MARKET RESEARCH

THE STATE OF ONLINE GAMING – 2019

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OVERVIEW

The *State of Online Gaming 2019* research report highlights the latest findings in Limelight Networks' ongoing series of consumer surveys about online habits and opinions. This report is based on responses from 4,500 consumers in France, Germany, India, Italy, Japan, Singapore, South Korea, the United Kingdom, and the United States age 18 and older who play video games at least once a week.

Respondents were asked questions on a variety of topics to determine the types of games they play and how often, the devices they use, how they access content, and what they believe is important for a successful gaming experience. Highlights of this report include:

- People who play video games spend an average of seven hours seven minutes each week playing. Playing time has increased 19.3 percent in the last year.

- Gamers 26-35 years old play for eight hours 12 minutes per week. This increased more than 25 percent in the last year.

- Mobile phones are the most commonly used devices for playing video games.

- Gamers overwhelmingly prefer downloading as their primary means for acquiring video games, with 64 percent choosing this method. This number has grown 12 percent in the last year.

- Nearly 85 percent of gamers find the process of downloading games frustrating. Slow download speeds are the primary issue.

- Casual single-player games are played more often than any other type of video game. However, gamers 18-25 prefer to play First-Person Shooter and Battle Royale games such as Fortnite.

- Gamers watch sports on television more often than they watch other people playing games on sites such as Twitch. However, gamers 18-25 spend 77 percent more time watching other people playing online than watching broadcast sports, and those 26-35 spend nearly the same amount of time watching online gaming as broadcast sports.

- Fast performance is the most important consideration when playing a video game.

- Gamers play for an average of 1 hour 22 minutes at a time. The average longest time gamers have ever consecutively played is four hours 19 minutes. 10 percent have played for 10 or more hours consecutively.

- More than 35 percent of gamers who work play video games while at work at least once a month.

- 36 percent of gamers would quit their jobs if they could support themselves as professional video gamers. More than 57 percent of male gamers 18-35 want to become professional gamers.

- More than half of gamers have missed sleep while gaming. More than a third have missed a meal.

- More than half of gamers would not continue to make purchases or play games on a website that has experienced a security incident such as a data breach.

EXECUTIVE SUMMARY

Video games have gone mainstream – moving from clunky PCs and expensive consoles, to the mobile devices we have in our pockets every day. Now, more people than ever are playing. Whether it is Casual Single-Players games that can be played anywhere anytime on a smartphone, or Battle Royale games such as Fortnite where squads compete to be the last ones standing, gamers have many choices. But it's not just about playing video games, watching other gamers play online is becoming increasingly popular and now rivals the viewership of traditional sports among younger gamers.

Gamers play for an average of seven hours seven minutes per week. This number has increased 19.3 percent since last year's State of Online Gaming 2018 report. However, younger gamers spend even more time playing, with those age 26-35 playing eight hours 12 minutes each week. Germans spend more time playing than gamers in any other country at nearly eight hours per week. South Koreans spend the least time playing each week at six hours 41 minutes.

More than half the people who play video games each week consider themselves casual gamers. With so many casual gamers, it's not surprising that Casual Single-Player games (such as Candy Crush, Angry Birds, and Spider Solitaire) are played most often. Mobile phones are the most common device used for gameplay, reflecting the number of Casual Single-Player games available on mobile and how easy it is to play your favorite game when you have free time or want a brief diversion. Gamers 18-25 are more likely to consider themselves expert gamers than older ones and prefer to play First-Person Shooter games such as Overwatch and Destiny 2 and Battle Royale games including Fortnite.

Nearly two-thirds of gamers (63.6 percent) prefer to acquire video games by downloading rather than purchasing physical copies, renting, or trading them. However, 85 percent are frustrated by the download process, with slow download speeds the primary complaint. When playing games, fast performance is the most important consideration.

Gamers play for an average of one hour 22 minutes at a time, with 18-25 year-olds averaging almost two hours for a typical gaming session. However, the majority of gamers have played for more than four hours consecutively, with 10 percent having played for 10 or more hours. While playing, gamers often miss common daily activities with more than half having missed sleep and a third having missed a meal while gaming.

Watching other people play video games online on video game streaming sites such as Twitch and YouTube Gaming is becoming increasingly popular. As a whole, gamers still watch sports on television more often than they watch other people playing online. However, younger gamers have moved away from watching broadcast sports, with those 18-25 spending 77 percent more time watching online gaming than traditional sports on television and gamers 26-35 spending nearly the same amount of time watching online gaming as broadcast sports.

Gamers are increasingly considering video gaming as a potential career option. More than a third of gamers would quit their jobs if they could support themselves as professional gamers. 57 percent of male gamers age 18-35 would like to pursue a professional gaming career. Speaking of work, more than a third of gamers who are currently employed play video games during work hours at least once a month.

Online security remains an important concern for gamers. More than half would not continue to make purchases or play games on a website that has experienced a security incident such as a data breach.

KEY FINDINGS

GAMERS SPEND MORE THAN SEVEN HOURS EACH WEEK PLAYING

Video gamers spend an average of 7.11 hours (seven hours, seven minutes) each week playing games. This is an increase of 19.3 percent in the last year. 34.0 percent play more than 7 hours each week, with 19.6 percent playing more than 12 hours a week.

Gamers in Germany spend the most time playing, at an average of almost eight hours a week. South Korea had the lowest weekly average at 6.69 hours, but even this was up more than 51 percent from last year's average of 4.42 hours per week in South Korea. Germany and the U.S. were tied with the highest percentage of gamers who play more than 20 hours each week at 11.6 percent.

Country	Less than 1 hour a week	1-2 hours a week	2-4 hours a week	4-7 hours a week	7-12 hours a week	12-20 hours a week	More than 20 hours a week	Average Hours Each Week
France	12.8%	21.4%	16.6%	16.6%	13.4%	10.0%	9.2%	6.97
Germany	15.2%	11.0%	17.2%	19.0%	13.6%	12.4%	11.6%	7.98
India	10.8%	14.6%	19.4%	15.8%	23.4%	11.4%	4.6%	6.92
Italy	13.0%	15.6%	19.4%	17.6%	17.8%	10.0%	6.6%	6.79
Japan	21.2%	17.8%	14.0%	18.0%	8.2%	9.8%	11.0%	6.88
Singapore	14.8%	17.4%	15.0%	16.6%	15.2%	10.6%	10.4%	7.44
South Korea	17.8%	17.0%	17.4%	17.2%	12.8%	8.8%	9.0%	6.69
U.K.	15.4%	19.2%	17.2%	16.6%	13.6%	9.2%	8.8%	6.76
U.S.	12.8%	19.8%	14.6%	18.6%	11.2%	11.4%	11.6%	7.61
Global	14.9%	17.1%	16.8%	17.3%	14.4%	10.4%	9.2%	7.11

Figure 1: How many hours each week do you spend playing video games?

Gamers age 26-35 spend the most time playing, at 8.21 hours a week. Those over 60 spend the least at 5.63 hours playing.

Age	Less than 1 hour a week	1-2 hours a week	2-4 hours a week	4-7 hours a week	7-12 hours a week	12-20 hours a week	More than 20 hours a week	Average Hours Each Week
18-25	9.4%	15.7%	19.2%	20.2%	12.6%	12.4%	10.5%	7.78
26-35	10.1%	13.4%	18.2%	17.6%	17.0%	12.3%	11.5%	8.21
36-45	12.1%	15.3%	16.7%	17.9%	16.1%	11.4%	10.6%	7.76
46-60	19.4%	18.2%	15.2%	17.1%	13.8%	9.0%	7.2%	6.32
Over 60	21.5%	23.7%	15.5%	14.2%	11.1%	7.2%	6.8%	5.63
All	14.9%	17.1%	16.8%	17.3%	14.4%	10.4%	9.2%	7.11

Figure 2: How many hours each week do you spend playing video games?

The age group with the highest increase in gaming time during the last year is gamers 26-45, who have increased their weekly playing time by more than 25 percent. Gamers 18-25 increased their playing time by 9.9 percent.
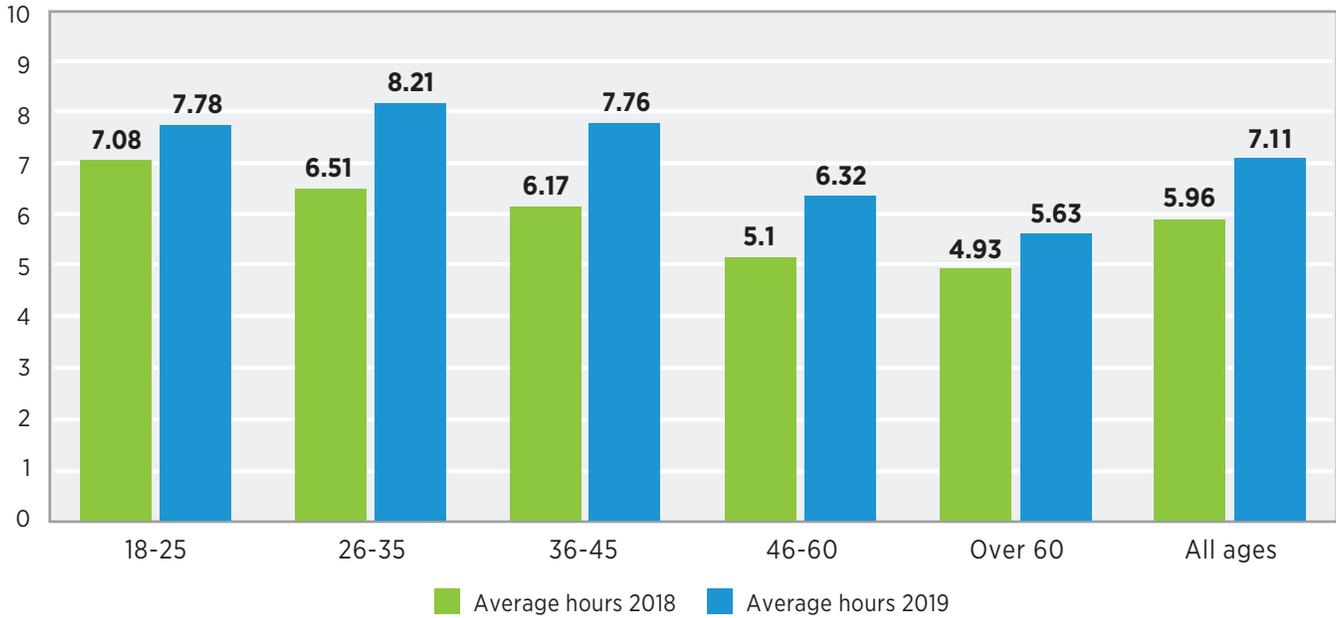
Figure 3: How many hours each week do you spend playing video games? (2018 and 2019)

Men play almost eight hours per week. This is an average of one hour 37 minutes longer than women, who play 6.28 hours. 23.0 percent of men play for 12 hours or more, compared to just 15.9 percent of women.

Gender	Less than 1 hour a week	1-2 hours a week	2-4 hours a week	4-7 hours a week	7-12 hours a week	12-20 hours a week	More than 20 hours a week	Average Hours Each Week
Female	17.8%	19.2%	17.5%	16.1%	13.6%	8.6%	7.3%	**6.28**
Male	12.1%	15.2%	16.1%	18.5%	15.1%	12.0%	11.0%	**7.89**
All	**14.9%**	**17.1%**	**16.8%**	**17.3%**	**14.4%**	**10.4%**	**9.2%**	**7.11**

Figure 4: How many hours each week do you spend playing video games?

In this year's survey, to better understand the behaviors and opinions of different types of gamers, respondents were asked to choose what type of gamer they consider themselves. The majority of respondents (56.6 percent) consider themselves casual gamers. 22.2 percent are novice gamers, 17.8 percent are experts, and 3.5 percent consider themselves aspiring professionals.

Older gamers are more likely to consider themselves novice or casual gamers. Only 5.6 percent of those over 60 identify as experts. Aspiring professionals are younger, with 6.3 percent of those 18-25 and 5.9 percent age 26-35 identifying as such.

Age	Aspiring professional	Expert	Casual Gamer	Novice
18-25	6.3%	25.2%	52.2%	16.3%
26-35	5.9%	26.0%	53.3%	14.8%
36-45	4.1%	23.8%	53.6%	18.5%
46-60	1.1%	10.4%	61.8%	26.8%
Over 60	1.1%	5.6%	59.8%	33.6%
All	3.5%	17.8%	56.6%	22.2%

Figure 5: What type of gamer are you?

Men are more likely than women to identify as aspiring professionals or experts. Women have a higher percentage of novice and casual gamers.
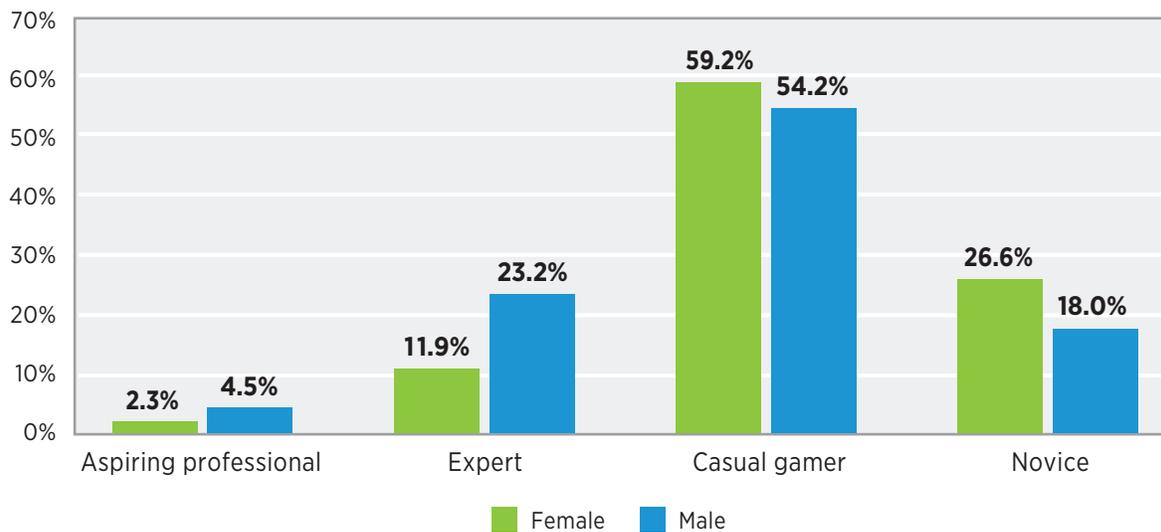

Figure 6: What type of gamer are you?

South Korea leads the way with the most gamers who hope to become professionals, at nearly 10 percent (9.8 percent). Japan has the highest number of novice gamers at 61.6 percent. The U.K. has the highest rate of casual gamers at 69.0 percent.

Country	Aspiring professional	Expert	Casual gamer	Novice
France	0.8%	18.0%	64.4%	16.8%
Germany	2.6%	22.2%	64.6%	10.6%
India	7.0%	30.6%	56.8%	5.6%
Italy	3.0%	29.8%	50.2%	17.0%
Japan	1.0%	4.4%	33.0%	61.6%
Singapore	2.6%	16.8%	65.6%	15.0%
South Korea	9.8%	6.0%	45.6%	38.6%
U.K.	2.4%	14.4%	69.0%	14.2%
U.S.	2.0%	17.6%	60.4%	20.0%
Global	**3.5%**	**17.8%**	**56.6%**	**22.2%**

Figure 7: What type of gamer are you?

Aspiring professionals and experts spend the most time playing each week, at more than 11 and a half hours of gaming time. Nearly a quarter of aspiring professionals (24.4 percent) play more than 20 hours each week. Novices play less than four hours each week, with a third playing less than one hour.

Gamer Type	Less than 1 hour a week	1-2 hours a week	2-4 hours a week	4-7 hours a week	7-12 hours a week	12-20 hours a week	More than 20 hours a week	Average Hours Each Week
Aspiring professional	4.5%	7.7%	13.5%	18.6%	13.5%	18.0%	24.4%	**11.80**
Expert	2.8%	6.6%	12.1%	18.0%	20.9%	19.8%	19.8%	**11.56**
Casual gamer	12.2%	17.8%	19.4%	18.5%	15.6%	9.4%	7.1%	**6.68**
Novice	33.1%	25.1%	14.1%	13.5%	6.0%	4.3%	3.8%	**3.93**
All	**14.9%**	**17.1%**	**16.8%**	**17.3%**	**14.4%**	**10.4%**	**9.2%**	**7.11**

Figure 8: How many hours each week do you spend playing video games?

MOBILE PHONES REMAIN THE PRIMARY GAMING DEVICE

To compare the popularity of different gaming devices, respondents were asked how much of their gaming takes place on gaming consoles, computers, tablets, and mobile phones. Device usage was ranked on a scale of 0-4 where 0 indicates the device is never used and 4 signifies the device is used most of the time.

Although a variety of devices are used for gaming, mobile phones remain the most popular device globally. This is consistent with the 2018 results where mobile phones were also the most used gaming device. Germany is the only country where mobile phones are not the most commonly used device, with computers leading the way. Gaming consoles have the highest usage in the U.K., and computers and tablets are used in India more than any other country.

Country	Gaming console	Computer (laptop or desktop)	Tablet	Mobile phone
France	1.37	1.62	0.99	1.85
Germany	1.21	1.83	1.00	1.79
India	1.40	1.88	1.21	2.28
Italy	1.46	1.80	1.20	1.89
Japan	1.03	1.02	0.75	2.29
Singapore	1.07	1.61	1.11	2.29
South Korea	0.82	1.67	0.88	2.30
U.K.	1.55	1.35	1.16	1.61
U.S.	1.38	1.49	1.03	1.78
Global	**1.25**	**1.59**	**1.04**	**2.01**

Figure 9: How much of your total time playing video games is on the following devices? (Scale 0-4)

Mobile phones have the highest usage with younger gamers. Those over 60 use computers more than any other device. Gaming consoles are most popular with gamers 26-35.

Age	Gaming console	Computer (laptop or desktop)	Tablet	Mobile phone
18-25	1.37	1.58	0.76	2.24
26-35	1.76	1.69	1.27	2.26
36-45	1.59	1.56	1.24	2.18
46-60	0.98	1.45	0.96	1.97
Over 60	0.53	1.75	0.84	1.31
All	**1.25**	**1.59**	**1.04**	**2.01**

Figure 10: How much of your total time playing video games is on the following devices? (Scale 0-4)

Women are more likely to use mobile phones for gaming than men, while men use computers and gaming consoles more than women.
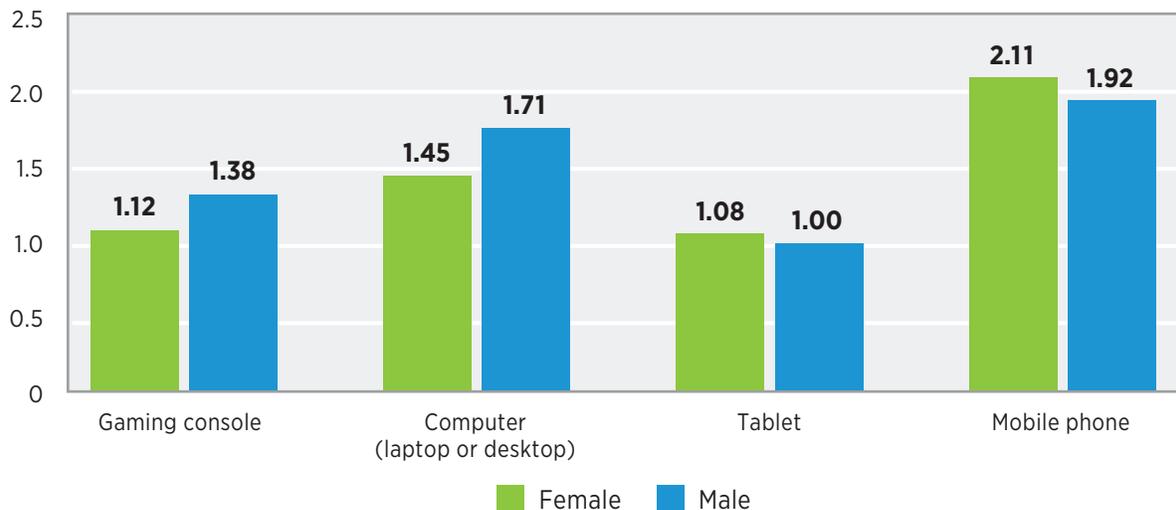

Figure 11: How much of your total time playing video games is on the following devices? (Scale 0-4)

GAMERS PREFER TO DOWNLOAD GAMES

Downloading remains the most common method of acquiring video games and is the most popular method in every country surveyed. The number of people who download games increased 7 percent in the last year from 59.6 percent of gamers to 63.6 percent. Mostly this is at the expense of physical purchases, which dropped by 19.5 percent in the last year.

Physical game sales are the highest in the U.K. where nearly 40 percent prefer to purchase a physical copy. Rentals are highest in Italy where 9.0 percent still rent video games, with trading games with another player or at a retail store enjoying its greatest popularity in France at 14.4 percent.

Country	Buy a physical copy	Download it	Rent it	Trade with another player or trade-in at a retail store
France	29.2%	53.0%	3.4%	14.4%
Germany	22.6%	67.0%	4.8%	5.6%
India	17.6%	74.6%	3.4%	4.4%
Italy	33.0%	50.6%	9.0%	7.4%
Japan	29.6%	52.0%	7.6%	10.8%
Singapore	16.8%	79.2%	1.6%	2.4%
South Korea	14.4%	79.6%	2.6%	3.4%
U.K.	39.8%	54.6%	2.4%	3.2%
U.S.	30.6%	61.4%	4.8%	3.2%
Global	**26.0%**	**63.6%**	**4.4%**	**6.1%**

Figure 12: How do you prefer to acquire your video games?

Gamers over 60 are the least likely to purchase physical games, and they download, rent, and trade games more often than any other age group. Gamers 26-35 purchase physical copies most often and download less frequently than other age groups.

Age	Buy a physical copy	Download it	Rent it	Trade with another player or trade-in at a retail store
18-25	26.8%	65.3%	2.9%	5.0%
26-35	33.0%	57.6%	4.2%	5.3%
36-45	29.7%	61.9%	4.2%	4.2%
46-60	22.8%	66.0%	4.3%	7.0%
Over 60	16.6%	68.0%	6.4%	9.1%
All	26.0%	63.6%	4.4%	6.1%

Figure 13: How do you prefer to acquire your video games?

Men are more likely to purchase physical copies of games, while women download and trade more often.

Gender	Buy a physical copy	Download it	Rent it	Trade with another player or trade-in at a retail store
Female	20.9%	67.4%	4.5%	7.3%
Male	30.7%	60.0%	4.3%	5.0%
All	26.0%	63.6%	4.4%	6.1%

Figure 14: How do you prefer to acquire your video games?

GAMERS ARE FRUSTRATED BY SLOW DOWNLOADS

Nearly 85 percent of global gamers find the process of downloading video games frustrating. In India and Singapore, those numbers exceed 90 percent. The length of time it takes to download games was noted as the top issue globally, with 33.8 percent noting this as their primary issue. Frustration with download speeds is highest in the U.S. where 39.4 percent of gamers report slow downloads as their top concern. Gamers in Germany and South Korea noted downloads that don't work as their primary frustration. In India and Italy, downloads being interrupted and having to start over again was the top issue.

Country	I don't find it frustrating	The length of time it takes to download	When it doesn't work	When the download process is interrupted and I have to start over again
France	20.0%	38.8%	18.4%	22.8%
Germany	18.8%	23.1%	29.5%	28.7%
India	8.7%	37.2%	16.0%	38.2%
Italy	12.7%	27.6%	24.1%	35.6%
Japan	24.9%	38.7%	20.7%	15.7%
Singapore	8.4%	32.7%	27.9%	31.0%
South Korea	13.0%	28.9%	29.8%	28.3%
U.K.	13.7%	39.0%	25.3%	22.0%
U.S.	17.6%	39.4%	25.5%	17.6%
Global	15.1%	33.8%	24.2%	26.9%

Figure 15: What is the most frustrating part of downloading video games?

Download speeds are the primary frustration for gamers 60 and under. Gamers over 60 are most annoyed by downloads being interrupted and needing to be restarted, closely followed by downloads that do not work.

Age	I don't find it frustrating	The length of time it takes to download	When it doesn't work	When the download process is interrupted and I have to start over again
18-25	12.1%	43.5%	21.9%	22.5%
26-35	12.9%	37.0%	20.2%	29.9%
36-45	13.3%	34.5%	24.2%	28.1%
46-60	16.1%	30.6%	27.5%	25.9%
Over 60	22.1%	24.8%	26.2%	26.9%
All	**15.1%**	**33.8%**	**24.2%**	**26.9%**

Figure 16: What is the most frustrating part of downloading video games?

Experienced gamers are the most concerned about download speed, with more than 41 percent of aspiring professionals and experts noting this as their primary frustration. This is because experienced gamers are more likely to play more complex games that require larger downloads, so download performance has a greater impact on their gaming experience.

Gamer Type	I don't find it frustrating	The length of time it takes to download	When it doesn't work	When the download process is interrupted and I have to start over again
Aspiring professional	11.5%	41.9%	22.3%	24.3%
Expert	11.7%	41.4%	17.3%	29.6%
Casual gamer	14.6%	30.5%	25.5%	29.4%
Novice	20.1%	34.6%	27.2%	18.2%
All	**15.1%**	**33.8%**	**24.2%**	**26.9%**

Figure 17: What is the most frustrating part of downloading video games?

CASUAL SINGLE-PLAYER GAMES ARE MOST POPULAR

There are many different types of video games available to be played online, and even more opinions about the best online games and the best mobile games. To compare the popularity of various types of games, gamers were asked how much time they spend playing each type of game on a scale from 0-4, where 0 indicates they never play that type of game and 4 indicates it is played most of the time.

Globally, Casual Single-Player games such as Candy Crush, Angry Birds, and Spider Solitaire are the most popular type of video game. First-person shooter games such as Call of Duty, Destiny 2, and Overwatch were the second most popular game type, followed by Single-Player Role-play games such as The Elder Scrolls Online, Casual Multi-Player games like Words With Friends, Battle Royale games like Fortnite and PUBG, Multiplayer Online Battle Arena games like League of Legends and DOTA 2, and Massively Multiplayer Online Role-Playing Games like World of Warcraft.

Country	Casual Single-Player games (e.g. Candy Crush or Angry Birds)	Casual Multi-Player games (e.g. Words With Friends)	First-Person Shooter games (e.g. Call of Duty)	Single-Player Role-play games (e.g. The Elder Scrolls)	Multiplayer Online Battle Arena games (e.g. League of Legends and DOTA 2)	Massively Multiplayer Online Role-Playing Games (e.g. World of Warcraft)	Battle Royale games (e.g. Fortnite and PUBG)
France	1.79	0.91	1.17	0.94	0.85	0.92	0.97
Germany	1.79	0.89	1.03	1.10	0.89	0.95	0.92
India	1.97	1.74	1.76	1.62	1.57	1.44	1.63
Italy	1.78	1.22	1.42	1.34	1.13	1.14	1.16
Japan	1.49	0.66	0.57	1.03	0.51	0.55	0.64
Singapore	1.85	1.34	1.26	1.16	1.21	1.07	1.13
South Korea	1.34	1.14	1.26	1.18	1.26	1.12	1.19
U.K.	1.81	1.07	1.32	1.06	0.80	0.82	0.90
U.S.	1.91	1.24	1.23	1.02	0.81	0.85	0.90
Global	**1.75**	**1.13**	**1.22**	**1.16**	**1.00**	**0.99**	**1.05**

Figure 18: How much of your time playing video games is spent playing each of the following types of games? (Scale 0-4)

Although Casual Single-Player games are the most played game type across all age groups, gamers 18-25 prefer First-Person Shooter and Battle Royale games. Fortnite has quickly become one of the most popular video games and helped grow the time spent playing Battle Royale games, particularly with younger players. Older gamers show a clear preference for casual single-player games.

Age	Casual Single-Player games (e.g. Candy Crush or Angry Birds)	Casual Multi-Player games (e.g. Words With Friends)	First-Person Shooter games (e.g. Call of Duty)	Single-Player Role-play games (e.g. The Elder Scrolls)	Multiplayer Online Battle Arena games (e.g. League of Legends and DOTA 2)	Massively Multiplayer Online Role-Playing Games (e.g. World of Warcraft)	Battle Royale games (e.g. Fortnite and PUBG)
18-25	1.41	1.20	1.47	1.25	1.17	1.09	1.47
26-35	1.79	1.46	1.59	1.60	1.43	1.41	1.46
36-45	1.85	1.33	1.47	1.41	1.29	1.26	1.29
46-60	1.79	0.95	0.99	0.93	0.70	0.71	0.71
Over 60	1.77	0.71	0.63	0.58	0.45	0.46	0.42
All	**1.75**	**1.13**	**1.22**	**1.16**	**1.00**	**0.99**	**1.05**

Figure 19: How much of your time playing video games is spent playing each of the following types of games? (Scale 0-4)

Both women and men play Casual Single-Player games more than any other game type. Coming in second for women is Casual Multi-Player games and for men, First-Person Shooter games. The largest gap in playing time between men and women is with First-Person Shooter games.

Gender	Casual Single-Player games (e.g. Candy Crush or Angry Birds)	Casual Multi-Player games (e.g. Words With Friends)	First-Person Shooter games (e.g. Call of Duty)	Single-Player Role-play games (e.g. The Elder Scrolls)	Multiplayer Online Battle Arena games (e.g. League of Legends and DOTA 2)	Massively Multiplayer Online Role-Playing Games (e.g. World of Warcraft)	Battle Royale games (e.g. Fortnite and PUBG)
Female	1.96	1.15	0.96	1.06	0.82	0.82	0.83
Male	1.55	1.12	1.47	1.26	1.17	1.14	1.25
All	**1.75**	**1.13**	**1.22**	**1.16**	**1.00**	**0.99**	**1.05**

Figure 20: How much of your time playing video games is spent playing each of the following types of games? (Scale 0-4)

More experienced gamers play First-Person Shooter games more often than other game types. Casual and novice gamers prefer Casual Single-Player games.

Gamer Type	Casual Single-Player games (e.g. Candy Crush or Angry Birds)	Casual Multi-Player games (e.g. Words With Friends)	First-Person Shooter games (e.g. Call of Duty)	Single-Player Role-play games (e.g. The Elder Scrolls)	Multiplayer Online Battle Arena games (e.g. League of Legends and DOTA 2)	Massively Multiplayer Online Role-Playing Games (e.g. World of Warcraft)	Battle Royale games (e.g. Fortnite and PUBG)
Aspiring professional	1.69	1.74	2.06	1.87	1.98	1.90	1.92
Expert	1.76	1.62	2.02	1.82	1.74	1.75	1.86
Casual gamer	1.83	1.13	1.18	1.10	0.92	0.90	0.95
Novice	1.54	0.65	0.56	0.68	0.48	0.44	0.52
All	1.75	1.13	1.22	1.16	1.00	0.99	1.05

Figure 21: How much of your time playing video games is spent playing each of the following types of games? (Scale 0-4)

WATCHING OTHER GAMERS PLAY ONLINE IS POPULAR WITH YOUNGER GAMERS

Along with the growing popularity of online gaming, there has been an increase in the amount of gaming content viewed on video game streaming sites such as Twitch and YouTube Gaming. In addition, major esports tournaments have also grown in popularity beyond just hard-core gamers. Gamers were asked the amount of time spent each week watching video games and esports online as well as watching traditional sporting events on television and online.

Globally, gamers spend more time watching traditional sports on television each week than watching gaming content online or watching traditional sports programming online. Gamers watch slightly more than three hours of broadcast sports each week, compared to just under two and a half hours of watching other players stream games online on gaming sites such as Twitch. However, in Japan, Singapore, and South Korea, gamers watch other people play video games online more than they watch traditional broadcast sports.

Country	Watch esports tournaments (such as The International or LoL World Championship)	Watch other people play video games online (such as Twitch or YouTube Gaming)	Watch traditional sports on television (such as football or basketball)	Watch traditional sports online (such as football or basketball)
France	1.40	2.02	2.57	1.97
Germany	1.49	2.23	3.20	2.45
India	3.33	3.68	4.25	3.92
Italy	1.83	2.34	3.76	3.11
Japan	0.71	1.70	1.54	0.83
Singapore	1.64	2.46	2.12	2.13
South Korea	2.04	3.31	2.79	2.50
U.K.	1.35	1.85	3.40	2.10
U.S.	1.67	2.33	4.14	2.34
Global	**1.72**	**2.43**	**3.08**	**2.37**

Figure 22: How many hours each week do you do the following?

Gamers in South Korea spend the most time watching other people play video games, with almost 80 percent watching weekly.

Country	Never	Less than 1 hour each week	1-3 hours each week	3-7 hours each week	7-15 hours each week	More than 15 hours each week	Average viewing hours per week
France	50.0%	17.8%	13.8%	10.4%	5.2%	2.8%	**2.02**
Germany	50.8%	17.0%	12.4%	9.8%	6.6%	3.4%	**2.23**
India	16.4%	25.6%	26.6%	15.6%	10.2%	5.6%	**3.68**
Italy	35.2%	27.0%	16.6%	10.4%	9.0%	1.8%	**2.34**
Japan	53.8%	18.8%	12.4%	9.0%	3.2%	2.8%	**1.70**
Singapore	33.8%	25.8%	19.6%	11.6%	5.4%	3.8%	**2.46**
South Korea	21.8%	25.8%	20.6%	20.0%	6.6%	5.2%	**3.31**
U.K.	52.4%	16.6%	14.8%	8.8%	5.0%	2.4%	**1.85**
U.S.	47.4%	21.0%	12.8%	8.6%	5.6%	4.6%	**2.33**
All	**40.2%**	**21.7%**	**16.6%**	**11.6%**	**6.3%**	**3.6%**	**2.43**

Figure 23: How many hours each week do you watch other people play video games online (such as Twitch or YouTube Gaming)?

Gamers 18-25 watch other people play video games online nearly four hours each week. That is 77 percent more than the two hours 14 minutes they spend watching traditional broadcast sports on television. And gamers 26-35 watch other people play online an average of three hours 41 minutes per week, only two minutes less than they watch traditional sports on television.

Age	Watch esports tournaments (such as The International or LoL World Championship)	Watch other people play video games online (such as Twitch or YouTube Gaming)	Watch traditional sports on television (such as football or basketball)	Watch traditional sports online (such as football or basketball)
18-25	1.74	3.97	2.24	2.05
26-35	2.76	3.68	3.72	3.35
36-45	2.36	3.01	3.60	3.08
46-60	1.05	1.28	2.64	1.77
Over 60	0.64	0.75	3.07	1.47
All	1.72	2.43	3.08	2.37

Figure 24: How many hours each week do you do the following?

More than 79 percent of gamers 18-25 watch other players stream games online each week, with nearly 16 percent watching seven or more hours. More than half of gamers 46 and older never watch others play online.

Age	Never	Less than 1 hour each week	1-3 hours each week	3-7 hours each week	7-15 hours each week	More than 15 hours each week	Average viewing hours per week
18-25	20.7%	21.3%	21.5%	20.7%	8.6%	7.3%	3.97
26-35	23.3%	20.3%	22.2%	18.4%	10.5%	5.3%	3.68
36-45	31.9%	22.6%	19.1%	12.7%	9.6%	4.1%	3.01
46-60	53.3%	22.5%	14.1%	6.1%	2.5%	1.5%	1.28
Over 60	67.1%	21.3%	6.3%	2.9%	1.1%	1.3%	0.75
All	40.2%	21.7%	16.6%	11.6%	6.3%	3.6%	2.43

Figure 25: How many hours each week do you watch other people play video games online
(such as Twitch or YouTube Gaming)?

Nearly 41 percent of gamers 18-25 never watch traditional sports on television. Only 25.2 percent of those 36 or older do not watch broadcast sports.

Age	Never	Less than 1 hour each week	1-3 hours each week	3-7 hours each week	7-15 hours each week	More than 15 hours each week	Average viewing hours per week
18-25	40.9%	18.7%	20.8%	11.8%	4.5%	3.2%	2.24
26-35	21.6%	19.6%	24.5%	18.4%	10.7%	5.2%	3.72
36-45	19.6%	19.9%	27.5%	17.5%	11.4%	4.1%	3.60
46-60	27.0%	25.5%	23.3%	15.1%	5.9%	3.2%	2.64
Over 60	29.3%	18.8%	25.1%	15.2%	7.0%	4.7%	3.07
All	26.6%	21.1%	24.4%	15.9%	8.0%	4.1%	3.08

Figure 26: How many hours each week do you watch traditional sports on television?

While traditional broadcast sports are favored by older gamers, younger gamers are moving away from watching traditional sports on television. This trend will have a major impact on the value of broadcast sports rights in the future.
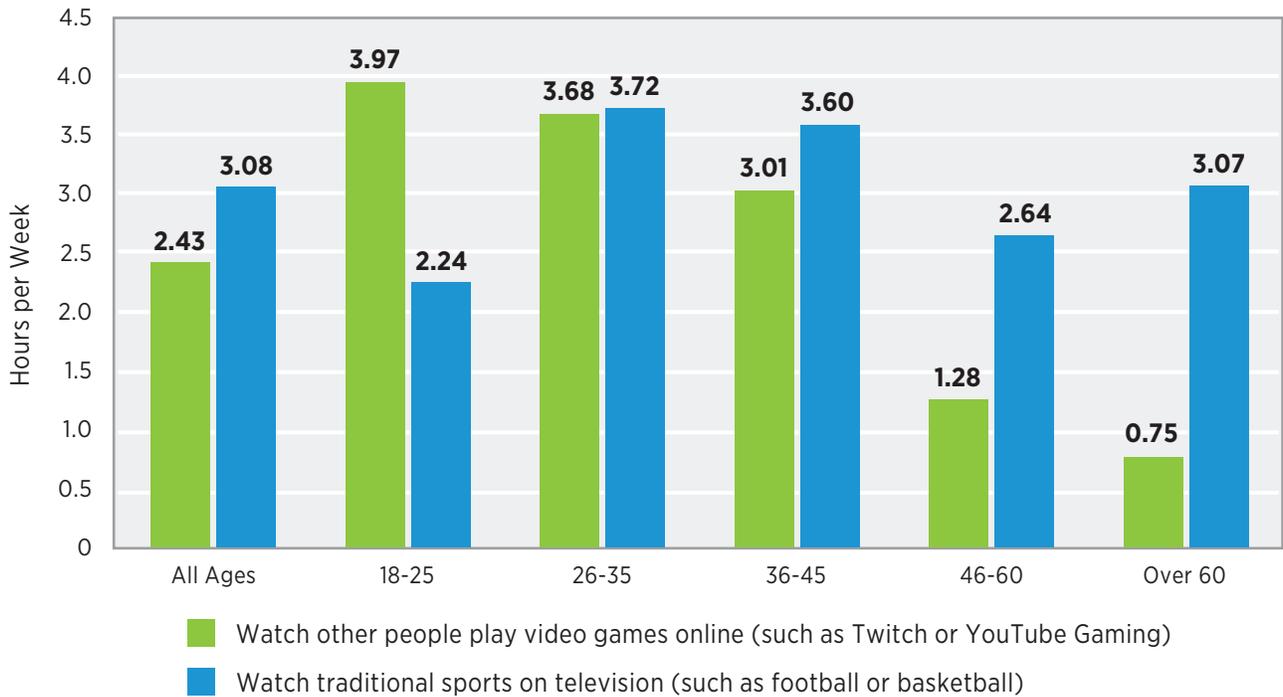

Figure 27: How many hours each week do you do the following?

Men watch significantly more online gaming and traditional sports programs than women.
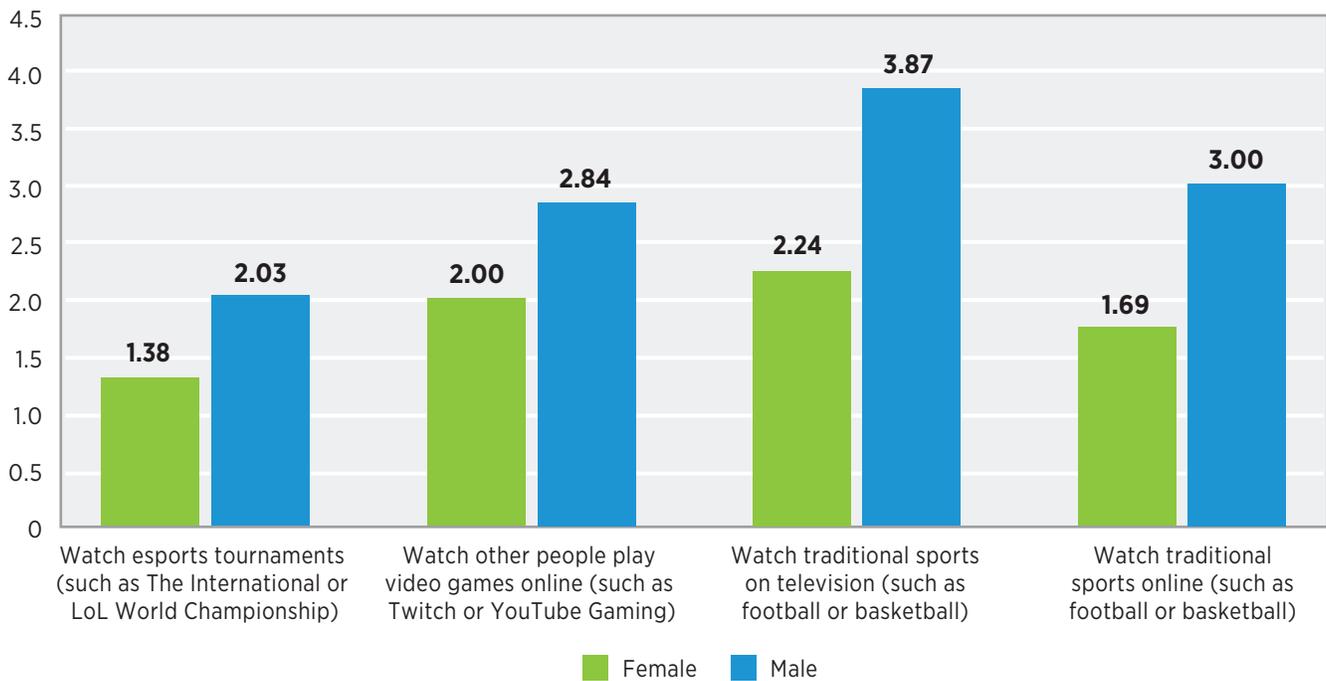
Figure 28: How many hours each week do you do the following?

PERFORMANCE IS CRITICAL TO GAMERS

Gamers rated the importance of various aspects of playing video games on a scale of 0-4, where 0 is not important and 4 is extremely important. In every country except Japan, fast performance is the most critical aspect of playing a video game, followed by simple gameplay, interesting storyline, and the ability to play offline.

Country	Simple gameplay—the game is easy to learn and play	Interesting storyline—the characters and story are exciting	Fast Performance—the game loads quickly and performance is speedy	I can play the game when I am not connected to the internet
France	2.86	2.78	2.94	2.63
Germany	2.80	2.67	2.83	2.56
India	3.02	2.99	3.23	2.92
Italy	2.55	2.81	2.90	2.65
Japan	2.84	2.80	2.72	2.48
Singapore	2.43	2.55	2.83	2.61
South Korea	2.33	2.39	2.62	2.25
U.K.	2.64	2.55	2.79	2.58
U.S.	2.68	2.52	2.90	2.52
Global	**2.68**	**2.67**	**2.86**	**2.58**

Figure 29: How important are each of the following when playing a video game?

Fast performance is the top priority of gamers 60 and under. For those over 60, simple gameplay was most important.

Age	Simple gameplay—the game is easy to learn and play	Interesting storyline—the characters and story are exciting	Fast Performance—the game loads quickly and performance is speedy	I can play the game when I am not connected to the internet
18-25	2.47	2.87	2.92	2.51
26-35	2.65	2.83	2.91	2.63
36-45	2.66	2.76	2.92	2.64
46-60	2.77	2.60	2.80	2.59
Over 60	2.80	2.32	2.78	2.48
Global	**2.68**	**2.67**	**2.86**	**2.58**

Figure 30: How important are each of the following when playing a video game?

Performance is the leading issue for both men and women. Simple gameplay and the ability to play offline are more important to women, while an interesting storyline was rated higher by men.

Gender	Simple gameplay—the game is easy to learn and play	Interesting storyline—the characters and story are exciting	Fast Performance—the game loads quickly and performance is speedy	I can play the game when I am not connected to the internet
Female	2.77	2.65	2.87	2.64
Male	2.61	2.70	2.86	2.52
Global	**2.68**	**2.67**	**2.86**	**2.58**

Figure 31: How important are each of the following when playing a video game?

Performance is the top priority for all types of gamers except novices, who look for simple gameplay.

Gamer Type	Simple gameplay—the game is easy to learn and play	Interesting storyline—the characters and story are exciting	Fast Performance—the game loads quickly and performance is speedy	I can play the game when I am not connected to the internet
Aspiring professional	2.56	2.80	2.90	2.53
Expert	2.66	2.96	3.05	2.68
Casual gamer	2.68	2.67	2.89	2.57
Novice	2.74	2.44	2.62	2.52
Global	**2.68**	**2.67**	**2.86**	**2.58**

Figure 32: How important are each of the following when playing a video game?

GAMERS PLAY FOR MORE THAN ONE AND A QUARTER HOURS AT A TIME

Gamers play consecutively for an average of 1.37 hours (1 hour, 22 minutes) at a time. The country with the longest average gaming duration is Singapore, at 1.56 hours. The shortest is Italy at 1.09 hours. The U.S. has the highest percentage of people who play for an average of more than two hours at a time at 18.8 percent.

Country	Less than 10 minutes at a time	10-30 minutes at a time	30 minutes to 1 hour at a time	1-2 hours at a time	2-5 hours at a time	More than 5 hours at a time	Average hours
France	5.8%	17.8%	34.6%	29.2%	10.2%	2.4%	1.30
Germany	4.0%	19.4%	28.4%	33.0%	12.4%	2.8%	1.42
India	6.8%	19.6%	35.2%	26.4%	8.6%	3.4%	1.29
Italy	5.6%	27.2%	33.0%	26.6%	5.4%	2.2%	1.09
Japan	8.2%	27.6%	29.8%	21.0%	10.4%	3.0%	1.23
Singapore	5.2%	19.8%	29.2%	27.4%	13.0%	5.4%	1.56
South Korea	4.8%	19.0%	32.4%	26.2%	13.4%	4.2%	1.49
U.K.	3.0%	19.2%	34.6%	28.6%	10.6%	4.0%	1.43
U.S.	4.6%	22.4%	27.6%	26.6%	13.8%	5.0%	1.54
Global	**5.3%**	**21.3%**	**31.5%**	**27.2%**	**10.9%**	**3.6%**	**1.37**

Figure 33: How long do you typically consecutively play video games?

Younger gamers play for a longer duration than older ones, with those 18-25 playing an average of almost two hours at a time.

Age	Less than 10 minutes at a time	10-30 minutes at a time	30 minutes to 1 hour at a time	1-2 hours at a time	2-5 hours at a time	More than 5 hours at a time	Average hours
18-25	5.8%	12.4%	22.9%	32.8%	18.6%	7.4%	1.92
26-35	2.3%	14.7%	30.1%	31.6%	15.5%	5.8%	1.73
36-45	3.9%	18.9%	31.1%	30.8%	11.6%	3.7%	1.44
46-60	5.9%	26.3%	35.6%	24.0%	6.6%	1.6%	1.07
Over 60	9.8%	32.2%	35.0%	17.6%	4.7%	0.8%	0.87
All	**5.3%**	**21.3%**	**31.5%**	**27.2%**	**10.9%**	**3.6%**	**1.37**

Figure 34: How long do you typically consecutively play video games?

Men play an average of 19 minutes longer than women, with more than 17 percent of men playing more than two hours at a time.

Gender	Less than 10 minutes at a time	10-30 minutes at a time	30 minutes to 1 hour at a time	1-2 hours at a time	2-5 hours at a time	More than 5 hours at a time	Average hours
Female	6.5%	25.0%	32.8%	24.0%	9.0%	2.7%	1.21
Male	4.2%	18.0%	30.6%	30.2%	12.6%	4.5%	1.52
All	**5.3%**	**21.3%**	**31.5%**	**27.2%**	**10.9%**	**3.6%**	**1.37**

Figure 35: How long do you typically consecutively play video games?

As expected, aspiring professionals and experts play much longer than casual and novice gamers. Nearly 20 percent of aspiring pros play for more than 5 hours at a time.

Gamer Type	Less than 10 minutes at a time	10-30 minutes at a time	30 minutes to 1 hour at a time	1-2 hours at a time	2-5 hours at a time	More than 5 hours at a time	Average hours
Aspiring professional	2.6%	11.5%	16.0%	25.6%	24.4%	19.9%	**2.89**
Expert	1.5%	6.4%	22.2%	38.6%	21.9%	9.5%	**2.25**
Casual gamer	3.2%	20.6%	35.8%	29.4%	9.1%	1.8%	**1.23**
Novice	14.2%	36.7%	31.0%	12.7%	4.3%	1.0%	**0.78**
All	**5.3%**	**21.3%**	**31.5%**	**27.2%**	**10.9%**	**3.6%**	**1.37**

Figure 36: How long do you typically consecutively play video games?

MOST GAMERS HAVE PLAYED FOR MORE THAN FOUR HOURS CONSECUTIVELY

Although gamers typically play for an average of 1.37 hours at a time, it is not uncommon for gaming sessions to run much longer. Globally, gamers reported their longest consecutive playing session lasted 4.31 hours (4 hours, 19 minutes). However, longest playing session times range from a low of 2.43 hours in Italy to 5.14 hours in Japan where 8.0 percent have played for more than 15 hours consecutively.

Country	Up to 1 hour	1-3 hours	3-5 hours	5-10 hours	10-15 hours	More than 15 hours	Average longest duration
France	23.8%	30.4%	26.8%	12.4%	4.0%	2.6%	**3.70**
Germany	17.8%	25.8%	25.4%	16.6%	9.0%	5.4%	**4.96**
India	17.4%	38.8%	25.4%	11.8%	3.6%	3.0%	**3.75**
Italy	37.8%	36.8%	16.4%	6.6%	1.4%	1.0%	**2.43**
Japan	19.2%	23.4%	24.4%	19.4%	5.6%	8.0%	**5.14**
Singapore	15.8%	29.4%	25.4%	16.8%	6.4%	6.2%	**4.86**
South Korea	20.8%	33.0%	23.2%	14.0%	4.6%	4.4%	**4.11**
U.K.	9.6%	30.6%	30.4%	19.4%	6.4%	3.6%	**4.78**
U.S.	13.6%	27.6%	23.4%	22.6%	8.2%	4.6%	**5.10**
Global	**19.5%**	**30.6%**	**24.5%**	**15.5%**	**5.5%**	**4.3%**	**4.31**

Figure 37: What is the longest you have ever consecutively played video games at one time?

Younger gamers have longer consecutive playing times than older gamers.

Age	Up to 1 hour	1-3 hours	3-5 hours	5-10 hours	10-15 hours	More than 15 hours	Average longest duration
18-25	12.4%	20.8%	25.0%	24.1%	9.7%	7.9%	5.92
26-35	8.6%	25.2%	27.7%	23.0%	8.8%	6.7%	5.69
36-45	14.7%	27.9%	30.9%	16.2%	5.9%	4.4%	4.62
46-60	24.2%	38.0%	22.3%	10.2%	2.8%	2.5%	3.35
Over 60	38.3%	37.1%	15.5%	6.8%	1.4%	1.0%	2.41
All	19.5%	30.6%	24.5%	15.5%	5.5%	4.3%	4.31

Figure 38: What is the longest you have ever consecutively played video games at one time?

The average man's longest session is almost 5 hours, which is more than one hour, 19 minutes longer than the average woman.

Gender	Up to 1 hour	1-3 hours	3-5 hours	5-10 hours	10-15 hours	More than 15 hours	Average longest duration
Female	23.8%	33.4%	23.8%	12.7%	3.5%	2.8%	3.63
Male	15.6%	28.1%	25.2%	18.1%	7.3%	5.7%	4.95
All	19.5%	30.6%	24.5%	15.5%	5.5%	4.3%	4.31

Figure 39: What is the longest you have ever consecutively played video games at one time?

Not surprisingly, aspiring pros and experts have longer consecutive playing times than casual or novice gamers. The average aspiring pro's longest session averages seven hours 38 minutes. More than 19 percent of aspiring pros have played for more than 15 hours consecutively. More than half of casual gamers and novices have never played for more than 3 hours at a time.

Gamer Type	Up to 1 hour	1-3 hours	3-5 hours	5-10 hours	10-15 hours	More than 15 hours	Average longest duration
Aspiring professional	7.1%	21.8%	21.8%	18.6%	11.5%	19.2%	7.64
Expert	6.0%	19.4%	28.0%	25.4%	12.1%	9.0%	6.58
Casual gamer	17.1%	34.0%	26.6%	15.3%	4.3%	2.8%	4.01
Novice	38.5%	32.6%	17.0%	7.6%	2.2%	2.1%	2.75
All	19.5%	30.6%	24.5%	15.5%	5.5%	4.3%	4.31

Figure 40: What is the longest you have ever consecutively played video games at one time?

GAMING CAN INTERFERE WITH DAILY ACTIVITIES

When gamers get caught up playing their favorite game, they often do not break away to attend to daily activities. More than half have missed sleep while playing a game. The most tired gamers are in South Korea where 66.8 percent have missed sleep while gaming. The hungriest gamers are in Germany, where 43.6 percent have missed a meal to play video games. Indians have missed work while gaming more than any other country at 24.2 percent. More than 41 percent of Italians have missed time with friends or going on a date while gaming, but only 5.2 percent of Japanese gamers have left their friends waiting.

Country	A meal	Work	A shower	Sleep	Spending time with friends or going on a date
France	29.6%	11.2%	25.6%	49.4%	22.8%
Germany	43.6%	8.8%	20.2%	56.6%	21.8%
India	37.2%	24.2%	26.8%	44.8%	35.0%
Italy	20.6%	8.2%	17.4%	42.6%	41.4%
Japan	40.0%	9.0%	23.0%	54.8%	5.2%
Singapore	38.2%	12.2%	31.4%	51.0%	37.2%
South Korea	25.8%	15.6%	15.8%	66.8%	22.0%
U.K.	36.4%	10.0%	22.4%	56.4%	21.8%
U.S.	37.6%	11.2%	25.0%	56.8%	26.4%
Global	**34.3%**	**12.3%**	**23.1%**	**53.2%**	**26.0%**

Figure 41: What daily activities have you missed due to playing a video game? (Select all that apply)

Younger gamers are more likely to skip a meal, work, or a shower than older ones. However, age is not a major factor when determining whether a gamer is more likely to miss sleep or skip spending time with friends.

Age	A meal	Work	A shower	Sleep	Spending time with friends or going on a date
18-25	36.7%	14.2%	31.3%	55.9%	24.2%
26-35	36.7%	18.8%	29.7%	53.2%	28.5%
36-45	38.4%	16.1%	26.2%	52.6%	27.3%
46-60	31.6%	8.0%	16.4%	55.3%	25.0%
Over 60	28.6%	4.5%	14.9%	48.3%	24.0%
All	**34.3%**	**12.3%**	**23.1%**	**53.2%**	**26.0%**

Figure 42: What daily activities have you missed due to playing a video game? (Select all that apply)

ONE-THIRD OF GAMERS PLAY AT WORK

More than 35 percent of gamers who work play video games during work at least once a month, with 9.5 percent playing daily. The highest rate is in India where 52 percent play during work monthly, and the lowest is in Japan at 18.3 percent.

Country	I never play video games during work	I play video games during work once a month	I play video games during work once a week	I play video games during work daily
France	71.0%	15.3%	9.0%	4.7%
Germany	69.9%	14.9%	10.3%	4.9%
India	48.0%	13.0%	19.6%	19.6%
Italy	74.3%	12.7%	8.9%	4.1%
Japan	81.7%	5.7%	5.1%	7.6%
Singapore	60.9%	12.7%	14.4%	12.0%
South Korea	58.4%	14.3%	17.8%	9.5%
U.K.	65.9%	13.3%	12.7%	8.0%
U.S.	56.5%	12.7%	17.9%	13.0%
Global	**64.8%**	**12.7%**	**13.0%**	**9.5%**

Figure 43: How often do you play video games during work?

Gamers 26-35 are most likely to play at work, with almost half (48.1%) playing each month. Less than 17 percent of gamers over 60 who are employed play at work.

Age	I never play video games during work	I play video games during work once a month	I play video games during work once a week	I play video games during work daily
18-25	56.8%	19.5%	13.7%	10.0%
26-35	51.9%	18.0%	18.0%	12.2%
36-45	59.9%	13.6%	15.4%	11.1%
46-60	77.2%	7.5%	8.3%	7.0%
Over 60	83.1%	4.4%	7.5%	5.0%
All	**64.8%**	**12.7%**	**13.0%**	**9.5%**

Figure 44: How often do you play video games during work?

MORE THAN A THIRD OF GAMERS WOULD LIKE TO BECOME PROFESSIONALS

As the prize money from gaming tournaments continues to rise and educational institutions offer classes in gaming, more people are considering video gaming as a possible professional career. Almost 36 percent of global gamers would quit their jobs and become professional gamers if they could support themselves by doing so. This is an increase of 11 percent in the past year. The countries with the highest percentage of gamers who would like to turn pro are India at 49.2 percent and the U.S. at 48.3 percent. Japan had the lowest number considering a professional career, with just 14.0 percent willing to quit their jobs to become professional gamers.

Country	No	Yes
France	70.6%	29.4%
Germany	64.8%	35.2%
India	50.8%	49.2%
Italy	59.0%	41.0%
Japan	86.1%	14.0%
Singapore	62.0%	38.0%
South Korea	72.7%	27.3%
U.K.	61.4%	38.6%
U.S.	51.7%	48.3%
Global	**64.3%**	**35.7%**

Figure 45: Would you quit your job if you could support yourself as a professional video game player?

Younger gamers are more interested in the prospect of becoming professionals, with almost half of those 18-35 wanting to turn pro.
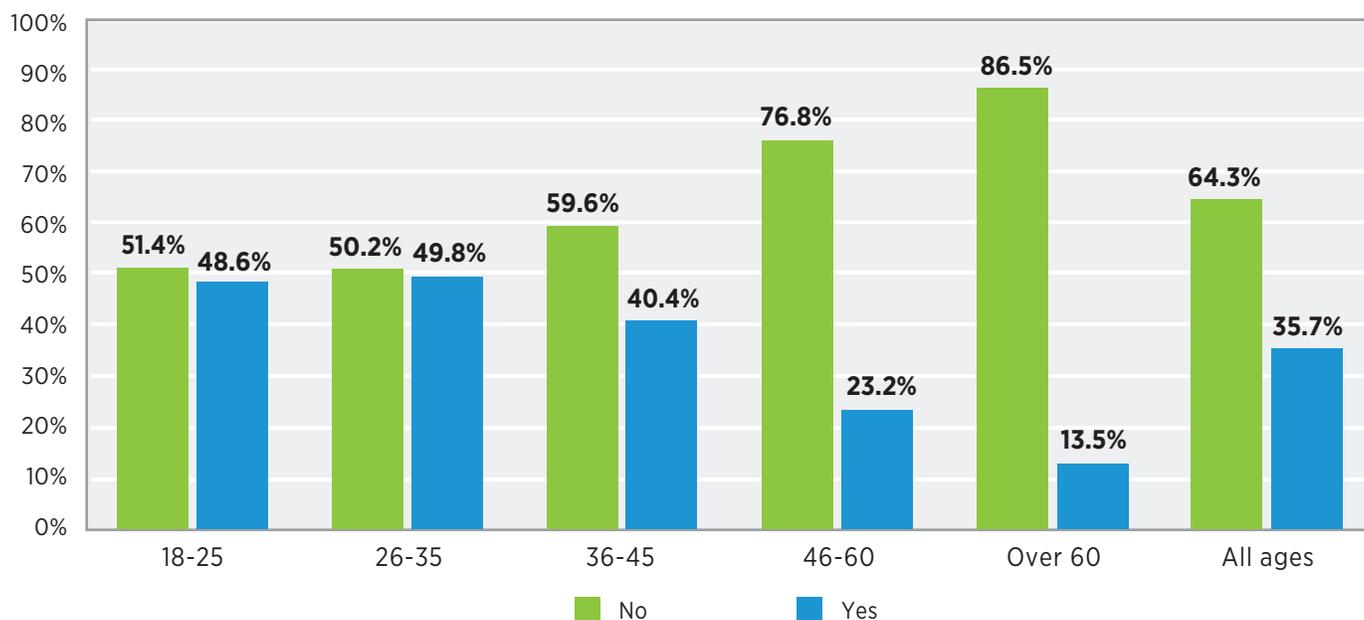

Figure 46: Would you quit your job if you could support yourself as a professional video game player?

Men are much more interested in a career as a professional gamer than women, with 41.2 percent of men willing to quit their jobs and become professional gamers compared to just 29.1 percent of women.

Gender	No	Yes
Female	70.9%	29.1%
Male	58.8%	41.2%
All	64.3%	35.7%

Figure 47: Would you quit your job if you could support yourself as a professional video game player?

A majority of younger male gamers would become professionals if they could support themselves by doing so. More than 56 percent of male gamers 18-35 would quit their jobs and turn pro. Less than a third of those 46 and older would do so.
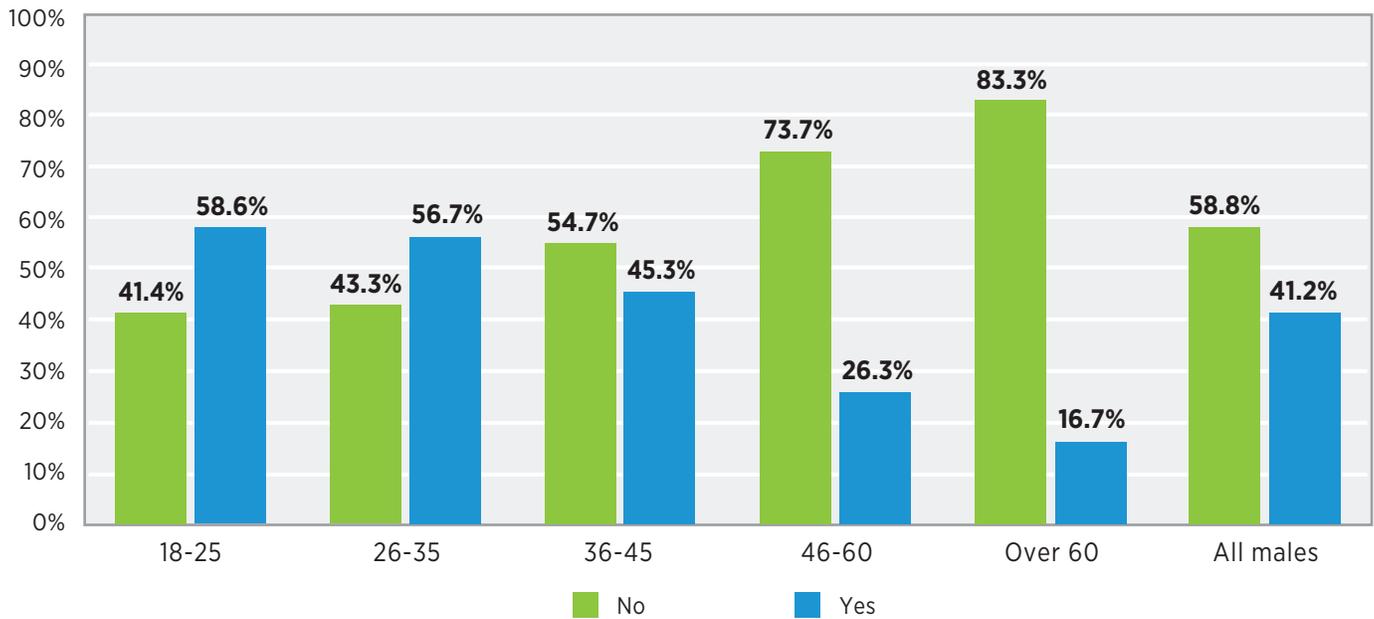
Figure 48: Would you quit your job if you could support yourself as a professional video game player? (Males)

ONLINE SECURITY IS A SERIOUS CONCERN FOR GAMERS

Gamers take online security very seriously. More than half (53.9 percent) would not continue to play online games or make purchases on a website that has previously been hacked or experienced a security incident such as a data breach. The number who would stop doing business with a gaming site after a security issue exceeds 60 percent in Germany (61.8 percent), Japan (62.6 percent), and South Korea (65.8 percent). Only 21.4 percent of gamers said they would continue to visit sites after a breach.

Country	No	Yes	I am not sure
France	51.8%	25.0%	23.2%
Germany	61.8%	16.2%	22.0%
India	44.6%	38.6%	16.8%
Italy	55.6%	16.2%	28.2%
Japan	62.6%	6.4%	31.0%
Singapore	51.0%	25.8%	23.2%
South Korea	65.8%	19.0%	15.2%
U.K.	44.4%	22.4%	33.2%
U.S.	47.8%	22.8%	29.4%
Global	53.9%	21.4%	24.7%
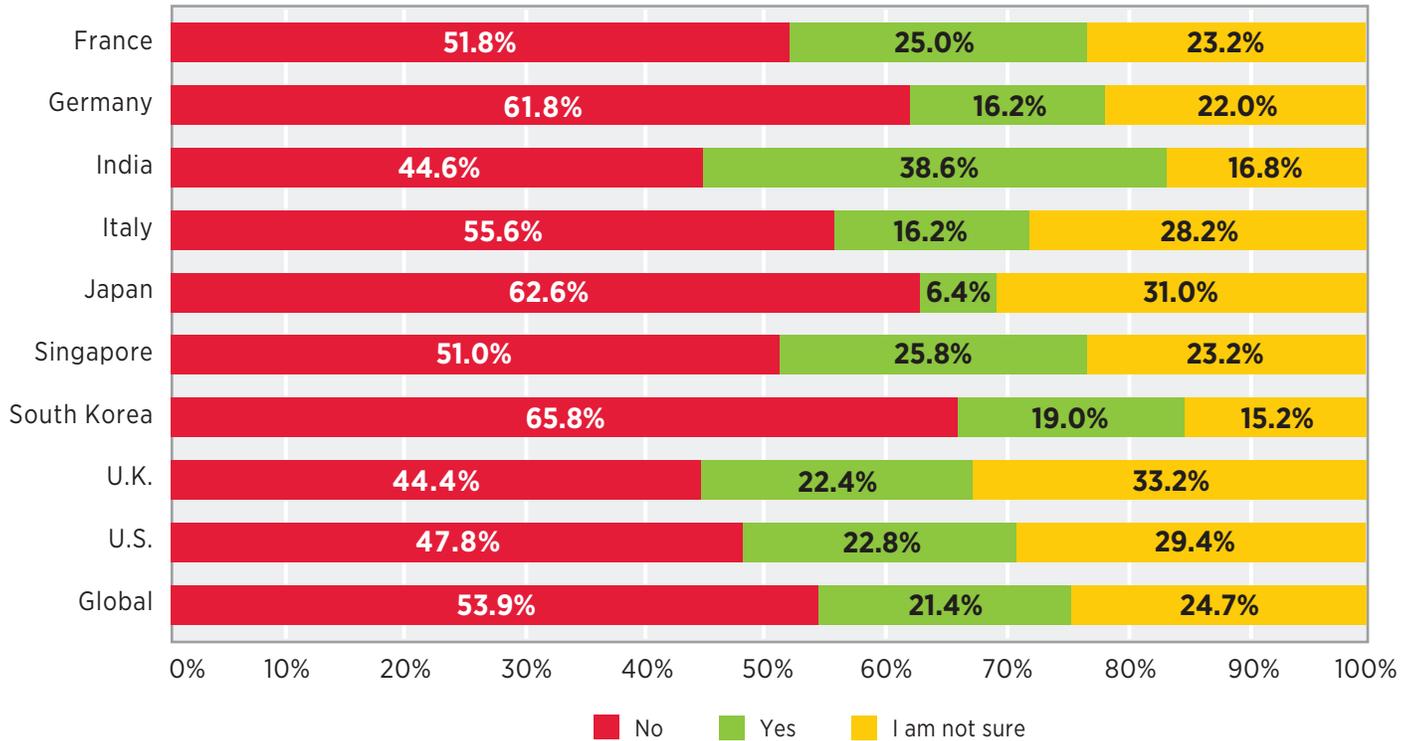
Figure 49: Will you continue to play online games or make purchases from a gaming website that has previously experienced a security breach or been hacked?

Older gamers are most concerned about online security. Only 12.9 percent of those 46-60 and 8.6 percent over 60 will play online games or continue visiting a gaming site after a security incident.

Age	No	Yes	I am not sure
18-25	47.0%	23.3%	29.7%
26-35	42.3%	32.6%	25.1%
36-45	46.0%	29.9%	24.1%
46-60	63.7%	12.9%	23.4%
Over 60	68.4%	8.6%	23.0%
All	53.9%	21.4%	24.7%
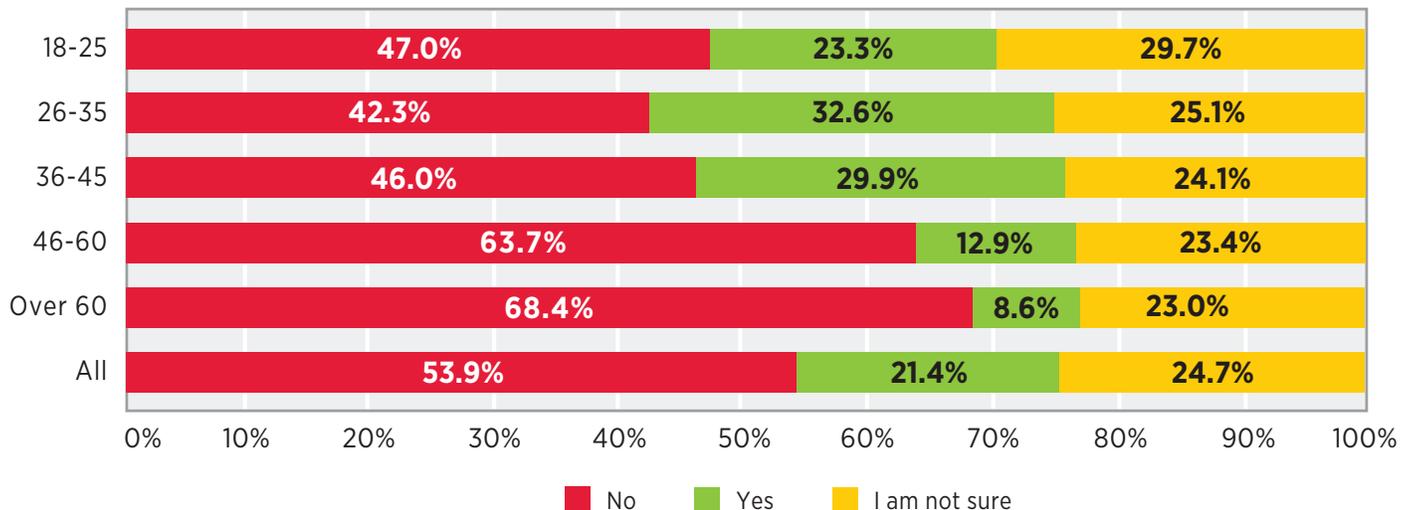
Figure 50: Will you continue to play online games or make purchases from a gaming website that has previously experienced a security breach or been hacked?

Women are more concerned about online security than men, with just 16.2 percent willing to continue to visit a gaming site after it has been compromised.

	No	Yes	I am not sure
Female	56.4%	16.2%	27.3%
Male	51.6%	26.2%	22.3%
All	53.9%	21.4%	24.7%

No   **Yes**   **I am not sure**
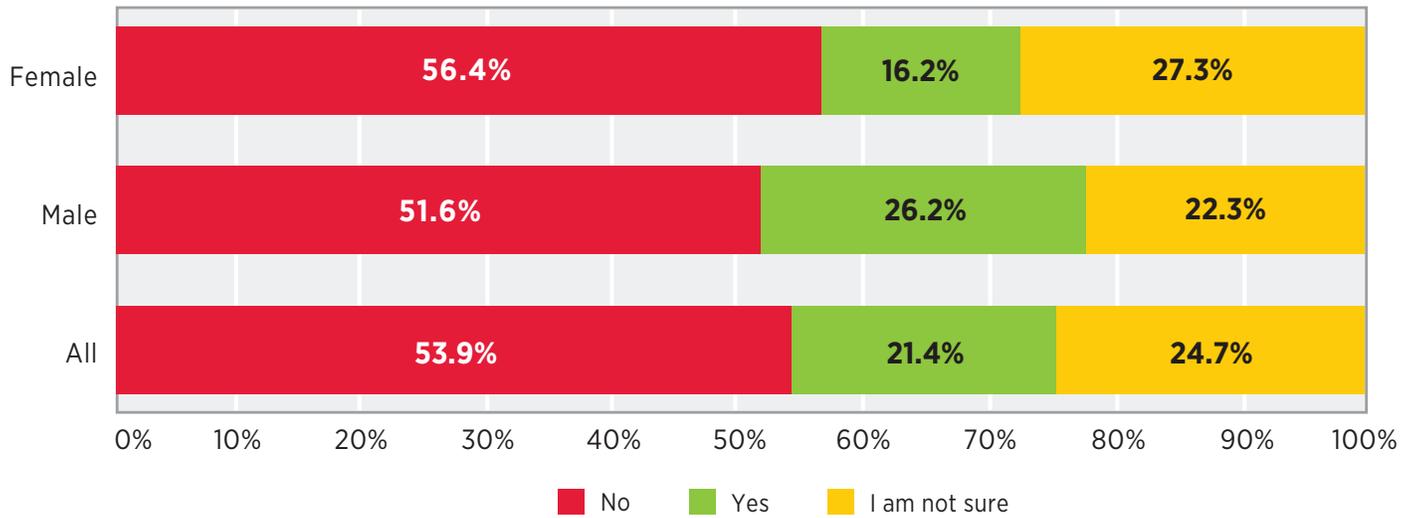
Figure 51: Will you continue to play online games or make purchases from a gaming website that has previously experienced a security breach or been hacked?

CONCLUSIONS AND RECOMMENDATIONS

To maximize revenue opportunities by providing gamers with the highest-quality online experiences that keep them playing longer and coming back for more, gaming companies should consider the following:

OPTIMIZE THE GAME DOWNLOAD PROCESS

Gamers overwhelmingly prefer to download games rather than purchasing physical copies. However, nearly 85 percent find the process frustrating, with slow download speeds as the primary complaint. To ensure all customers receive the fastest download speeds when you post a major new release or software update, utilize the services of a Content Delivery Network (CDN) with the global capacity and performance to handle spikes in traffic. A CDN with a dense caching architecture and direct peering with ISPs and major end-user networks will provide the highest performance by ensuring gamers are able to download games from a direct connection to a local point of presence where the software is available. Be sure to position game software in caches prior to release to ensure all gamers get the fastest download performance as soon as the software is available.

IMPLEMENT CLOUD-BASED SECURITY SOLUTIONS

Security breaches have both an immediate and long-term impact on revenue. The majority of gamers will not make purchases or play games on a site that has previously experienced a security breach. To protect your web infrastructure and sensitive customer data, a Web Application Firewall (WAF) should be utilized to protect web servers from malicious attacks. By utilizing a WAF that is integrated between a CDN and the web application infrastructure, only requests for content that has not been previously cached need to be inspected by the WAF, increasing overall content delivery performance. Bot traffic mitigation should also be employed to guard against the increasing number of malicious bots being used to try to exploit potential security vulnerabilities in web infrastructure. In addition, Distributed Denial of Service (DDoS) protection should be utilized to ensure your site is not overwhelmed by large-scale volumetric attacks intended to make the site unresponsive. For maximum protection and performance under a DDoS attack, a DDoS mitigation solution that has massive scrubbing capabilities integrated with a CDN network ensures site performance is not impacted, even during a large-scale attack.

APPENDIX
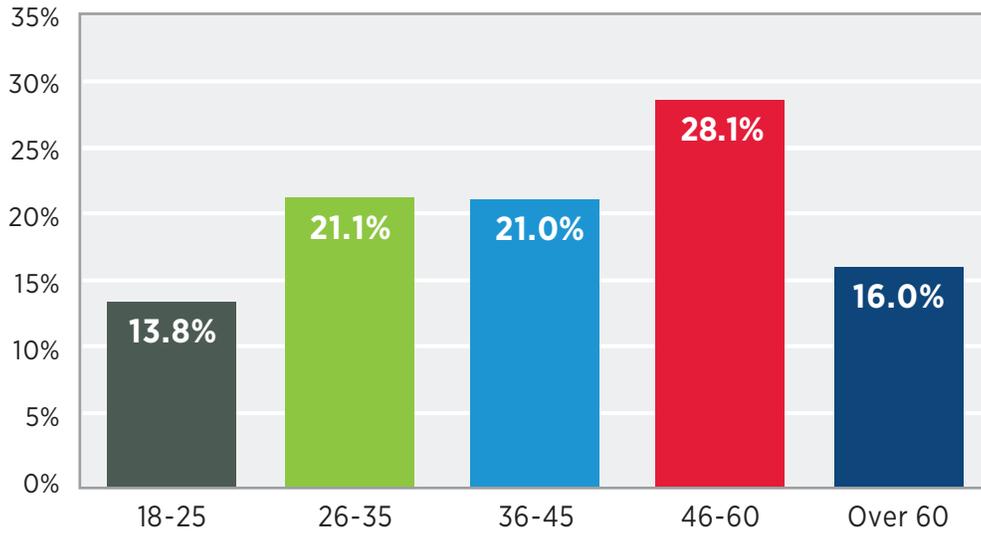
Figure 52: How old are you?
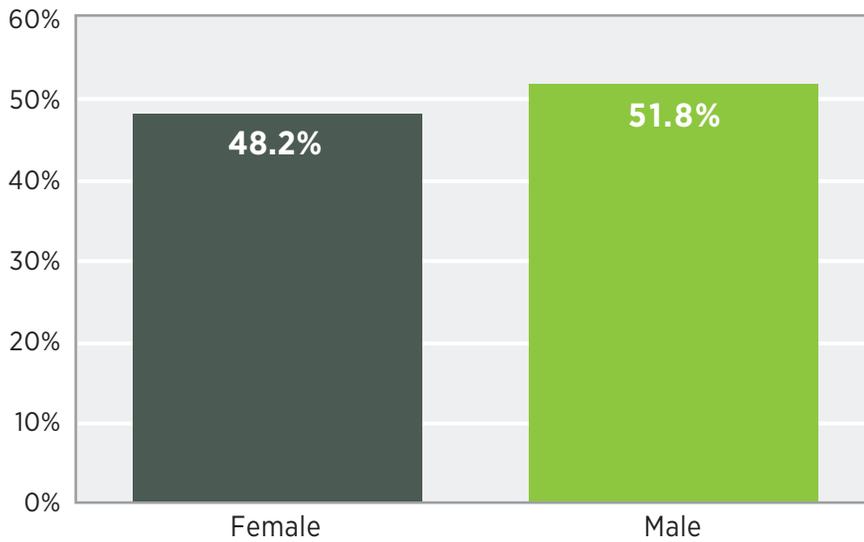
Figure 53: What is your gender?

METHODOLOGY

This survey was fielded by a third-party company with access to consumer panels in France, Germany, India, Italy, Japan, Singapore, South Korea, the United Kingdom, and the United States. 500 responses were collected from each country for a total of 4,500 global responses. Survey responses were collected between January 25, 2019 and February 14, 2019.

ABOUT LIMELIGHT NETWORKS

Limelight Networks, Inc. (NASDAQ: LLNW), a leading provider of digital content delivery, video, cloud security, and edge computing services, empowers customers to provide exceptional digital experiences. Limelight's edge services platform includes a unique combination of global private infrastructure, intelligent software, and expert support services that enable current and future workflows. For more information, visit https://www.limelight.com, follow us on Twitter, Facebook, and LinkedIn.

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