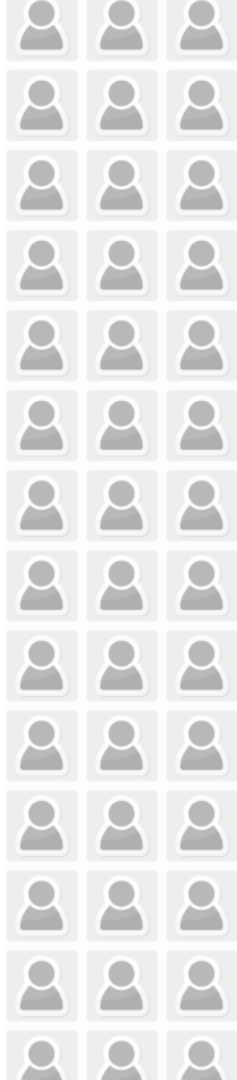
Fire Emblem,
Pillars of Eternity

Animal Crossing, The Sims,
Harvest Moon



SKIRMISHER (18%)

“I enjoy the adrenaline rush of fast-paced team-based matches.”



SKIRMISHER

Skirmishers enjoy fast-paced, explosive, team-based competition, but they care very little about world-building features.

Skirmishers are action-oriented, social gamers who love the adrenaline rush of gaming, whether it's the frenetic pacing, explosions, or charging at enemies. They enjoy the immediate, psychological arousal of video games.

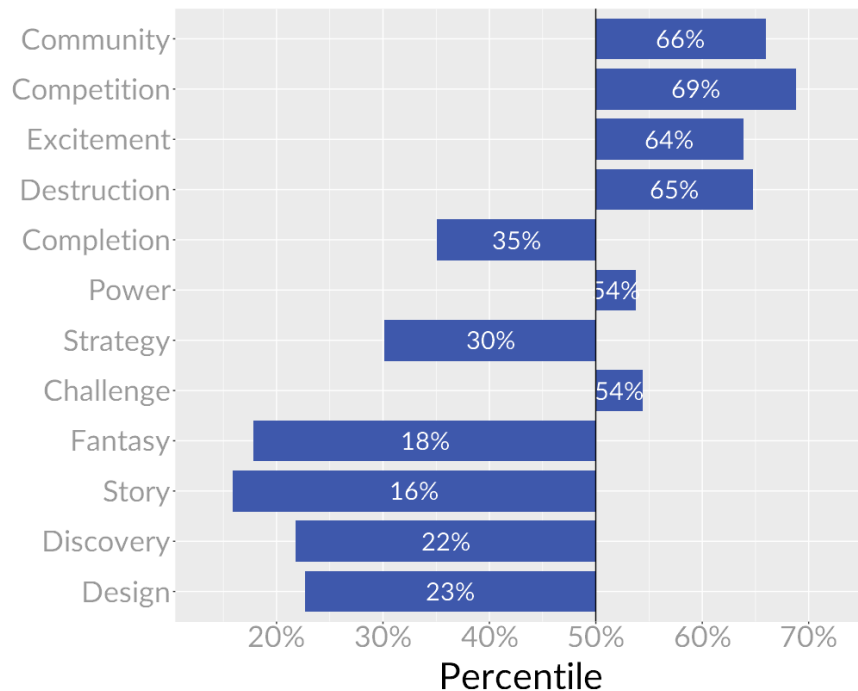
While they moderately enjoy power progression and mastering core game skills, they tend to not have the patience for completing tasks/quests and thinking/planning ahead.

Skirmishers find very little appeal in world-building features—e.g., rich lore, stories, interesting NPCs, an interesting world to explore, and customization opportunities. To them, this is all unnecessary fluff in a video game. In their popular games list, we find lots of online shooters that offer the immediacy of guns-blazing matches in fairly generic settings (such as CoD, Halo, Fortnite, and PUBG).

Compared to the other segments, Skirmishers have a moderately lower % of female gamers.

SKIRMISHER PROFILE

- **Gender**
 - Male: 92% / Female: 7% / Non-Binary: 2%
 - Moderately lower % of female gamers than average (13%)
- **Age**
 - Median: 26
 - Is right around the average (25.6)
 - Mean: 27.31, SD: 8.15
- **Gamer Type**
 - Casual: 3% / Core: 62% / Hardcore: 34%
 - Slightly higher % of hardcore gamers than average (30%)
- **Gaming Frequency**
 - Typical number of days per week where they play games for more than 30 minutes
 - 0-1 day: 2%
 - 2-3 days: 17%
 - 4-5 days: 28%
 - 6-7 days: 52%
 - Slightly lower gaming frequency than average



Motivation Profile

- Is most interested in Competition (duels, matches, leader boards) and Community (chatting, teamwork).
- Is least interested in Story (interesting narrative, characters, lore) and Fantasy (being someone else, somewhere else).

SKIRMISHER POPULAR GAMES

Game	Score
Halo 5: Guardians	17.47
Call of Duty: WWII	12.05
Call of Duty: Black Ops 4	10.04
Middle-earth: Shadow of War	7.94
Apex Legends	6.52
Tom Clancy's Ghost Recon: Wildlands	6.43
Fortnite	6.18
PLAYERUNKNOWN'S BATTLEGROUNDS	4.86
Tom Clancy's The Division	4.45
Halo 3	4.35

Game	Score
Cuphead	4.31
Monster Hunter: World	4.28
Doom (2016)	4.15
Horizon Zero Dawn	4.05
Halo 2	3.85
Battlefield 1	3.65
Clash Royale	3.62
Super Mario Odyssey	3.57
Titanfall 2	3.44
Path of Exile	3.43

Score: The Score is an odds ratio calculated by dividing the frequency of each game in this sample by the baseline frequency. Thus, a QF Score of 2 would mean that this audience mentions a game as a favorite at twice the baseline frequency.

This adjustment is necessary because the same highly popular games tend to be mentioned by every sub-group (e.g., Skyrim). 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.

These games exemplify the motivations and mechanics that are most appealing for this audience.

SKIRMISHER UNPOPULAR GAMES

Game	Score
Dragon Age (series)	0.06
Dragon Age: Inquisition	0.07
Portal (series)	0.09
Final Fantasy IV	0.11
Crusader Kings II	0.16
Fire Emblem (series)	0.17
The Sims 4	0.17
Resident Evil (series)	0.18
The Witcher (series)	0.18
Age of Empires II: The Age of Kings	0.19

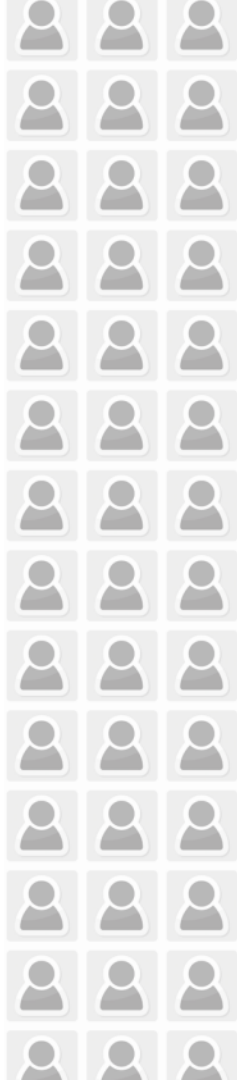
Game	Score
Cities: Skylines	0.19
Batman: Arkham Knight	0.2
Assassin's Creed II	0.21
Star Wars: Knights of the Old Republic (series)	0.22
Super Mario (series)	0.22
Tetris	0.22
The Legend of Zelda: Twilight Princess	0.23
XCOM: Enemy Unknown	0.23
Fallout 3	0.24
Life is Strange	0.25

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.



PLACEHOLDER PAGES

In an actual report, we would then provide the audience profile for each of the other player segments. These profiles (like the one for the Duelist) would contain:

- A descriptive sketch of what motivates this segment and how they compare with the other segments.
- The demographic profile
- The motivation profile chart
- The ranked list of games that are disproportionately popular and unpopular within this segment.



APPENDIX

DETAILS OF SAMPLE &
MOTIVATION FACTORS

DETAIL ACTION CLUSTER

Destruction	Excitement
<p>Gamers who score high on this component are <u>agents of chaos and destruction</u>. They love having many tools at their disposal to blow things up and cause relentless mayhem. They enjoy games with lots of guns and explosives.</p> <p>They gravitate towards titles like <i>Call of Duty</i> and <i>Battlefield</i>. And if they accidentally find themselves in games like <i>The Sims</i>, they are the ones who figure out innovative ways to get their Sims killed.</p>	<p>Gamers who score high on this component enjoy games that are <u>fast-paced, intense, and provide a constant adrenaline rush</u>. They want to be surprised. They want gameplay that is full of action and thrills, and rewards them for rapid reaction times.</p> <p>While this style of gameplay can be found in first-person shooters like <i>Halo</i>, it can also be found in games like <i>Street Fighter</i> and <i>Injustice</i>, as well as energetic platformers like <i>BIT.TRIP RUNNER</i>.</p>



DETAIL SOCIAL CLUSTER

Competition	Community
<p>Gamers who score high on this component enjoy competing with other players, often in <u>duels, matches, or team-vs-team scenarios</u>.</p> <p>Competitive gameplay can be found in titles like <i>Starcraft</i>, <i>League of Legends</i>, or the PvP Battlegrounds in <i>World of Warcraft</i>. 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.</p>	<p>Gamers who score high on Community enjoy <u>socializing and collaborating with other people</u> while gaming. They like chatting and grouping up with other players.</p> <p>This might be playing <i>Portal 2</i> with a friend, playing <i>Mario Kart</i> 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.</p>



DETAIL MASTERY CLUSTER

Challenge	Strategy
<p>Gamers who score high on Challenge enjoy playing <u>games that rely heavily on skill and ability</u>. 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.</p> <p>These gamers play at the highest difficulty settings and don't mind failing missions repeatedly in games like <i>Dark Souls</i> because they know it's the only way they'll master the game. They want gameplay that constantly challenges them.</p>	<p>Gamers who score high on this component enjoy games that require <u>careful decision-making and planning</u>. 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.</p> <p>They tend to enjoy both the tactical combat in games like <i>XCOM</i> or <i>Fire Emblem</i>, as well as seeing their carefully-devised plans come to fruition in games like <i>Civilization</i>, <i>Cities: Skylines</i>, or <i>Europa Universalis</i>.</p>



DETAIL **ACHIEVEMENT CLUSTER**

Completion	Power
<p>Gamers with high Completion scores want to <u>finish everything the game has to offer</u>. They try to complete every mission, find every collectible, and discover every hidden location.</p> <p>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 <i>World of Warcraft</i>.</p>	<p>Gamers who score high on this component strive for <u>power in the context of the game world</u>. They want to become as powerful as possible, seeking out the tools and equipment needed to make this happen.</p> <p>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.</p>



DETAIL IMMERSION CLUSTER

Fantasy	Story
<p>Gamers who score high on Fantasy want their gaming experiences to allow them to <u>become someone else, somewhere else.</u> They enjoy the sense of being immersed in an alter ego in a believable alternate world, and enjoy exploring a game world just for the sake of exploring it.</p> <p>These gamers enjoy games like <i>Skyrim</i>, <i>Fallout</i>, and <i>Mass Effect</i> for their fully imagined alternate settings.</p>	<p>Gamers who score high on Story want games with <u>elaborate storylines and a cast of multidimensional characters</u> with interesting back-stories and personalities.</p> <p>They take the time to delve into the back-stories of characters in games like <i>Dragon Age</i> and <i>Mass Effect</i>, and enjoy the elaborate and thoughtful narratives in games like <i>The Last of Us</i> and <i>BioShock</i>. Gamers who score low on Story tend to find dialogue and quest descriptions to be distracting and skip through them if possible.</p>



DETAIL CREATIVITY CLUSTER

Discovery

Gamers who score high on Discovery are constantly asking “What if?” For them, game worlds are fascinating contraptions to open up and tinker with.

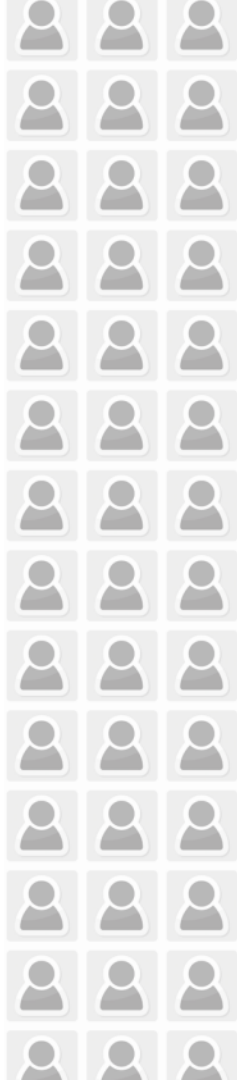
In an MMO, they might swim out to the edge of the ocean to see what happens. In *MineCraft*, they might experiment with whether crafting outcomes differ by the time of day or proximity to zombies. They “play” games in the broadest sense of the word, often in ways not intended or imagined by the game’s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

Design

Gamers who score high on this component want to actively express their individuality 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.





MOTIVATION SPECTRUMS

The motivation factors in our model are spectrums. In the same way that Introverts don't have "less personality" than Extraverts, scoring low on a motivation doesn't necessarily mean these gamers don't have equally strong preferences

The following charts provide additional details on each motivation:

- What does scoring low on each motivation mean?
- What are the anchors on both ends of each motivation spectrum?
- What are examples of games that have high and low scores for each motivation?

ACTION-SOCIAL SPECTRUMS



Preferences	Games Examples	<u>Motivation</u>	Game Examples	Preferences
<p><u>Independence</u> Single-player. Soloable quests. Be in full control.</p>	<p>Lego Harry Potter, Hatoful Boyfriend, Farm Heroes Saga</p>	<p>Community <i>Shared Experience</i></p>	<p>Destiny, Battlefield, Final Fantasy XIV, Rainbow Six Siege,</p>	<p><u>Teamwork</u> Grouping up. Chatting. Social interaction. Collaboration.</p>
<p><u>Non-Adversarial</u> Non-competitive. No rankings/duels against human players.</p>	<p>Myst, Gone Home, Dragon Age II, Lego Dimensions</p>	<p>Competition <i>Social Comparison</i></p>	<p>League of Legends, DotA 2, Call of Duty, CS:GO</p>	<p><u>High Conflict</u> Adversarial. Arenas. Duels. Matches. Leaderboards. Rankings.</p>
<p><u>Calm</u> Turn-based. Can be paused. Relaxed. Predictable. Low visual stimulation.</p>	<p>Civilization, Myst, Master of Orion II, Europa Universalis</p>	<p>Excitement <i>Novelty</i></p>	<p>CS:GO, Call of Duty, Super Smash Bros. Melee</p>	<p><u>Thrilling</u> Fast-paced. Action-based. Surprising. Adrenaline rush.</p>
<p><u>Enduring</u> Idyllic. Serene. Evergreen. No weapons/gore. Typically G/PG content.</p>	<p>Professor Layton, Myst, Animal Crossing, Harvest Moon</p>	<p>Destruction <i>Entropy</i></p>	<p>Halo, Call of Duty, Destiny 2, Battlefield</p>	<p><u>Chaotic</u> Guns. Explosions. Mayhem. Carnage. Gore. Destructible environments.</p>

MASTERY-ACHIEVEMENT SPECTRUMS



Preferences	Games Examples	<u>Motivation</u>	Game Examples	Preferences
<p><u>Self-Driven</u> Decide what to do myself. Sandbox/open gameplay. Self-directed goals.</p>	<p>RimWorld, Victoria II, Kerbal Space Program, Cities: Skylines</p>	<p>Completion <i>Source of Goals</i></p>	<p>Dragon Nest, Aura Kingdom, Lego Dimensions, Final Fantasy</p>	<p><u>Task-Oriented</u> Complete tasks/quests. Collect stars/trophies and collectibles.</p>
<p><u>Flat Progression</u> Fully-developed characters from the start. Static. Level playing field.</p>	<p>Night in the Woods, The Longest Journey, Ico, 80 Days, Her Story</p>	<p>Power <i>Growth</i></p>	<p>World of Warcraft, League of Legends, Diablo III, Summoners War</p>	<p><u>Progression-Based</u> Start weak and grind. Level up character/stats. Upgrade weapons/spells.</p>
<p><u>Spontaneous</u> Reactive gameplay. Low cognitive load. Short time horizons.</p>	<p>The Sims, Disney Emoji Blitz, Mario Kart Wii, Covet Fashion</p>	<p>Strategy <i>Decision Complexity</i></p>	<p>StarCraft II, Crusader Kings II, Europa Universalis IV, Stellaris, Eve Online</p>	<p><u>Contemplative</u> Think. Plan. Complex decisions. Long-term strategies. Consider consequences.</p>
<p><u>Easy Fun</u> Quick to learn. Low skill barrier. Straightforward mechanics. No skill-based gates.</p>	<p>Oxenfree, Stardew Valley, The Longest Journey, Animal Crossing</p>	<p>Challenge <i>Skill Improvement</i></p>	<p>Super Smash Bros. Melee, DotA,osu!, Street Fighter V</p>	<p><u>Skill-Based</u> Steep learning curve. Complex moves/rules. Difficult missions, bosses.</p>

CREATIVITY-IMMERSION SPECTRUMS



Preferences	Games Examples	<u>Motivation</u>	Game Examples	Preferences
<p><u>Generic/Abstract</u> Generic or abstract setting. 2D/retro graphics. Minimal world-building/lore.</p>	<p>Counter-Strike, Street Fighter, Candy Crush Saga, World of Tanks</p>	<p>Fantasy <i>Suspending Disbelief</i></p>	<p>Mass Effect, Dragon Age, Star Wars: KOTOR, Fallout</p>	<p><u>Deep Lore</u> Rich world lore/history. Compelling alternate world. Visually immersive world.</p>
<p><u>Open-Ended</u> No overarching narrative. Basic/stock NPCs. Blank canvas to build on.</p>	<p>Factorio, SimCity, Transport Tycoon, Quake III Arena</p>	<p>Story <i>Web of Human Drama</i></p>	<p>Mass Effect, Dragon Age, Life is Strange, Persona 4</p>	<p><u>Scripted Drama</u> Elaborate narrative arc. Large cast of characters with motive/personality.</p>
<p><u>Practical</u> Fully-exposed rulesets. Minimal unknown variables and possible interactions.</p>	<p>FIFA, Call of Duty, Mahjong, Scrabble</p>	<p>Discovery <i>The Unknowns</i></p>	<p>The Elder Scrolls, Riven, Fallout, Legend of Zelda</p>	<p><u>Curious</u> Explore world. Find hidden secrets/treasures. Experiment with objects. Tinker.</p>
<p><u>Curated</u> Fixed, but often highly stylized avatar. None or few customization opportunities.</p>	<p>Braid, Spelunky, Super Meat Boy, Super Mario Galaxy 2</p>	<p>Design <i>Expressing Individuality</i></p>	<p>Guild Wars 2, The Sims, The Elder Scrolls Online, Animal Crossing</p>	<p><u>Customizable</u> Express individuality. Customize avatar/house. Lots of skins/accessories.</p>

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

400,000+ 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) ...



QUANTIC
FOUNDRY

