WHAT TURNS PLAYERS INTO PAYERS

UNDERSTANDING THE GAMING PAYMENTS EXPERIENCE

CONTENTS

FOREWORD

AN INTRODUCTION TO THE REPORT

In 2018, the global games market will reach $137.9 billion and by 2021, mobile gaming alone will be a $100 billion market. While the potential revenue opportunity for games has never been higher, the free-to-play model and abundance of game choices have given gamers the power to choose where, how, and when they spend their money. Games get one chance to engage, delight, and convert their players.

Understanding the nuances in gamers' paying habits, experiences, and preferences, and how they differ across demographic groups helps publishers craft a top-quality and custom experience for their most treasured gamers.

ACI Worldwide and Newzoo have conducted a large-scale study on the paying gamer and their payment behavior in the U.S., the U.K., and Germany, to gather a better understanding of these exact topics. These key markets account for almost 30% of global games market revenues in 2018.

In our survey, we identified that while gamers are spending the most time on mobile, they are far more likely to spend money on console. The ongoing transition to digital spending is being driven by younger gamers (aged 18-29) who spend a larger share of their budget on digital rather than boxed goods. Although power-ups are the most popular in-game purchase overall, there are large differences per country, age, and gender that need to be taken into account when trying to engage and convert gamers.

Payments is undoubtedly a complex area that is changing fast as gamers reshape the market. Aside from a demographic profile of paying gamers, this report details the payment and fraud experience, and how it can be improved. User experience is everything in online gaming. Failure to optimize it increases the risk of gamers abandoning their payment. We hope you find the report helpful in understanding gamers' motivation to pay and in providing a frictionless customer experience.

Andy McDonald
VP Merchant Payments Europe
ACI Worldwide

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Newzoo

newzoo

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WHERE TODAY'S GAMERS ARE PLAYING

CHAPTER HIGHLIGHTS

1

MOBILE IS THE MOST-PLAYED GAMING SEGMENT

Mobile games are the most popular segment in all three countries, played by more than 90% of gamers. In Germany, one of the biggest PC gaming markets in Europe, console games are noticeably less popular than in the U.S. and the U.K.

2

GERMAN GAMERS HAVE DIFFERENT DEVICE PREFERENCES

Looking at the devices that gamers are using on each platform, German gamers diverge from the others; 60% use Android devices to play mobile games, compared to less than half of U.S. and U.K gamers. They are also much more likely to be using a PC (versus a laptop or Mac) for PC games and less likely to be using a PS4 on console.

3

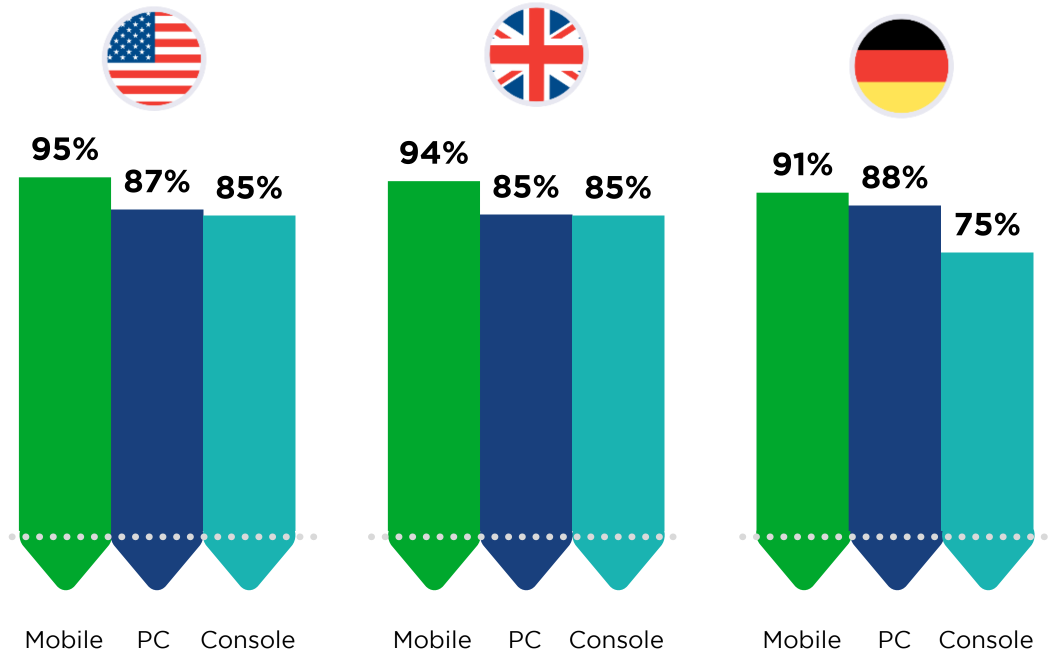
MAJORITY OF GAMERS PLAY ON ALL PLATFORMS

Modern gamers are not exclusively loyal to one gaming platform. Over 70% of gamers across the three countries are playing games on mobile, console, and PC. Many publishers are catering to this trend by releasing and optimizing titles for each platform. In terms of franchises, Mario is still the most played title overall with newcomer Fortnite at #5.

MOBILE IS THE MOST POPULAR PLATFORM IN ALL THREE COUNTRIES

SHARE OF GAMERS PER PLATFORM PER COUNTRY | MOBILE, PC, CONSOLE

SHARE OF GAMERS | PER PLATFORM



95%

of gamers across the three countries are playing mobile titles.

German gamers have traditionally preferred PC gaming over console and this is the only market where PC is far more popular than console.

Looking at hours spent, gamers also spend the most time on mobile, with 33% of mobile gamers playing for more than six hours a week across the three countries.

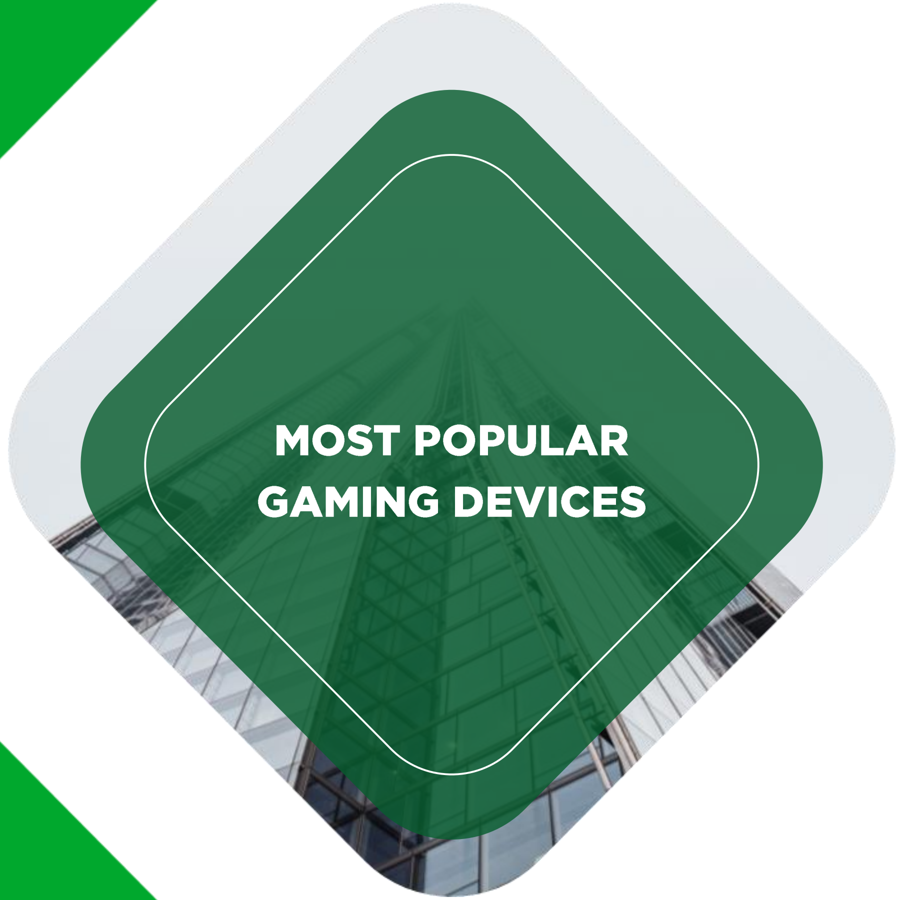
PAYMENT METHOD

PayPal is the preferred payment method for each gaming platform, in every country.

Base: Play games on any platform for at least 2 hours per week.

73%

OF GAMERS PLAY GAMES ON ALL THREE PLATFORMS



SMARTPHONE

Android devices are the most popular mobile devices for gaming, followed by the iPhone.

SHARE OF GAMERS WHO OWN AND USE ANDROID FOR GAMING

49%	44%	60%

PC

56% of gamers own and use a PC to play games, compared to 10% who own and use a Mac.

SHARE OF GAMERS WHO OWN AND USE A PC FOR GAMING

55%	49%	66%

CONSOLE

PlayStation 4 (incl. Slim and Pro) is the most popular console device, owned and used by 42% of gamers, while 28% own and use an Xbox One (incl. X or S).

SHARE OF GAMERS WHO OWN AND USE A PS4 FOR GAMING

43%	45%	35%

MARIO IS THE MOST POPULAR FRANCHISE IN THE U.S. AND GERMANY

MOST PLAYED FRANCHISES PER COUNTRY

TOP FRANCHISES PLAYED IN THE LAST 3 MONTHS

FRANCHISES	U.S.	U.K.	GERMANY
MARIO	38%	26%	26%
CALL OF DUTY	37%	33%	18%
CANDY CRUSH SAGA	35%	26%	23%
GRAND THEFT AUTO	32%	36%	25%
FORTNITE	35%	26%	17%
POKÉMON	30%	21%	18%
MINECRAFT	27%	18%	14%
ASSASSIN'S CREED	24%	25%	19%
CLASH OF CLANS	23%	14%	15%
FIFA	17%	32%	22%

FRANCHISES

38%

of players in the U.S. play Mario, where it's the number one title. It's also the top title in Germany. In the U.K., Grand Theft Auto is the most popular game with a 36% player share. Overall, German gamers are less likely to be playing all of the top franchises.

GENRES

We also looked at gamers' favorite genres and saw that 55% of players enjoy action/adventure games, making this the most popular genre across the three countries. Strategy is the second most popular genre overall (50%), but is less popular in the U.K. than the other countries (41%).

The casino genre is notably more popular in the U.S. (22%) than in the U.K. (13%) and Germany (11%).

Base: Play games on any platform for at least 2 hours per week.

2

WHAT TURNS PLAYERS INTO PAYERS?

CHAPTER HIGHLIGHTS

1

MOBILE HAS THE MOST PLAYERS BUT THE SMALLEST SHARE OF PAYERS

Although mobile is the most popular platform, its players are least likely to spend money. This is a consequence of the relatively casual nature of the platform and the prevalence of free-to-play titles. The majority of mobile gamers who do spend money, spend on in-game purchases (75%).

Across all three countries, console gamers are most likely to pay, driven by the relative lack of free-to-play titles compared to PC and mobile.

2

ENJOYMENT IS KEY MOTIVATOR TO SPEND MONEY IN A GAME

For paying gamers, the main motivation to spend money on or in a game is to enjoy themselves more.

Interestingly, 20% of payers are motivated to pay to show their support for the game developer. Highlighting the fact that game payment shows appreciation for the developer can encourage gamers to pay for, or within, your game.

3

PAYING GAMERS CAN BE ENGAGED THROUGH COMPETITIVE ELEMENTS AND REWARDS

Paying gamers are far more likely than non-paying gamers to compete in online or offline tournaments against other gamers and to keep playing a game that offers loyalty/ reward programs.

Adding a competitive element to your game, or a reward program, can help attract and retain more of these valuable players.

4

(YOUNGER) PC/CONSOLE GAMERS ARE DRIVING THE TRANSITION TO DIGITAL

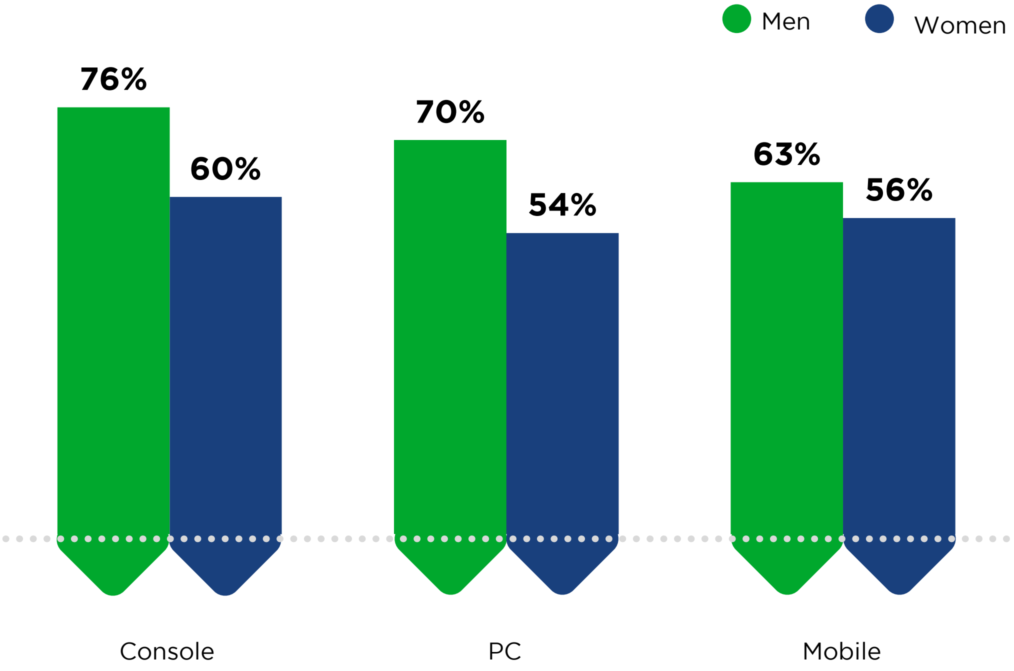
Paying gamers are more likely to spend part of their PC/Console budget on digital/download games and in-game purchases than on boxed games.

This is driven by younger gamers who are far less likely than older gamers (aged 30-40) to be spending their budget on traditional boxed formats.

AMERICAN CONSOLE GAMERS MOST LIKELY TO SPEND MONEY

SHARE OF U.S. GAMERS WHO PAY PER PLATFORM, GENDER COMPARISON

SHARE OF PAYING GAMERS PER PLATFORM



Base: Gamers who play games on that platform

76%

of American men who play console games spend money on them. With 70% of all console players paying for console games, console has the highest ratio of payers to players compared to the other gaming platforms.

AGE

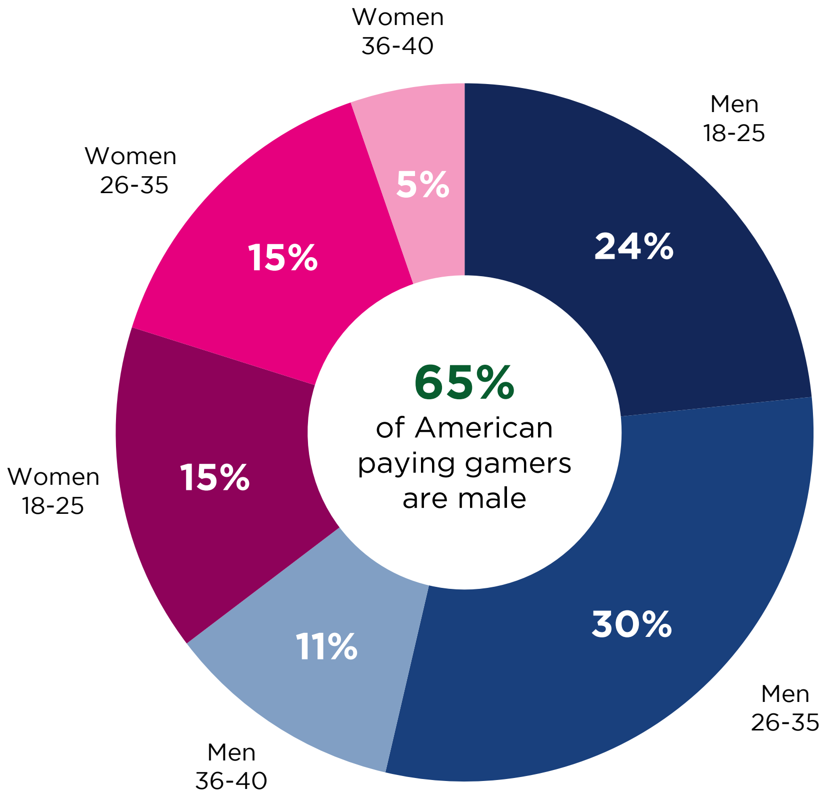
SHARE OF PLAYERS THAT ARE AVERAGE/BIG SPENDERS*

	YOUNG PAYERS (18-29)	OLDER PAYERS (30-40)
CONSOLE	72%	**73%**
PC	**71%**	70%
MOBILE	55%	**58%**

*Average/big spenders spend at least $5 per month on the relevant platform

A PROFILE OF PAYING GAMERS IN THE U.S.

AGE-GENDER AND KEY FACTS ON GAMERS WHO SPEND MONEY



KEY FACTS ON THE PAYING GAMER | U.S.

25% compete in online or offline tournaments against other gamers (28% for men and 19% for women) vs. 5% of non-payers.

36% have gambled for real money in the past 6 months vs. 12% of non-payers.

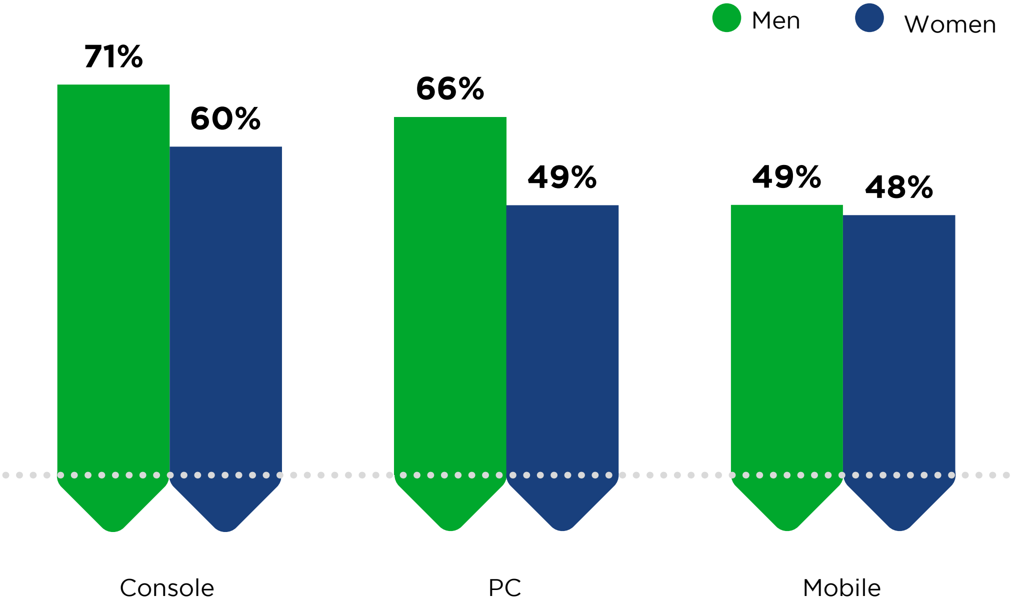
73% are more likely to keep playing a game if it offers loyalty/reward programs vs. 61% of non-payers.

Base: Play games on any platform for at least 2 hours per week AND pay on or in games.

MEN AND WOMEN ARE EQUALLY LIKELY TO PAY FOR MOBILE GAMES

SHARE OF U.K. GAMERS WHO PAY PER PLATFORM, GENDER COMPARISON

SHARE OF PAYING GAMERS PER PLATFORM



Base: Gamers who play games on that platform

49%

of men and 48% of women who play mobile games spend money on them.

This is interesting as there is a much bigger gender gap when it comes to paying on the other platforms. This is especially true for PC where 66% of men and 49% of women spend money.

AGE

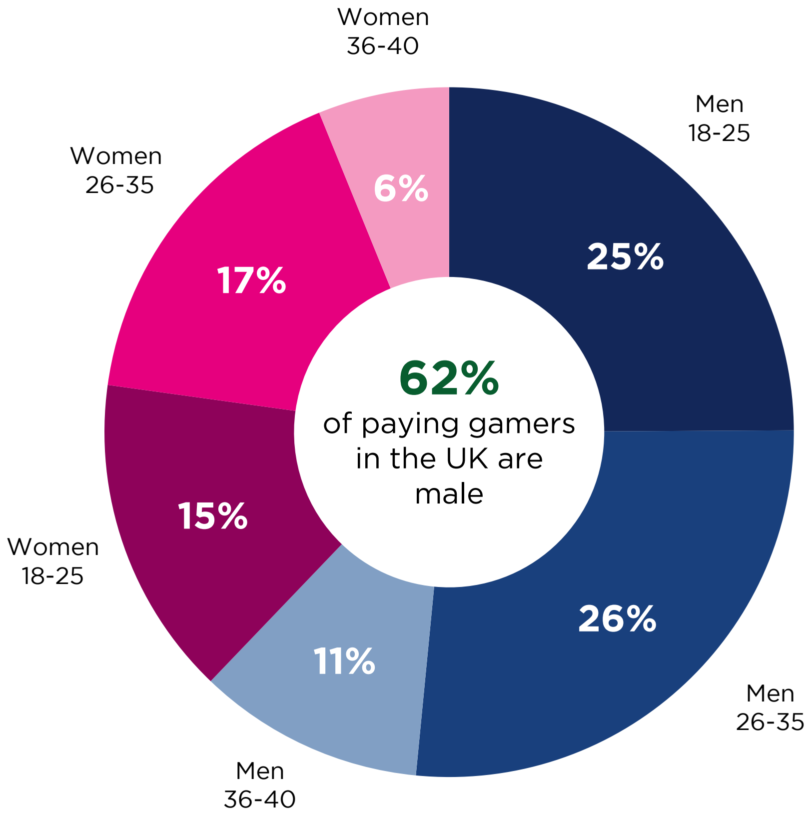
SHARE OF PLAYERS THAT ARE AVERAGE/BIG SPENDERS*

	YOUNG PAYERS (18-29)	OLDER PAYERS (30-40)
CONSOLE	73%	**74%**
PC	62%	**73%**
MOBILE	43%	**46%**

*Average/big spenders spend at least $5 per month on the relevant platform

A PROFILE OF PAYING GAMERS IN THE U.K.

AGE-GENDER AND KEY FACTS ON GAMERS WHO SPEND MONEY



KEY FACTS ON THE PAYING GAMER | U.K.

16% compete in online or offline tournaments against other gamers (15% for men and 19% for women) vs. 5% of non-payers.

51% have gambled for real money in the past 6 months vs. 32% of non-payers.

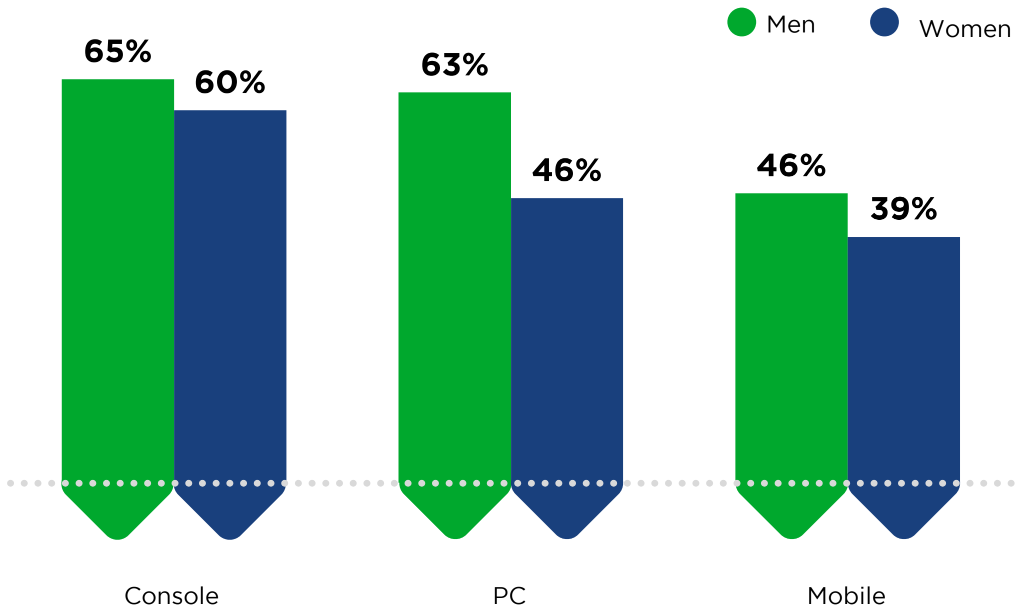
68% are more likely to keep playing a game if it offers loyalty/reward programs vs. 56% of non-payers.

Base: Play games on any platform for at least 2 hours per week AND pay on or in games.

GENDER PAY GAP ON CONSOLE IS RELATIVELY SMALL

SHARE OF GERMAN GAMERS WHO PAY PER PLATFORM, GENDER COMPARISON

SHARE OF PAYING GAMERS PER PLATFORM



Base: Gamers who play games on that platform

65%

of men who play console games in Germany pay for them versus 60% of women. This is the smallest pay gap on console that we see across the three countries.

Women who play mobile games in Germany are the least likely to spend money on that platform – 39% vs. 48% (U.K.) and 54% (U.S).

AGE

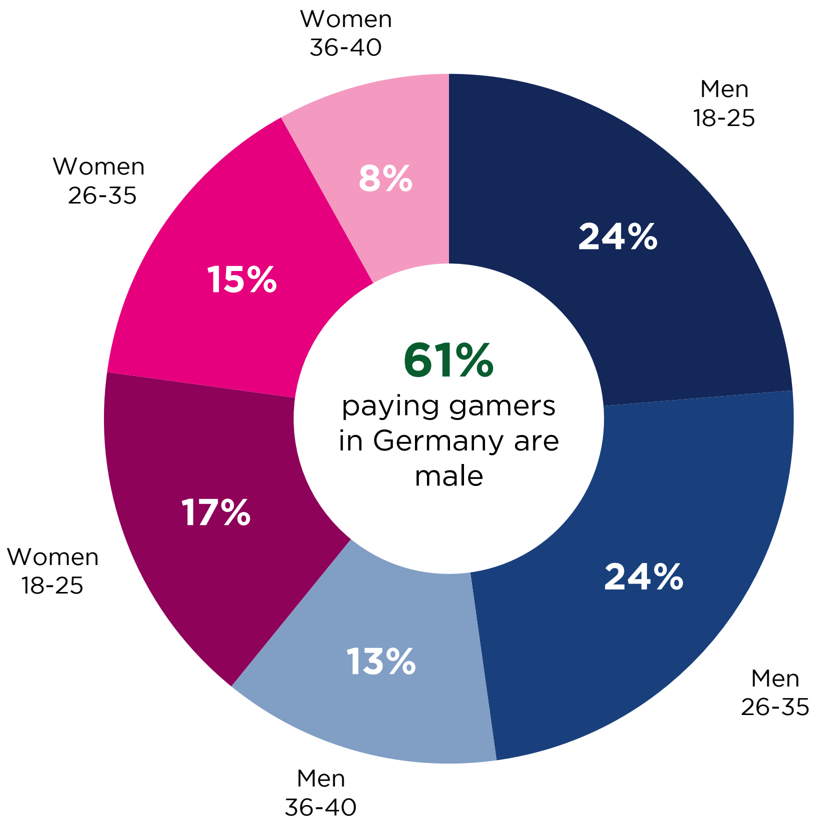
SHARE OF PLAYERS THAT ARE AVERAGE/BIG SPENDERS*

	YOUNG PAYERS (18-29)	OLDER PAYERS (30-40)
CONSOLE	66%	**72%**
PC	**77%**	72%
MOBILE	44%	**50%**

*Average/big spenders spend at least $5 per month on the relevant platform

A PROFILE OF PAYING GAMERS IN GERMANY

AGE/GENDER AND KEY FACTS ON GAMERS WHO SPEND MONEY



KEY FACTS ON THE PAYING GAMER | GERMANY

13% compete in online or offline tournaments against other gamers (16% for men and 8% for women) vs. 3% of non-payers.

30% have gambled for real money in the past 6 months vs. 12% of non-payers.

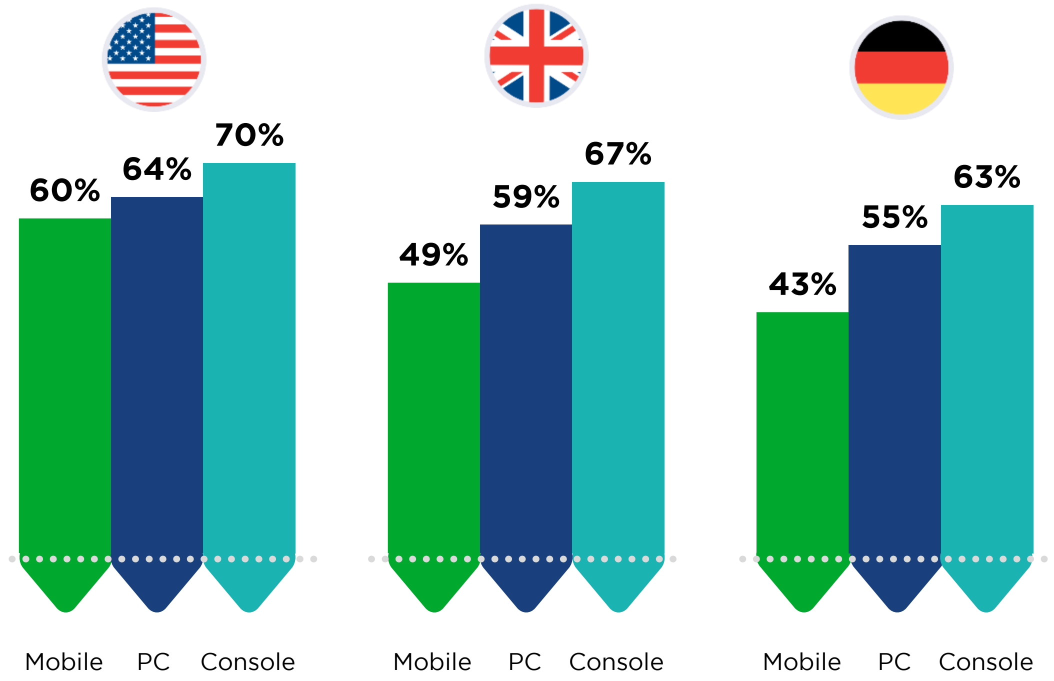
63% are more likely to keep playing a game if it offers loyalty/reward programs vs. 59% of non-payers.

Base: Play games on any platform for at least 2 hours per week AND pay on or in games.

SPEND PER PLATFORM: A COUNTRY COMPARISON

SHARE OF PAYERS PER PLATFORM PER COUNTRY | MOBILE, PC, CONSOLE

SHARE OF PAYERS | PER PLATFORM



77%

of gamers across the three countries spend money on games. The U.S. has the largest share of payers overall, with 78%, followed by the U.K. (77%). Germany has the lowest player/payer ratio with 70%.

Console has the highest player/payer ratio in every country, followed by PC and mobile. American gamers are far more likely to pay on mobile than the others with a 60% payer rate vs. 49% and 43% for the U.K. and Germany, respectively.

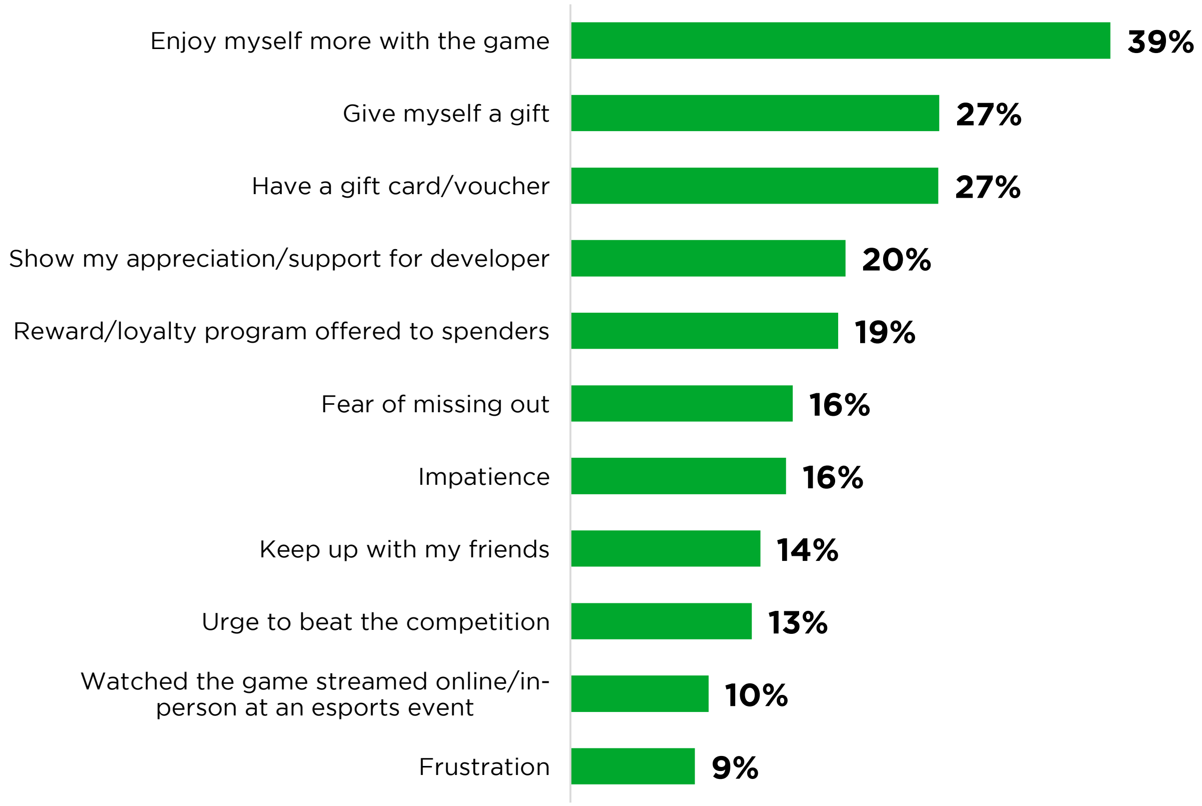
LEVEL OF SPEND

The U.S. has the highest share of big and average spenders (spend at least $5 per month) on every platform and this is most pronounced on mobile; 34% versus 21% in the U.K. and 20% in Germany. Console payers are the most likely group to spend a big or average amount in every country.

Base: Play games on any platform for at least 2 hours per week.

MORE ENJOYMENT IS THE MAIN MOTIVATION FOR SPENDING

FACTORS THAT MAKE PAYERS WANT TO SPEND IN GAME



39%

of paying gamers say that more enjoyment of a game is one of their main motivators for spending money and 20% of payers spend money to show appreciation for the developer. Female paying gamers are less motivated by this than men (15% vs. 23%). Women are more likely to be influenced to pay by reward programs (23% vs. 17%).

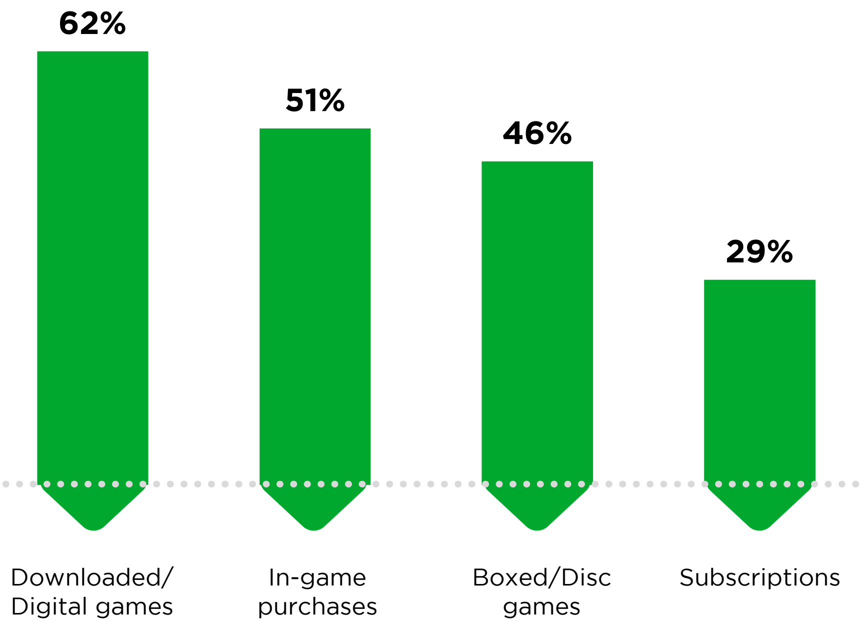
The next biggest factors for players to spend on a game are to give themselves a gift or to spend a gift card that they have. Frustration is the least important factor at 9%.

Base: Play games on any platform for at least 2 hours per week AND pay on or in games.

WHAT ARE GAMERS SPENDING ON?

HOW PAYERS ARE SPENDING THEIR GAMING BUDGET

WHERE PC/CONSOLE PAYERS SPEND THEIR BUDGET



62%

of paying PC/console gamers spend some of their gaming budgets on downloaded/digital games. Just over half of them spend money on in-game purchases. They are least likely to spend their money on subscriptions.

For mobile payers, 75% of them spend money on in-game purchases. This high share is driven by American gamers.

SHARE OF PAYING MOBILE GAMERS THAT SPEND MONEY ON IN-GAME PURCHASES

78% 65% 65%

AGE

Paying PC/console gamers aged 30-40 are more likely to buy boxed/disc games (51%) compared to younger gamers aged 18-29 (43%). Older PC/console payers are less likely to spend their budget on downloaded/digital games or subscriptions compared to younger payers.

Base: Play games on any platform for at least 2 hours per week AND pay on or in games.

POWER-UPS ARE THE MOST POPULAR IN-GAME PURCHASE

WHAT PAYERS WHO BUY IN-GAME PURCHASES ARE SPENDING THEIR MONEY ON



	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN
POWER-UPS	53%	45%	47%	39%	46%	38%
DLC/EXPANSION PACKS	30%	49%	36%	44%	29%	50%
PLAYABLE CHARACTERS	33%	39%	35%	33%	41%	44%
COSMETICS/SKINS	35%	36%	27%	24%	23%	28%
LOOT BOXES	28%	32%	19%	28%	17%	26%
TIME-SAVERS	34%	28%	26%	25%	20%	17%

Base: Gamers who said that they spend part of their budget on in-game purchases

50%

of German men spend money on DLC/expansion packs, compared to 29% of women.

Women are more likely to be buying power-ups and time-savers than men in all three countries. The U.K is the only country where a higher share of women are buying cosmetics/skins than men.

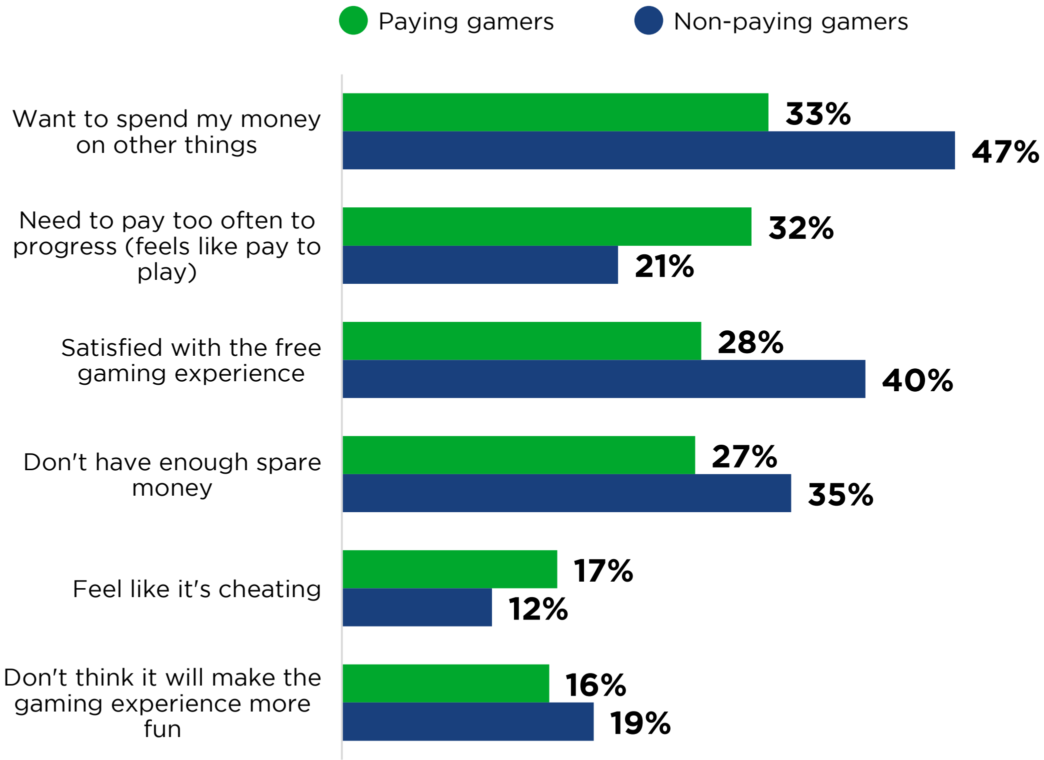
AGE

In general, cosmetics/skins purchases are more popular with younger than older payers. Power-ups are less popular with younger payers (40%) than older (55%), among whom it's the most popular in-game item to buy. DLC/expansion packs are the most popular in-game item among younger payers.

newzoo

SATISFACTION WITH FREE VERSION OF A GAME DETERS SPENDING

REASONS NOT TO SPEND MONEY ON A GAME | PAYING GAMERS VS. NON-PAYING GAMERS



40%

of non-paying gamers say that one of the reasons they wouldn't spend on a certain game is because they are satisfied with the free gaming experience. This trend is driven by Germany, where half of non-payers don't spend for this reason.

A much larger share of payers than non-payers (32% vs. 21%) don't spend on a game because it requires them to pay too many times, making it feel like a pay-to-play game. Payers are, interestingly, more likely than non-payers to not pay for a game because they think it feels like cheating.

NON-PAYERS WHO DO NOT SPEND BECAUSE THEY'RE SATISFIED WITH THE FREE EXPERIENCE

Base: Play games on any platform for at least 2 hours per week.

3

HOW PAYING GAMERS LIKE TO PAY

CHAPTER HIGHLIGHTS

1

GERMAN GAMERS MOST INTERESTED IN A SEAMLESS EXPERIENCE

For German gamers, one of the main reasons they prefer a certain payment method is if it offers the most seamless process. This aspect is more important here than in the other countries.

Overall, when it comes to picking an online payment method, trust is the biggest factor that gamers take into account. Providing a quick service is also a crucial aspect.

2

(AMERICAN) GAMERS ARE WARMING TO CRYPTOCURRENCIES

On average, around 23% of gamers who are aware of cryptocurrencies have a positive attitude toward them. American gamers are most likely to have a positive attitude (25%), skewing the number upward. In the U.K. and Germany, it's 16% and 18%, respectively.

Over the coming months, we will see if this attitude is reflected in spending habits. As crypto becomes more main stream, it is likely that gamers will think more positively about it and it will reach a level similar to Apple Pay (40%) and Google Pay (46%).

3

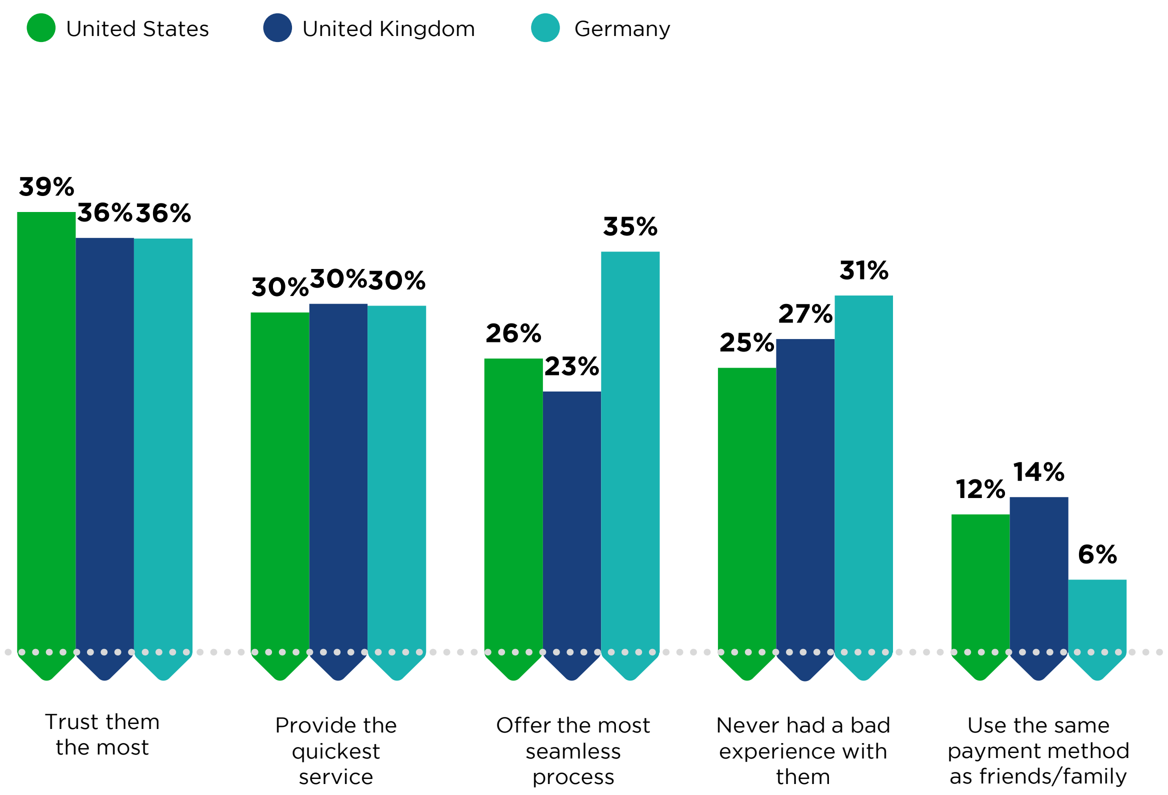
PAYPAL DOMINATES PREFERENCE AND USE IN EVERY COUNTRY

PayPal is the most used and preferred payment method on every segment – console, PC, and mobile. Mastercard is the most common second choice. New payment players such as Google and Apple Pay will find it hard to unseat the incumbents, though younger players are using them more than older players.

Germany is the only country where younger gamers have a more positive attitude toward PayPal than older gamers. Younger gamers here are quicker than older gamers to embrace newer, digital payment alternatives.

TRUST IS THE BIGGEST DRIVER FOR PAYMENT METHOD PREFERENCE

WHY PLAYERS PREFER CERTAIN ONLINE* PAYMENT METHODS I COUNTRY COMPARISON



38%

of gamers across the three countries say that trust is the biggest reason they prefer the online payment method that they do.

In Germany, having a seamless experience is almost as important as trust and is a much bigger motivator for preferring a provider (35%) than in the U.S. (26%) and the U.K. (23%).

Gamers in Germany were also more likely to prefer a payment method because they've never had a bad experience with them (31%), compared to gamers in the U.S. (25%) and the U.K. (27%).

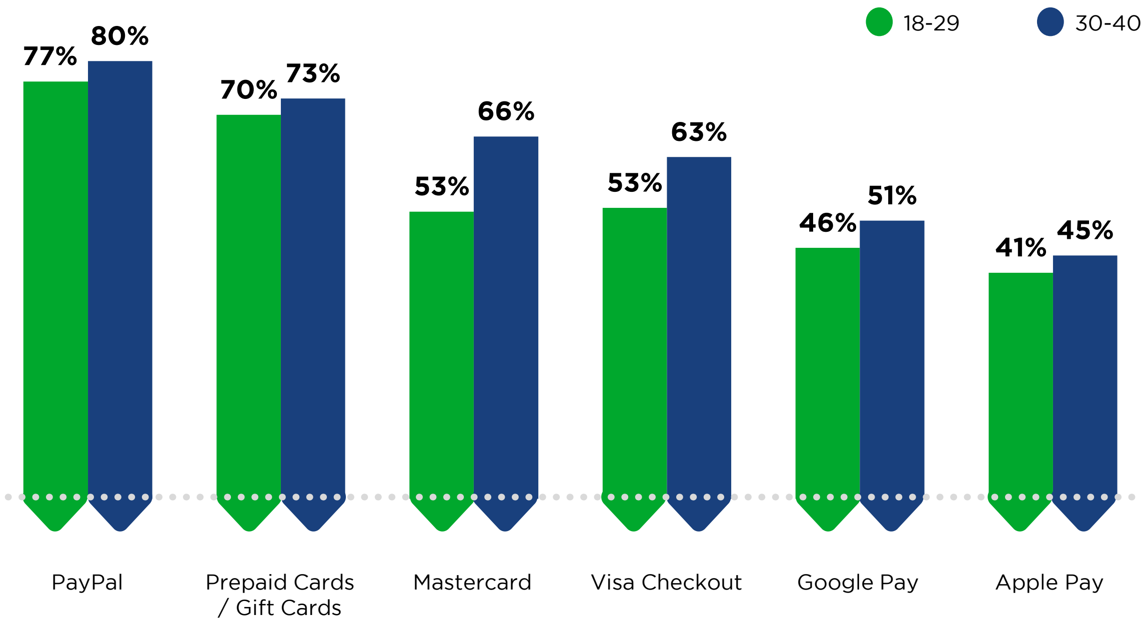
*Can be in any online setting, not necessarily while gaming

Base: Play games on any platform for at least 2 hours per week AND pay on or in games.

GAMERS' ATTITUDES TOWARD PAYMENT TYPES | U.S.

ATTITUDE TOWARD VARIOUS PAYMENT TYPES

SHARE OF GAMERS WITH A POSITIVE ATTITUDE* TOWARD CERTAIN PAYMENT TYPES**



*Respondents answered either positive or very positive when asked for their attitude toward a list of payment methods

**Based on those aware of the relevant payment type

80%

of older gamers in the U.S. who are aware of PayPal have a positive attitude toward it with younger gamers also very positive: 77%. Both groups are also very positive about prepaid cards/gift cards.

In general, older gamers are more positive about the payment types presented here than younger gamers. This is especially interesting in the case of newer digital payment methods, such as Google Pay and Apple Pay. It seems that older gamers in the U.S. are even more willing to embrace modern payment methods than younger gamers.

CRYPTO

25%

of gamers in the U.S. who are aware of cryptocurrency, have a positive attitude toward it.

Base: Play games on any platform for at least 2 hours per week.

PAYPAL IS THE MOST USED ON ALL GAMING DEVICES | U.S.

PREFERENCE AND USAGE OF PAYMENT METHODS AMONG PAYING GAMERS

MOST USED PAYMENT METHOD PER GAMING DEVICE

Console	PayPal	49%
	Mastercard	28%
	Prepaid cards/gift cards	15%
PC	PayPal	54%
	Mastercard	26%
	Prepaid cards/gift cards	14%
Mobile	PayPal	44%
	Mastercard	22%
	Google Pay	12%

32%

of paying gamers in the U.S. say that mobile is their most preferred platform for paying for games, making it the top choice.

Across all devices, paying gamers are most likely to be using PayPal, followed by Mastercard. Prepaid cards/gift cards are the third most used payment method on console and PC. On mobile, Google Pay is the third most popular choice.

AGE

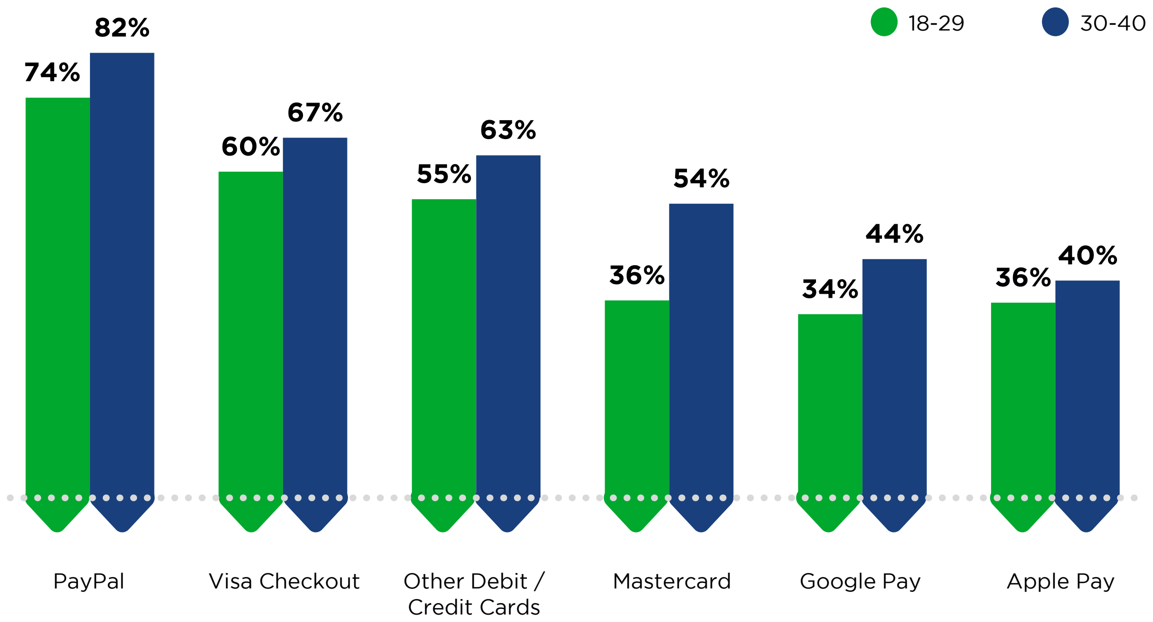
Younger payers are less likely to use Mastercard as a payment method when paying for games across all devices compared to older payers. Apple Pay is used more by younger than older payers when paying for mobile games.

Base: Play games on any platform for at least 2 hours per week AND pay on or in games.

GAMERS' ATTITUDES TOWARD PAYMENT TYPES | U.K.

ATTITUDE TOWARD VARIOUS PAYMENT TYPES

SHARE OF GAMERS WITH A POSITIVE ATTITUDE* TOWARD CERTAIN PAYMENT TYPES**



*Respondents answered either positive or very positive when asked for their attitude toward a list of payment methods

**Based on those aware of the relevant payment type

67%

of 30-40-year-olds have a positive attitude toward Visa Checkout, a higher share than the younger age group (60%).

Younger gamers are slightly more positive about Apple Pay compared to Google Pay, while older gamers show the reverse. Similar to the U.S., the younger age group demonstrates a less positive attitude toward all of the selected payment methods compared to older gamers.

CRYPTO

16%

of gamers in the U.K. who are aware of cryptocurrency, have a positive attitude toward it.

Base: Play games on any platform for at least 2 hours per week.

VISA CHECKOUT PERFORMS RELATIVELY WELL IN THE U.K.

PREFERENCE AND USAGE OF PAYMENT METHODS AMONG PAYING GAMERS

MOST USED PAYMENT METHOD PER GAMING DEVICE

Console	PayPal	61%
	Visa Checkout	15%
	Mastercard	12%
PC	PayPal	63%
	Visa Checkout	13%
	Mastercard	10%
Mobile	PayPal	61%
	Apple Pay	13%
	Visa Checkout	9%

32%

of paying gamers in the U.K. say that PC is their most preferred platform for paying for games, making it the top choice.

Across all devices, paying gamers are most likely to be using PayPal. Visa Checkout performs relatively well in the U.K. and is the second most popular payment method on console and PC and the third most popular on mobile. Apple Pay is the second most popular way to pay for mobile games.

AGE

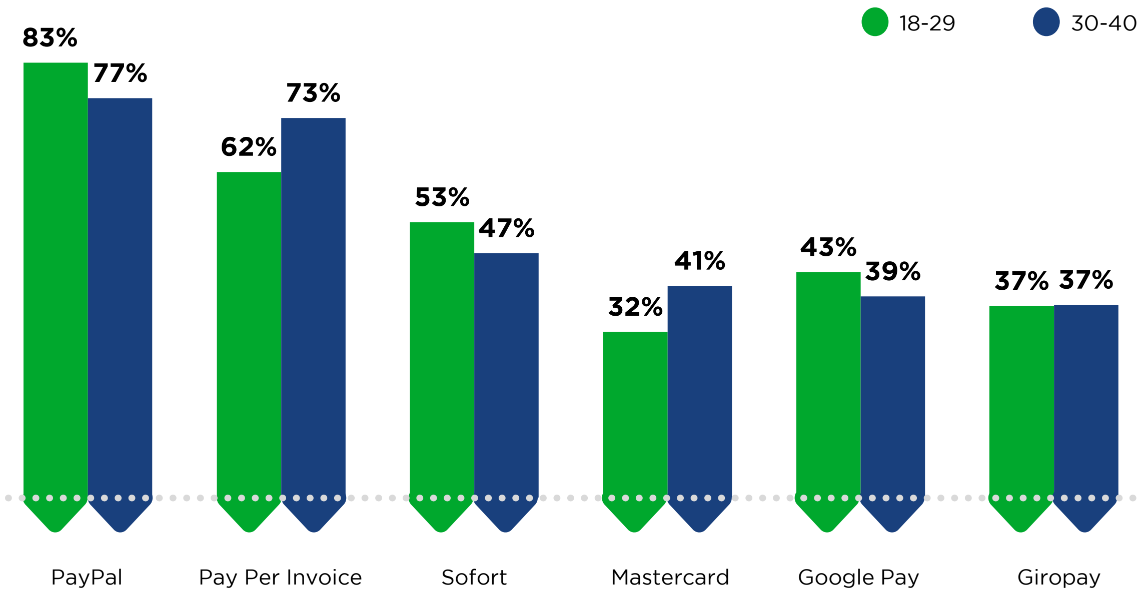
Young mobile payers are more likely to use Google Pay and Apple Pay to pay for mobile games than older mobile payers.

Base: Play games on any platform for at least 2 hours per week AND pay on or in games.

GAMERS' ATTITUDES TOWARD PAYMENT TYPES | GERMANY

ATTITUDE TOWARD VARIOUS PAYMENT TYPES

SHARE OF GAMERS WITH A POSITIVE ATTITUDE* TOWARD CERTAIN PAYMENT TYPES**



*Respondents answered either positive or very positive when asked for their attitude toward a list of payment methods

**Based on those aware of the relevant payment type

73%

of 30-40-year-old gamers in Germany who are aware of paying by invoice have a positive attitude toward it, higher than the younger age group with 62%.

Germany is the only country where younger gamers demonstrate a more positive attitude toward some of the selected payment methods, including PayPal and Google Pay, than the older generation.

CRYPTO

18%

of German gamers who are aware of cryptocurrency have a positive attitude toward it.

Base: Play games on any platform for at least 2 hours per week.

PREPAID MORE POPULAR IN GERMANY THAN OTHER COUNTRIES

PREFERENCE AND USAGE OF PAYMENT METHODS AMONG PAYING GAMERS

MOST USED PAYMENT METHOD PER GAMING DEVICE

Console	PayPal	70%
	Mastercard	11%
	Prepaid cards/gift cards	10%
PC	PayPal	76%
	Voucher	12%
	Prepaid cards/gift cards	11%
Mobile	PayPal	71%
	Prepaid cards/gift cards	10%
	Voucher	7%

49%

of paying gamers in Germany say that PC is their most preferred platform for paying for games, making it the top choice.

Across all devices, paying gamers are most likely to be using PayPal. In fact, PayPal is used by at least 70% of gamers on every device, making it more popular here than in the U.S. and the U.K.

Prepaid cards and gifts are also relatively more popular in Germany, as one of the top three payment methods on every device.

AGE

Younger payers are more likely to use PayPal when spending money on games across all devices compared to older payers.

Base: Play games on any platform for at least 2 hours per week AND pay on or in games.

4

GAMERS’ (DESIRED) PAYMENT EXPERIENCES

CHAPTER HIGHLIGHTS

1

PAYMENT FRAUD IS A TOP CONCERN FOR GAMERS AND A CONTINUING BARRIER TO PAYMENT

19% of gamers have experienced fraud when paying for or in games online and one-third of paying gamers say that worrying about fraud makes them less likely to spend within a game.

Building a holistic fraud management strategy which is configured to drive conversion rates is a way to keep sales moving safely through the funnel.

2

LOYALTY/REWARD PROGRAMS FOR IN-GAME SPENDING IMPROVES PAYMENT EXPERIENCE

Of paying gamers, 44% think the payment experience within games can be improved. The most common thing that they would like to see is more loyalty/reward programs offered for in-game payments.

Gamers in both age groups indicated that they would want this.

3

OLDER GAMERS ARE LESS CONCERNED ABOUT SECURITY THAN YOUNGER GAMERS

Interestingly, older gamers seem less concerned with security; they are more likely to want to skip security measures after completing them once and to register their details in advance of a purchase.

They are also more likely to agree that extra security measures make it less likely they will complete in-game purchases or make future ones.

4

GERMAN GAMERS ARE NOT NEGATIVELY AFFECTED BY SECURITY MEASURES

German gamers are the least likely to have had a negative payment experience online and to have experienced fraud. This is likely tied to their relatively slower uptake of digital payment methods compared to the other countries.

Following this, they are much less likely than other gamers to be negatively impacted by extra security measures.

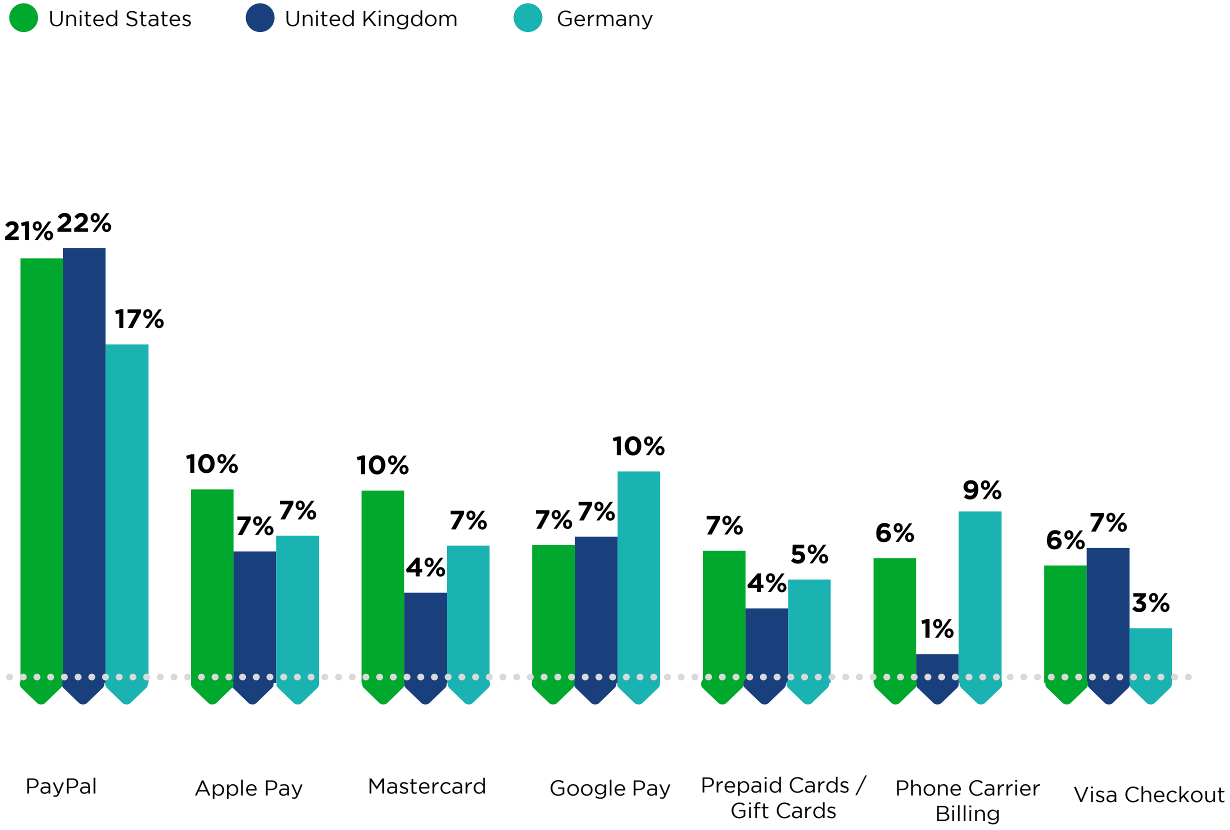
38%

OF GAMERS HAVE HAD A NEGATIVE EXPERIENCE WHILE PAYING ONLINE*

*Can be in any online setting, not necessarily while gaming

WHERE THE PAYMENT EXPERIENCE HASN'T DELIVERED

PAYMENT METHODS WHERE GAMERS SAY THEY HAVE HAD A NEGATIVE EXPERIENCE*



22%

of gamers in the U.K. have had a negative experience when paying with PayPal. In the U.S. and Germany, the share is 21% and 17%, respectively.

American gamers are more likely to have a bad experience with Apple Pay and Mastercard than the other gamers, while German gamers have had more negative experiences with Google Pay.

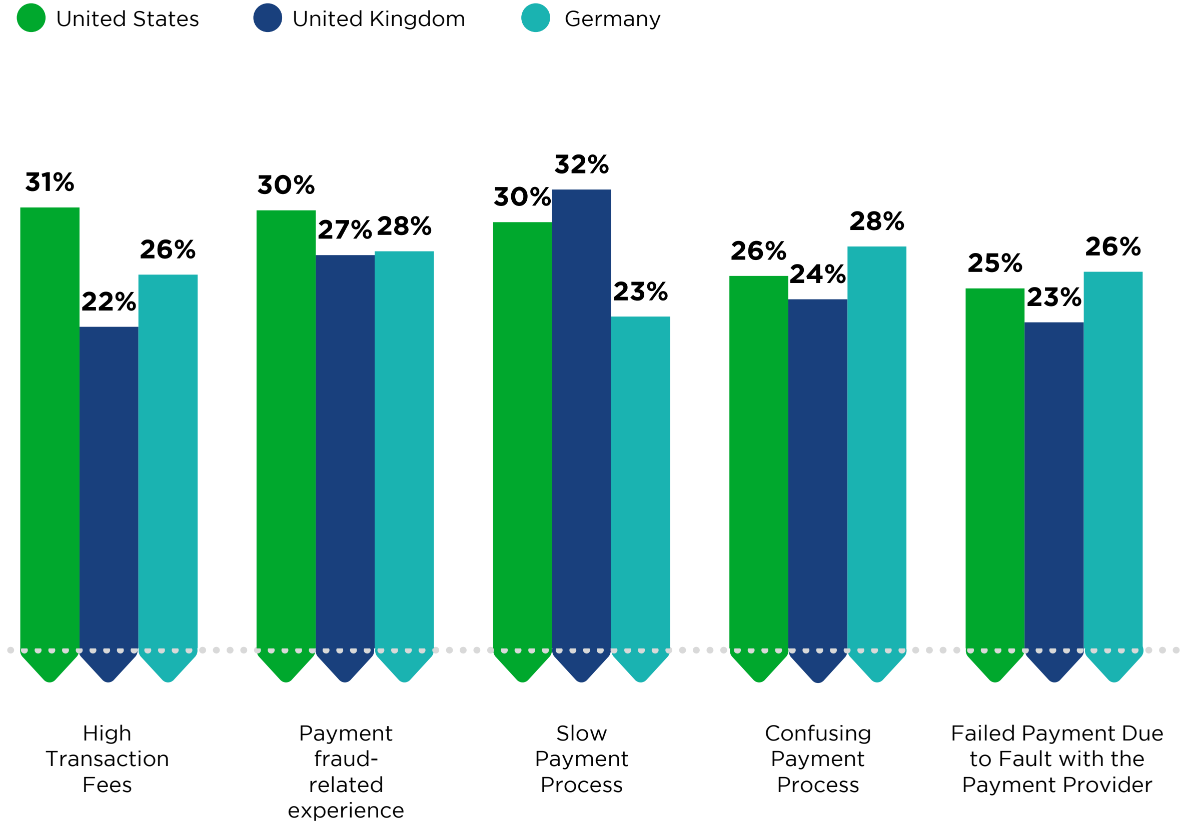
SHARE OF GAMERS THAT HAVE HAD A NEGATIVE EXPERIENCE WHEN PAYING ONLINE

*Can be in any online setting, not necessarily while gaming

Base: Play games on any platform for at least 2 hours per week and is aware of the relevant payment method

U.K. GAMERS MOST LIKELY TO HAVE EXPERIENCED SLOW PAYMENT

BIGGEST PAYMENTS EXPERIENCE FAILURES PER COUNTRY*



32%

of gamers in the U.K. have a bad experience online where the payment process was too slow, making this the most common negative experience for them. This is compared to 23% of German gamers and 30% of American gamers.

For German gamers, fraud and confusing processes are the most common negative experience. In the U.S., they are high transaction fees and fraud.

Overall, the experiences are quite similar across all three markets.

*Can be in any online setting, not necessarily while gaming

Base: Play games on any platform for at least 2 hours per week.

I AM LESS LIKELY TO SPEND MONEY ON GAMES ONLINE OR MAKE IN-GAME PURCHASES BECAUSE I AM WORRIED ABOUT THE RISK OF PAYMENT FRAUD WHEN USING ONLINE PAYMENT METHODS

33% OF PAYING GAMERS AGREE

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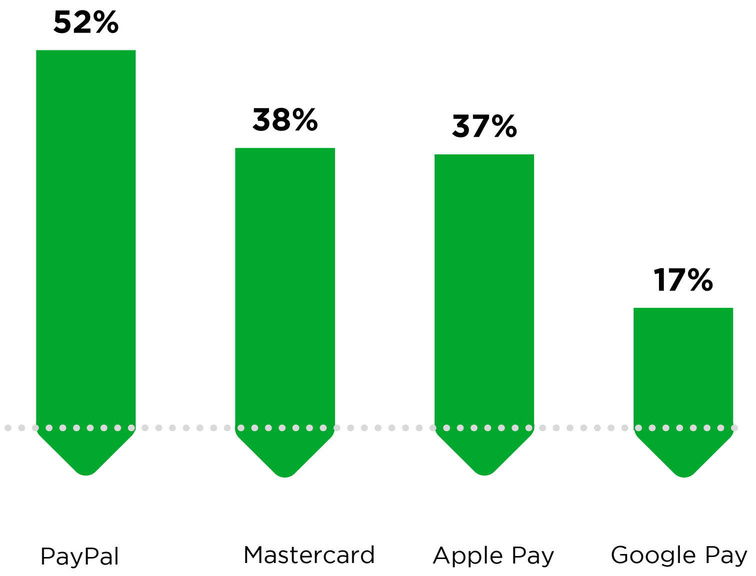
PAYMENT FRAUD WHEN GAMING OCCURRED MOST WITH PAYPAL

PAYMENT TYPES WHERE FRAUD OCCURRED WHILE GAMING

TOP FIVE PAYMENT METHODS WHERE PLAYERS EXPERIENCED FRAUD



Base: Payers who have experienced fraud when gaming and are aware of the relevant payment method

19%

of paying gamers have experienced fraud when paying for games.

In terms of payment methods, the rate of fraud is highest for PayPal: 52% of those who have experienced payment fraud when gaming, experienced it with PayPal. This make sense, as the majority of gamers are using PayPal.

HAS EXPERIENCED FRAUD WHILE PAYING FOR GAMES

20% 18% 17%

OUTSIDE OF GAMES

56% of paying gamers purchase, sell, or trade in-game items outside of a game. One third of these have experienced fraud while doing this.

44%

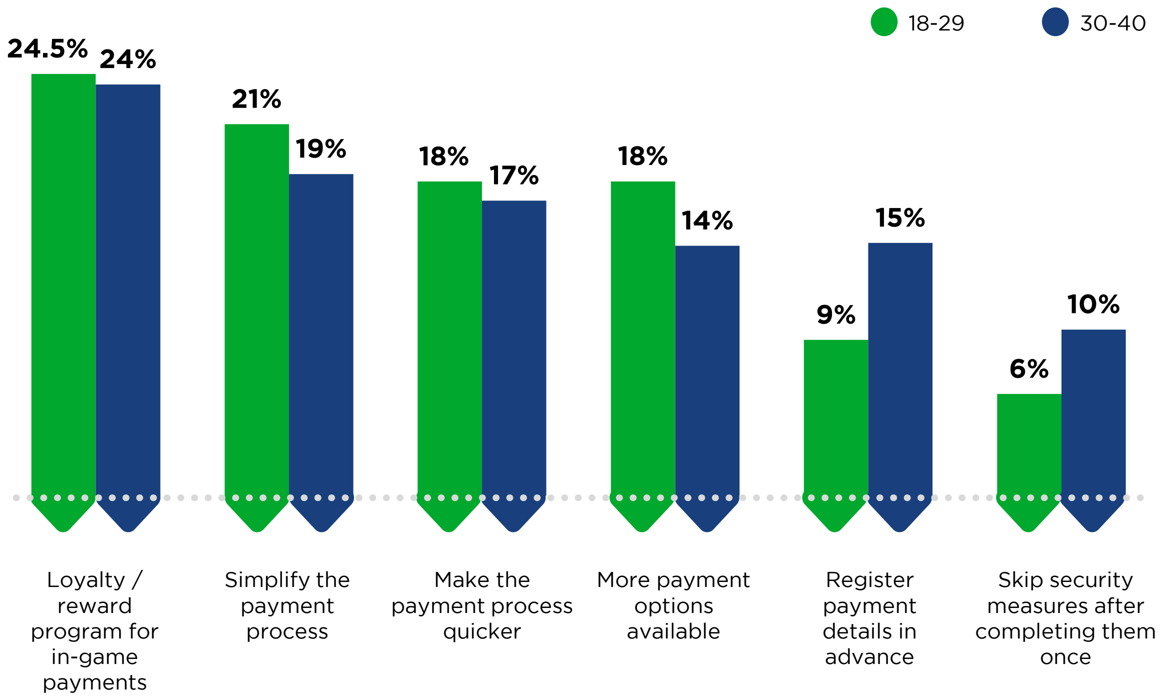
OF PAYING GAMERS THINK THE PAYMENT EXPERIENCE WITHIN GAMES CAN BE IMPROVED*

*Agreed or strongly agreed with: “In my opinion, the online payment user experience within games could be significantly improved.”

THE PAYMENTS EXPERIENCE GAP IN GAMING

THE IMPROVEMENTS PLAYERS WANT TO SEE IN THEIR ONLINE PAYMENTS EXPERIENCE

HOW TO IMPROVE THE ONLINE PAYMENT EXPERIENCE IN GAMES



24%

of paying gamers who believe the payment experience can be improved would like to see loyalty/reward programs offered for in-game payments.

Younger payers consider simplifying the payment process and making more payment options available to be more important than the older age group.

A much higher share of older payers than younger payers would like the option to register their payment details in advance and to skip security measures after completing them once.

SHARE OF GAMERS WHO WANT TO BE OFFERED LOYALTY / REWARD PROGRAM FOR IN-GAME PAYMENTS

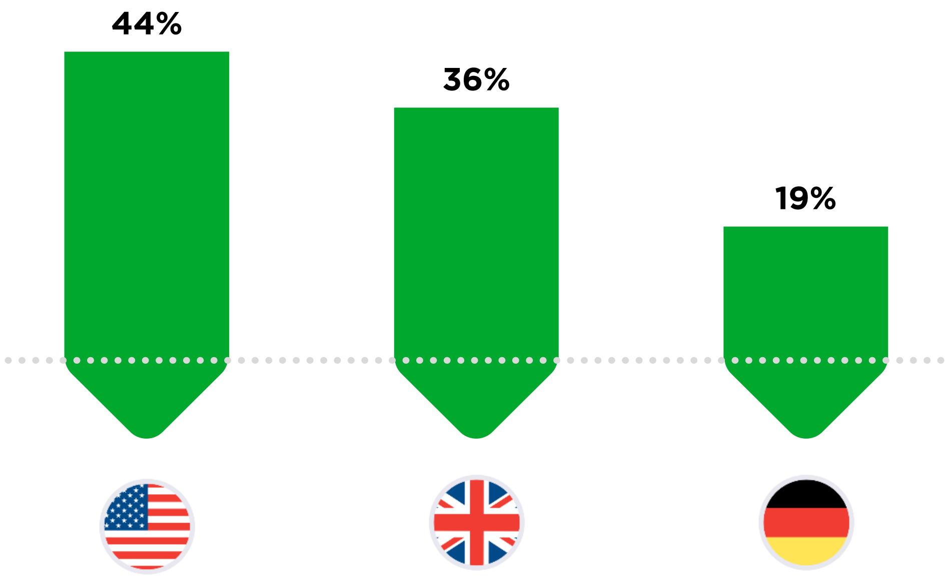
Base: Payers who agree that the experience can be improved

SECURITY MEASURES ADD FRICTION FOR U.S. AND U.K. PLAYERS

ATTITUDE TOWARD IN-GAME PAYMENT SECURITY MEASURES | COUNTRY COMPARISON

SHARE OF PAYERS WHO AGREE* WITH THE FOLLOWING STATEMENT:

"Encountering additional security measures when making in-game purchases slows down and negatively impacts my gaming experience and makes me less likely to complete in-game purchases or to make future in-game purchases."



44%

of paying gamers in the U.S. agreed that encountering additional security measures when making in-game purchases negatively impacts their gaming experience and makes them less likely to pay.

Payers in the U.K. were also negative about encountering additional in-game security measures, with more than one-third in agreement with the statement.

Interestingly, only 19% of German payers agreed with the statement, indicating that these extra security measures do not bother them as much as gamers in the other countries.

As Germans have been slower to adopt digital online payment methods, these additional security measures may help them to feel more confident with the digital payment process.

SUMMARY OF KEY FINDINGS

1 CONSOLE HAS THE LEAST PLAYERS BUT THE HIGHEST PLAYER/PAYER RATIO

Mobile games are the most popular segment in all three countries, played by more than 90% of gamers. However, the player/payer ratio is the lowest of all platforms (56%). This is a consequence of the relatively casual nature of the platform and the prevalence of free-to-play titles. Across all three countries, console gamers are most likely to spend money with a player/payer ratio of 69%.

2 AGE AND GENDER IMPACT SPENDING CHOICE

Across all the countries and platforms, men are more likely than women to spend money. Older gamers (aged 30-40) are slightly more likely to be average or big spenders (meaning they spend $5 or more a month) on mobile and console, but younger players (18-29) spend more on PC. When it comes to in-game purchases, women are more likely to buy power-ups and time-savers than men in every country. Power-ups are the #1 item for older gamers, but DLC/expansion packs are the favorite add-on for the younger age group.

3 LOYALTY/REWARD PROGRAMS ENCOURAGE ENGAGEMENT AND SPENDING

Loyalty/reward programs are one of the key factors that motivate paying gamers to spend money on a game. Additionally, gamers of all ages said the #1 way the paying experience can be improved would be to add these programs. Offering rewards can also increase time spent on your game; more than two-thirds of paying gamers are more likely to keep playing a game if loyalty/reward programs are offered.

4 (YOUNGER) PC/CONSOLE GAMERS ARE DRIVING THE TRANSITION TO DIGITAL

Paying gamers are more likely to spend part of their PC/console budget on digital/downloadable games and in-game purchases than on boxed games. This move to digital is driven by younger gamers who are far less likely than older gamers to be spending their budget on traditional boxed formats.

5 PAYPAL DOMINATES, GAMERS WARMING TO CRYPTOCURRENCY

PayPal is by far the most used and the most preferred payment method for every gaming segment (console, PC, and mobile) and every age group. Gamers also have a more positive attitude toward it than any other payment method. The newest payment method that was researched, cryptocurrency, is perceived positively by 23% of gamers. American gamers are notably more positive about it than their European counterparts. It is likely that as crypto becomes more widely known and used, it will catch up to more established payment methods like Apple Pay (40%) and Google Pay (46%).

6 CONCERNS ABOUT FRAUD ARE STILL A PAYMENTS BARRIER

For one-third of paying gamers, worrying about fraud makes them less likely to spend within a game and 19% of them have experienced fraud when paying for games online. This highlights the fact that trust and security are still an extremely important factor for consumers. Gaming companies must ensure the right levels of protection are in place to build consumer trust, underpin a smooth payments experience, and safeguard brand reputation.

METHODOLOGY

RESEARCH OBJECTIVES AND SCOPE

RESEARCH OBJECTIVES

This research project was conducted to explore paying behavior, payment preferences, and the payment experience among gamers in order to gather insights into the most effective ways to optimize payment conversion in games.

TOPICS

PLAYING BEHAVIOR

E.g. Device(s) played on, genres played, franchises played, etc.

PAYING BEHAVIOR

E.g. Device(s) paid on, money spent on, spending benefits, motivations, and deterrents, etc.

PAYMENT METHODS

E.g. Attitude toward payment methods, payment method use and preference, negative experience with payment methods, etc.

PAYMENT (USER) EXPERIENCE WITHIN GAMES

E.g. Preferred device to pay with, payment fraud experience, improving the payment experience, etc.

COUNTRIES

RESPONDENTS & METHODOLOGY

RESPONDENTS:

2,051 gamers (play at least two hours per week on any platform) across the U.S., U.K., and Germany. Respondents were aged 18-40 and are nationally representative of the gamer group.

COMPUTER ASSISTED WEB INTERVIEWING CAWI:

Sent out to "invitation-only" respondents, conducted over a period of two weeks, including two weekends for a balanced sample (May 02– May 14, 2018).

QUESTIONNAIRE LENGTH:

Average length per respondent: 15-17 minutes

DEFINITIONS OF KEY TERMS USED

PLAYERS: Gamers who play on any platform at least two hours per week.

PAYERS: Play for at least two hours per week across any platform AND spend money on games.

YOUNG PLAYERS/PAYERS: Aged 18-29.

OLDER PLAYERS/PAYERS: Aged 30-40.

AVERAGE/BIG SPENDERS: Spend at least $5 per month on the relevant platform.

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ABOUT NEWZOO

GLOBAL LEADER IN GAMES, ESPORTS, AND MOBILE INTELLIGENCE

OUR MISSION

The current pace of change in consumer behavior, media, and technology requires a new type of intelligence firm that is agile, innovative, truly global, and ahead of the curve. We are that firm. As the number one provider of games, esports, and mobile intelligence in the world, we support our global clients daily in growing their businesses.

MORE THAN 150 GLOBAL SUBSCRIBERS

OUR EXPERTISE

MARKET FORECASTS

TRACKING DATA

CONSUMER INSIGHTS

OUR SOLUTIONS

STANDARD SUBSCRIPTIONS

MARKET PACKAGES

CUSTOM SERVICES

PARTNER MODEL

ABOUT ACI

ACI UNIVERSAL PAYMENTS

ACI WORLDWIDE, THE UNIVERSAL PAYMENTS (UP) COMPANY

ACI Worldwide, the Universal Payments (UP) company, powers electronic payments for more than 5,100 organizations around the world, executing $14 trillion each day in payments and securities.

ACI's UP eCommerce Payments solution is an integrated payments gateway and fraud management solution designed to support the fast-moving gaming, retail and digital goods sectors. It offers access to an extensive global payments network, with immediate coverage in more than 160 countries to enable payments acceptance from consumers anywhere and any way they want to pay.

Our global team of payment and risk experts have in-depth gaming sector expertise, and understand the challenges around gaming monetization, building customer loyalty and the struggle of balancing those needs with effective fraud prevention.

Using our gaming sector-specific machine learning technology and data, ACI helps gaming clients deploy tailored strategies and solutions designed to both prevent fraud and maintain high conversion rates.

Gaming merchants get the cost-effective, flexible tools and technology they need to power seamless payments across any channel, geography or device. Delivered in the cloud, ACI's resilient, scalable solutions also give the confidence to handle mass volume transactions at peak trading times and ensure an uninterrupted player experience.

ACI has a proven track record helping gaming merchants deliver against player expectations to secure their share of the gaming payments opportunity.

For more information, please contact us at merchantpayments@aciworldwide.com
or visit: **www.aciworldwide.com/gaming**