

Gamers Gonna Game! Gamer Survey Suggests Strength In Gaming Trends

Gamers are Playing Across Many Platforms, Playing Longer, and Spending More Money

Summary

We conducted a survey of 800 console gamers in the U.S. and found the overall gaming market robust. Gamers are playing across multiple platforms, they are spending more time playing games, and they are spending the same if not more money on games than they were a year ago. Only 30% of gamers are downloading full games, which represents a big opportunity for publishers. We remain bullish on EA and ATVI based on these survey results, and believe that a strong pipeline of games and digital revenue will drive incremental earnings upside for both stocks.

Key Points

- 1) Gamers are spending more time playing games across multiple platforms.** Over 50% of respondents play on either console, but we also found that nearly 67% also play on their smartphones, and 40% play games on tablets as well. Also, 75% said they are playing games the same amount of time or more than they were a year ago.
- 2) Gamers plan to spend more money than they did a year ago.** About 68% of those surveyed said they plan to spend the same or more money on games over the next year. This is positive as it points to how publishers have implemented a successful strategy of selling games and additional content to keep people engaged (and spending money) on those properties.
- 3) Significant room for digital gaming growth.** We found that only 30% of players currently download full games, and 32% do not buy any DLC or extra content. We view these as opportunities for the publishers to drive more digital sales with console owners. Finally, 48% said they are spending money on mobile games, which is another big opportunity. In our opinion, digital revenue will be paramount to driving higher gross margins and earnings upside for all four publishers, while ATVI and EA should garner out-sized share of mobile game revenue.
- 4) Call of Duty and Candy Crush Saga are top console and mobile games.** We were surprised by this given concerns around CoD and Candy Crush. This is a clear positive for ATVI.

Company	Symbol	Price (6/09)	Rating		
			Prior	Curr	PT
Activision Blizzard Inc	ATVI	\$38.54	-	Buy	\$42.00
Electronic Arts Inc.	EA	\$76.25	-	Buy	\$84.00
Take-Two Interactive Software, Inc.	TTWO	\$39.58	-	Buy	\$40.00
Ubisoft Entertainment SA	UBI FP	€33.30	-	Neutral	€28.00

Source: Bloomberg and Mizuho Securities USA

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Mizuho Video Game Market Survey 1.0

During the first week of June, we surveyed over 800 people in the U.S. who are current-gen console owners (PS4 and Xbox One) to better understand existing and emerging video game playing trends. Key findings include:

- 1) Gamers are engaging with multiple platforms and spending more time playing games.** Over 50% of respondents play on either console, but we also found that nearly 67% also play on their smartphones, and 40% play games on tablets. More importantly, 75% of those we surveyed said they are playing games the same amount of time or more than they were a year ago. This is very positive for the overall industry.
- 2) Call of Duty and Candy Crush Saga are top console and mobile games.** Despite the negative YouTube trailer reviews for Call of Duty, our respondents indicated that CoD is the #1 most wanted game of the year. #2 game was Final Fantasy XV (Square Enix), #3 is Uncharted 4 (Sony), #4 is Gears of War (Microsoft), and #5 is Battlefield One (EA). On the mobile side, Candy Crush Saga was the #1 most played mobile game. ATVI seems to be leading the pack on console and mobile gaming.
- 3) Significant room for digital gaming growth.** Per our survey, we found that only 30% of players currently download full games, and 32% do not buy any DLC or extra content. We view these as opportunities for the publishers to drive more digital sales with console owners. In our opinion, digital revenue will be paramount to driving higher gross margins and EPS upside.
- 4) Gamers are spending more money than they were a year ago.** About 68% of those surveyed said they plan to spend the same or more money on games over the next year. This is positive as it points to how publishers have implemented a successful strategy of selling games and additional content to keep people engaged (and spending money) on those properties.
- 5) We want our PS4.5!** Here's the kicker – 58% of gamers said they'd be open to spending ~\$400 on a refreshed console with better graphics and performance. We would not have expected this after 2.5 years since the latest consoles were launched. But given how technology is changing, people's expectations for faster and improved hardware devices seem to be increasing. This does make sense – updated smartphones and tablets come out almost every year, and those devices carry price tags similar to consoles.
- 6) VR & eSports – still too early to tell.** Most people we surveyed said they are not interested in buying a VR headset over the next 12 months. Cost, form factor, and lack of content were all reasons for waiting. But those who were

interested in VR seemed to put the PS VR at the top of their list, followed by the Oculus Rift.

Our Survey results reaffirmed our top video game stock picks in EA and ATVI. ATVI came out ahead in terms of demand for games, but we like EA’s digital strategy and the cadence of games that EA plans on releasing this year.

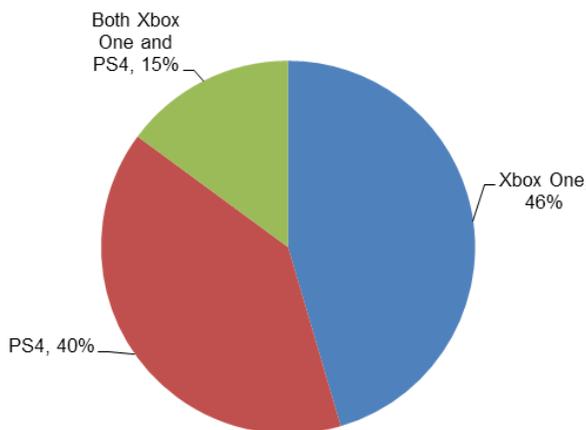
And now, we move on to the Mizuho Video Game Market Survey results:

1. Overall Video Games

Gaming Platforms

Our inaugural Mizuho Video Game Market survey indicated that nearly 20% of respondents have the PS4 and/or an Xbox One. Given there are ~130m households in the U.S. and ~26m of these consoles sold to date (based on NPD data), this is in line with our expectations. However, the split of PS4 and XB1 units sold in the U.S is 53%/47% according to NPD data, while our survey had those identical figures flipped for the PS4 and XB1. We note that 15% of these respondents own both console systems.

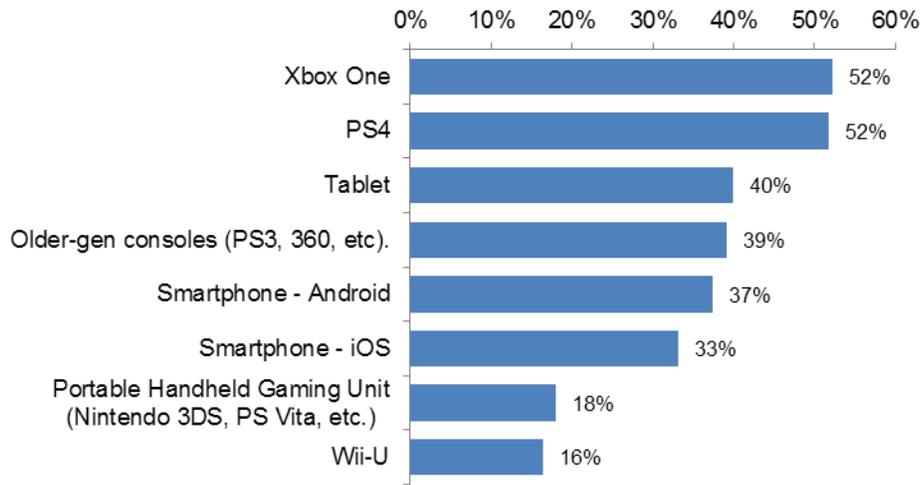
Exhibit 1: Question 1: Do you own an Xbox One or PS4?



Source: MSUSA, SurveyMonkey, N=807 (June 2016)

Of those that own a current-gen console, 40% play games on their tablets, which was interesting to us, given that more of the general population seem to use their Smartphones for content and Internet consumption. Furthermore, roughly 2/3 play games on their smartphones – less than what we would have expected. In our view, this highlights that mobile still has a long way to go in capturing the hearts of core players. We believe the immersive experience provided by most console games cannot be replicated on a mobile screen.

Exhibit 2: Which video game platforms do you play games on? (check all that apply)*

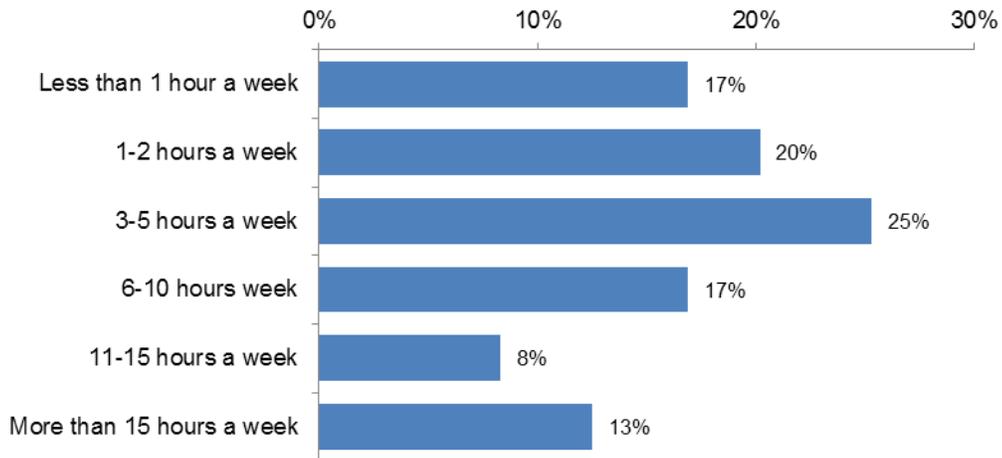


Source: MSUSA, SurveyMonkey, N=807 (June 2016)

Playing Trends – Engagement Is Positive

Players are spending significant amounts of time in their games highlighted by ~45% of respondents spending 1-5 hours per week playing video games and 22% spending more than 11 hours per week, and 13% are playing more than 15 hours a week (that’s more than 2 hours per day)!

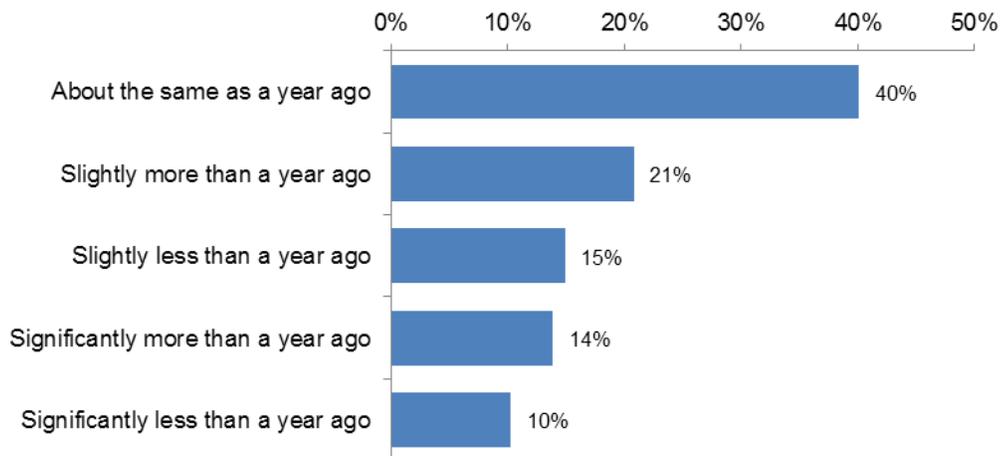
Exhibit 3: How often do you play video games (console, PC, smartphone combined)?



Source: MSUSA, SurveyMonkey, N=807 (June 2016)

As a group, gamers appear to be more engaged as 75% of players are playing the same if not more than a year ago versus 25% who are playing less than they were a year ago. We give credit to the publishers for releasing more content in a timely manner for key games to drive engagement and playing time up.

Exhibit 4: Over past 12 months, I am playing video games (console, PC, mobile combined)...



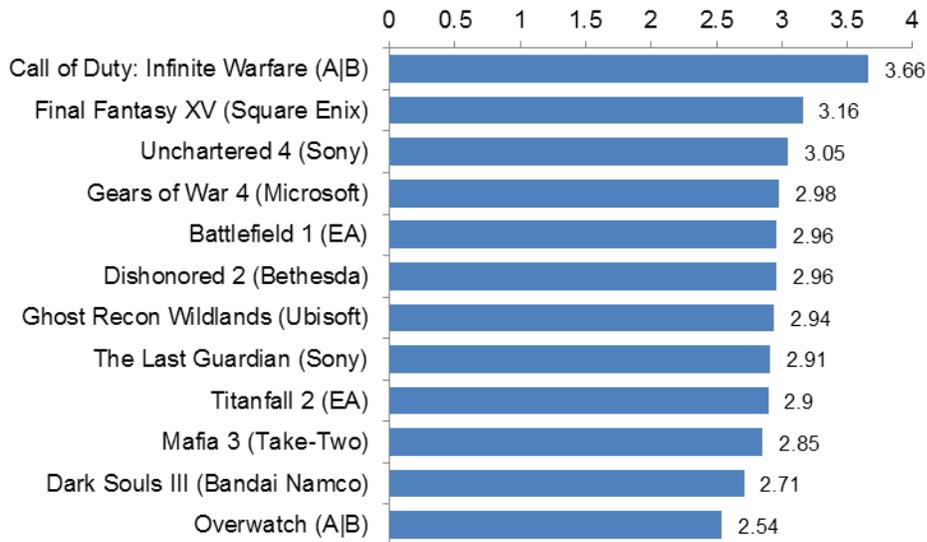
Source: MSUSA, SurveyMonkey, N=807 (June 2016)

2. Console Gaming

To our surprise, the top title for '16 is *CoD: Infinite Warfare*

We polled for some of the most anticipated games for 2016 and the key takeaway was that despite the degree of criticism Activision's *Call of Duty: Infinite Warfare* has received on its YouTube trailer (it's the second most disliked video of all time on YouTube), the title topped the list of the most desired games in our survey – and by a significant margin. **This is the power of the network and social aspect of the game – many players will play the game with their friends and this becomes more of a social activity for millions of people.** When we drilled into underlying data set, we found CoD: Infinite Warfare garnered the most category-5 ratings (most wanted game) by an extremely wide margin – 48%, nearly 2x as much as the next leading title, Sony's *Uncharted 4*, and 4x as much as EA's *Battlefield 1*. We continue to expect *Call of Duty: Infinite Warfare* to be the biggest title of 2016.

Exhibit 5: Rank order the top 5 games you want this year from the list below (5 = most wanted game, 1= least wanted game)



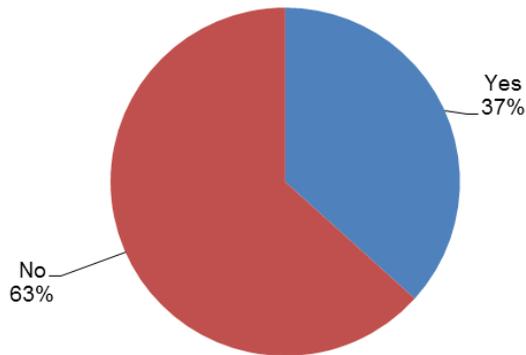
Source: MSUSA, SurveyMonkey, N=807 (June 2016)

A Closer Look at GTA V

Given Grand Theft Auto V is one of the best-selling games of all time, we wanted to see how well its online sister game is performing. Based on our survey, roughly 37% of current-gen console owners have a copy of Grand Theft Auto V. What's interesting to us is that 58% of GTA V players also play GTA V Online and of that audience, roughly 20% spend money in the game on micro-transactions. If we apply

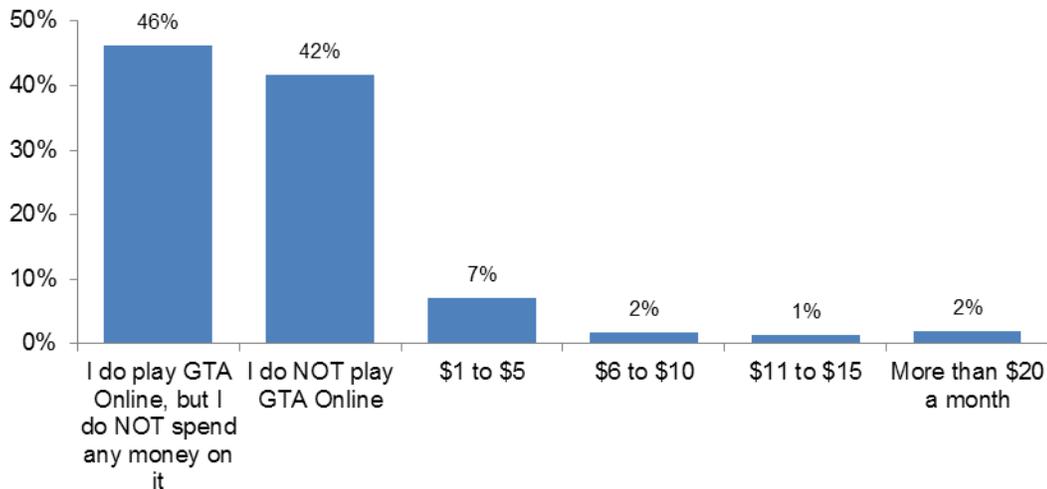
those percentages to the installed base of PS4 and Xbox One console players in the U.S., that implies ~5.5m people play GTA Online and ~1.1m of them are paying players. Using the midpoint of the general ranges and the weighted averages of payer spending, we calculate the average payer is spending at least \$7 per month in the game. We estimate GTA V Online is generating in the neighborhood of \$25m per quarter in the U.S and perhaps \$50m globally.

Exhibit 6: Do you own Grand Theft Auto 5?



Source: MSUSA, SurveyMonkey, N=807 (June 2016)

Exhibit 7: Do you play Grand Theft Auto Online? If so, how much do you spend monthly in the game?

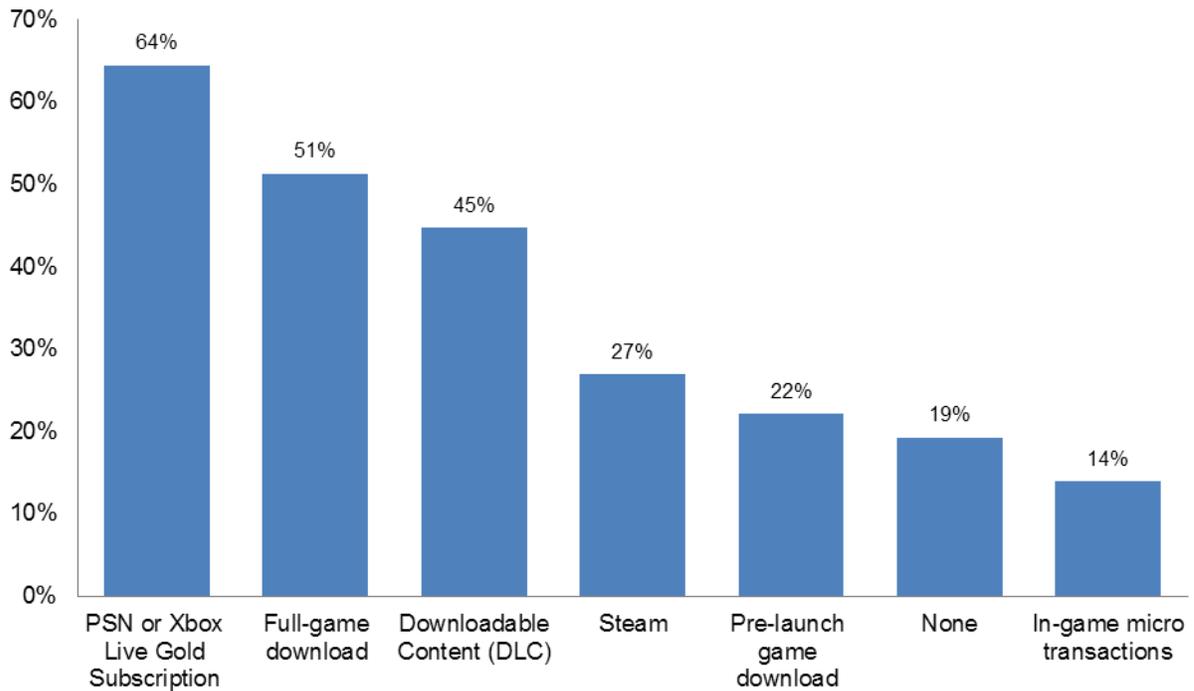


Source: MSUSA, SurveyMonkey, N=296 (June 2016)

Digital Services

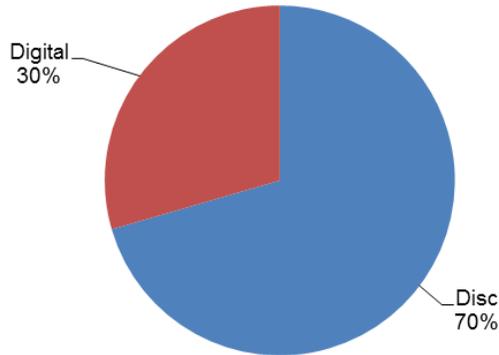
Our survey indicated that roughly half of current-gen console owners have downloaded a digital copy of a game, but only about 30% of players regularly do so. This is in line with our expectations based on commentary from the major publishers. Although we believe digital sales continue to grow as a percentage of software sales, we believe the shift to digital will likely be a longer runway than many believe owing to various factors such as the strong pre-owned ecosystem, download speeds, hard drive storage limits, and payment limitations with cash vs. credit cards.

Exhibit 8: Have you used any of the following digital services or products for your gaming console? (check all that apply)



Source: MSUSA, SurveyMonkey, N=807 (June 2016)

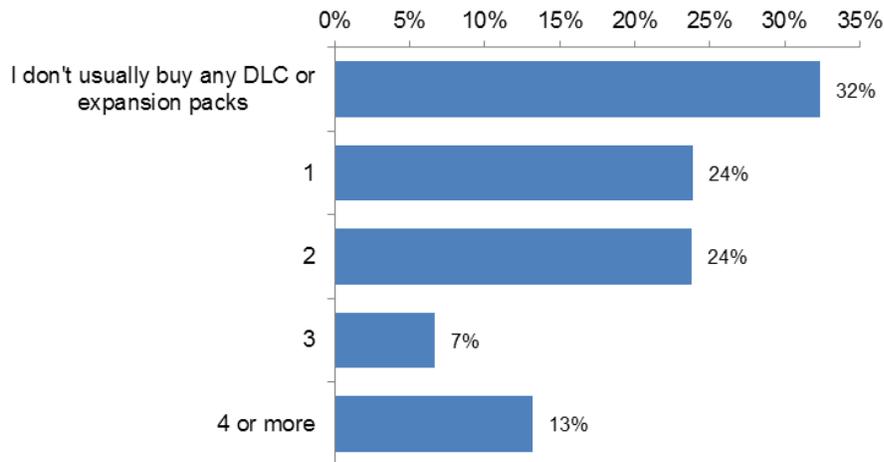
Exhibit 9: Do you usually buy physical video game discs or do you download digital copies of games?



Source: MSUSA, SurveyMonkey, N=807 (June 2016)

Our survey also indicated 68% of current-gen owners have downloaded digital DLC which is higher than we expected. However, what we found surprising was that roughly 1/3 of people who have downloaded DLC typically do not buy DLC or expansion packs. In other words, there is significant demand for DLC that has yet to be fulfilled. We believe those players may have given DLC a try and were disappointed with the additional content. We believe this situation offers publishers two key opportunities to go after the 55% of players who have yet to try DLC, as well as the ~15% of players who have tried DLC but didn't find the content engaging enough to regularly down DLC again.

Exhibit 10: On average, how many DLC / expansion packs do you usually buy for console games that you play?

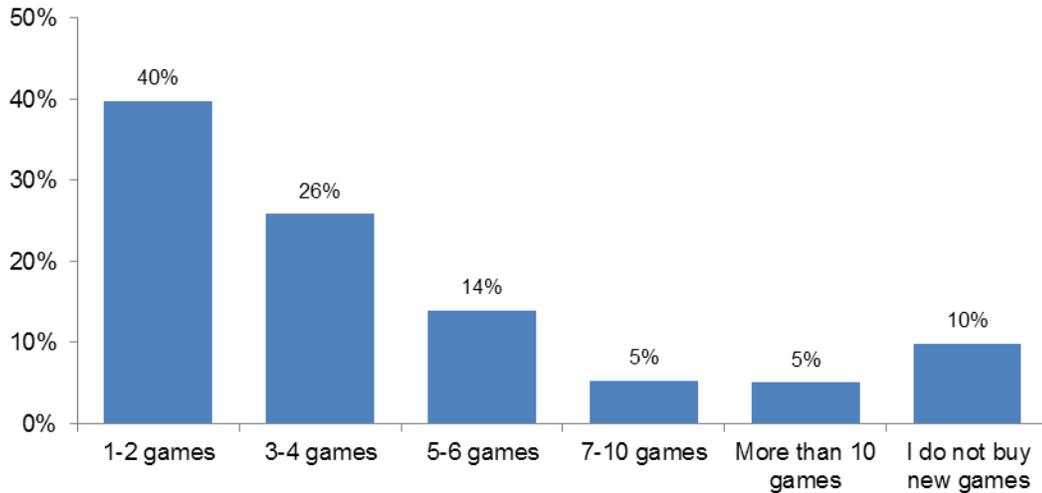


Source: MSUSA, SurveyMonkey, N=652 (June 2016).

New / Used Games

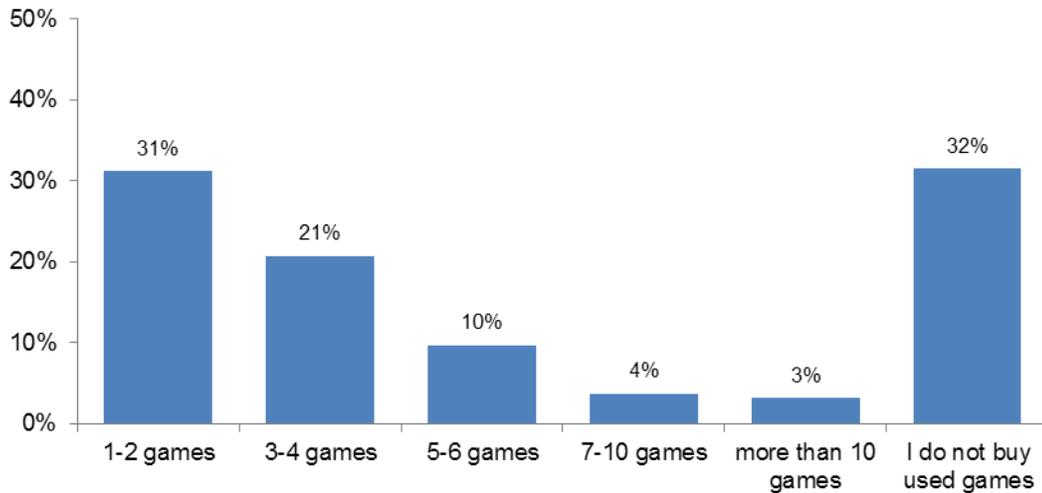
Although 90% of players purchase new games, 68% of players also purchase used games which we believe highlights the strength of the used games ecosystem, particularly for GameStop (the company does generate north of \$1B in trade-in credits annually). We also believe the 32% of players that do not buy used games are likely those that are most keen to digital downloads and it'll be interesting to see if that number grows in the future.

Exhibit 11: How many NEW console games do you purchase each year, on average?



Source: MSUSA, SurveyMonkey, N=807 (June 2016)

Exhibit 12: How many USED console games do you purchase each year, on average?



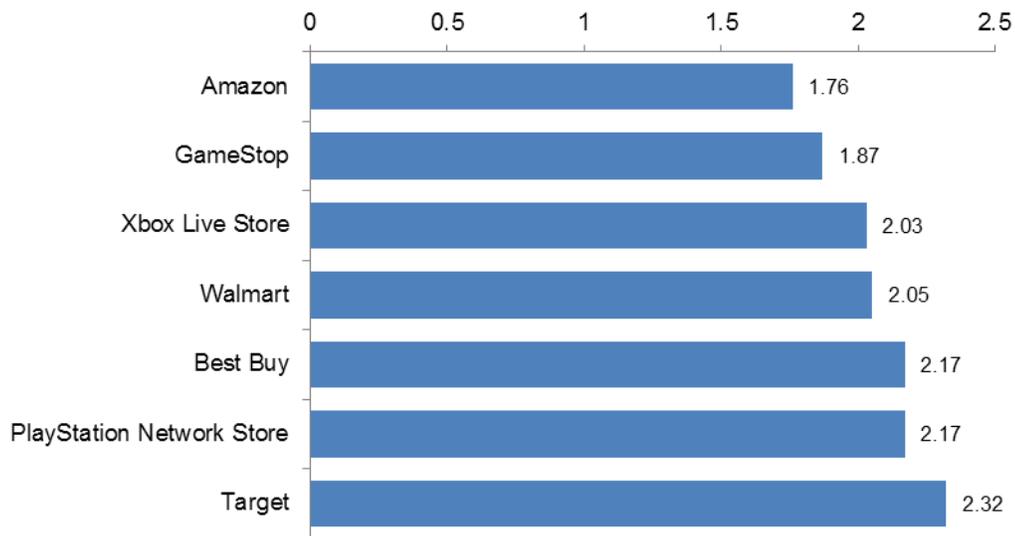
Source: MSUSA, SurveyMonkey, N=807 (June 2016)

Retailers

When we asked players to rank their top three retailers for game purchases, we were slightly surprised at the strength of Amazon’s position. The company came in first, ahead of GameStop, based on a weighted average of the three ranking positions. GameStop came in ahead on absolute votes with 514 votes versus Amazon’s 478 votes, followed by Walmart’s 361 votes, Best Buy’s 308 votes, and Target’s 217 votes. We believe Amazon has gained share in the category over the past several years with its low prices and more recently, a compelling 20% off new titles within the first two weeks of launch for Prime members. GameStop still has a dominating position with its specialty focus on games and a strong used ecosystem.

Sony’s and Microsoft’s digital storefronts only won 12% of the category-1 ranking, but garnered a combined vote count of 361.

Exhibit 13: Rank the top 3 places where you purchase your games from based on the list below (1 = top choice 2 = second best choice and 3 = third best choice)

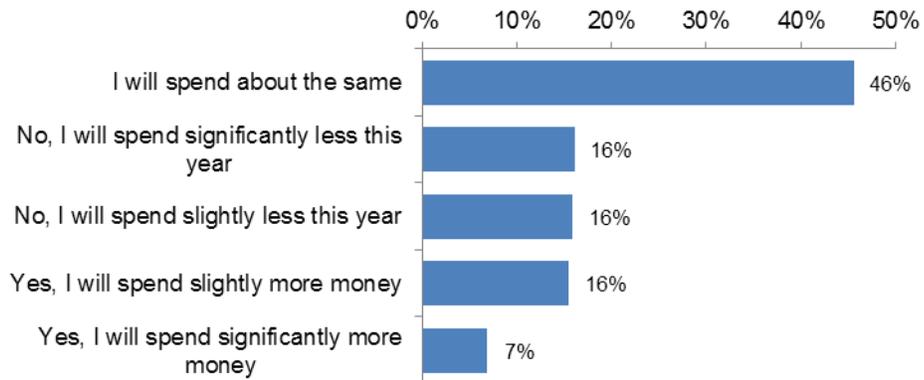


Source: MSUSA, SurveyMonkey, N=807 (June 2016)

Spending Trends

Roughly 68% of players plan to spend the same amount of money or more on games over the next year versus 32% who plan to spend less. We believe consumers will increasingly focus their discretionary dollars on fewer, bigger, better titles that will also benefit from additional follow-on content.

Exhibit 14: Do you think you will spend more money on games and additional content over the next 12 months than you did over last 12 months?

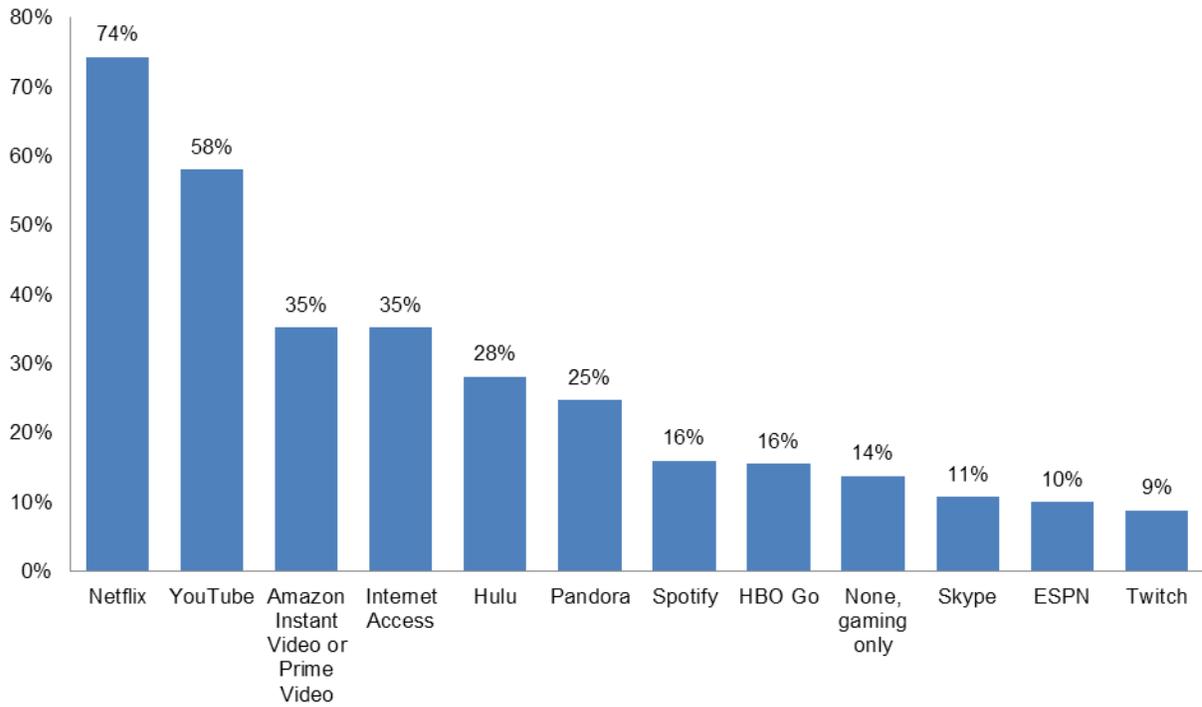


Source: MSUSA, SurveyMonkey, N=807 (June 2016)

Other Digital Media Services

In our survey we looked at what PS4 and Xbox One owners do with their consoles aside from playing games. We found that 86% of our respondents use their consoles for other forms of entertainment which we believe helps boost demand for this generation of hardware consoles. The most popular use of the gaming console outside of gaming is Netflix. Actually we find that video streaming in general is the most popular activity outside of gaming with 58% using YouTube, 35% using Amazon Prime Video, 28% using Hulu 35%, 16% using HBO Go, and 10% on ESPN. Surprisingly, 35% use their gaming console for Internet Access. Music comes next on the list with 25% using Pandora and 16% using Spotify. We also found that about 11% use Skype for video calls.

Exhibit 15: Aside from Gaming, how do you use your gaming console? (check all that apply)

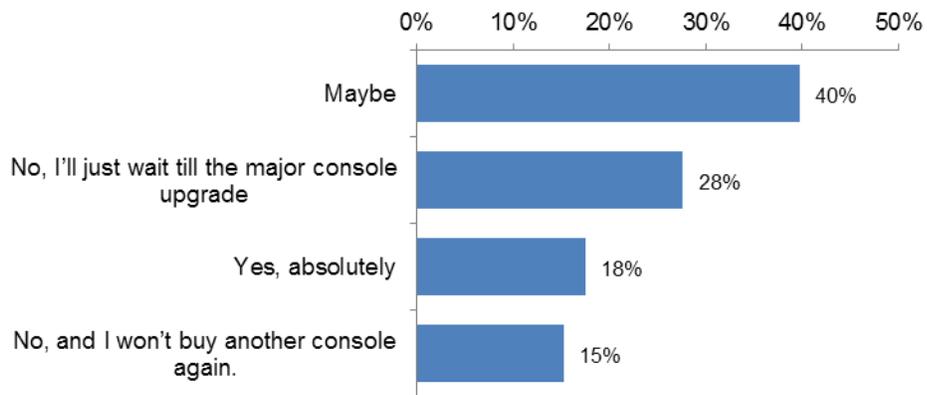


Source: MSUSA, SurveyMonkey, N=807 (June 2016)

Mid-Console Refresh

With rumors that Sony and Microsoft are looking to upgrade their existing consoles, we wanted to see how many existing PS4 and Xbox One owners would be interested in upgrading their systems - ~58% are interested which we found surprising given they just launched in November 2013. Perhaps more importantly, the key question will be whether or not any console upgrades would accelerate adoption among people who currently do not own either system.

Exhibit 16: There is talk of a mid-console refresh, where Sony and Xbox might release new consoles with some upgrades like faster processing power, 4K, and more storage. Would you be interested in buying such a console, assuming that it costs around \$400 and is compatible with the existing PS4 or Xbox One?

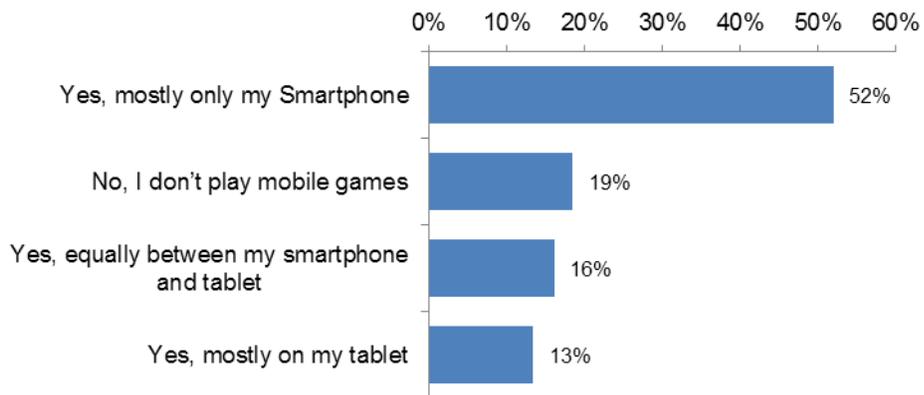


Source: MSUSA, SurveyMonkey, N=807 (June 2016)

3. Mobile Gaming

According to our survey, 81% of console owners also play mobile games – with 52% playing predominantly on smartphones.

Exhibit 17: Do you play mobile games?

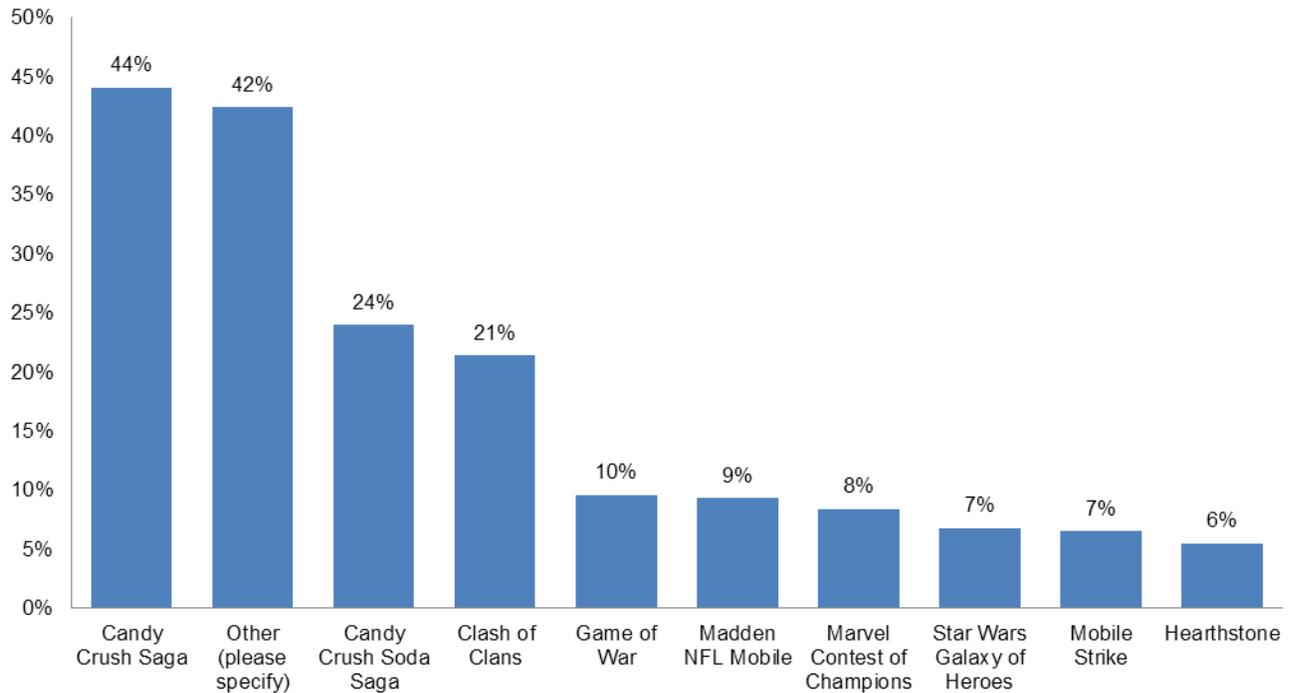


Source: MSUSA, SurveyMonkey, N=807 (June 2016)

Key Mobile games

King’s Candy Crush is the most popular mobile game in the U.S across our current-gen console owners with at least 44% having played the game in the past six months. We believe that figure is likely higher even with heavy overlap from 24% who play Candy Crush Soda Saga. We estimate that ~98% of Candy Crush players do not spend money in the game and that offers a significant opportunity for Activision Blizzard to monetize those players – most likely with advertising in our view.

Exhibit 18: Which mobile games have you played in the past 6 months? (check all that apply)

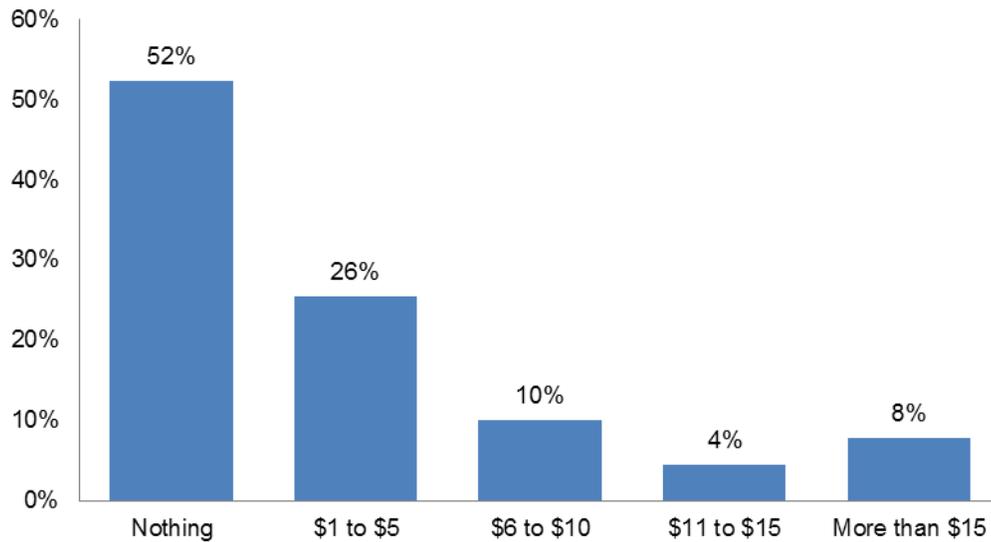


Source: MSUSA, SurveyMonkey, N=658 (June 2016)

Monetization

We found that 52% of current-gen console owners do not spend any money on mobile games, while 26% spend about \$1-\$5, 10% spend \$6-\$10, 4% spend \$11-\$15, and 8% spend more than \$15. Mobile gaming is accessible to a much larger installed base than consoles and therein lays the mobile opportunity. **We note the 48% of those surveyed who are willing to pay for a mobile game represents a significant audience to monetize.** We also note that mobile developers can also monetize off that large base through other ways, such as advertising or in game promotions.

Exhibit 19: How much do you spend a month on mobile games (purchasing games and/or in-game transactions)?



Source: MSUSA, SurveyMonkey, N=658 (June 2016)

4. Virtual Reality

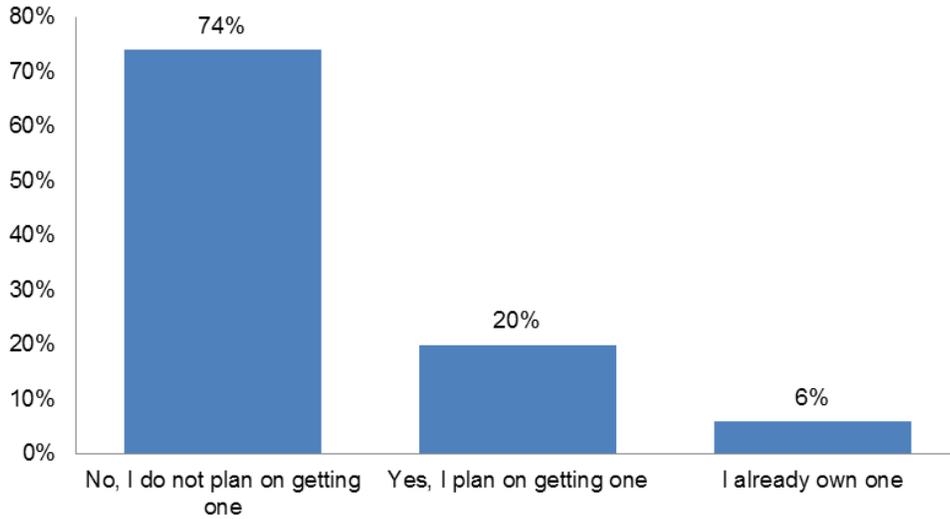
In regards to virtual reality, we found 74% of current-gen console owners have no intention of purchasing a VR headset in the next 12 months. Several reasonable factors were cited:

- 49% of the 74% not willing to buy VR headset in the near future are people who are not interested in VR at the moment
- 54% think \$400-\$600 per VR unit is too expensive for VR (we note several units run north of that)
- 18% are waiting for additional content/games before investing in VR
- 15% are concerned about the computing requirement of the VR being too high and costly
- Others are concerned that VR headset is not portable enough (12%) or that the VR headset is too bulky (9%).

For the 20% that do plan on getting a VR headset in the next 12 months and 6% that already own a VR headset, we found that the majority (41%) was interested in the Sony PS VR while 28% indicated interest in the Oculus Rift and 15% wanting the HTC Vive.

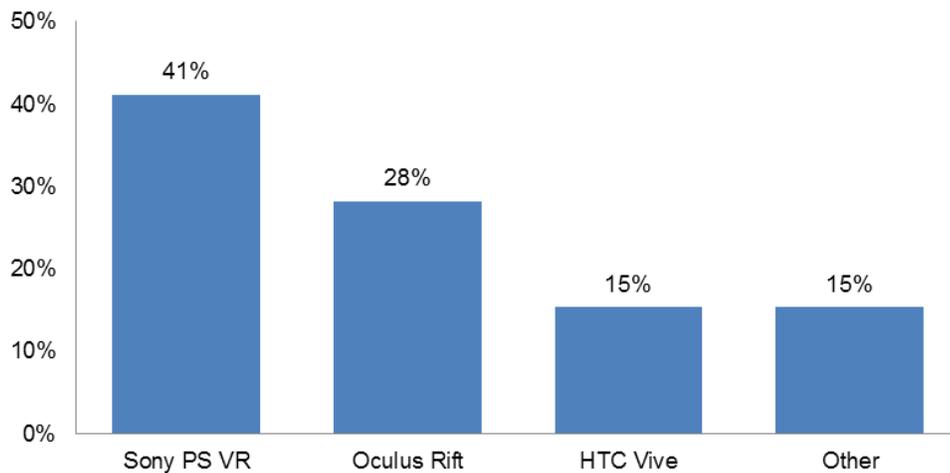
We also asked our survey participants what they wanted to use their current or future VR device for and found that 83% wanted to use it for gaming and 59% wanted to use it for watching movies.

Exhibit 20: Do you plan on buying a fully integrated Virtual Reality (VR) headset (excluding Google Cardboard and Samsung VR) in the next 12 months?



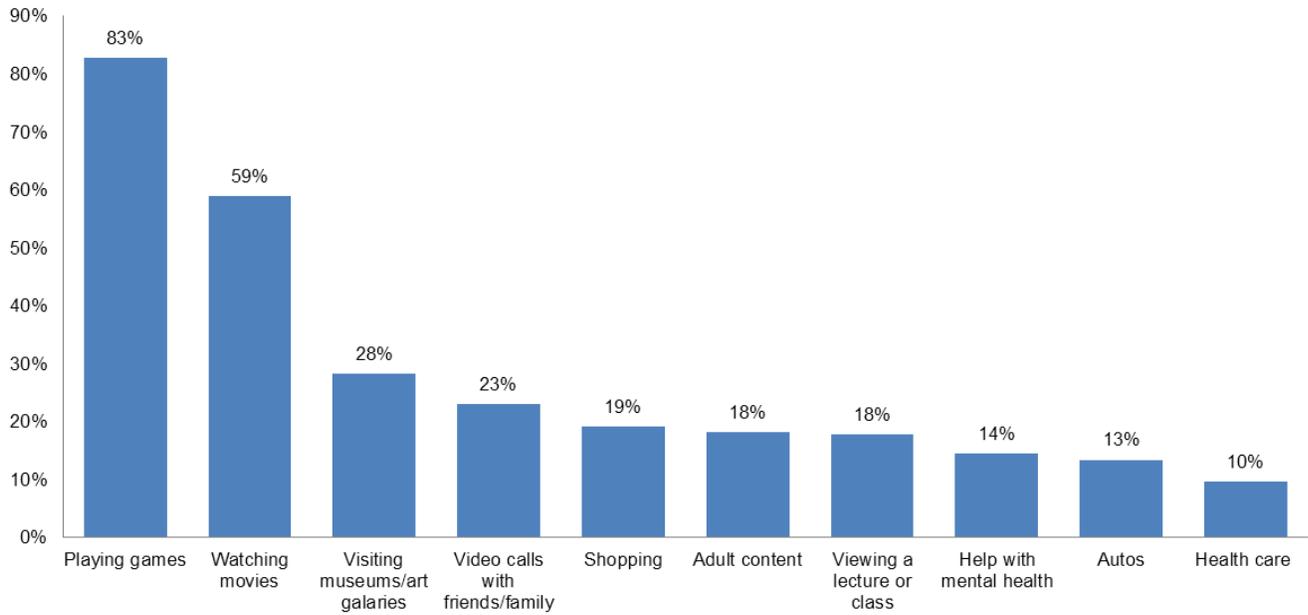
Source: MSUSA, SurveyMonkey, N=807 (June 2016)

Exhibit 21: If you own a VR device, which one do you own? If you don't own one but plan on buying one in the next 12-18 months, which VR device do you plan on buying?



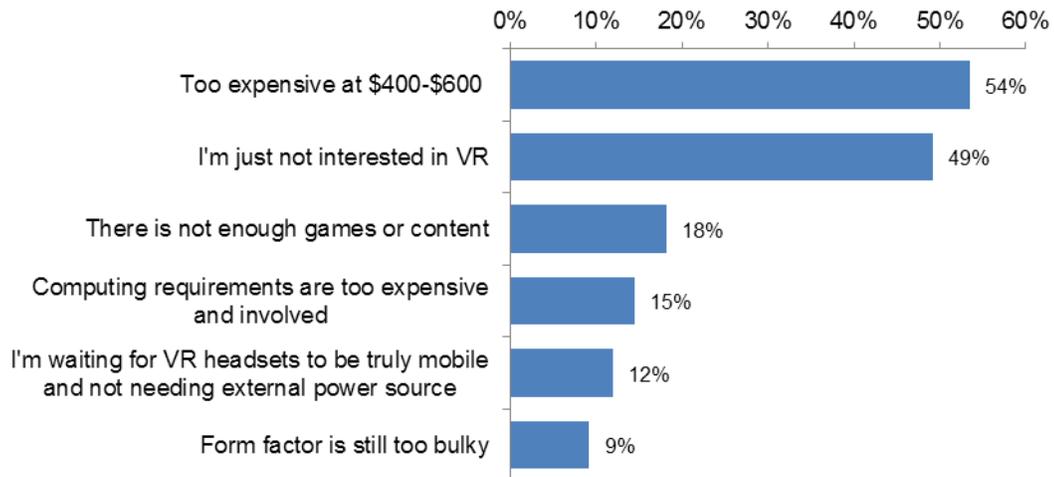
Source: MSUSA, SurveyMonkey, N=209 (June 2016)

Exhibit 22: What do you plan on using your current or future Virtual Reality device for? (check all that apply)



Source: MSUSA, SurveyMonkey, N=209 (June 2016)

Exhibit 23: If you do not plan on buying a fully integrated VR headset, why? (check all that apply)

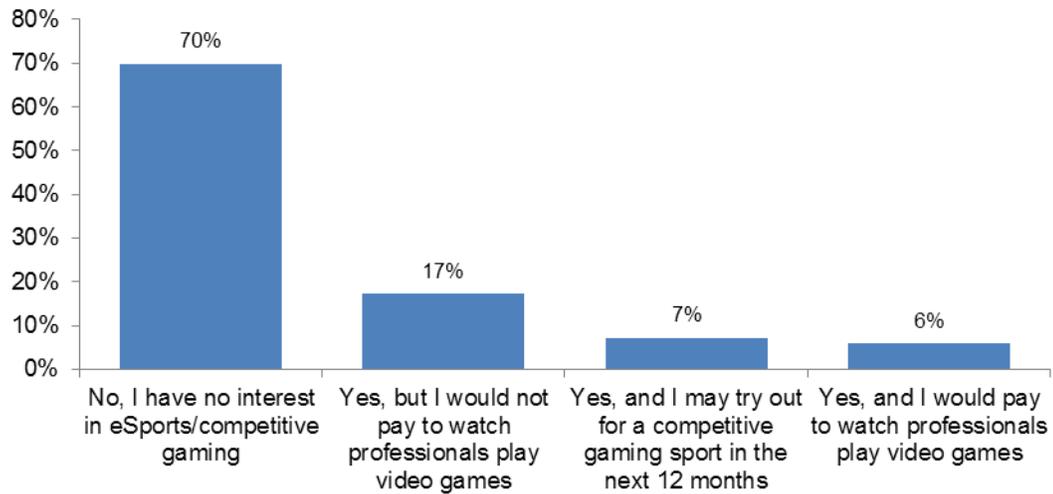


Source: MSUSA, SurveyMonkey, N=598 (June 2016)

5. eSports

In 2015 eSports generated global revenue of approximately \$748 million with a viewership of approximately 188 million worldwide according to SuperData Research. While the interest in eSports continues to grow, we find that based on our survey, that 70% of the console gaming population still has no interest in eSports or competitive gaming. Additionally, 17% are interested, but would not be willing to pay to watch professionals play video games. Only 7% of console players have an interest to compete, while 6% would be willing to pay to watch competitive gaming. These results lead us to believe eSports has a long way to go before it becomes mainstream and a meaningful revenue stream to publishers.

Exhibit 24: Do you have interest in eSports or competitive gaming?



Source: MSUSA, SurveyMonkey, N=807 (June 2016)

Price Target Calculation and Key Risks

Activision Blizzard Inc

Valuation

Our price target of \$42 is based on a combination of EV/EBTIDA and non-GAAP P/E valuation methodologies.

Using EV/EBTIDA, we apply a target multiple of 15x to our 2017 EBITDA estimate of \$2.3 billion to reach an enterprise value of \$34.9 billion. Adjusting for 2016 end of year net debt of \$2.0 billion, we arrive at a market cap of \$32.9 billion, or \$42 per share.

Using P/E, we apply a target multiple of 20x our 2017 non-GAAP EPS of \$2.05 to reach a price target of \$41.

Using the average of the three methodologies, we arrive at a target price of \$42.

Risks

1) Competition - ATVI faces heavy competition from other game publishers, including EA, TTWO, and UBI. Furthermore, ATVI faces competition from first party studios, online/mobile game companies like Zynga and King, as well as from thousands of smaller developers.

2) King acquisition could come with some integration risk as well as add lower visibility into future guidance due to the fleeting nature of mobile casual gamers.

3) Destiny's success is questionable. Investors were expecting Destiny to be ATVI's next billion dollar franchise, but the game fell well below expectations. We believe that recent DLC releases have been well received, and Destiny is on its way to becoming another \$B franchise for ATVI, but it will take longer than investors expected.

4) Margin cap? ATVI has the best margin structure of any of the publishers, but at 32%, we are expecting modest margin improvement of the next three years. It is possible that margins move faster and higher than we are modeling, but it will depend on the success of new FTP and digital content that ATVI releases.

Electronic Arts Inc.

Valuation:

Our price target of \$84 is based on a combination of valuation methodologies, including F2017 EV/EBTIDA and F2017 Non-GAAP P/E.

Using EV/EBTIDA, we apply a target multiple of 15x to our F2017 EBITDA estimate of \$1.6 billion to reach an enterprise value of \$23.8 billion. Adjusting for F2016 end of year net cash of \$2.7 billion (we are not assuming further share repurchases), we arrive at a market cap of \$26.5 billion, or \$83 per share.

Using P/E, we apply a target multiple of 24x our F2017 Non-GAAP EPS of \$3.52 to reach a price target of \$85. Adjusting for F2016 end of year net cash of \$2.7 billion, results in a more reasonable P/E target multiple of approximately 21.5x excluding net

cash of approximately ~\$8.40 per share. Using the average of the three methodologies, we arrive at a target price of \$84.

Risks:

- 1) Competition - EA competes heavily with other publishers like ATVI, TTWO, Nintendo, and first party platform studios from Sony and Microsoft. New game development can be very costly, and stakes are high if a game fails.
- 2) Online Woes - EA has had issues in the past regarding large scale multi-player, and this has resulted in weak sales of particular games, loud complaints from players, and selling pressure on the stock.
- 3) Possible margin expansion ceiling. Given EA's reliance on licensed IP vs. its own IP, EA has a structural disadvantage on margin expansion potential as it must pay 20-30% of its revenue to the IP owners.

Take-Two Interactive Software, Inc.

Valuation:

Our price target of \$40 is based on a combination of valuation methodologies – a four-year average of F2014-F2017E EV/EBTIDA and F2014-F2017E Non-GAAP P/E. We believe a 4-year average is sensible given the variance in revenues and earnings between years with GTA releases.

Using EV/EBTIDA, we apply a target multiple of 9x to our average F2014-F2017E EBITDA estimate of \$352 million to reach an enterprise value of \$3.2 billion. Adjusting for F2016 end of year net cash of \$1.3 billion (we are assuming the company's convertible debt will be satisfied by equity), we arrive at an equity value of \$4.4 billion, or \$40 per share.

Using P/E, we apply a target multiple of 16x our average F2014-F2017E Non-GAAP EPS of \$2.44 to reach a price target of \$39.

Using the average of the two methodologies, we arrive at a target price of \$40.

Risks:

- 1) Competition - Take-Two faces heavy competition from other publishers like Activision Blizzard, EA, Ubisoft, Nintendo, and first party platform studios from Sony and Microsoft.
- 2) Game delays - Making blockbuster AAA titles can be a herculean effort subject to numerous delays. Game delays are generally common in the industry, but Take-Two has had more than its share of delays in the past. Game delays result in higher development costs and defer earnings streams expected by investors.
- 3) We believe the company's success is highly dependent on its Rockstar Games subsidiary, particularly creative leads Sam and Dan Houser. Rockstar generally tends to spend more time, and correspondingly, more development dollars relative to peers in creating games.

Ubisoft Entertainment SA

Valuation:

Our price target of €28 is based on a combination of valuation methodologies - F2017E EV/EBTIDA and Non-IFRS P/E.

Using EV/EBTIDA, we apply a target multiple of 12x our F2017E EBITDA estimate of €256 million to reach an enterprise value of €3.1 billion. Adjusting for F2016 end of year net cash of €200 million, we arrive at a market cap of €3.3 billion, or €29 per share.

Using P/E, we apply a target multiple of 20x our F2017E Non-IFRS EPS of €1.33 to reach a price target of €27.

Using the average of these methodologies, we arrive at a price target of €28.

Risks:

1) Competition - Ubisoft faces heavy competition from other publishers like Activision Blizzard, EA, Take-Two, Nintendo, and first party platform studios from Sony and Microsoft.

2) Game delays - Making blockbuster AAA titles can be a herculean effort subject to numerous delays. Game delays result in higher development costs and defer earnings streams expected by investors.

3) Ubisoft is unique in the industry for operating an integrated mini-studio. We are skeptical when video game companies try to move beyond their core competencies and start investing in movies, television, etc.

4) Vivendi has taken a 15% stake in Ubisoft which management is vocally unhappy about. This could disrupt the board and decision making process at Ubisoft.

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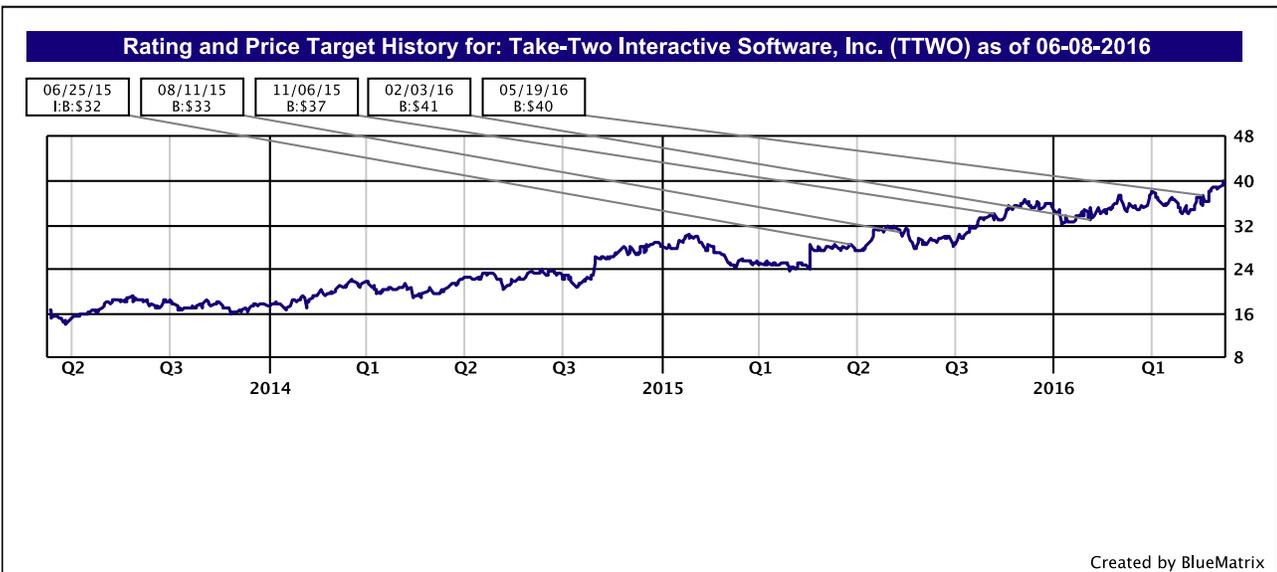
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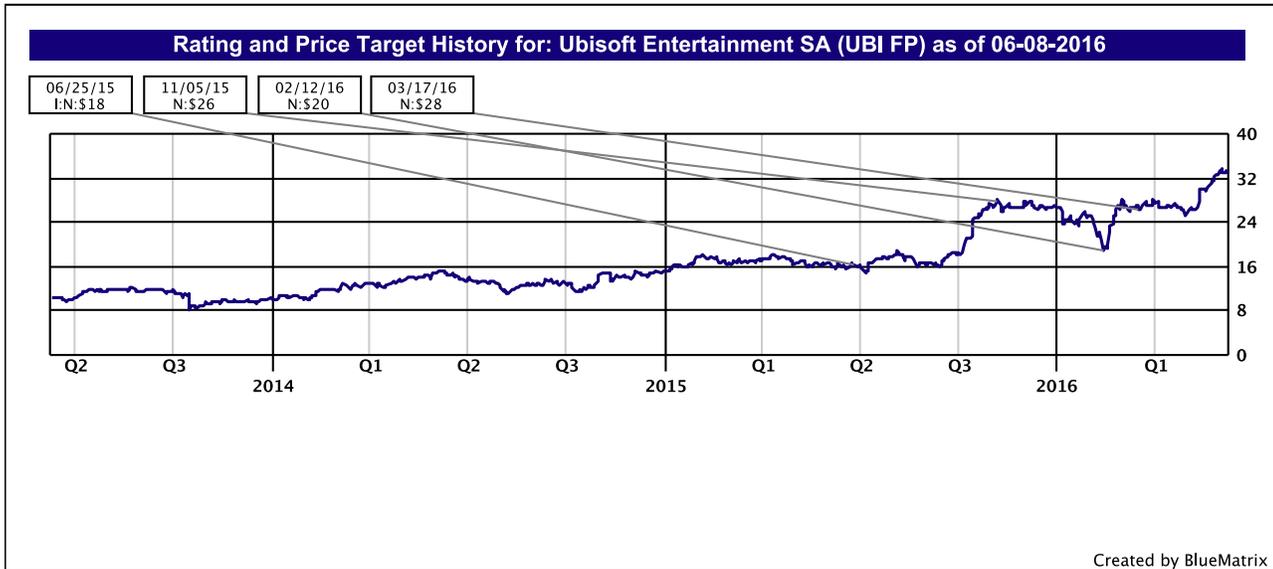
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