

# Understanding the Modern Gamer

## What Google search data says about gamer behavior

### Introduction: An Evolution in Behavior

In recent years, the video game industry has significantly transformed due to the emergence of new gaming platforms, the rise of digital content, and the advancement of online distribution. In response to this evolving landscape, publishers have re-allocated their resources to fewer, but larger games with rich content that can be delivered to consumers at any time and across multiple platforms, from consoles to mobile devices. This radical industry shift has intensified competition and impacted how gamers interact with the biggest titles.

At Google, we focus on understanding user behavior, and search engine data provides a unique insight into this evolution. Search data analysis is representative of gamer behavior for 2 reasons: (1) millions of gamers use search engines, providing us with an unparalleled data set and, (2) gamers are incredibly savvy Internet users whose searches reveal an extraordinarily high level of intention.

To identify meaningful gamer insights, we tapped into this massive database of intent, and analyzed hundreds of millions of video game searches that occurred on desktops and mobile devices (including both phones and tablets) for the top 20 selling games of 2010 and 2011.\*

Our findings are segmented into 2 parts:

- **Part 1:** Changes in Digital Engagement with Top Titles
- **Part 2:** Exploring the Predictive Power of Search – From Digital Engagement to Physical Sales

### Key Insights

- Digital engagement with top-tier games during the 10 months around release is higher than ever – desktop searches per gamer increased 20% y/y and mobile searches grew 168% y/y
- Engagement is shifting to the 6 months pre-launch as gamers research which titles to purchase: in 2011, 4 in 10 searches occurred during this phase
- Gamers seek different information as they proceed through the purchase path – they care about publisher-released assets during pre-launch, advancement information (such as tips) during launch, and extension content (such as DLC) during post-launch
- For major franchise titles, engagement is extending beyond the traditional release cycle to year-round interaction
- Interaction with marquee titles on mobile devices is rapidly growing: in 2011, 10% of searches happened on mobile
- Gamers leverage mobile as a purchase device and secondary screen – 1 in 5 buy searches during launch and 27% of tips searches during post-launch took place on mobile
- Desktop engagement patterns closely align with game unit sales trends (.92 correlation); AdWords clicks in the 10 months surrounding launch predict 84% of game unit sales\*\*

# Part 1: Changes in Digital Engagement with Top Titles

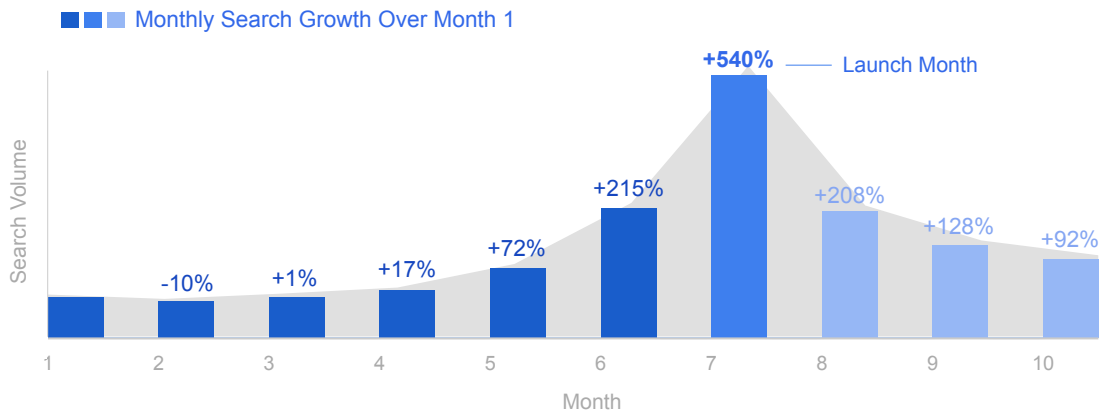
## Engagement is Growing

Our findings reveal that gamers are interacting on desktops with the biggest titles more than ever. In 2011, desktop searches per gamer grew 20% y/y. Additionally, desktop search volume for marquee titles increased 29% y/y, outpacing the 8% growth y/y in console gamers online.

**+20%**  
increase y/y in desktop searches per gamer

Gamers' engagement with triple-A titles follows a bell-curve, as depicted by the gray area in chart 1. The overlaid blue bars show monthly search growth relative to total searches in month 1. Accordingly, engagement peaks during launch month (7), with searches in launch month being 540% greater than searches in month 1. Several of the games in our analysis made announcements six months ahead of launch, resulting in higher search volume in month 1 relative to month 2.

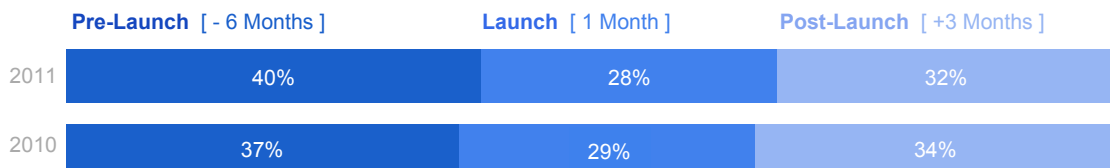
Chart 1 | Average Search Volume for Triple-A Game – Desktop



## More Competition, More Research

As gamers encounter a growing number of high-quality, competing titles, they increasingly conduct more searches during pre-launch to help them research which titles to purchase. In fact, recent third-party research found that the average gamer considers at least 2 different titles before making a final purchase decision.\*\* Our data shows that pre-launch search displayed the strongest growth y/y of 37%, whereas launch search increased 29% y/y and post-launch search rose 21% y/y. Similarly, chart 2 shows that the pre-launch share of total launch cycle searches grew from 37% in 2010 to 40% in 2011.

Chart 2 | Launch Cycle Search Distribution – Desktop



\*Nielsen gamer defined as 18+ male / female who (owns Xbox 360 OR PlayStation 3 OR Wii) AND (purchased a video game online / offline in past 6 months). Searches per gamer metric = total number of annual game title searches for top 20 selling games / total number of gamers online, according to Nielsen, 2010 and 2011.  
\*\*Video Game Purchase Behavior, Ipsos OTX, 2012.

## The Journey: Research, Purchase, and Extend

Search patterns demonstrate that gamers seek different information as they proceed through the purchase path. They research, purchase, and then extend their experiences.

Chart 3 | Top 5 Search Categories by Launch Phase – Desktop

Rank	Pre-Launch [ -6 Months ]	Launch [ 1 Month ]	Post-Launch [ +3 Months ]
1	Release Date	Tips	Tips
2	Trailer	Review	DLC
3	Image	Image	Image
4	Review	Release Date	Review
5	Demo	DLC	Video

During the 6 months pre-launch, gamers are most interested in researching official publisher-released content to help them decide which titles to buy. Gamers want to know when titles will be available, view trailers, see game art, and play short versions of games.

**~7 in 10**  
pre-launch searches are for publisher-released content

During launch, gamers who have purchased a title shift their attention to advancement. Players seek walkthroughs to navigate their experience and desktop wallpaper to make the game a part of their daily lives. Those who have not made a purchase decision seek reviews – both professional and amateur – to finalize their choices.

**#2**

DLC is the #2 most popular search category during post-launch

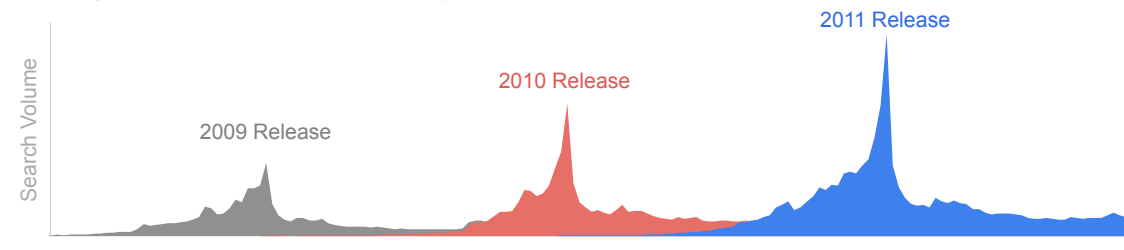
Reviews continue to be in demand even 4 months after release week as some gamers remain undecided. During post-launch, those who have already purchased encounter another decision requiring research – whether to extend their experience by buying downloadable content (DLC).

The journey outlined above is a cycle. After committing to a title, the research phase begins again as gamers decide what to buy next.

## The Evolving Path

For gamers who have purchased a franchise title, their research process quickly begins again. Our data reveals that gamers' engagement with marquee franchise titles is persistent, overlapping and growing between successive versions of games. This finding suggests that gamers who play franchise titles become active members of growing communities that are interested in year-round interaction with franchise content. Chart 4 exhibits the search volume for a top franchise title that released an installment in 2009, 2010, and 2011. Although this chart shows a single title, it is a trend we see across multiple franchises.

Chart 4 | Annual Search Volume for a Major Franchise Title – Desktop



\*To identify user values, our analysis used game title keywords combined with all relevant game content keywords, such as 'Battlefield 3 trailer', 'Skyrim wallpaper', 'Modern Warfare 3 review', and more. Standalone game title keywords were removed from this portion of the analysis due to their inability to reveal user intent.

## More Engagement on Mobile

To supplement their desktop experience, gamers increasingly turn to mobile devices to engage with top-tier titles. Our data shows that gamers rely on phones and tablets more and more to seek gaming-related information. In 2011, mobile search for marquee titles surged 168% y/y.

**+168%**  
increase y/y in mobile searches for top-tier games

We discovered that mobile engagement patterns closely align with those on desktops: engagement is higher than ever, interaction is shifting to pre-launch for research purposes, content sought by gamers varies throughout the purchase path, and engagement is persistent for franchise titles.

Chart 5 | Average Search Volume for Triple-A Game – Mobile

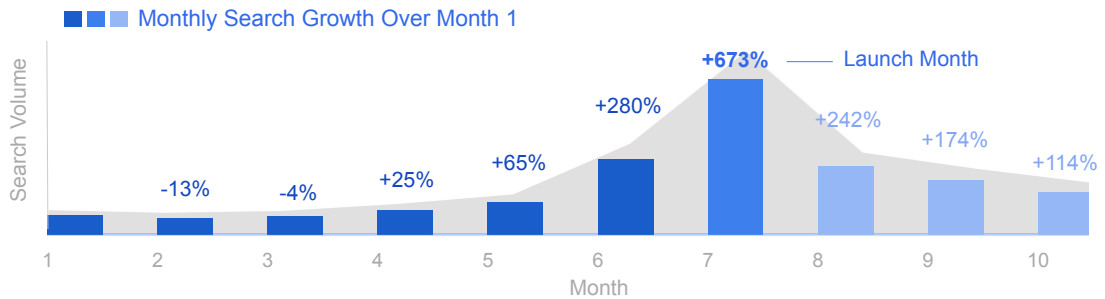


Chart 6 | Launch Cycle Search Distribution – Mobile

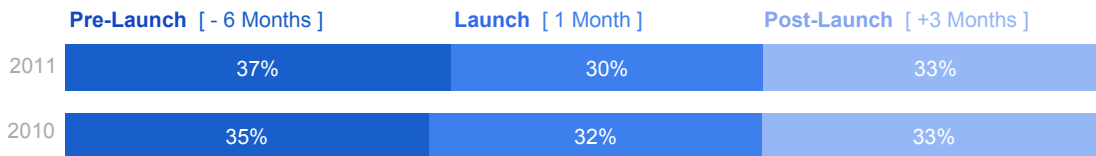


Chart 7 | Top 5 Search Categories by Launch Phase – Mobile

Rank	Pre-Launch [ - 6 Months ]	Launch [ 1 Month ]	Post-Launch [ +3 Months ]
1	Release Date	Tips	Tips
2	Trailer	Review	DLC
3	Review	Release Date	Review
4	Tips	DLC	Image
5	Demo	Buy	Video

Chart 8 | Annual Search Volume for a Major Franchise Title – Mobile



## Different Device, Different Use

We found that gamers leverage mobile as a purchase device and then as a secondary screen to provide assistance during gameplay. Mobile devices garnered: 15% of all pre-order category searches during pre-launch, 21% of all buy category\* searches during launch, and 24% of all buy category searches during post-launch. This finding is corroborated by recent research that revealed that 1 in 3 gamers purchases a game after researching it on a mobile device.\*\*

**1 in 5**  
buy searches during  
launch occurs  
on mobile

**27%**

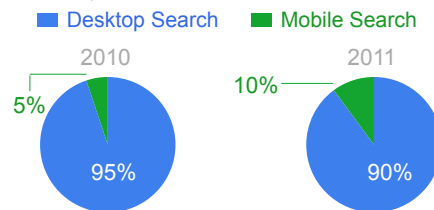
of tips searches  
during post-launch  
happen on mobile

Our data validates the belief that gamers, similar to all users, leverage mobile devices as secondary screens, often using those devices in conjunction with other larger screens, such as televisions, desktops, or laptops. We discovered that 23% of all tips-related searches during launch month and 27% of all tips-related searches during post-launch take place on mobile. Thus, gamers are using mobile devices to locate tips, cheats, hints, and walkthroughs while they are actually playing video games.

## Mobile Matters Now

Digital interaction on mobile devices with the biggest titles is becoming more and more popular among gamers. Chart 9 shows that mobile search doubled its share of platform searches in 2011, such that 1 in 10 searches happened on mobile devices.

Chart 9 | Annual Search Device Distribution



## Part 2: Exploring the Predictive Power of Search – From Digital Engagement to Physical Sales

### Search. Click. Purchase.

A search, at its core, signifies a user's request for more information. After entering a request in the search engine box, a user encounters a page of results showing multiple links that lead to various content sources. At this point, a user has the option to click on any of the appropriate search results. A click, therefore, represents a user's decision to further engage with a content source. Due to the millions of searches that occur for triple-A titles, we naturally wondered if the millions of associated AdWords clicks – each click a signal of continued engagement – were somehow predictive of top-tier game unit sales.

To address this question, we aggregated and analyzed AdWords clicks on brand keywords and unit sales for the top 25 selling games of 2011, according to NPD.\*\*\* Click data was segmented by time period in relation to launch month to determine if there is any particular time when clicks are more or less predictive of game unit sales.

\*The buy search category includes purchase-related terms combined with major game retailers, such as Best Buy, Walmart, GameStop, Amazon, and more.  
\*\*Video Game Purchase Behavior, Ipsos OTX, 2012.

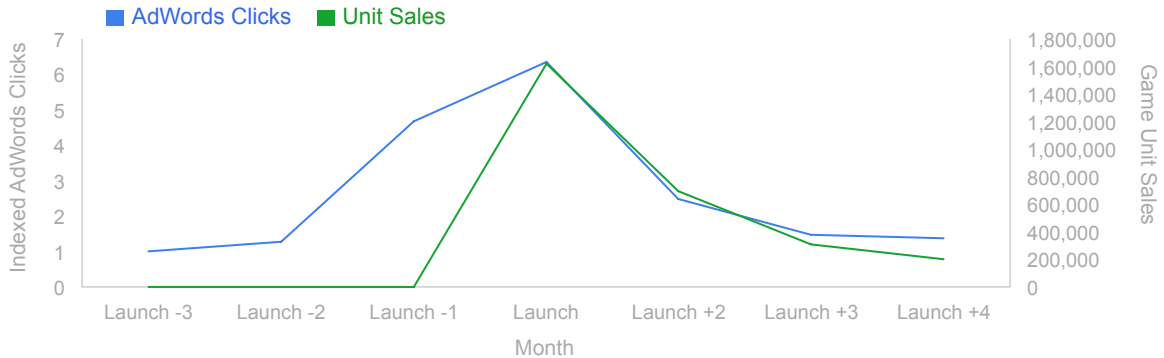
\*\*\*NPD console video game POS data, 2011.

Note on methodology: we looked at the top 25 console titles by units sold, and excluded fitness & dance titles because they have a different audience of non-core gamers. A 'click' was counted every time someone searched for the title of one of these games, an ad was served against that query, and the searcher clicked that ad. It does not discriminate between clicks on ads paid for by the publisher of that game and ads paid for by a third party, such as GameStop or Walmart. We believe this is still a sound analysis, because the click is still an indication of interest and intent on the part of the searcher.

We ran correlation analysis to find out whether there is a relationship between clicks and game units sold, and then conducted a single-variable regression analysis to see if clicks could actually be used to predict game sales.

Our data reveals a .92 correlation (on a scale of -1 to 1, 1 signifies perfect correlation) between clicks during the 10 month game launch cycle and game units sold during the first 4 months post-release, as illustrated in chart 10.

Chart 10 | AdWords Clicks + Game Unit Sales Correlation

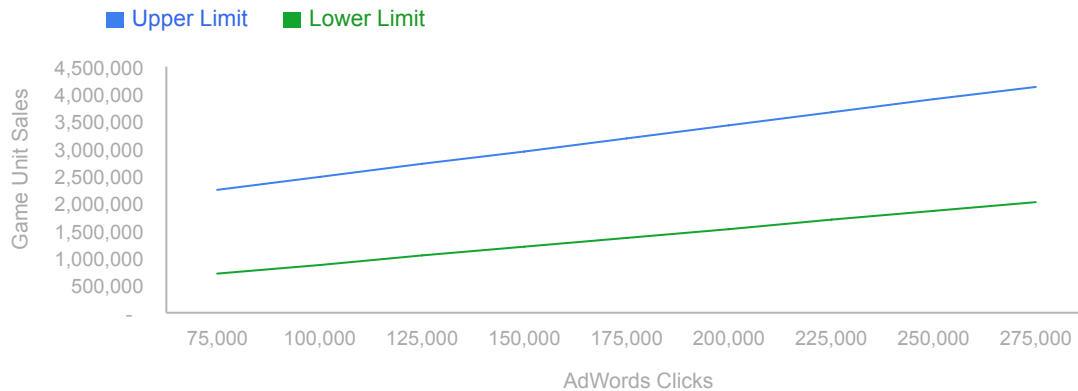


More importantly, our data demonstrates that 84% of sales can be predicted by all clicks during the 10 month launch cycle. We used the regression coefficient from our analysis to create a predictive model and found that if a game accrues 250,000 clicks in the 10 months around launch, it will likely sell between 2 and 4 million units in the first four months after release. Chart 11 displays the predicted range of game unit sales based on the number of AdWords clicks on game title keywords.

**2-4MM**

predicted range of unit sales for games that garner 250,000 AdWords brand clicks in the 10 months around launch

Chart 11 | AdWords Clicks + Predicted Game Unit Sales



Although user click data is a powerful predictor of game unit sales, we readily acknowledge that other factors – such as game quality, TV investment, online display investment, social buzz, and more – must be incorporated into our analysis to create a predictive model that is even more accurate and reliable. In the future, we plan to include such factors in a multi-variate model.

## Conclusion: Implications for the Gaming Community

Gamers increasingly leverage desktops and mobile devices to interact with marquee titles, actively conducting millions of searches to help them navigate the modern gaming landscape. In a world of ever-expanding choices, search helps them decide what to buy, learn how to play better, and even connect to the larger community surrounding their favorite game.

This ever present relationship between gamer and game may be digital, but it has implications for real-world sales. There is a quantifiable link between what people search for and what they buy that enables us to predict game sales.

Digital tools, such as search, offer gamers the unique ability to directly reach out to publishers and retailers. Publishers and retailers, in turn, have a tremendous opportunity to drive even stronger results by reaching back to gamers. Retailers can maximize game sales, from pre-orders to DLC, by delivering key content to gamers at the right moments across multiple devices. The publisher of the future can successfully grow their brands by controlling and facilitating meaningful, ongoing conversations with their fans from announce to launch, and beyond.

*Special thanks to Adam Stewart, Nishad Pai, Sam Franklin, and Matt Seitz for contributing to this whitepaper.*