

RESEARCH



FINAL REPORT FOR THE PHONE-PAID SERVICES AUTHORITY

ANNUAL MARKET REVIEW FOR PHONE-PAID SERVICES (2018-2019)

AUGUST 2019

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1 Executive summary

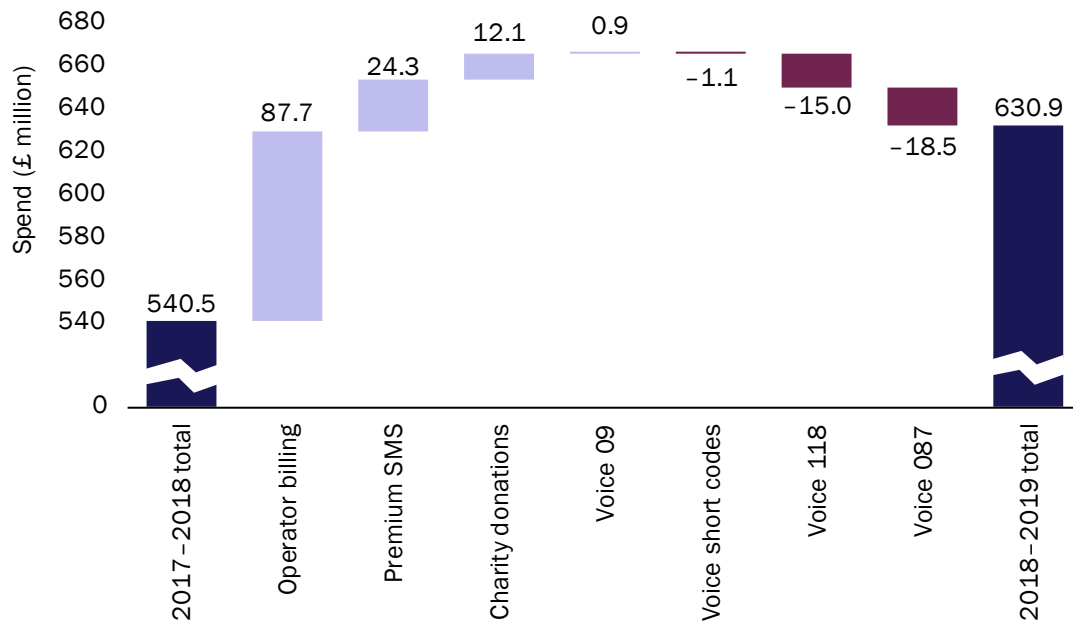
This report is the Annual Market Review of the phone-paid services market for 2018–2019,¹ prepared by Analysys Mason on behalf of the Phone-paid Services Authority. The Annual Market Review provides an overview of the size of the phone-paid services market in the UK for 2018–2019, a discussion of the key market drivers, as well as an outlook for the market for 2019–2020. The report draws upon a survey of 8724 consumers conducted between April and May 2019 about their usage and perception of phone-paid services. It also includes insights from in-depth interviews with 17 industry participants from across the value chain, as well as quantitative modelling of market demand.

The phone-paid services market in the UK was worth £630.9 million in 2018–2019, in terms of end-user spend excluding VAT, which represents a 17% increase from £540.5 million in 2017–2018.² This growth was driven primarily by increased end-user spend on services that leverage operator billing (for example, games, entertainment, betting, gambling and lotteries) and (to a lesser extent) by an increase in spending on TV and radio engagement services paid through premium SMS. Charity donations also made a significant contribution to the overall growth in spend on phone-paid services, benefitting from the cyclical nature of large, biannual telethon events that were held during 2018–19 (and not in 2017–2018), as well as the changes made in late 2018 that allow higher, single donations to be made via premium SMS (from £20 to £30). Spend on all other (voice-based) services remained flat (Voice 09) or continued to decline (including voice short codes, Voice 118 and Voice 087) in 2018–2019.

¹ 2018–2019 refers to the Phone-paid Services Authority's 2018–2019 fiscal year, running from 01 April 2018 to 31 March 2019 (also referred to as 'the past 12 months' in the text). The 2019–2020 fiscal year should be understood as the period running from 01 April 2019 to 31 March 2020 (also referred to as 'the next 12 months' in the text).

² The Phone-paid Services Authority restated the total end-user spend for 2017–2018 in June 2019 to account for retrospective corrections in VAT reported in the network returns from network operators.

Figure 1.1: Variations in end-user spend (excluding VAT) by spending channel, 2017–2018 to 2018–2019



Note: This chart shows the total spend in 2017–2018 (accounting for retrospective corrections in VAT) on the left-most bar and total spend in 2018–2019 on the right-most bar. Bars in between show spend growth (in light purple) or decline (in dark red) by spending channel (for example, spend on operator billing increased by £87.7 million between 2017–2018 and 2018–2019).

Source: Phone-paid Services Authority

Operator billing was the largest and fastest-growing spending channel between 2017–2018 and 2018–2019, a performance primarily driven by an increasing number of content providers offering operator billing as an option, as well as improved consumer perceptions of this payment option, which has led to increased adoption. Spend uplift on TV and radio engagement services positively contributed to the growth of premium SMS (the second-largest spending channel), driven by the offer of higher-quality content from broadcasters, a higher level of audience engagement and the launch of dedicated websites for competitions.

Figure 1.2: End-user spend (excluding VAT) via operator billing by service category,³ 2018–2019

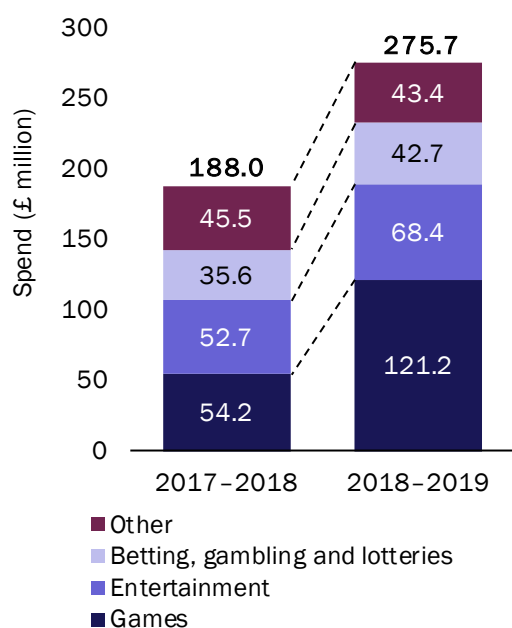
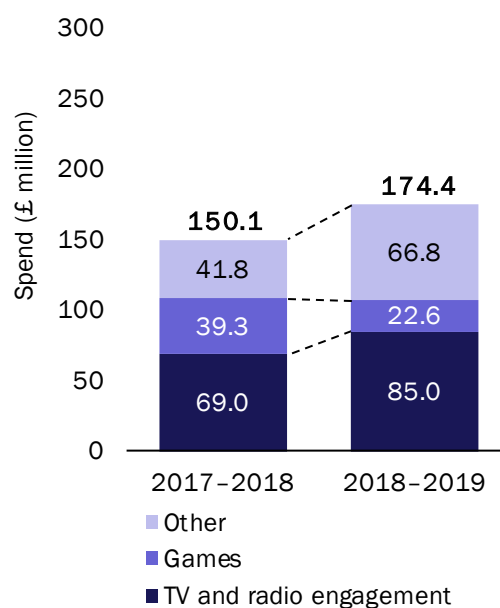


Figure 1.3: End-user spend (excluding VAT) via premium SMS by service category,⁴ 2018–2019



Source: Analysys Mason, 2019

Spend on charity donations in 2018–2019 significantly exceeded the levels reached in 2017–2018 because of the cyclical nature of large, biannual telethon events, and because of the introduction of a higher spend cap per donation. The continuous decline in spending of most legacy voice-based services (except Voice 09) was driven by a diminishing user base and reduced spend per user (in particular, price caps for Voice 118), as well as an acceleration of the migration of businesses to cheaper premium rate numbers (for instance, 084) or alternative free channels.

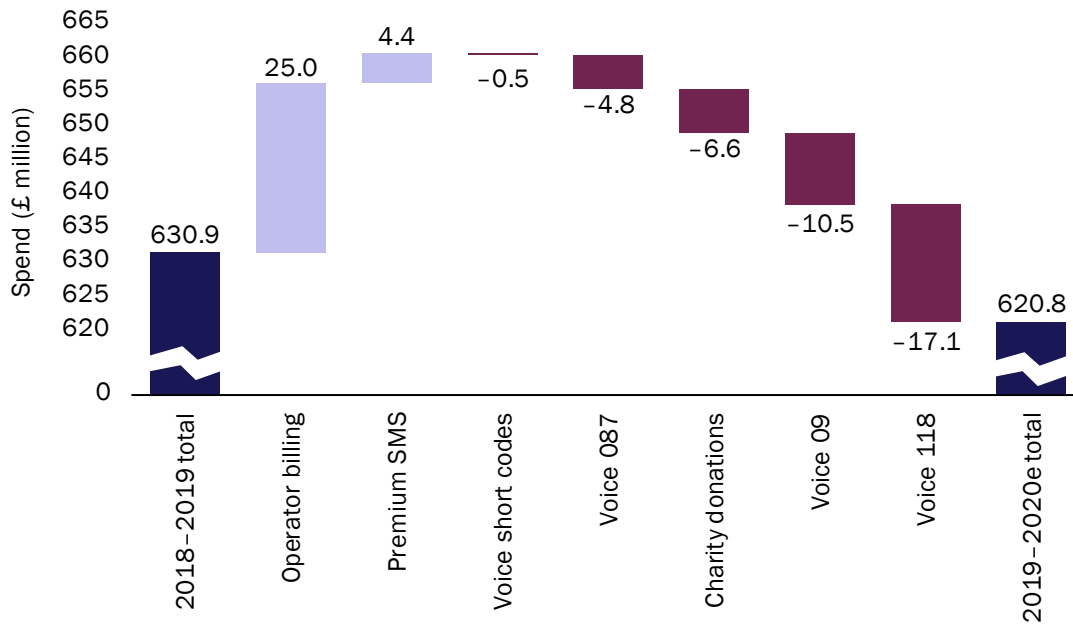
The phone-paid services market is expected to remain mostly flat at £620.8 million in 2019–2020 (–2% year-on-year). Spend on both operator billing and premium SMS channels is projected to grow more slowly than in 2018–2019 because no new partnerships between mobile network operators and major merchants or aggregators (on operator billing) are expected to be agreed in 2019–2020, and the higher-than-expected success of broadcaster competitions in 2018–2019 is unlikely to be exceeded next year (via premium SMS). Spend on charity donations is expected to be lower in 2019–2020 as a result of the cyclical nature of major telethon events. End-user spend

³ In Figure 1.2, 'Other' includes the remaining seven service categories, including competitions and quizzes; device personalisation and security; digital payments; information, news and education; personal and relationship services; sexual entertainment; and TV and radio engagement. No single category in 'Other' is estimated to have generated over 3% of revenue for the channel.

⁴ In Figure 1.3, 'Other' includes the remaining six service categories, including device personalisation and security; digital payments; information, news and education; lifestyle; personal and relationship services; and sexual entertainment. No single category in 'Other' is estimated to have generated over 10% of revenue for the channel.

on legacy voice-based services (including Voice 09 and Voice 087) will decline, which follows the pattern set in previous years.

Figure 1.4: End-user spend variation (excluding VAT) by spending channel, 2018–2019 to 2019–2020e (estimated)



Source: Phone-paid Services Authority, 2019

Our research suggests that 58% of the UK population aged 16 or above used at least one phone-paid service in 2018–2019. Several factors are influencing usage, the most common of which are convenience, impulse purchasing and price. Some individuals do not use phone-paid services because they do not need them or because they use alternative services or payment methods. About 25% of users reported that they experienced problems with their services in the past 12 months. The most-common issues included challenges associated with using the services and a mismatch between expectations and reality in terms of what is advertised and the usefulness of the service. Sexual entertainment and personal and relationship services account for the largest share of problems, while charity donations had the lowest number of issues. Overall, the Net Promoter Score achieved by the industry is very low (–26), although a few select services (such as entertainment and music) perform relatively well (equal or above NPS = 0).

2 Introduction

This report is the Annual Market Review of the phone-paid services market for 2018–2019⁵ conducted for the Phone-paid Services Authority. It provides an overview of the size of the phone-paid services market in the UK in 2018–2019, a discussion of the key market drivers, as well as an outlook for the market in the next 12 months. The purpose of the report is to assist with planning and policy-making at the Phone-paid Services Authority and to provide insight into the current and future development of the market for existing and prospective industry participants.

This report has been prepared by Analysys Mason on behalf of the Phone-paid Services Authority.

Our approach to the study combined quantitative modelling of the market with primary and desktop research.

- We reviewed previous studies published by the Phone-paid Services Authority, as well as other relevant literature, to improve our understanding of the phone-paid services market, including individual services, spending channels and price points, and regulatory decisions and key developments that may have impacted the market in 2018–2019.
- We audited and improved the structure of the existing market demand model for phone-paid services.
- We conducted a consumer survey of a nationally representative sample of 8724 respondents.⁶ This survey captured information from those aged 16 and above regarding their usage of phone-paid services (for example, types of services used, spending channels, frequency of use and spend levels) and key underlying factors affecting usage and overall satisfaction (such as preferences, issues and levels of trust).
- We conducted in-depth interviews with executives in senior positions across 17 organisations (referred to in this report as ‘industry participants’) in the phone-paid services sector across the value chain, including mobile operators, fixed line operators, intermediaries, Level 1 providers⁷ and Levels 2 providers.⁸

⁵ 2018–2019 refers to the Phone-paid Services Authority’s 2018–2019 fiscal year, running from 01 April 2018 to 31 March 2019 (also referred to as ‘the past 12 months’ in the text). The 2019–2020 fiscal year should be understood as the period running from 01 April 2019 to 31 March 2020 (also referred to as ‘the next 12 months’ in the text).

⁶ Field work for the consumer survey was conducted by market research company Luc.id between April and May 2019.

⁷ A Level 1 provider is an organisation that provides a platform which, through arrangements made with a network operator or another Level 1 provider, enables a phone-paid service to be accessed by a consumer. A Level 1 provider also offers other technical service that facilitate the provision of a phone-paid service.

⁸ A Level 2 provider is an organisation that controls or is responsible for the operation, content and promotion of a phone-paid service and/or the use of a facility within a phone-paid service.

- We used the information from our consumer survey and interviews to validate our understanding of the main market developments over the past 12 months, inform our market demand modelling assumptions and produce a rounded picture of the current state and size of the market in 2018–2019 and its outlook for the next 12 months. More detail on our modelling methodology can be found in Annex B.

The remainder of this document is laid out as follows.

- Section 3 gives an overview of the size of the phone-paid services market in 2018–2019, split by spending channel and by service category.
- Section 4 provides an analysis of the key factors that have influenced the growth of the market over the past 12 months.
- Section 5 discusses the potential outlook for the market in 2019–2020.
- Section 6 examines in more detail the typical profile of users of phone-paid services and key issues affecting their usage.
- Section 7 focuses on our conclusions.

The report includes two annexes containing supplementary material.

- Annex A contains a taxonomy of the phone-paid services considered in this market review, as well as additional market data by service category and service type.
- Annex B provides further details on our market sizing methodology.

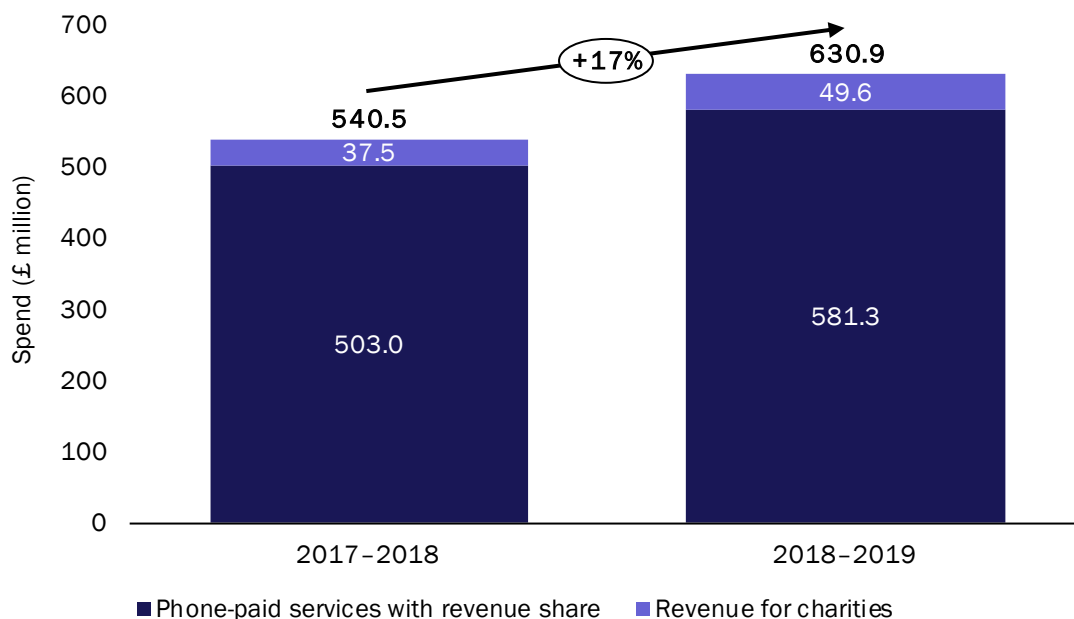
3 Size of the phone-paid services market in 2018–2019

The phone-paid services market in the UK was worth £630.9 million in 2018–2019, which represents a 17% increase from £540.5 million in 2017–2018. This growth was driven primarily by end-user spend on services that leverage operator billing (for example, games, entertainment, betting, gambling and lotteries), and (to a lesser extent) by an increase in spending on TV and radio engagement services paid using premium SMS. Charity donations also made a significant contribution to the overall growth in spend of phone-paid services, benefitting from the cyclical nature of large, biannual telethon events that were held during 2018–2019 (and not in 2017–2018), as well as the changes made in late 2018 that allow higher, single donations to be made via premium SMS (from £20 to £30). Spend on all other (voice-based) services have remained flat (Voice 09) or continued to decline (including voice short codes, Voice 118 and Voice 087).

3.1 Overall market size

Consumers spent £630.9 million in phone-paid services in 2018–2019 in the UK (+17% year-on-year), of which £581.3 million revenue captured by the phone-paid services industry itself (+16% year-on-year), and £49.6 million revenue for charities (+34% year-on-year). This growth is significantly higher than revenue growth from fixed and mobile telecoms services in the UK, which remained flat (+1% year-on-year) over the same period, although absolute revenue for the phone-paid services industry is significantly smaller.

Figure 3.1: End-user spend (excluding VAT) on phone-paid services, 2017–2018 and 2018–2019



The Phone-paid Services Authority restated the total end-user spend for 2017–2018 in June 2019 to account for retrospective corrections in VAT reported in the network returns from network operators.

Source: Phone-paid Services Authority, 2019

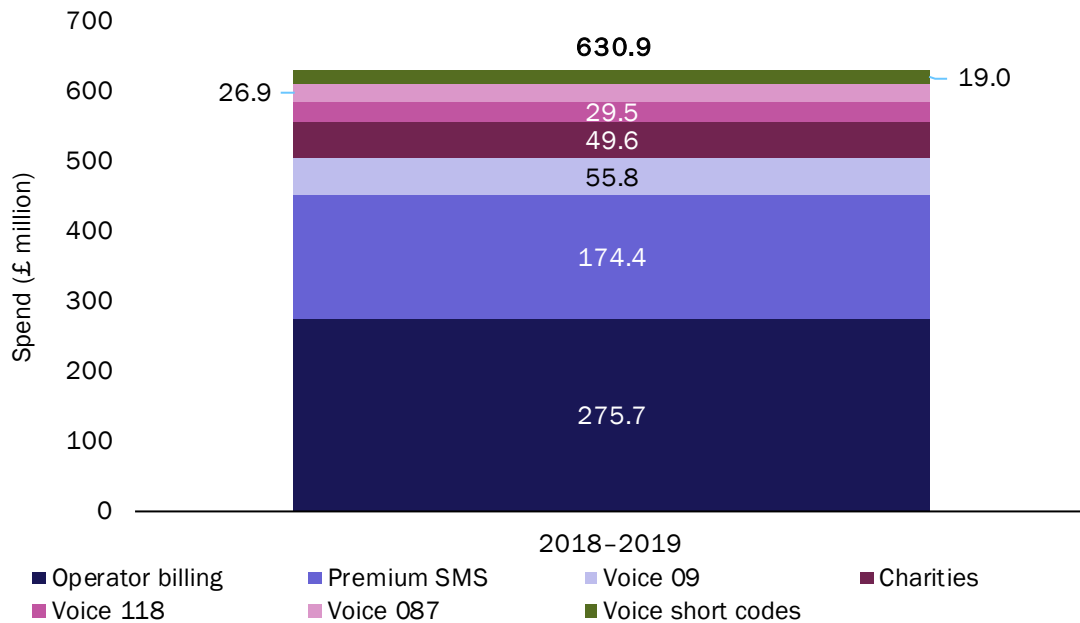
The overall revenue growth of the phone-paid services market is largely associated with increased adoption of operator billing among consumers, the partnerships between Apple and EE (March 2018) and Apple and O2 (May 2018), which effectively increased the total addressable market for operator billing, and the relative success of premium SMS in the TV and radio engagement category.

An analysis of the evolution of end-user spend by key spending channel and service category is provided in subsections 3.2 and 3.3, below. A more-detailed discussion of the main factors driving increased or reduced spend across each spending channel is provided in Section 4.

3.2 Spend by channel

Operator billing was the largest spending channel in 2018–2019 (as it also was in 2017–2018), capturing £275.7 million of consumer spend (or 44% of the total spend), followed by premium SMS (spend of £174.4million – excluding charity donations). Both channels combined accounted for 71% of total end-user spend on phone-paid services. Figure 3.2 below provides a spend breakdown of by spending channel in 2018–2019.

Figure 3.2: End-user spend (excluding VAT), by spending channel, 2018–2019



Source: Phone-paid Services Authority, 2019

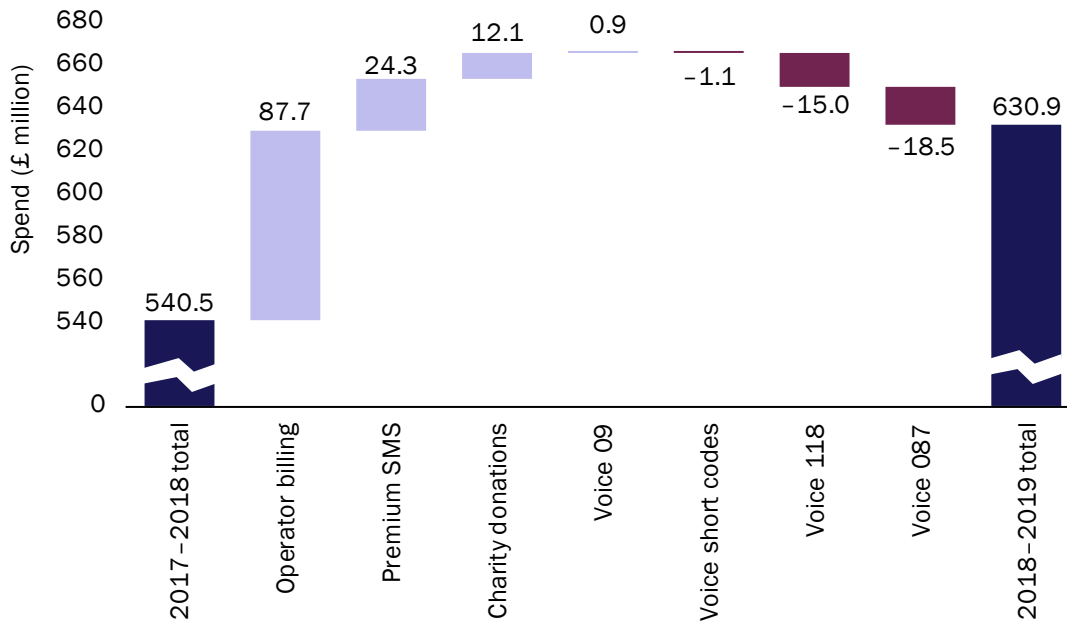
In absolute terms, the additional spend on phone-paid services between 2017–2018 and 2018–2019 (+£90.4 million) was primarily driven by operator billing, premium SMS and charity donations (see Figure 3.3 below).

- The operator billing channel generated an additional £87.7 million in 2018–2019, mainly because of the expansion of the addressable market for operator billing through the agreements between EE and Apple (announced in March 2018) and between O2 and Apple (announced in May 2018), as well as the growing popularity of operator billing as a payment option among smartphone users (more detail on this is provided in subsection 4.1).
- Spend via the premium SMS channel increased by £24.3 million,⁹ primarily driven by an increasing number of (online and offline) broadcaster competitions (that is, competitions run by TV and radio broadcasters) to promote their content (for example, ITV WIN), as well as their growing popularity among audiences. TV and radio engagement services captured 50% of revenue accrued through premium SMS (see subsection 4.2).
- Charity donations increased by £12.1 million, mainly because large biannual telethon events took place during 2018–2019 (for example, Red Nose Day). In addition, higher donations via premium SMS were made possible (see subsection 4.3).

End-user spend in voice-based services has either remained stagnant (Voice 09) or decreased (voice short codes, Voice 118 and Voice 087), driven by a reduced user base, the declining frequency of use per consumer and spend per user (for instance, price caps for Voice 118), as well as an acceleration of the migration of businesses to cheaper premium rate numbers (such as 084) or alternative free channels (see subsections 4.4 to 4.6 for more detail).

⁹ We note that this follows a significant drop of £80.1 million between 2016–2017 and 2017–2018 (–35% year-on-year), which was reported in last year’s Annual Market Review as a result of artificially high revenue from the online competitions and quizzes category in 2016–2017, and this, in turn, was driven by a surge in promotions and sales (without this artificially high revenue, the decline over 2016–2017 and 2017–2018 would have been only –8% year-on-year).

Figure 3.3: End-user spend variation (excluding VAT) by spending channel, 2017–2018 to 2018–2019



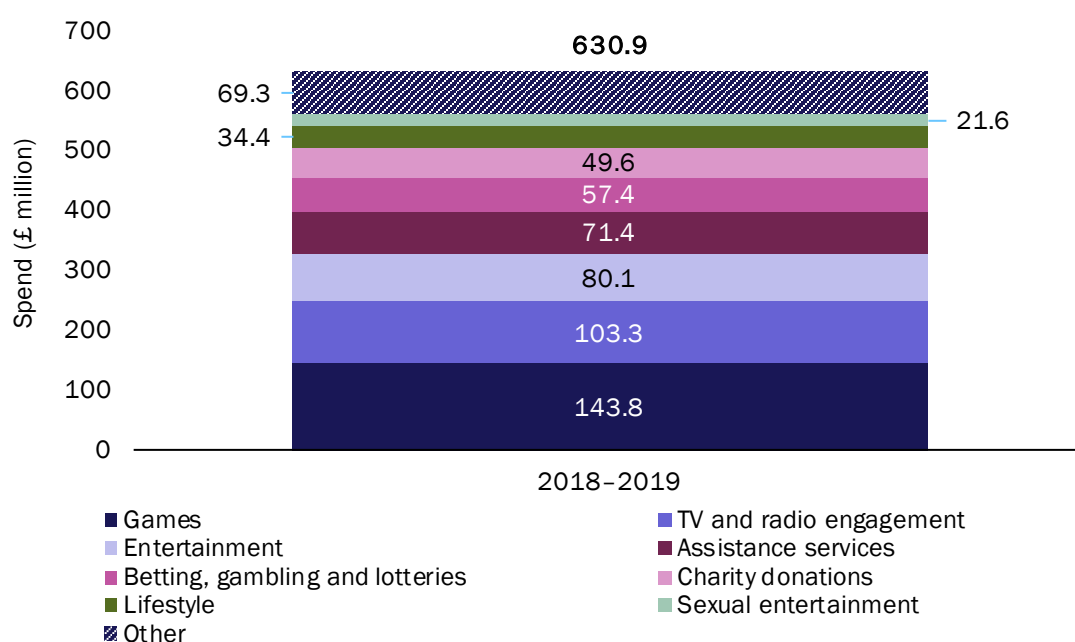
Note: This chart shows the total spend in 2017–2018 (accounting for retrospective corrections in VAT) on the left-most bar and total spend in 2018–2019 on the right-most bar. Bars in between show spend growth (in light purple) or decline (in dark red) by spending channel (for example, spend on operator billing increased by £87.7 million between 2017–2018 and 2018–2019).

Source: Phone-paid Services Authority

3.3 Spend by service category

Consumers spent an estimated £143.8 million on phone-paid games in 2018–2019, the largest service category. TV and radio engagement (for example, broadcaster competitions) and entertainment services (such as music services) were the second- and third-largest service categories, generating £103.3 million and £80.1 million in spend, respectively. These three service categories together accounted for an estimated 52% of total spend on phone-paid services.

Figure 3.4 below provides Analysys Mason’s estimated breakdown of spend by service category. Note that more detail regarding the service taxonomy (including definitions) and service-level data can be found in Annex A. Annex B expands further on our approach to estimating the breakdown of end-user spend by service category and individual service type.

Figure 3.4: End-user spend (excluding VAT), by service category,¹⁰ 2018–2019

Sources: Phone-paid Services Authority, Analysys Mason, 2019

As shown on Figure 3.5 below, in absolute terms, the variation in total end-user spending between 2017–2018 and 2018–2019 (+£90.4 million) was mainly driven by games, TV and radio engagement, betting, gambling and lottery services.

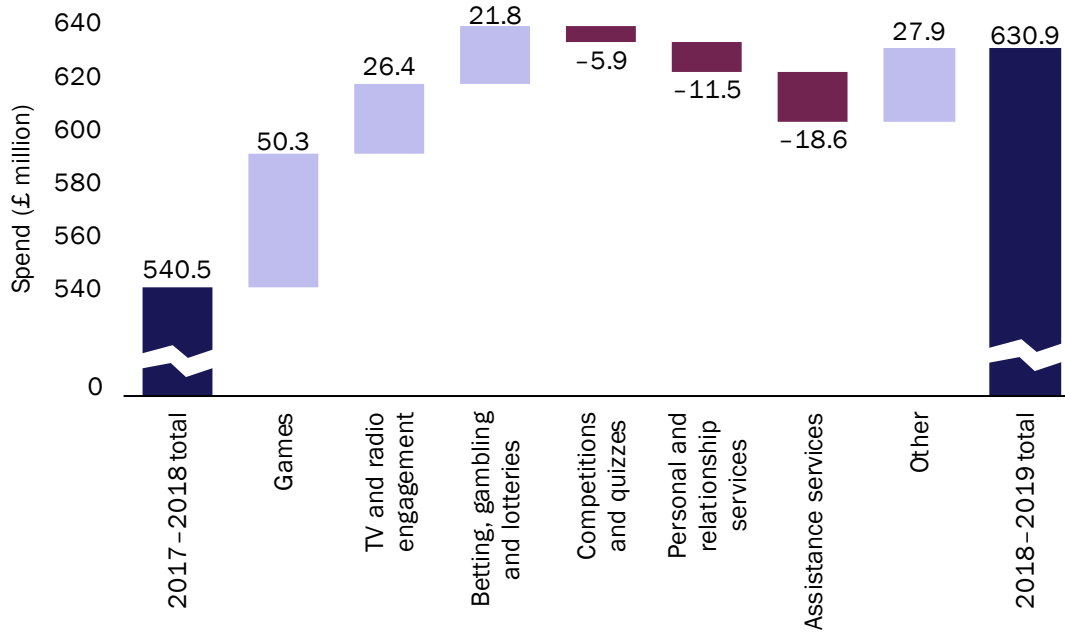
- Increased end-user spend on games (+£50.3 million) was primarily driven by the growing use of operator billing as a payment option in app stores. Games accounted for 70% of consumer spend via the operator billing channel (more detail on this in subsection 4.1).
- Growth in spend on TV and radio engagement services (+£26.4 million) was positively impacted by a higher number of competitions run by TV or radio broadcasters and their growing popularity among audiences (see subsection 4.2).
- Betting, gambling and lotteries services accrued an additional £21.8 million in spend in 2018–2019, driven by the growing popularity of the broader online gambling and betting (see subsection 4.1).

The service categories that experienced the greatest decline in spend over the past 12 months include competitions and quizzes, personal and relationship services, and assistance services. The overall contribution of the remaining service categories to the growth of the phone-paid market between 2017–2018 and 2018–2019 was limited. Together, the seven service categories, (entertainment; charity donations; lifestyle; information, news and education; device

¹⁰ 'Other' includes service categories that are estimated to have generated £20 million or less, namely: personal and relationship services; competitions and quizzes; digital payments; information, news and education; and device personalisation and security.

personalisation and security; digital payment; and sexual entertainment) accounted for 26% of the net incremental market growth.

Figure 3.5: End-user spend¹¹ variation (excluding VAT), by service category, 2017–2018¹² to 2018–2019



This chart shows the total spend in 2017–2018 (accounting for retrospective corrections in VAT) on the left-most bar and total spend in 2018–2019 on the right-most bar. Bars in between show spend growth (in light purple) or decline (in dark red) by service category (for example, spend on games increased by £50.3 million between 2017–2018 and 2018–2019).

Source: Analysys Mason

¹¹ The absolute growth has been estimated based on the distribution by service category reported in the Annual Market Review 2017–2018 report, applied to the restated market total spend for 2017–2018.

¹² ‘Other’ includes service categories estimated to have grown or declined by £20 million or less, namely: entertainment; charity donations; lifestyle; information, news and education; device personalisation and security; digital payment; and sexual entertainment.

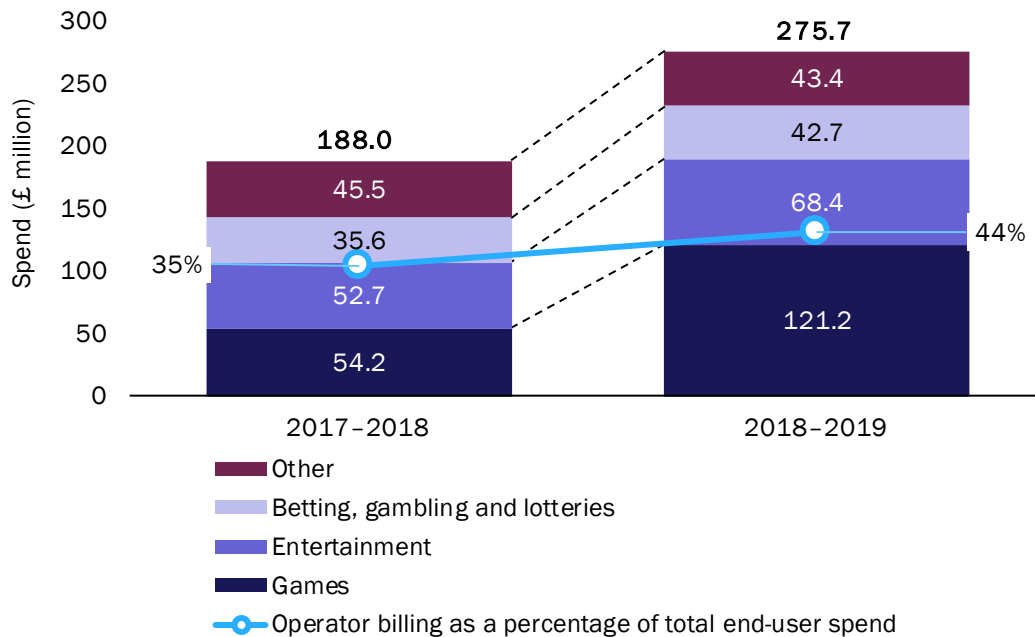
4 Analysis of key market drivers

Operator billing was the largest and fastest-growing spending channel between 2017–2018 and 2018–2019, a performance that was primarily driven by an increasing number of content providers offering operator billing as an option, and improved consumer perceptions of this payment option, which has led to increased adoption. Spend uplift on TV and radio engagement services positively contributed to the growth of premium SMS (the second-largest spending channel), driven by the offer of higher-quality content from broadcasters, a higher level of audience engagement and the launch of dedicated websites for competitions. Spend on charity donations significantly exceeded the levels reached in 2017–2018 because of the cyclical nature of large, biannual telethon events, and because of the introduction of a higher spend cap per donation. The continued decline in consumer spending on most legacy voice-based services (except Voice 09) was driven by a diminishing user base and reduced spend per user (in particular, price caps for Voice 118), as well as an acceleration of the migration of businesses to cheaper premium rate numbers (for instance, 084) or alternative free channels.

4.1 Operator billing

As highlighted in subsection 3.2, operator billing was the largest and fastest-growing spending channel in 2018–2019, capturing 44% of total spend in 2018–2019 (the equivalent of £275.7 million), up from 35% in 2017–2018 (or £188.0 million). As shown in Figure 4.1 below, games, entertainment, betting, gambling and lotteries have remained the three largest service categories using operator billing as a spending channel in 2018–2019.

Figure 4.1: End-user spend (excluding VAT) via operator billing, by service category,¹³ 2017–2018¹⁴ to 2018–2019



Source: Analysys Mason, 2019

Below we discuss the key factors that have impacted the evolution of end-user spend via operator billing across these service categories.

Games

Consumers spent an estimated £121.2 million on games-related purchases via operator billing in 2018–2019 (64% of the overall spend on games and entertainment). This spend was primarily on paid-for games downloads in app stores (accounting for 39% of end-user spend on games) such as Apple App Store or Google Play, as well as in-game purchase of items or rewards (accounting for 40% of end-user spend on games) such as currency, lives or customisable content.

The following key factors impacted growth of spend on games.

- Wider availability of operator billing.** The agreement between EE and Apple signed in March 2018, and the agreement between O2 and Apple signed in May 2018, which allow subscribers of both operators to use operator billing for purchases on Apple App Store, Apple

¹³ 'Other' includes the seven remaining service categories, including competitions and quizzes; device personalisation and security; digital payments; information, news and education; personal and relationship services; sexual entertainment; and TV and radio engagement. No single category in 'Other' is estimated to have generated over 3% of revenue for the channel.

¹⁴ 'Other' includes service categories estimated to have grown or declined by £20 million or less, namely: entertainment; charity donations; lifestyle; information, news and education; device personalisation and security; digital payments; and sexual entertainment.

Music, iBooks, iTunes, and iCloud, has significantly expanded the pool of potential users of operator billing and has therefore been a key driver of growth in overall adoption. For example, O2 and EE together had a total of 54.4 million mobile connections¹⁵ as of March 2018, and Analysys Mason’s research suggests that around 30–40% of O2 and EE’s subscribers primarily use an Apple device. This indicates that these partnerships are likely to create around 16–22 million potential new users of operator billing that can purchase games on Apple App Store. Note that these agreements are also likely to have had a positive impact on the growth of spend on applications that are not related to games or entertainment services (such as lifestyle or dating services).

- **Continued growth of operator billing as a payment mechanism.** The increasing availability of operator billing to purchase games and in-game content from well-known and reputable merchant brands’ (such as Google, Microsoft and Sony) is likely to have had a positive impact on consumers’ perceptions of operator billing as a payment mechanism in general, which, in turn, is driving adoption.

Figure 4.2: Availability of operator billing as a payment option (as of June 2019) from major games and content providers, by mobile network operator

Provider	EE	Vodafone	Three	O2
Apple App Store	✓	✗	✗	✓
Google Play	✓	✓	✓	✓
Microsoft Store	✓	✗	✓	✓
Spotify	✓	✓	✓	✓
PSN Wallet	✓	✓	✓	✓

Source: Analysys Mason, 2019

Entertainment

Entertainment services generated £68.4 million revenue via operator billing for the industry in 2018–2019, fuelled by the growth of subscription-based music services, one-off transactions for pay-per-view TV or video content, as well as an array of smaller, more-niche service providers of TV or video content.¹⁶

The following key factor has impacted growth of entertainment services.

- **Improved consumer perceptions of operator billing as a payment mechanism.** The increasing number of trusted major merchant entertainment services providers (such as Spotify) that offer operator billing as a payment option has had a positive effect on consumers’

¹⁵ Including mobile handset and mobile broadband connections but excluding IoT connections.

¹⁶ For example, Watch It!, an online streaming platform for niche TV content related to cars, fitness, martial arts and music, and Footbox.tv, a source for football videos and statistics.

perceptions of operator billing and adoption more generally. This is expected to continue in the future across more new services. For example, one (unnamed) mobile operator partnered with Amazon to offer operator billing-based payment for Amazon Prime Video subscriptions.¹⁷ Figure 4.2 shows the current availability of operator billing across major games and entertainment content providers and mobile network operators.

Betting, gambling and lotteries services

The betting, gambling and lotteries service category was the third-largest category in terms of end-user spend on operator billing-based phone paid services (£42.7 million). The majority of revenue was generated from online gambling services (including mobile casinos applications and websites), followed by sports betting services (19%), and lotteries (5%).

The following key factors impacted growth.

- **Continued migration from physical to online gambling and betting.** Factors such as changing consumer behaviour, technological developments, availability of ubiquitous connectivity and broader service propositions for online gambling have all continued to drive migration from physical to online gambling, which has expanded the pool of potential users of operator billing-based gambling services.
- **Growth of lotteries.** The society lotteries category is a relatively new type of service in the phone-paid services market, typically organised by businesses, charities or societies to raise money. This category accrued £3.1 million in spend in 2018–2019.

The revised Payment Services Directive (PSD2) regulations came into force in January 2018 and were initially expected to have a significant impact on the phone-paid services industry (particularly on gambling, betting and lotteries services) by limiting the spend of a small share of high-value customers to a certain price cap (approximately £40 per single payment transaction and £240 cumulative value per billing month). However, our interviews with industry participants suggest that the actual impact from these regulations on their businesses has been seemingly limited in practice.

Other services

The remaining eight service categories (lifestyle, competitions and quizzes, device personalisation and security, digital payments, information, news and education, personal and relationship services, sexual entertainment, and TV and radio engagement) together generated 16% of end-user spend via operator billing in 2018–2019, with lifestyle being the only service category to generate over £5 million in 2018–2019.

¹⁷ No official announcement has been published, nor did it appear that operator billing is available as a payment option on Amazon Prime Video at the time of writing.

Spend for most of these services categories remained stagnant (except competitions and quizzes, digital payment and information, news and education) in 2018–2019. Some industry participants suggested that the introduction by mobile operators of a two-step authentication and/or PIN/passwords for Payforit transactions in 2018 had a positive impact on consumer confidence in phone-paid services and overall satisfaction, while others believed it has impacted the conversion rate of customers, especially for smaller services (larger service providers such as Apple or Spotify have separate partnerships with mobile operators or aggregators and do not use Payforit).

In addition, some industry participants expressed the view that Special Conditions for online adult services and online competition services set by the Phone-paid Services Authority in 2017 which introduced – among other things – a requirement for such services to obtain double opt-in consent to charge from the consumer at the point of each purchase, has impacted conversion rates. The view of these participants is that this has resulted in the decline in spend, with only a small number of residual users remaining.

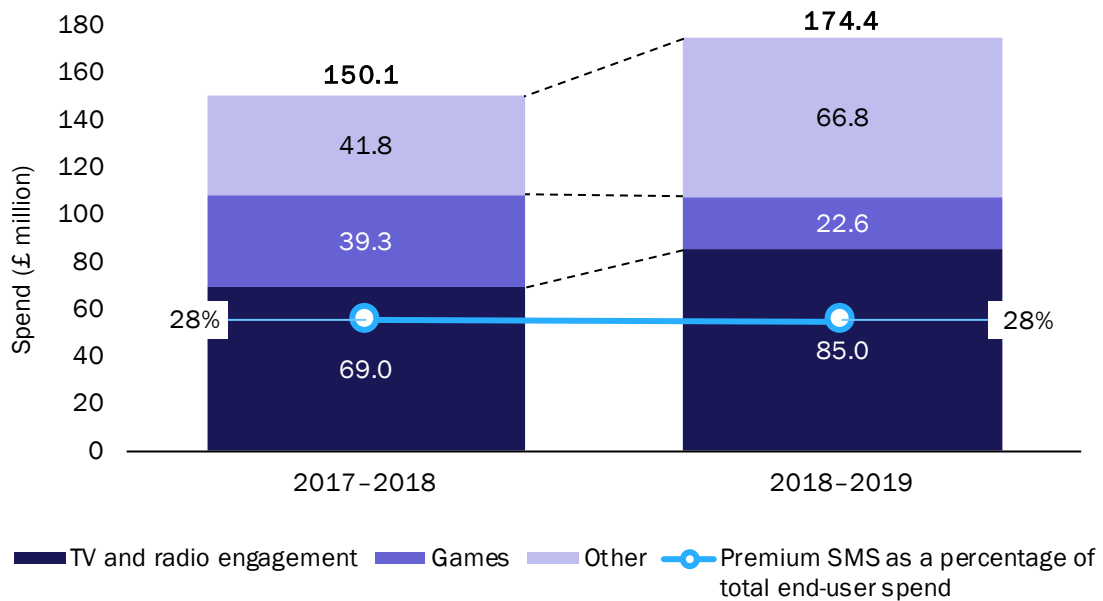
New services such as m-ticketing remain in the trial or pilot phase with only a few reported new developments. One key point highlighted by industry participants is the reportedly significant difficulty for new merchants to enter the market or launch new services using operator billing, as a result of the breadth and complexity of requirements, commercial terms, fees and regulations). In this context, some industry participants expressed the view that smaller merchants are likely to exit the phone-paid service market and monetise their services through credit or debit card payments, or other payment methods.

4.2 Premium SMS

Premium SMS was the largest and second-fastest growing spending channel for phone-paid services in 2018–2019, accruing £174.4 million in spend this year and representing 28% of the total phone-paid services market. This growth in spend follows a previous decline between 2016–2017 and 2017–2018 (from £230.2 million in 2016–2017 to £150.1 million in 2017–2018)¹⁸ and has been driven by the strong performance of competitions run by broadcasters to monetise their content. As shown in Figure 4.3 below, TV and radio engagement (including competitions from broadcasters) and games have remained the two largest service categories leveraging premium SMS in 2018–2019, together accounting for 62% of end-user spend.

¹⁸ The 2017–2018 Annual Market Review reported a decline in revenue of 32% for ‘mobile’, which included both premium SMS and voice short codes. The figures for premium SMS and voice short codes have been split out in this Annual Market Review and all comparisons have been adjusted accordingly.

Figure 4.3: End-user spend (excluding VAT) via Premium SMS by service category,¹⁹ 2017–2018 to 2018–2019



Source: Analysys Mason, 2019

The following provides a discussion of the key factors that have impacted the evolution of end-user spend via premium SMS across those service categories.

TV and radio engagement services

Consumers spent an estimated £85 million on TV and radio engagement services in 2018–2019 (accounting for 49% of end-user spend on premium SMS), primarily generated through entry fees that must be paid in order to participate in the competitions that are run by TV and radio broadcasters to engage with their audience (these activities accounted for 96% of spend on TV and radio engagement). The remaining consumer spend was via other engagement methods used by broadcasters to monetise content (such as voting or texting a show host) was minimal because broadcasters increasingly offer these forms of engagement freely in order to incentivise their use.

The following key factors impacted growth.

- **A higher number of participants in competitions**, as a result of the improved quality of content offered by broadcasters and higher level of audience engagement. In addition, the

¹⁹ 'Other' includes the seven remaining service categories, including device personalisation and security; digital payments; gambling, betting and lotteries; information, news and education; lifestyle; personal and relationship services; and sexual entertainment. No single category in 'Other' is estimated to have generated over 10% of revenue for the channel.

launch of dedicated competition websites (such as ITV WIN) has expanded the pool of potential participants and has reportedly had a positive impact on this segment of the market.

- **Growth in average end-user spend.** A corollary of the factors above. Industry participants also reported an increase in end-user spend on competitions (from individuals participating more frequently).

Some industry participants are showing increasing interest in shifting to smartphone applications and operator billing to provide a more modern, lower-and increasingly expected digital user experience and different price points (for example, discounts based on number of competition entries) that are not possible via the more-rigid premium SMS channel.

Games

Games accounted for the second-largest service category in terms of end-user spend on premium SMS-based phone-paid services (£22.6 million), typically including subscription services billed on a weekly or monthly basis for game downloads (unlimited or limited to a certain number of games per time period) from online games portals.

End-user spend on games accessed via premium SMS declined between 2017–2018 and 2018–2019²⁰ as users moved to services with more-engaging digital content, which is typically provided through operator billing. Special conditions set by the Phone-paid Services Authority and mobile operators' rules for operator billing are likely to have improved consumer confidence in engaging with content. However, some industry participants also report that these conditions have impacted the take-up of new customers, albeit to a lesser extent than other, more-traditional types of phone-paid services identified as 'higher risk' (for example, online adult or competition services).

Other services

The remaining nine service categories generated 38% of end-user spend via premium SMS in 2018–2019 and include a long list of services (including competition and quizzes, as well as device personalisation and security) that have historically used premium SMS (typically because it is easier to onboard new customers via this spending channel).

Spend on device personalisation and security, digital payments, entertainment, personal & relationship services, and sexual entertainment declined in 2018–2019. Special conditions included in the Phone-paid Services Authority's Code of Practice, as well as the decision made by some mobile operators not to allow services discovered and consumed online being billed via premium SMS, may have limited service providers' ability to attract new customers, and this has resulted in a significant decline in spend.

²⁰ Part of this decline can be explained by the fact that some gambling and betting services were accounted for under the games category in the 2017–2018 Annual Market Review.

Rich Communication Services (RCS) is perceived by the phone-paid services industry as having the potential to provide a boost to the market for traditional phone-paid services. Development of RCS began in 2007 to replace SMS that supports multimedia message content, such as over-the-top (OTT) messaging applications (for example, Facebook Messenger or WhatsApp). These multimedia capabilities are designed to boost market growth by providing a more modern, digital experience for mobile marketing content, which can lead to higher levels of engagement from consumers (for example, it is reported that Virgin Trains is planning to use RCS to improve the boarding experience and accessibility of information for its customers).

EE, Three and Vodafone (but not O2) support RCS in the UK as of July 2019. Existing services provided via premium SMS will likely benefit from the improved engagement over RCS. However, the adoption of RCS by new merchants may be limited if their customers do not know or understand what RCS is. As of March 2019, 97% of handset connections were smartphones, on which OTT messaging applications have become more popular than SMS. This trend has resulted in only a few compelling reasons for users to adopt RCS for personal use to date.

4.3 Charity donations

Spend on charity donations made through premium SMS reached £49.6 million in 2018–2019, up from £37.5 million in 2017–2018 (which represents +32% growth). The majority of donations are made during telethons: industry interview participants suggested that up to 80% of the spend on charity donations comes from telethons, while 64% of consumer survey respondents that made a charity donation in the past 12 months reported they had done so to support a telethon (see Figure 4.4).

Most donations are made to well-known and large charities: 40% of those survey respondents (see Figure 4.5) that made a charity donation in 2018–2019 donated to Comic Relief, the largest UK telethon organiser (Comic Relief includes Sports Relief and Red Nose Day). Other charities that host charity telethons, such as BBC’s Children in Need, Stand Up to Cancer and STV appeal, were referenced by a smaller share of respondents and are included in the ‘Others’ category.

Figure 4.4: Channels used by survey respondents for phone-paid charity donations, 2018–2019

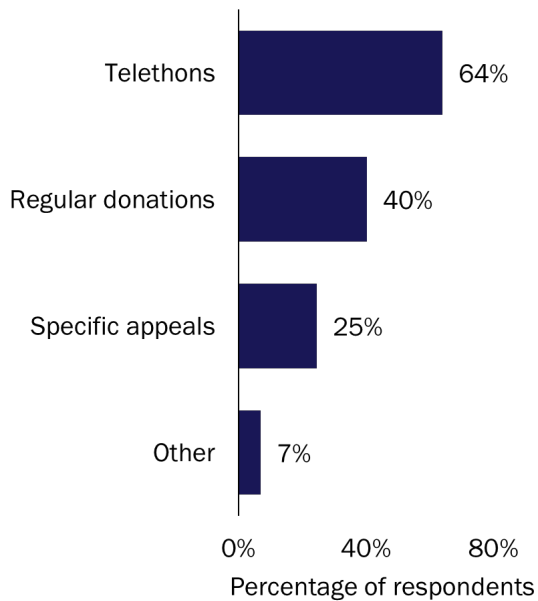
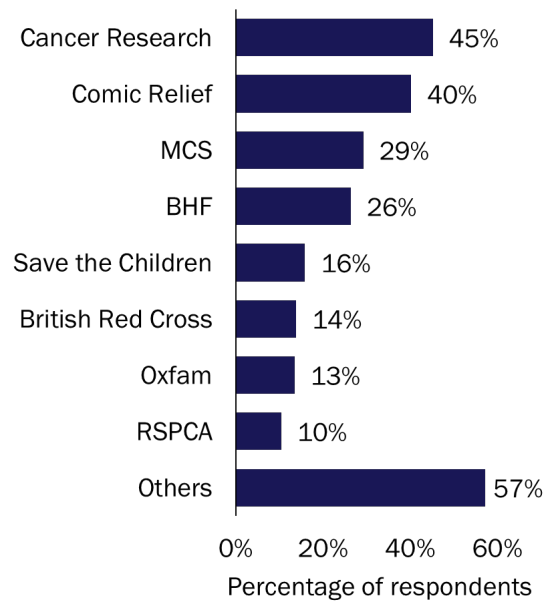


Figure 4.5: Charities to which survey respondents reported they made phone-paid charity donations, 2018–2019



'MCS' refers to Macmillan Cancer Support, 'BHF' to the British Heart Foundation and 'RSPCA' to the Royal Society for the Prevention of Cruelty to Animals. No single charity within 'Others' was cited by more than 10% of respondents.

Base: respondents who have made a phone-paid charity donation in the past 12 months (n = 1083). Questions: "Under which circumstances have you made these donations?" [multiple choice]; "Which charity (or charities) have you donated to using phone-paid services in the past 12 months?" [multiple choice].

Source: Analysys Mason, 2019

The following factors impacted growth.

- **Biannual telethon events taking place in 2018–2019.** Some key charity telethon events only occur every 2 years. This means that charity donation totals can vary significantly across different years. For example, in 2018–2019 across all spending channels, an additional £33.9 million was raised through telethons, compared to that which was raised in 2017–2018.

Figure 4.6: Reported totals (regardless of payment mechanism) raised by telethon events and phone-paid revenue for charities, 2017–2018 and 2018–2019

Telethon event	2017–2018	2018–2019
Children in Need	£60.8 million (November 2017)	£58.0 million (November 2018)
Red Nose Day (biannual)		£63.9 million (March 2019)
Sports Relief (biannual)	£38.2 million (March 2018)	
Stand Up to Cancer (biannual)		£11.0 million (October 2018)
STV appeal	£2.6 million (September 2017)	£2.6 million (September 2018)
Total telethons	£101.6 million	£135.5 million (+£33.9 million)
Total phone-paid revenue for charities	£37.5 million	£49.6 million (+£12.1 million)

Sources: Comic Relief, BBC, Cancer Research UK, STV, Analysys Mason, 2019

- **Availability of higher donation amounts (driver).** The previous limit of £20 per donation via premium SMS was lifted by mobile operators to £30 in late 2018, which positively impacted the average value per donation. This higher donation cap also incentivised telethon organisers to more-actively promote premium SMS as a donation method and, as a result, contributed to an increase in the number of donations through this channel.
- **Growth in mobile donations outside of telethon events (driver).** Our interviews with industry participants suggest that more-active promotion of premium SMS as a donation channel during telethon events had a positive effect on broader consumer awareness, as well as an indirect positive impact on the number of individuals opting to subscribe to charities and make regular donations via premium SMS.

4.4 Voice short code

Voice short codes typically provide customers that call from mobile devices with an alternative to other premium rate numbers (such as 09 or 087) and are often used as an alternate method of contact for mobile customers to many of the same, or similar types of services (for example, broadcaster competitions, customer services and talk services).

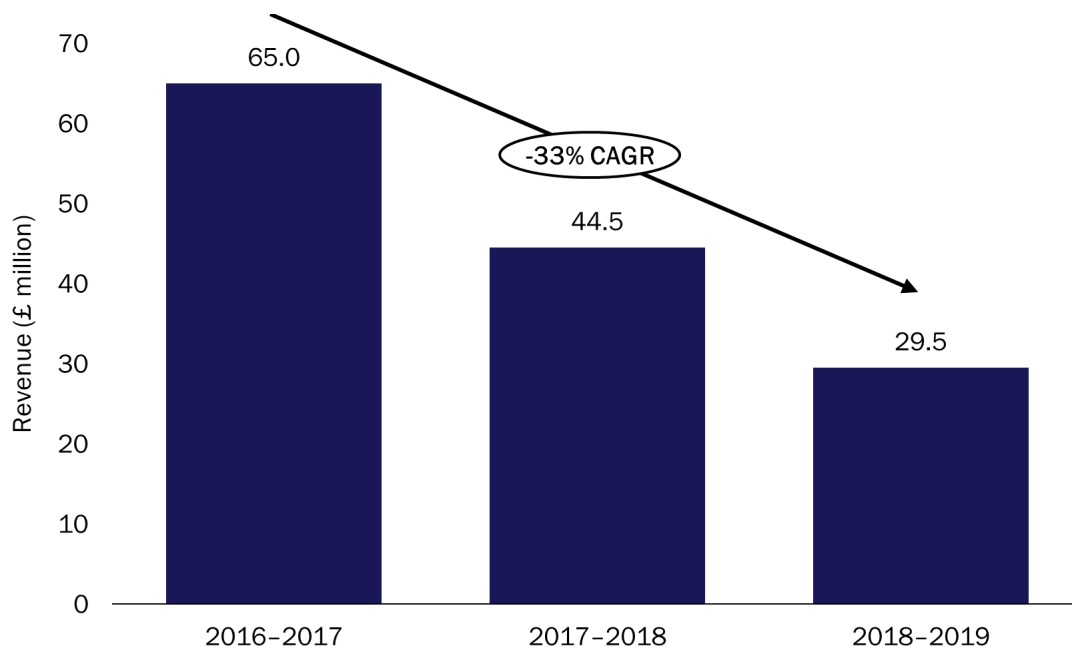
Services that use voice short codes accrued £19.0 million in spend in 2018–2019 in (3% of end-user spend in phone-paid services), a slight decrease from £20.1 million in 2017–2018 (–2% year-on-year).

4.5 Voice 118

Directory enquiries are the only service category using the 118-number range (as designated by Ofcom). In 2018–2019, revenue from this service was £29.5 million in 2018–2019, down from

£44.5 million in 2017–2018 (–34% year-on-year), which follows the similar trend of previous years (see Figure 4.7).

Figure 4.7: Directory enquiries revenue (excluding VAT), 2016–2017 to 2018–2019



Source: Phone-paid Services Authority, 2019

The following factors are impacting growth.

- **Decline in call volumes.** The number of calls to directory enquiry services has declined at a compounded annual rate of 40% over the past 4 years, driven by the growing ubiquity of information being made accessible online.
- **Price cuts.** Following a market review of directory enquiry services published in November 2018, Ofcom decided to impose a price cap of £3.65 per 90-second call for calls to the 118-number range, primarily on the basis of high prices and poor price transparency. For example, the cost per 90-second call to 118 118, the most-popular service in the UK, has risen substantially over recent years (+200% between 2012–2013 and mid 2018–2019). While price caps were applicable from April 2019 (that is, after 2018–2019), BT pre-emptively cut the prices of its 118 500 service (the second most-popular directory enquiry service in the UK, which accounted for 20–30% call volumes as of September 2017) from £6.88 to £3.10 in June 2018.²¹ This resulted in a reduction in the average spend per call to directory enquiry services.

²¹ Service charges for BT's 118 500 service are reported in Ofcom's *Directory Enquiries (118) Review*, published in November 2018. Available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0017/128420/Directory-Enquiries-118-Review-statement.pdf.

4.6 Voice 087 and Voice 09

Services accessed through, and paid for via, premium rate 09 and 087 number ranges (which includes information, connection and signposting services (ICSS), customer services, and chat services) generated a combined £82.7 million in 2018–2019 and accounted for 13% of total end-user spend on phone-paid services. This represents a decline of £17.6 million in spend since 2017–2018 (–18% year-on-year).

Voice 087

The 087-number range has historically been used for pre-sales functions by businesses and other organisations.

Industry revenue from this service fell sharply to £26.9 million in 2018–2019, down from £45.4 million in 2017–2018 (–41% year-on-year), primarily as a result of organisations moving post-sales calls functions to cheaper or free alternatives (for example, the 084-number range or online channels) and to enhance the omni-channel experience of their customers.

Voice 09

The 09-number range has a higher maximum service charge and has typically supported more-expensive phone-paid services (such as chat services).

Industry revenue through this channel was flat at £55.8 million in 2018–2019, compared to £54.9 million in 2017–2018 (+2% year-on-year), this represents a resurgence after falling at around –10% per year over the previous 2 years. Our interviews with industry participants suggest that this relatively stable performance was driven by the success of competitions in the TV and radio engagement category, bolstering 09 call volumes.

The decline in previous years was driven by the migration by service providers away from the 09 number range to other payment methods (for example, credit/debit cards) and falling call volumes. Some industry participants suggested that the relatively high access charge fee of up to £0.55 per min charged by the originating network operator had a ‘bill shock’ effect on some consumers, and therefore incentivised service providers to move away from the 09 numbers.

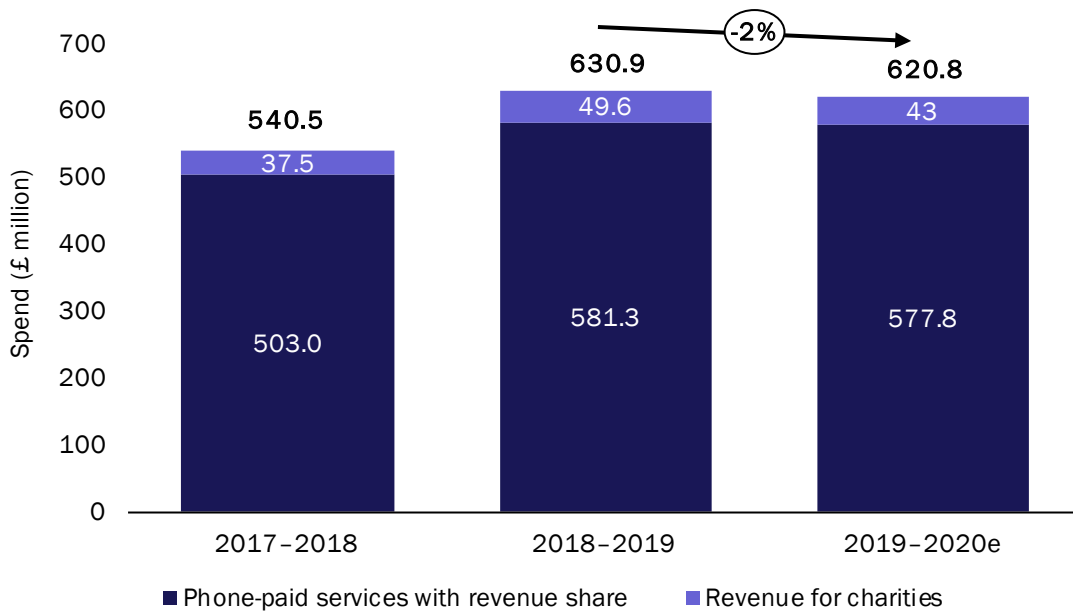
5 Market outlook in 2019–2020

The phone-paid services market is expected to remain mostly flat at £620.8 million in 2019–2020 (–2% year-on-year). Spend on both operator billing and premium SMS spending channels is expected to grow more slowly than in 2018–2019 because no new partnerships between mobile network operators and major merchants or aggregators are expected (on operator billing), and the higher-than-expected success of broadcaster competitions in 2018–2019 is unlikely to be exceeded next year (via premium SMS). Spend on charity donations is expected to decline in 2019–2020, as a result of the cyclical nature of major telethon events. End-user spend on legacy voice-based services (including Voice 118 and Voice 087) will continue to decline, which follows the pattern set in previous years. Voice 09 spend will shrink again after experiencing flat growth in 2018–2019.

5.1 Overall market size

After strong growth in 2018–2019 (+17% year-on-year), we forecast end-user spend to decline from £630.9 million in 2018–2019, to £620.8 million in 2019–2020, (–2% year-on-year). The biannual schedule of key telethon events (see subsection 4.3 for details) is expected to result in a decline in charity donations of 13% year-on-year from £49.6 million in 2018–2019 to £43.0 million in 2019–2020. The revenue generated by the phone-paid industry is expected to remain relatively flat at £577.8 million in 2019–2020.

Figure 5.1: End-user spend (excluding VAT), by type, 2016–2017 to 2019–2020e (estimated)



The Phone-paid Services Authority restated the total end-user spend for 2017–2018 in June 2019 to account for incorrectly reported VAT within the network returns from network operators.

Sources: Analysys Mason, Phone-paid Services Authority, 2019

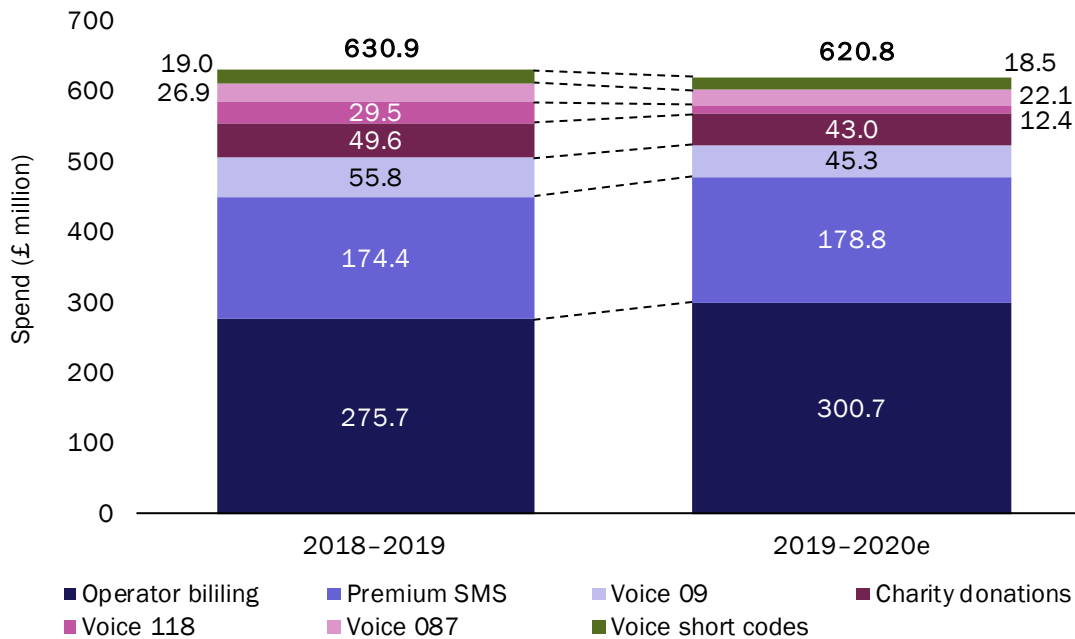
A high-level analysis of the evolution of end-user spend by key spending channel and service category is provided in subsections 5.2 and 5.3 below.

5.2 Spend by channel

Driven by the increasing availability of operator billing as a payment option for games, entertainment, betting, gambling and lotteries, among others, operator billing will continue to be the largest spending channel for 2019–2020, capturing £300.7 million (or 48% of total spend), followed by premium SMS (£178.8 million). Both channels will capture an increasing share of total spending (77%, up from 71% in 2018–2019).

Figure 5.2 below provides a breakdown of end-user spend in 2018–2019 and a forecast for 2019–2020 by spending channel.

Figure 5.2: End-user spend (excluding VAT) by spending channel, 2018–2019 – 2019–2020e (estimated)



Source: Analysys Mason, 2019

Operator billing and premium SMS will be the only two spending channels to experience overall net growth in end-user spend in 2019–2020.

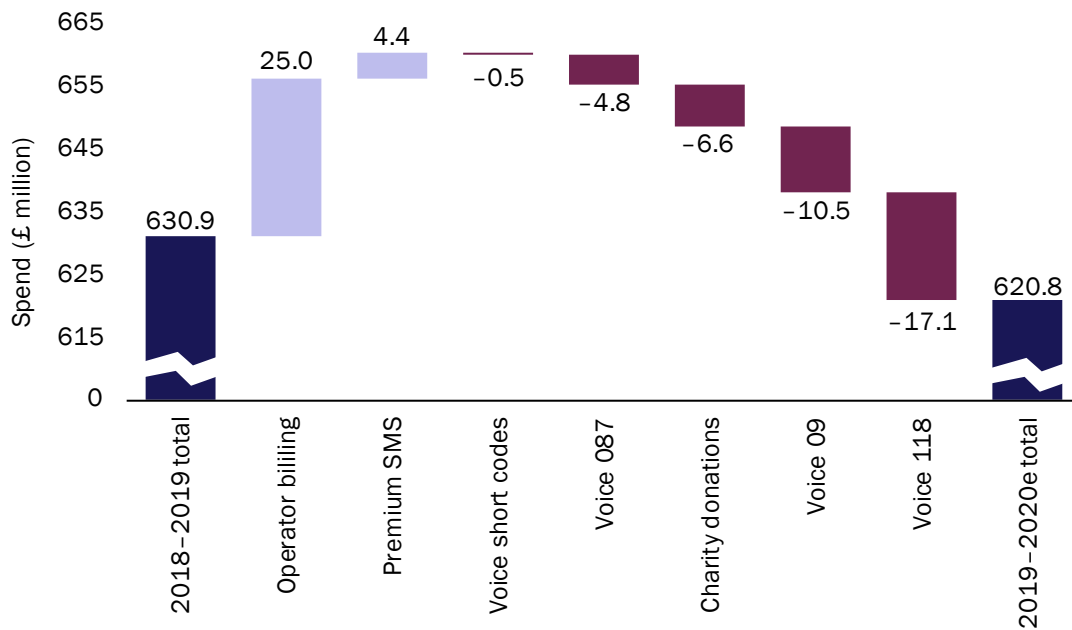
- Spend on services that use operator billing is expected to grow by an estimated £25.0 million between 2018–2019 and 2019–2020, a more-modest increase than the £87.7 million additional spend achieved between 2017–2018 and 2018–2019 – in part driven by the expected absence of new partnerships between mobile network operators and major merchants in 2019–2020 (although negotiations are likely underway, no evidence suggests of any new partnership being agreed in 2019–2020)
- Spend via premium SMS is forecast to grow by an estimated £4.4 million between 2018–2019 and 2019–20, resulting from sustained growth in the number of competitions run by TV or radio broadcasts and their popularity among audiences. As in the case of operator billing, growth in spend is expected to be lower than in 2018–2019 (+£49.6 million) as the industry reported significant success from broadcaster competitions in 2018–2019, which is unlikely to happen again next year. Migration of broadcaster competitions from premium SMS to operator billing may also be of interest to broadcasters in 2019–2020 and could also have an adverse effect on consumer premium SMS spend.

End-user spend on voice-based services (including Voice 09 and Voice 087) is expected to fall. The key drivers of this trend include a declining user base, use frequency and spend per user, as well as an acceleration of the migration of businesses to cheaper premium rate numbers (e.g. 084)

or alternative free channels. Growth in spending Voice 09 services remained flat in 2019–2020 but is expected to follow the long-term trend and decline in 2019–2020.

Spend on services using voice short codes (for example, broadcaster competitions, customer services and chat services) has, until now, held up reasonably well to the usage decline of with other voice channels. Consumer spend on services using voice short codes is expected to remain broadly stagnant.

Figure 5.3: End-user spend variation (excluding VAT), by spending channel, 2018–2019 to 2019–2020e (estimated)



Note: This chart shows the total spend in 2018–2019 on the left-most bar and total spend in 2019–2020e on the right-most bar. Bars in between show spend growth (in light purple) or decline (in dark red) by spending channel.

Source: Phone-paid Services Authority, 2019

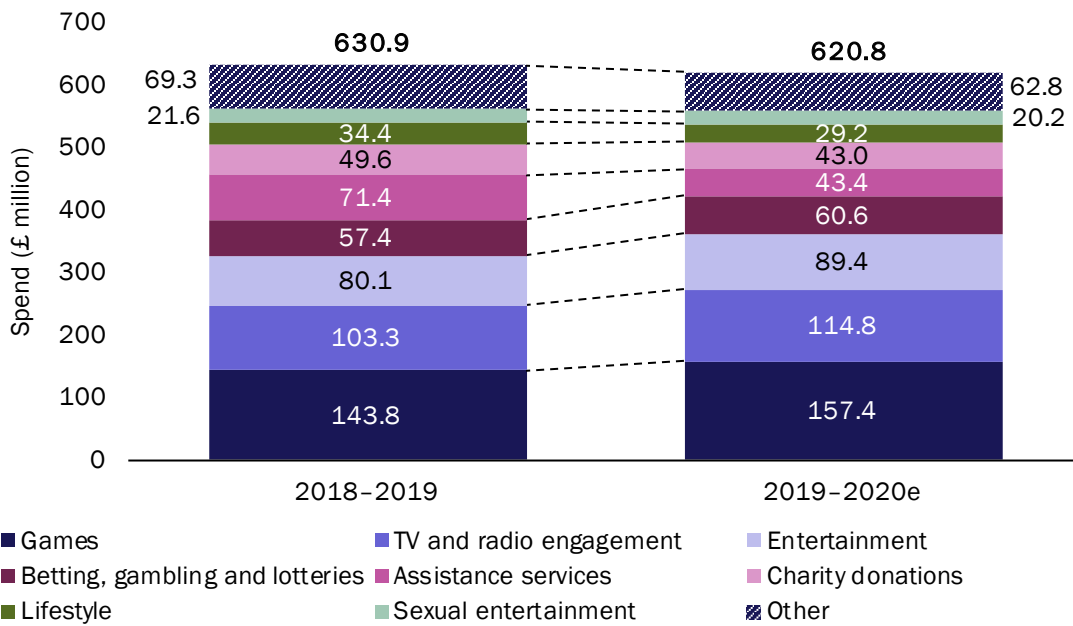
Directory enquiry services (Voice 118) are forecast to continue to experience a significant decline in spend in 2019–2020 following implementation of Ofcom’s price cap, which came into effect in April 2019 (in other words, at the start of the financial year of year 2019–2020) and limits the service charge for a 90-second call to £3.65. While BT, which runs the second-largest directory enquiry service (118 500), cut prices in June 2018, other services were only required to adjust their prices to comply with the regulation from 1 April 2019 (for example, 118 118, the largest directory enquiry service by call volume, used to charge £11.23 per 90-second call before the regulation came into force). The decline in the volume of calls (–40% compounded annual rate over the past 4 years) is expected to continue into 2019–2020 and will contribute to the overall drop in spend.

5.3 Spend by service category

We project that games will remain the largest service category by end-user spend in the phone-paid services market, generating £157.4 million in 2019–2020. Similarly, TV and radio engagement and entertainment services will continue to be the second- and third-largest categories of end-user spend, and are forecast to generate £114.8 million and £89.4 million, respectively. Growth in spend in games and entertainment services will be driven by the increasing adoption of operator billing by customers on app store and OTT services, while the rise in engagement of TV and radio services will be driven by the continued success of broadcaster competitions that leverage premium SMS as a method to engage audiences.

These three categories are expected to account for 58% of the total end-user spend in 2019–2020, up from 52% in 2018–2019. Figure 5.4 below provides a breakdown of end-user spend in 2018–2019 and 2019–2020 by spending channel.

Figure 5.4: End-user spend (excluding VAT), by service category, 2018–2019 to 2019–2020e (estimated)



Source: Analysys Mason, 2019

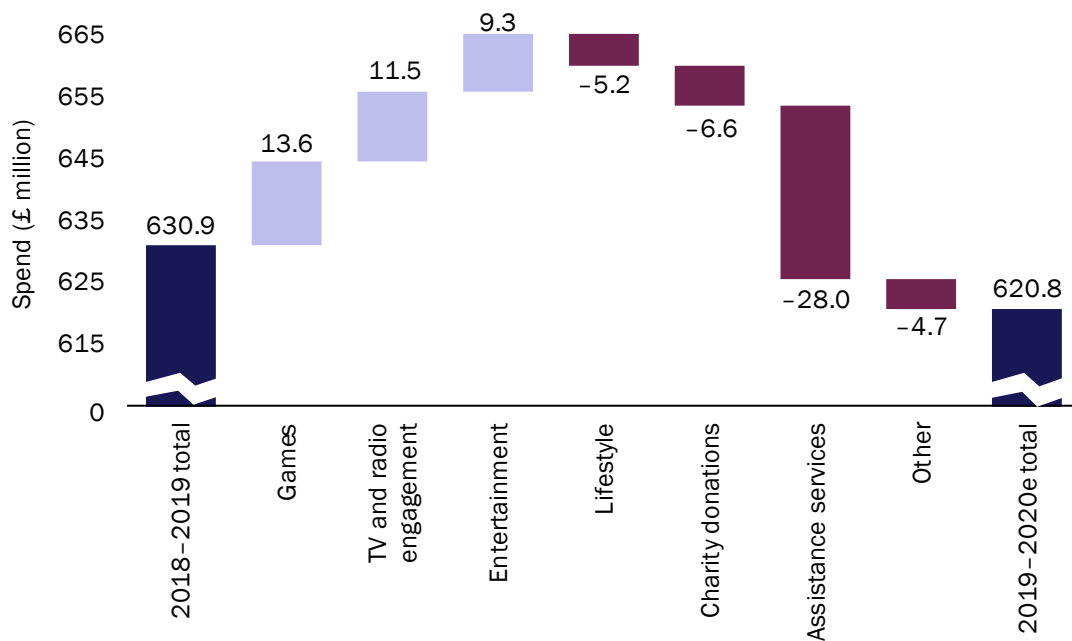
Games, TV and radio engagement and entertainment are also expected to be the only service categories to experience an overall positive net growth in end-user spend in 2019–2020 (see Figure 5.5 below).

- Spend in games is expected to grow by £13.6 million (significantly less than the £49.3 million of additional spend in 2018–2019). This projection of conservative growth is because no new partnerships to enable operator billing are expected to be formed between operators and large

merchants in 2019–2020 (negotiations are likely to be underway, but unlikely to come into effect during this period). Such partnerships would boost the number of individuals downloading games through this spending channel.

- Spend on TV and radio engagement services will continue to increase as broadcasters continue to effectively promote their content and engage with their audiences through competitions. Spend growth in 2019-20 is expected to be +£11.5 million in 2019–2020, lower than the +£27.9 it was in 2018–2019. 2018–2019 was an exceptional year – in particular for radio broadcasters – and it may be difficult to exceed this growth again. Further details about the reasons for this decline are detailed in subsection 5.2.
- Similarly to games, spend on entertainment services is expected to continue to grow, driven by the increasing adoption of operator billing for high-quality digital services and content that generates high levels of consumer trust.

Figure 5.5: End-user spend variation (excluding VAT), by service category 2018–2019 to 2019–2020e (estimated)



Note: This chart shows the total spend in 2018–2019 on the left-most bar and total spend in 2019–2020e on the right-most bar. Bars in between show spend growth (in light purple) or decline (in dark red) by service category.

Source: Phone-paid Services Authority, 2019

As shown in Figure 5.5 above, the service categories that are expected to decline the most in absolute terms over the next 12 months include assistance services, charity donations and lifestyle. Spend on assistance services will be primarily impacted by the sharp decline in the projected spend on directory enquiries (see subsection 4.5), as well as the further projected decline of call volumes

to customer services and ICSS, and the continuous migration of service providers from Voice 087 and 09 channels to cheaper or free alternatives.

6 Consumer analysis

Our research suggests that 58% of the UK population aged 16 or above used at least one phone-paid service in 2018–2019. Several factors are influencing usage, particularly convenience, impulse purchasing and price. Some individuals do not use phone-paid services because they do not need them or because they use alternative services or payment methods. About 25% of users reported that they have experienced problems with a service in the past 12 months. The most common issues included challenges associated with using the services, and a mismatch between expectations and reality in terms of what is advertised and the usefulness of the service. Sexual entertainment and personal and relationship services accounted for the largest share of problems, while charity donations had the fewest number of issues. Overall, the Net Promoter Score achieved by the industry is very low (–26), although a few select services (such as entertainment and music) perform relatively well (equal or above NPS = 0).

6.1 Demographics

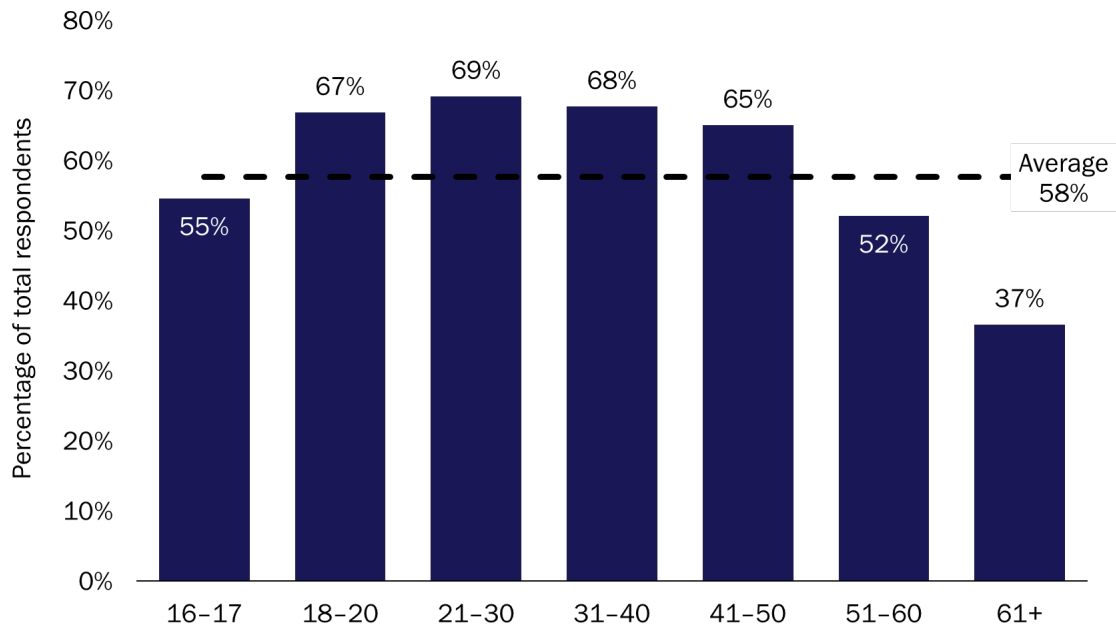
Data from our consumer survey suggests that 58% of respondents had used one or more phone-paid service over the past 12 months, an increase from the 49% reported in the 2017–2018 Annual Market Review.²² Given the nature of online consumer surveys, which typically have a bias towards ‘connected consumers’ that are more willing or able to consume mobile or digital content and services, the actual national penetration of phone-paid services is expected to be lower.

As shown in Figure 6.1 below, service penetration is highest among those aged 21–30, due to the large number of services in the entertainment and games categories that are likely to appeal to younger age groups, but the variation of penetration across age groups between 18 to 60 years still remains relatively narrow (a maximum of 17 percentage points). The penetration of phone-paid services in the 61+ age group is much lower than in other age groups and the UK overall.

Results from the survey did not suggest a variation in the level of use of phone-paid services by gender or region.

²² The 2017–2018 Annual Market Review included a similar survey of phone-paid services users. Results should not be considered directly comparable, as the structure, questions, descriptions and survey sample are different.

Figure 6.1: Penetration of phone-paid services, by age group, 2018–2019



Base: total sample of respondents (n = 8724). Question: “Based on your understanding of phone-paid services, which of the following categories of services have you used and paid for via your mobile phone bill or landline phone bill over the last 12 months?” [multiple choice]

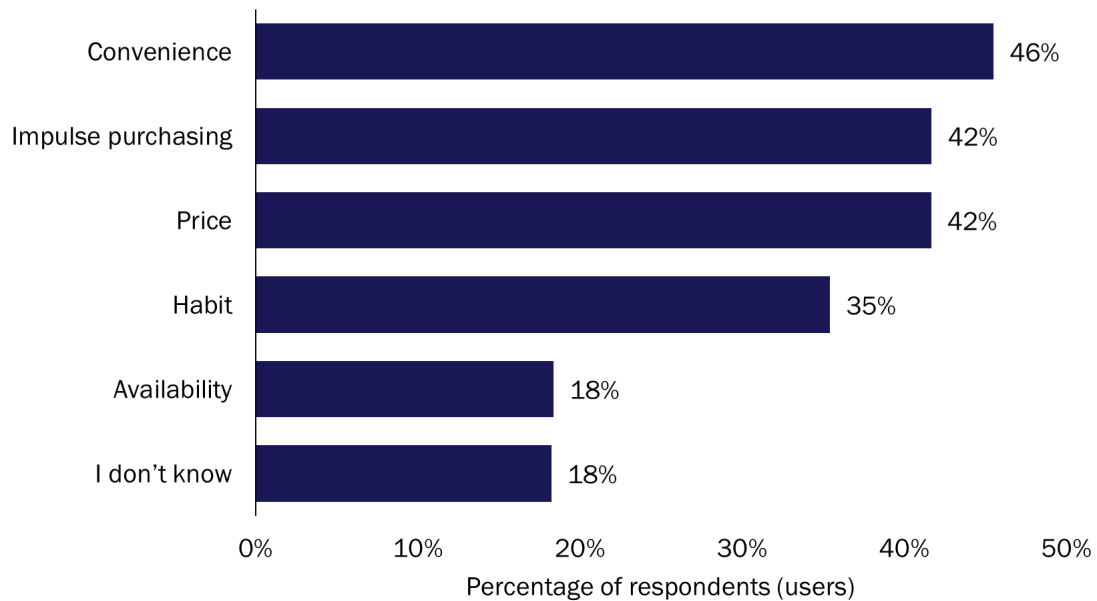
Source: Analysys Mason, 2019

6.2 Drivers of use

Consistent with previous year’s findings, there was no single major driver behind the use of phone-paid services. As shown in Figure 6.2, convenience was the main reason for use for 46% of respondents,, followed by impulse purchasing (42%) and price (42%). 35% of respondents continue to use these services out of habit. As a benchmark, convenience was also cited as the top driver of phone-paid services usage in the 2017–2018 Annual Market Review, while impulse purchasing was ranked in third position, behind service usefulness.²³

²³ ‘Service usefulness’ was removed as a potential answer in the 2018–2019 consumer survey on the basis that usefulness is an underlying driver of service adoption for all services.

Figure 6.2: Drivers of use among phone-paid services users, 2018–2019



Base: respondents who have used the listed PPS in the past 12 months (n = 5041). Question: “Why did you use the service/content?” [multiple choice].

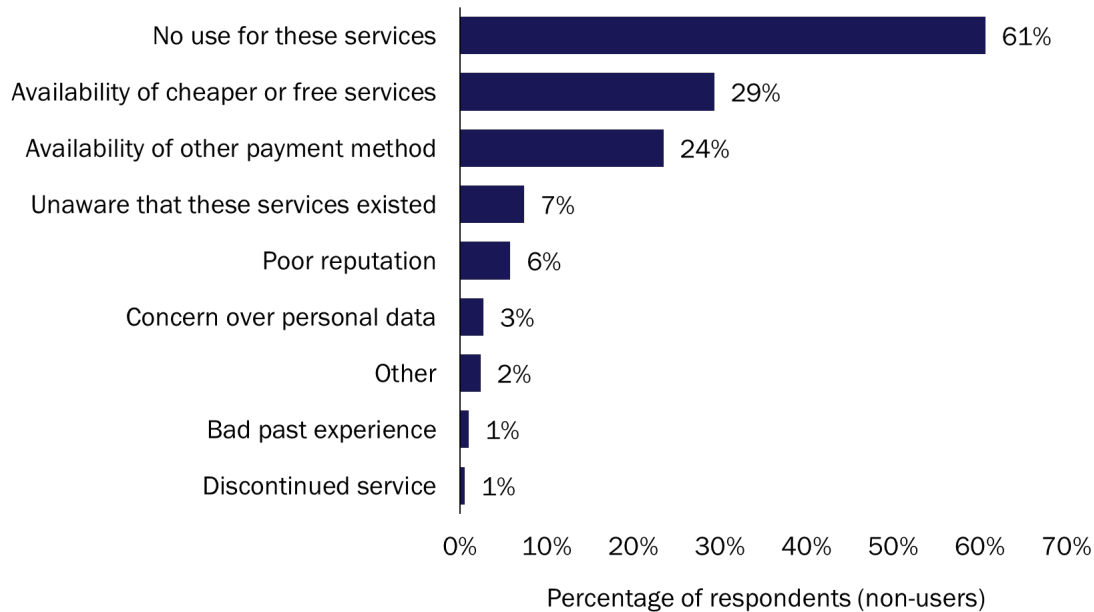
Source: Analysys Mason, 2019

Of those respondents that did not use any phone-paid service in the past 12 months, the vast majority (85%) had never used a phone-paid service before. The remaining 15% had previously used phone-paid services, but not within the past 12 months.

As shown in Figure 6.3, the reason that the majority of respondents (61%) did not use a phone-paid service in the past 12 months was because they did not need them. The next two most-cited reasons for not using phone-paid services were availability of cheaper or free alternative services elsewhere (29%) or use of alternate payment methods (24%). Any Other factors were cited by less than 10% of respondents.

Our interviews with 17 industry participants indicate that the growth of the phone-paid services industry has long been impacted by various degrees of negative publicity over alleged scams, and suggestions that rules and regulations inhibit new entrants, and that service providers and mobile network operators have tried to distance themselves from the negative publicity. However, in 2018–2019, only 6% of respondents cited the poor reputation of phone-paid services as a key factor for not using them. Similarly, previous bad experiences with phone-paid services do not appear to have played a major role in the decision of individuals to stop using them.

Figure 6.3: Reasons for not using phone-paid services among non-users, 2018–2019



Base: respondents who have not used one of the listed PPS in the past 12 months (n = 1973). Question: “Why have you never used phone-paid services? / Why did you stop using phone-paid services?” [multiple choice]

Source: Analysys Mason, 2019

6.3 Problems encountered

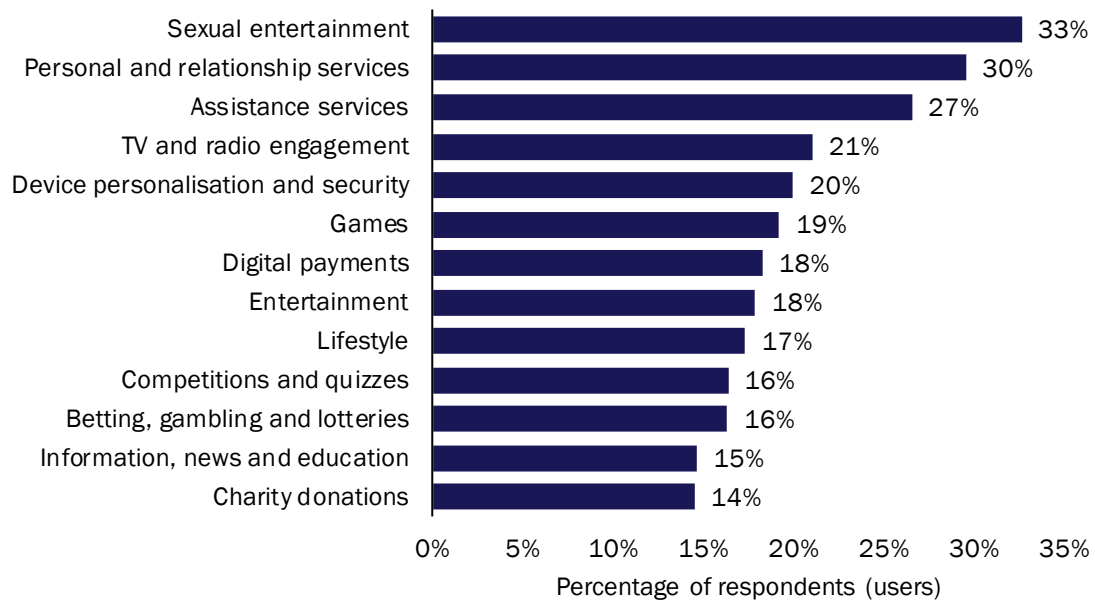
On average, 25% of the respondents who have used phone-paid services in the past 12 months reported encountering a problem with at least one of the services, up from 15% reported in the 2017–2018 Annual Market Review. This is broadly consistent with an increase in the number of complaints reported by consumers to the Phone-paid Services Authority in 2018–2019 (+29% year-on-year).²⁴

Sexual entertainment and personal and relationship services were the categories with the highest share of respondents that encountered problems in the past 12 months (33% and 30%, respectively), as shown in see Figure 6.4. Assistance services were also reported to generate problems for a significant number of respondents (27%). Respondents typically reported the same types of problems for these service categories as with the overall market. The high percentage of problems may have been in relation to a small number of companies that operate in the service categories that were found to be causing consumer distrust, (sexual entertainment, personal and relationship services and assistance services), either by not seeking consent from consumers or not properly informing consumers about the service. The Phone-paid Services Authority has taken regulatory action against a number of providers of such services.

²⁴ The number of complaints to the Phone-paid Services Authority is as reported by the Phone-paid Services Authority in 2019. Available at: <https://psauthority.org.uk/about-us/annual-and-quarterly-operational-reports>.

Within each service category, more respondents that use subscription services tended to report encountering a problem than those respondents that used services for one-off transactions. An extreme example of this is the sexual entertainment service category where 51% of users of a subscription service reported encountering a problem in the past 12 months, compared with 32% of respondents who made a one-off purchase.

Figure 6.4: Share of respondents that encountered a problem, by service category, 2018–2019

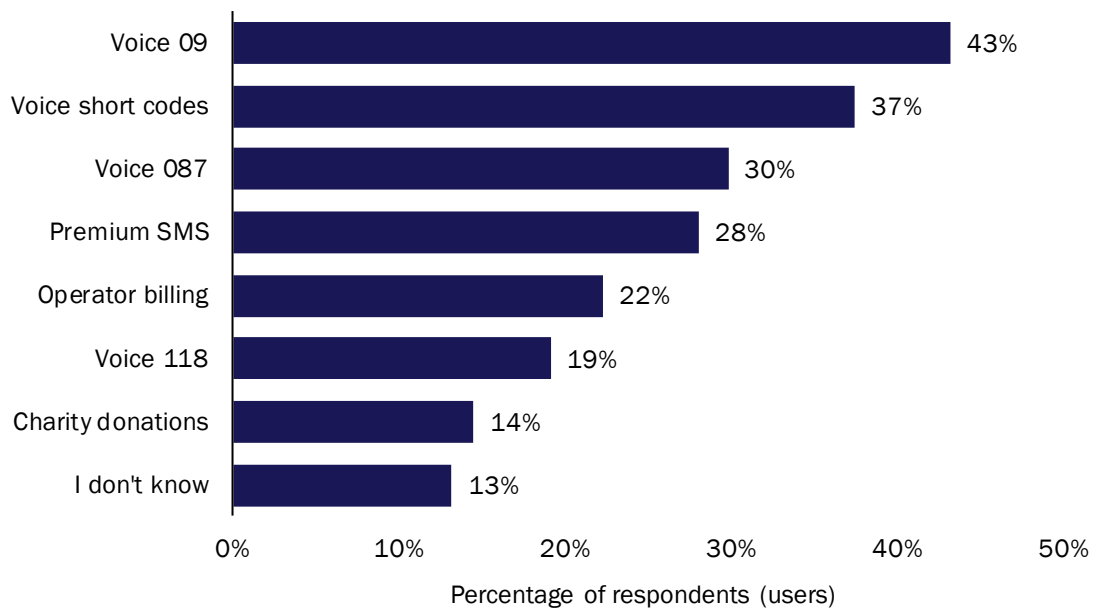


Base: respondents who have used the listed PPS in the past 12 months (n = variable, between 420 for the sexual entertainment service category and 2222 for the Games category). Question: “Have you experienced any problem(s) when using the service in the past 12 months?”

Source: Analysys Mason, 2019

By mapping service categories against the spending channels that they are delivered through, the survey results suggest that the Voice 09 channel accounts for the largest share (43%) of respondents experiencing problems (see Figure 6.5), followed by voice short codes (37%). Services delivered by Voice 09 and voice short code typically include customer services, help lines and talk services. 22% of respondents that used services leveraging operator billing reported encountering a problem, and some industry stakeholders suggested that this is as a result of an inconsistent and poor user experience of Payforit.

Figure 6.5: Share of respondents that encountered a problem, by spending channel, 2018–2019

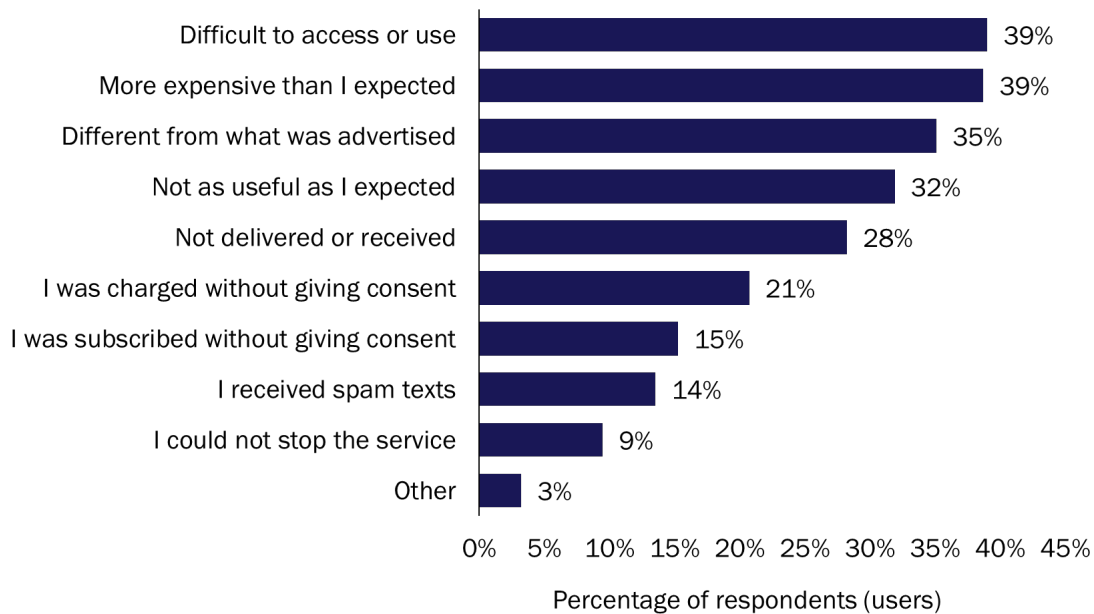


Base: respondents who have used the listed PPS in the past 12 months (N = variable, between 356 for the 118-number range to 3141 for operator billing). Question: Have you experienced any problem(s) when using the service in the past 12 months?

Source: Analysys Mason, 2019

The two most-commonly cited problems reported by respondents were the difficulty of accessing or using a service (e.g. payment process, navigation through different options offered), and the price (or ‘bill shock’), both reported by 39% of respondents (see Figure 6.6). Other commonly cited problems include the mismatch in how the service was advertised and how it was received, or that the service was not as useful as expected. These other commonly cited problems suggest a potential divergence between consumers’ expectations of a service (in terms of promotion and usefulness) and their experience. The types of problems reported by respondents do not vary significantly by service category or by spending channel.

Figure 6.6: Share of respondents that encountered a problem, by the type of problem, 2018–2019



Base: respondents who have used the listed PPS in the past 12 months and encountered a problem with at least one service (n = 1279). Question: “Can you please identify from the following what this (these) problem(s) was (were)?” [multiple choice]

Source: Analysys Mason, 2019

6.4 Net Promoter Scores (NPS)

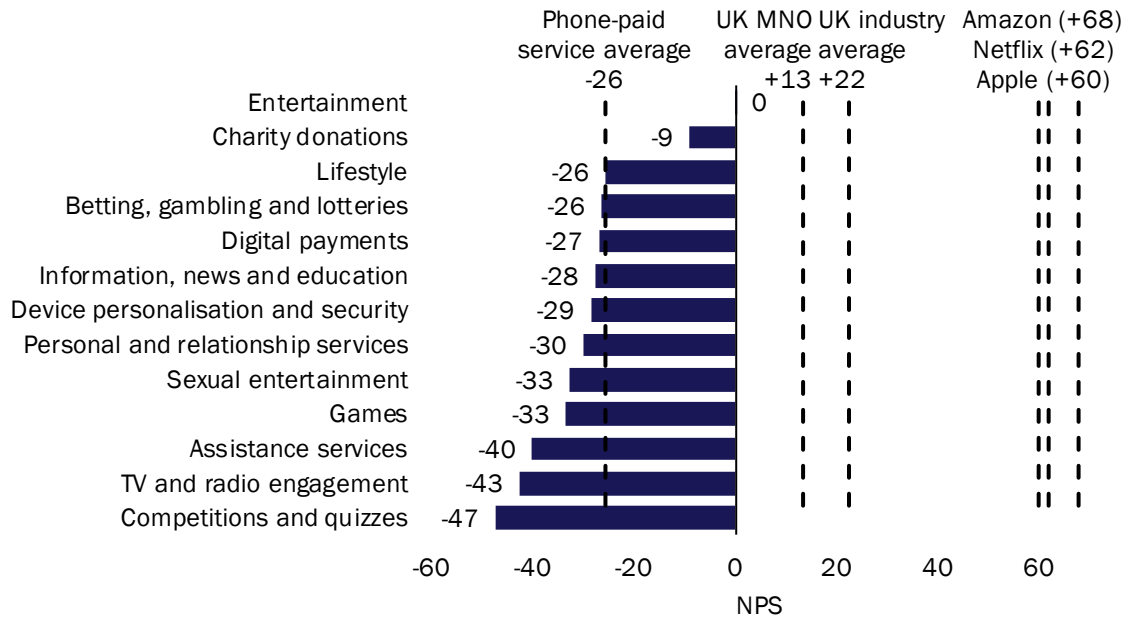
The NPS is an industry standard index to measure the willingness of customers to recommend products or services to others. The overall NPS across phone-paid services for 2018–2019 was –26, lower than the NPS in 2017–2018 (–12), but above the 2016–2017 NPS (–31). However, it should be noted that this year’s result reflects a change in methodology for calculating the NPS, using a more-standard 10-point scale.²⁵

As shown in Figure 6.7, the highest NPS in the phone-paid services industry was achieved by services in the entertainment category (NPS of 0) and, within that category, by music services (NPS of +7). Charity donations are a relatively close second (NPS of –9). There is a significant gap between charity donations and the next service category. For example, lifestyle, achieved an NPS of –26 (which matches the industry average). All other service categories have an NPS of –26 or below, and the competitions and quizzes category has the lowest NPS (–47).

²⁵ The 2017–2018 and 2016–2017 Annual Market Reviews included a similar assessment of the NPS of phone-paid services. However, different scales have been used to estimate the NPS; the 2017–2018 Annual Market Review used a 5-point scale, while this Annual Market Review uses a 10-point scale, the industry standard. As such, these NPS results should not be considered directly comparable.

Comparatively, Analysys Mason’s 2018 *Connected Consumer Survey*²⁶ found that three mobile network operators in the UK achieved an overall NPS of 13, while the UK Customer Satisfaction Index²⁷ run by the Institute of Customer Service reported an average NPS score across all industries of 22, as of January 2019. Tech companies such as Apple, Amazon and Netflix have NPSs above 60.²⁸

Figure 6.7: Net Promoter Score, by service category, 2018–2019



Source: Analysys Mason, 2019

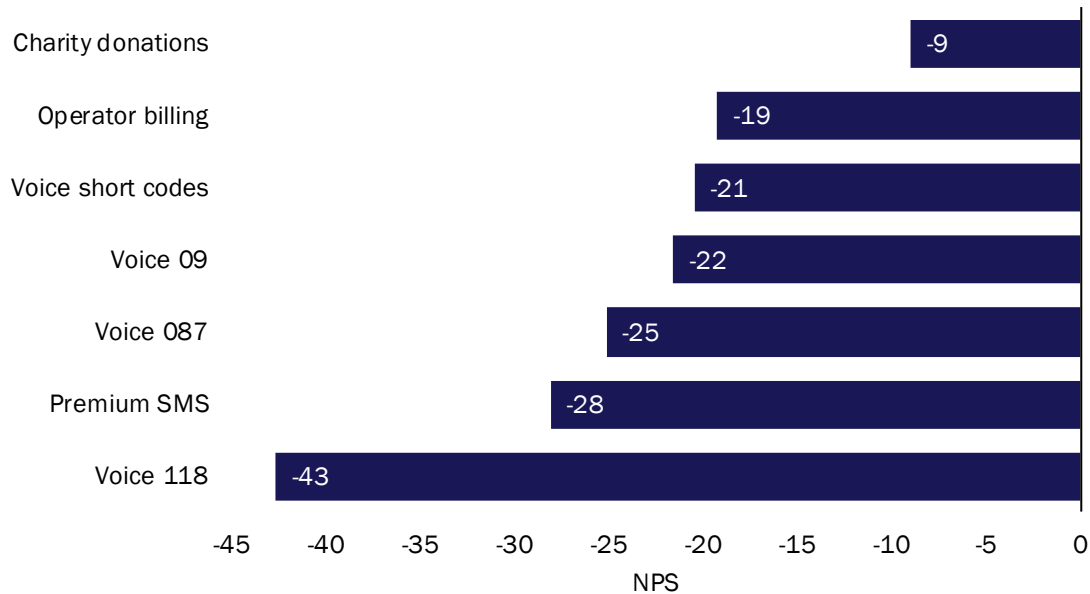
By mapping service categories against the spending channels that they are delivered through (see Figure 6.8), results show that the services that leverage a operator billing channel (including entertainment, betting, gambling and lotteries, and games) have, on average, the highest overall NPS (–19), while directory enquiry services have the lowest NPS (–43), far below services that are paid for via premium SMS such as TV and radio engagement, games, and betting, gambling and lotteries that have an NPS of –28.

²⁶ Analysys Mason’s 2018 *Connected Consumer Survey* collected data from 1000 connected consumers within the UK. The MNO average NPS was calculated using the same question and approach to this Annual Market Review and covers the MNOs EE, Vodafone, O2 and Three. Read more about the *Connected Consumer Survey* at: www.analysismason.com/Research/Content/Reports/Mobile-satisfaction-Europe-USA-RDMMO.

²⁷ Available at: <https://www.instituteofcustomerservice.com/research-insight/research-library/ukcsi-the-state-of-customer-satisfaction-in-the-uk-january-2019>.

²⁸ NICE (2018), *Net Promoter Benchmarks*. Available at: <http://info.nice.com/rs/338-EJP-431/images/NICE-Satmetrix-infographic-2018-b2c-nps-benchmarks-050418.pdf>.

Figure 6.8: Net Promoter Score, by spending channel, 2018–2019



Source: Analysys Mason, 2019

6.5 Impact of problems on usage, trust and NPS

Unsurprisingly, survey results (see Figure 6.9) suggest that most of the services that respondents have experienced some problems with have also reported a reduction in consumer usage (65%) or have been negatively impacted by a reduction in consumer trust (82%).

Results suggest that there is a relationship between the NPS score and the number of problems experienced by users. – For example, services for which three or more types of problems were reported by consumers have an NPS of –40, which is 15 points below those services with no reported problems (see Figure 6.10). It is worth noting there is no strict causal relationship between both variables. For example, the proportion of respondents reporting a problem when using directory enquiry services is one of the lowest across spending channels (19%, see Figure 6.5), but directory enquiry services generate the lowest NPS across all spending channels (–43, see Figure 6.8).

Figure 6.9: Impact of a problem on respondent's usage of and trust in the service, 2018–2019

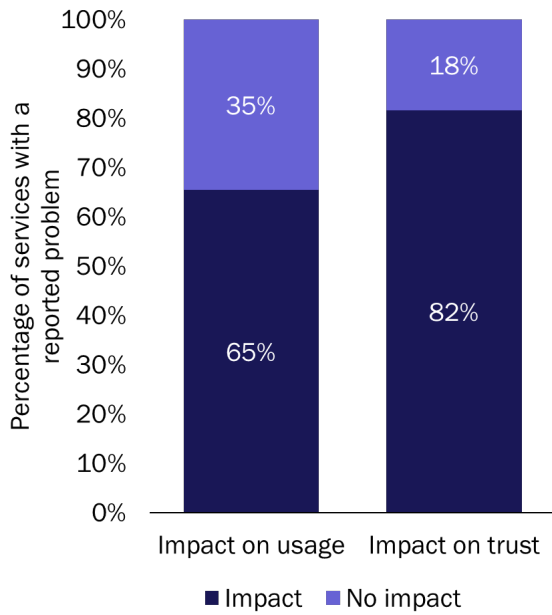
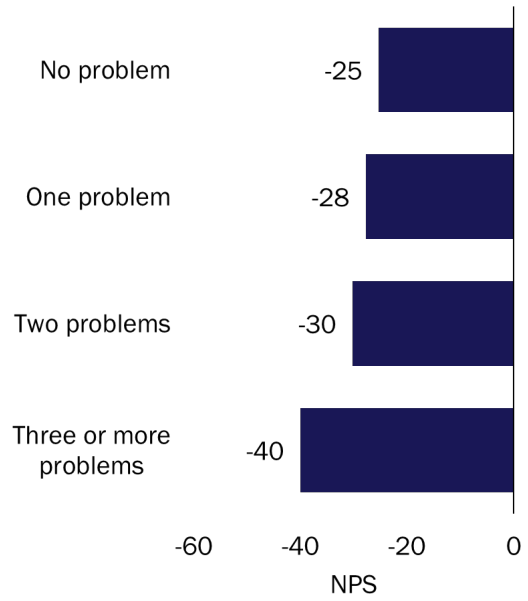


Figure 6.10: Overall NPS by number of problems encountered for the service, 2018–2019



Base: total number of phone-paid services that respondents have used in the past 12 months (n = 28 883) and the number of services which respondents encountered at least one problem (n = 4537).

Source: Analysys Mason, 2019

7 Conclusions

7.1 The phone-paid services market in 2018–2019

The phone-paid services market in the UK reached £630.9 million in 2018–2019 in terms of end-user spend excluding VAT, which represents a 17% increase from £540.5 million in 2017–2018. £581.3 million of the £630.9 million was generated by phone-paid services with revenue share, up from £503.0 million in 2017–2018 (+16% year-on-year), while the remaining £49.6 million was accrued from charity donations made via premium SMS (which have grown by +34% year-on-year).

The growth outlined above was largely driven by the increased end-user spend on services that leverage operator billing (for example, games and entertainment, betting, gambling and lotteries), and (to a lesser extent) by the good performance of TV and radio engagement services paid through premium SMS.

Phone-paid charity donations were also a significant contributor to growth in this sector because of cyclical telethon events taking place in 2018–2019 and not in 2017–2018, as well as the recent introduction of a larger cap per donation. All other (voice-based) services remained stagnant (Voice 09) or declined (including voice short codes, Voice 118 and Voice 087).

Operator billing was the largest spending channel in 2018–2019 (44% of the total market), capturing £275.7 million in consumer spend, up from £188.0 million in 2017–2018. Games, entertainment, and betting, gambling and lotteries were the three largest service categories using operator billing in 2018–2019 and the main drivers of the spend growth accrued through this channel.

An increase in the number of trusted content providers and app aggregators offering operator billing as a payment option, as well as the resulting improvement in consumer perceptions of this spending channel, were key drivers of the growth of end-user spend in games and entertainment services.

Betting, gambling and lotteries benefitted from the effect of the continued migration from physical to online gambling and betting, as well as some of the growth of society lotteries organised by businesses, charities or societies to raise money.

Premium SMS was the second-largest spending channel in 2018–2019 (accounting for 28% of the total market), generating £174.4 million in 2018–2019, up from £150.1 million in 2017–2018. TV and radio engagement (including competitions from broadcasters) and games have remained the two largest service categories leveraging premium SMS in 2018–2019, although spend on games declined by 42% in 2018–2019.²⁹

Growth in spend on TV and radio engagement services was driven by an increasing number of participants in competitions run by TV and radio broadcasters, which was, in turn, was the result of broadcasters offering higher-quality content and a higher level of audience engagement. The launch of dedicated websites for competitions also positively contributed to the growth of premium SMS.

A decline in spend for games paid for via premium SMS (typically subscription services billed on a weekly or monthly basis for games downloads from online games portals) was driven by the migration of users to services with more-engaging digital content, typically provided through operator billing. According to the industry, the special conditions set by the Phone-paid Services Authority and mobile operators' codes of practice for operator billing may have limited the take-up of these services by new customers.

The charity donations category was the third-largest contributor to the growth of phone-paid services and generated an overall £49.6 million in 2018–2019, up from £37.5 million in 2017–2018. Charity donations benefitted from the cyclical schedule of telethon events that took place in 2018–2019 and not in 2017–2018 and the recent introduction of larger single-donation amounts (up to £30 per donation from £20).

The majority of charity donations are made during telethons, and the results from our interviews with industry participants suggest that up to 80% of the spend on charity donations comes from telethons.

Most donations are made to well-known and large charities: 40% of survey respondents who made a charity donation in 2018–2019 donated to Comic Relief, the largest UK telethon organiser (e.g. Sports Relief and Red Nose Day).

End-user spend in voice-based services has either remained stagnant (Voice 09) or decreased (for example, voice short codes, Voice 118 and Voice 087), driven by a reduced user base, the declining frequency of use per consumer and spend per user (in particular, price caps for Voice

²⁹ Although part of the decline in the games category is attributed to the allocation of gambling or betting services over premium SMS to the gambling, betting and lotteries service category.

118), as well as an acceleration of the migration of organisations to cheaper premium rate numbers (such as 084) or free alternatives.

7.2 Market outlook for 2019–2020

The phone-paid services market is expected to remain mostly flat at £620.8 million in 2019–2020 (-2% year-on-year). The industry revenue will remain relatively flat at £577.8 million in 2019–2020, while the spend on charity donations is expected to decline by 13% year-on-year, from £49.6 million in 2018–2019 to £43.0 million in 2019–2020.

Both operator billing and premium SMS spending channels are expected to experience lower growth than in the previous year, primarily because no new partnerships are expected to be agreed between mobile network operators and major merchants (operator billing), and the higher-than-expected success of broadcaster competitions in 2018–2019 is unlikely to be exceeded next year (premium SMS). Spend on charity donations is expected to decline in 2019–2020 because of the cyclical nature of major telethon events. End-user spend on legacy voice-based services (including Voice 09 and Voice 087) will continue to decline, which follows the pattern set in previous years.

7.3 Consumer analysis

Our research suggests that 58% of the UK population used at least one phone-paid service in 2018–2019. Several factors are driving usage, the most-common of which are convenience, impulse purchasing and price. Some individuals do not use phone-paid services because they do not need them or because they use alternative services or payment methods.

While the growth of the phone-paid services industry has been cited as being impacted by negative publicity over alleged scams, only 6% of non-users cited this as a key factor for not using such services. Similarly, previous bad experiences with phone-paid services do not appear to have played a major role in the decision of individuals to stop using them.

About 25% of users reported that they have experienced problems with their services in the past 12 months. The most-common issues included challenges associated with using the services and a mismatch between expectations and reality in terms of what is advertised and the perceived usefulness of the service. Sexual entertainment and personal and relationship services account for the largest share of problems, and charity donations account for the lowest. At the spending channel level, results suggest that the Voice 09 channel accounts for the largest share (43%) of respondents experiencing problems, followed by voice short codes (37%), Voice 087 (30%) and premium SMS (28%).

Overall, the NPS achieved by the industry is very low (-26), although a few select services (for example, entertainment and music) perform relatively well (equal to or above NPS = 0), as does the charity donations category (with an NPS of -9).

Results show that services that leverage operator billing channel (for example, entertainment, betting, gambling and lotteries, and games) have, on average, the highest overall NPS (–19), while directory enquiry services have the lowest (–43), which is far below the NPS for services paid for via premium SMS (–28) such as TV and radio engagement, games, and betting, gambling and lotteries.

Comparatively, three mobile network operators in the UK achieved an overall NPS of 13, while the UK Customer Satisfaction Index,³⁰ run by the Institute of Customer Service, reported an average NPS score of 23 across all industries as of January 2019.

³⁰ The Institute of Customer Service (January 2019), *UKCSI: The state of customer satisfaction in the UK – January 2019*. Available at: <https://www.instituteofcustomerservice.com/research-insight/research-library/ukcsi-the-state-of-customer-satisfaction-in-the-uk-january-2019>.

Annex A Service taxonomy and data

This section contains a taxonomy of the phone-paid services assessed in this market review, as well as additional market data on a per-service basis.

A.1 Service taxonomy.

This Annual Market Review uses the same service taxonomy that was used in the 2017–2018 report. It includes 13 service categories broken down into 47 service types.

Figure A.1: Phone-paid services taxonomy, by service category and type (2018–2019)

Service category	Service type	Service type definition
Assistance services	Directory enquiries	<ul style="list-style-type: none"> Voice service used to find out a specific phone number and/or address of a residence, business or public entity. Accessed and paid for via a premium rated six-digit number beginning with 118.
	Customer services	<ul style="list-style-type: none"> Voice service to contact the customer service of an organisation. Accessed and paid for via a premium-rated number beginning with 087 or 09, or presented as a voice short code.
	Information, connection and/or signposting services (ICSS)	<ul style="list-style-type: none"> Voice service to contact a specific business or service (for example, a lawyer or solicitor). Accessed and paid for via a premium-rated number beginning with 087 or 09.
Betting, gambling and lotteries	Betting	<ul style="list-style-type: none"> Entry to a sport-related competition to win prizes (for example, via an event, bookmaker or online) Paid for via premium SMS or operator billing.
	Gambling	<ul style="list-style-type: none"> Entry to a game of chance to win prizes (for example, mobile casino, arcade or bingo). Excludes bets and lotteries. Paid for via premium SMS or operator billing.
	Lotteries	<ul style="list-style-type: none"> Entry to a lottery/tombola typically organised by a business, charity or society to raise money. Paid for via premium SMS or operator billing.
Charity donations	Charity donations	<ul style="list-style-type: none"> Text-based donation to a charity (as part of a televised event, regular donations collected by charities, or specific appeals during humanitarian crises). Paid for via premium SMS.

Service category	Service type	Service type definition
Competitions and quizzes	Online competitions	<ul style="list-style-type: none"> Entry to competitions advertised online (for example, on a website or through email marketing). Excludes competitions run by TV or radio broadcasters. Paid for via premium SMS or operator billing.
	Offline competitions	<ul style="list-style-type: none"> Entry to competitions advertised offline (for example, on TV, in newspapers, or on public billboards). Excludes competitions run by TV or radio broadcasters. Paid for via premium SMS or using a premium-rated number beginning with 09.
Device personalisation and security	Ringtones, ring-back tones, wallpapers	<ul style="list-style-type: none"> Purchase and download of ringtones, ring-back tones and wallpapers for device personalisation. Paid for via premium SMS or operator billing.
	Security	<ul style="list-style-type: none"> Purchase and download of a software to protect a mobile device (for example, from viruses, hackers or other malware). Paid for via premium SMS or operator billing.
Digital payments	Vouchers	<ul style="list-style-type: none"> Purchase of discount codes (for example, that can be used at a retailer or supermarket). Paid for via premium SMS or operator billing,
	Virtual gifts	<ul style="list-style-type: none"> Purchase of virtual gifts on social media websites (such as virtual flowers). Paid for via premium SMS or operator billing.
	Gift cards	<ul style="list-style-type: none"> Purchase of gift cards (for example, to use at a retailer or supermarket). Paid for via premium SMS or operator billing.
	Low-cost international or reverse charge calls	<ul style="list-style-type: none"> Alternate call services typically with a charge per minute. Accessed and paid for via a premium-rated number beginning with 087 or 09, or presented as a voice short code.
Entertainment	Music	<ul style="list-style-type: none"> Subscription to music streaming services or one-off download of songs or music albums. Paid for via premium SMS or operator billing.
	TV	<ul style="list-style-type: none"> Subscription to niche TV channels or one-off download of TV shows. Paid for via premium SMS or operator billing.
	Video	<ul style="list-style-type: none"> Subscription to video streaming services or one-off download of short videos.

Service category	Service type	Service type definition
		<ul style="list-style-type: none"> • Paid for via premium SMS or operator billing.
	Film	<ul style="list-style-type: none"> • Subscription to film bundles/channels or one-off download of individual films. • Paid for via premium SMS or operator billing.
	Books	<ul style="list-style-type: none"> • Subscriptions to, or one-off downloads of, books and magazines. • Paid for via premium SMS or operator billing.
Games	Games downloaded from app store	<ul style="list-style-type: none"> • Purchase and download of games from an online store (including app stores such as Apple App Store or Google Play, large online games stores such as PlayStation Store or Microsoft Store, as well as other small independent online games portals). • Paid for via operator billing.
	Games played on social media	<ul style="list-style-type: none"> • Access to games playable on social media websites. • Paid for via premium SMS or operator billing.
	Games bundled as part of monthly subscription	<ul style="list-style-type: none"> • Subscription service for games downloads (unlimited or limited to a certain number of games per time period) from online games portals. • Paid for via premium SMS or operator billing.
	In-game purchases	<ul style="list-style-type: none"> • Purchase of in-game items or rewards (for example, boosters, lives or customisable content), or the premium version of a free-to-play game (for example, with no ads or with expanded game content available). • Paid for via premium SMS or operator billing.
	In-game credit top-ups	<ul style="list-style-type: none"> • Purchase of in-game credit, such as in-game currency (such as gold or gems), that can be used to purchase in-game items or rewards. • Paid for via premium SMS or operator billing.
Information, news and education	Weather	<ul style="list-style-type: none"> • Voice service used to access weather information. • Accessed and paid for via a premium rated number beginning with 087, 09, or presented as a voice short code.
	News	<ul style="list-style-type: none"> • Voice service used to access news information. • Accessed and paid for via a premium rated number beginning with 087, 09 or presented as a voice short code
	Travel	<ul style="list-style-type: none"> • Voice service used to access travel information

Service category	Service type	Service type definition
		<ul style="list-style-type: none"> Accessed and paid for via a premium rated number beginning with 087, 09, or presented as a voice short code.
	Sport	<ul style="list-style-type: none"> Voice service used to access information on sports results. Accessed and paid for via a premium rated number beginning with 087, 09, or presented as a voice short code.
	Stocks and shares	<ul style="list-style-type: none"> Voice service used to access information on stocks / shares. Accessed and paid for via a premium rated number beginning with 087, 09, or presented as a voice short code.
	Alerts	<ul style="list-style-type: none"> Service used to set up alerts at specific times. Accessed and paid for via a premium rated number beginning with 087, 09, or presented as a voice short code, via premium SMS, or through operator billing.
	Educational services	<ul style="list-style-type: none"> Service used to access information on educational services. Accessed and paid for via a premium rated number beginning with 087, 09, or presented as a voice short code, or accessed online and paid for through operator billing.
Lifestyle	Fitness, health and wellbeing	<ul style="list-style-type: none"> Service used to access information, tips, advice or reminders on nutrition, dieting and exercise. Paid for via premium SMS or operator billing.
	Food and recipes	<ul style="list-style-type: none"> Subscription to, or one-off downloads of, information on foods and recipes. Paid for via operator billing.
Personal and relationship services	Dating	<ul style="list-style-type: none"> Access to dating services or in-app purchases (for example, credit or premium messaging) in free-to-use dating services. Accessed and paid for via a premium rated number beginning with 087, 09, or presented as a voice short code, via premium SMS, or through operator billing.
	Flirting chat services	<ul style="list-style-type: none"> Voice- or message-based (non-explicit) flirting chat with a service operator. Accessed and paid for via a premium rated number (beginning with 087, 09, or presented as a voice short code), via premium SMS, or through operator billing.
	Chat services	<ul style="list-style-type: none"> Voice- or message-based chat with a helpline or friendship service. Excludes flirting chat services.

Service category	Service type	Service type definition
Sexual entertainment		<ul style="list-style-type: none"> Accessed and paid for via a premium rated number beginning with 087, 09, or presented as a voice short code, via premium SMS, or through operator billing.
	Tarot/astrology services	<ul style="list-style-type: none"> Service used to access services such as horoscopes and, tarot card readings. Accessed and paid for via a premium rated number beginning with 087, 09, or presented as a voice short code, via premium SMS, or through operator billing.
	Glamour pics	<ul style="list-style-type: none"> Access to and/or download of revealing or nude photos. Paid for via premium SMS or operator billing.
	Adults pics	<ul style="list-style-type: none"> Access to and/or download of hardcore and explicit photos. Paid for via premium SMS or operator billing.
	Adults videos	<ul style="list-style-type: none"> Access to and/or download of hardcore and explicit videos, Paid for via premium SMS or operator billing.
	Adults cams	<ul style="list-style-type: none"> Purchase of tokens to access online video streams. Paid for via premium SMS or operator billing.
	Adults chat (messaging)	<ul style="list-style-type: none"> Message-based (explicit) chat service. Paid for via premium SMS or operator billing.
	Adult talk services (voice)	<ul style="list-style-type: none"> Voice-based (explicit) chat service. Accessed and paid for via a premium rated number (beginning with 087, 09, or presented as a voice short code).
TV and radio engagement	Broadcaster competitions	<ul style="list-style-type: none"> Entry to an (online or offline) competition run by a TV or radio broadcaster. Paid for via premium SMS or operator billing, or using a premium-rated number beginning with 09, or presented as a voice short code.
	Voting on a TV/radio show	<ul style="list-style-type: none"> Voting in the context of a TV or radio show (for example, voting for a favourite candidate). Paid for via premium SMS or using a premium-rated number presented as a voice short code.
	Texting in to show host	<ul style="list-style-type: none"> Text-based engagement with the presenter of a TV or radio show. Paid for via premium SMS.

A.2 Service-level data

This sub-section provides additional market data across the 13 service categories, namely:

- For each service category: the spend by service type in 2018–2019 and 2019–2020, and associated year-on-year growth rates.
- For each service type: the spend, number of users, implied yearly ASPU (Average Spend Per User), the share of users that have reported encountering a problem in the previous 12 months, the share of users that have had their trust impacted as a result of encountering a problem, and the NPS score.

ASSISTANCE SERVICES

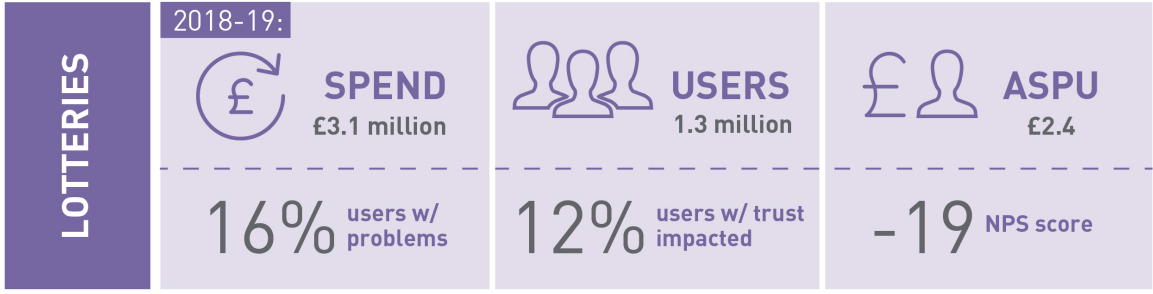
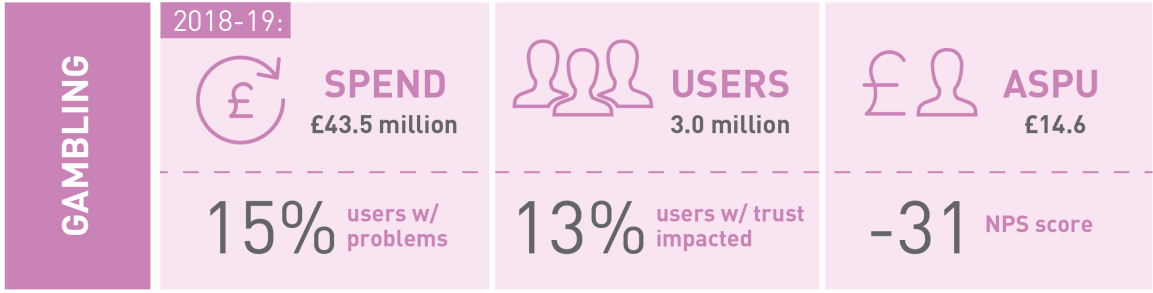
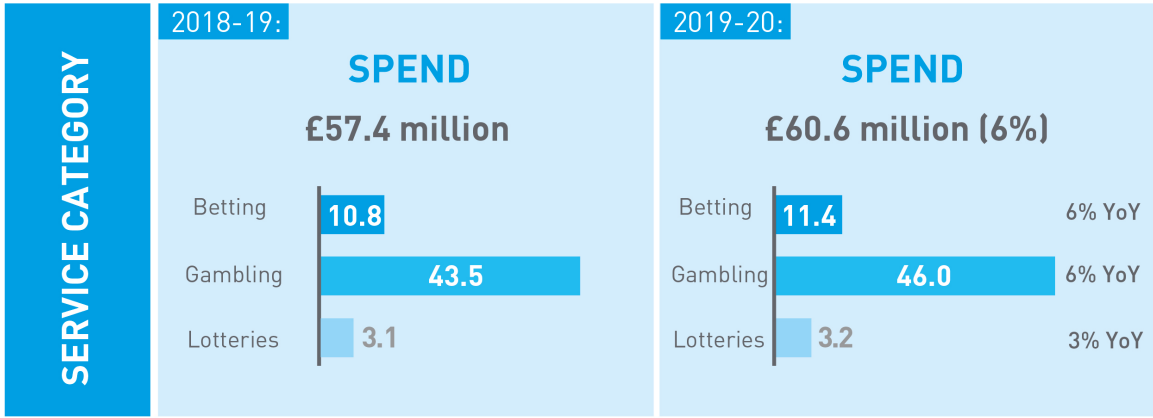
SERVICE CATEGORY	2018-19:	2019-20:
		<p>SPEND £71.4 million</p> <p>Directory enquiries: 29.5</p> <p>Customer services: 20.9</p> <p>Information, connection and/or signposting services (ICSS): 21.0</p>

DIRECTORY ENQUIRIES	2018-19:	<p>SPEND £29.5 million</p>	<p>USERS 1.1 million</p>	<p>ASPU £26.8</p>
		<p>19% users w/ problems</p>	<p>15% users w/ trust impacted</p>	<p>-43 NPS score</p>

CUSTOMER SERVICES	2018-19:	<p>SPEND £20.9 million</p>	<p>USERS 2.9 million</p>	<p>ASPU £7.1</p>
		<p>20% users w/ problems</p>	<p>16% users w/ trust impacted</p>	<p>-47 NPS score</p>

INFORMATION, CONNECTION AND/OR SIGNPOSTING SERVICES (ICSS)	2018-19:	<p>SPEND £21.0 million</p>	<p>USERS 1.7 million</p>	<p>ASPU £12.1</p>
		<p>34% users w/ problems</p>	<p>29% users w/ trust impacted</p>	<p>-26 NPS score</p>

BETTING, GAMBLING AND LOTTERIES

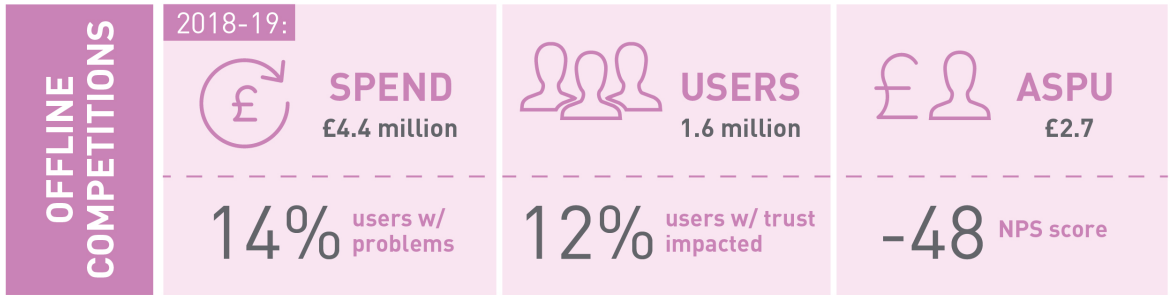
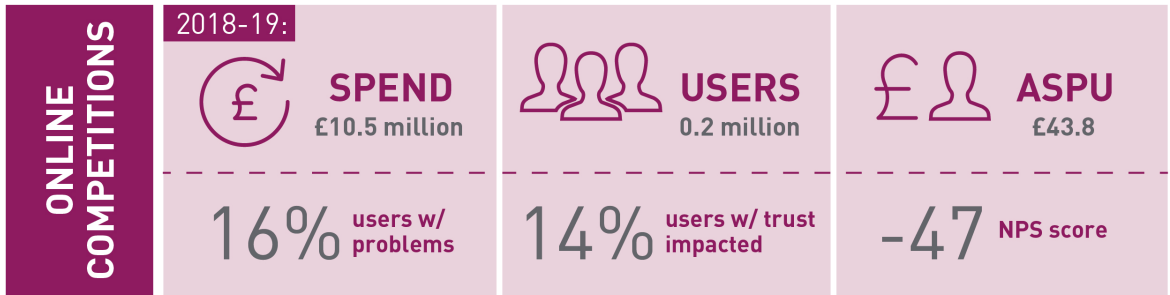
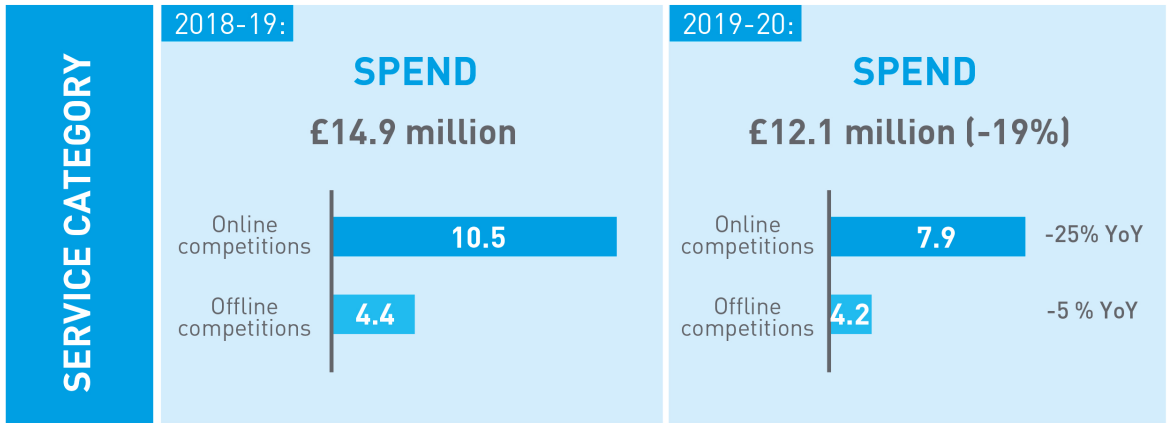


CHARITY DONATIONS

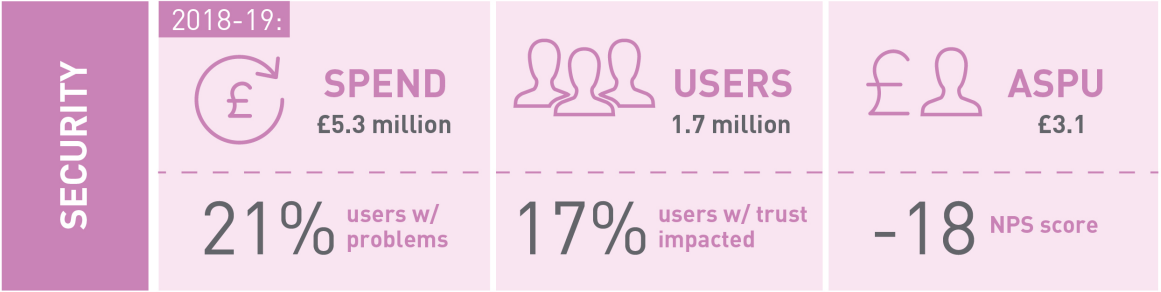
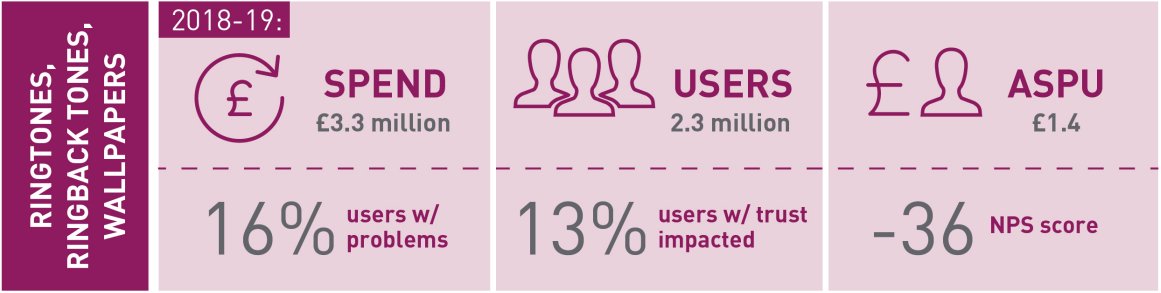
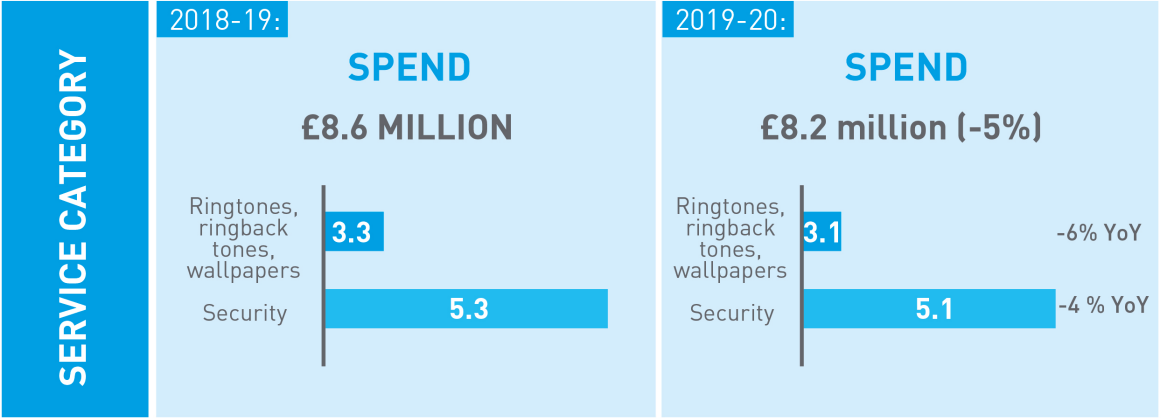
SERVICE CATEGORY	2018-19:	2019-20:
		<p>SPEND £49.6 MILLION</p>

CHARITY DONATIONS	2018-19:		
		<p> SPEND £49.6 million</p>	<p> USERS 6.2 million</p>
	<p>14% users w/ problems</p>	<p>12% users w/ trust impacted</p>	<p>-9 NPS score</p>

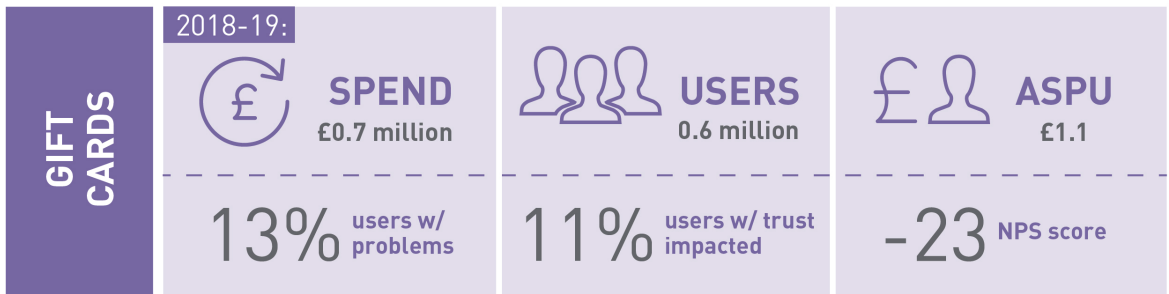
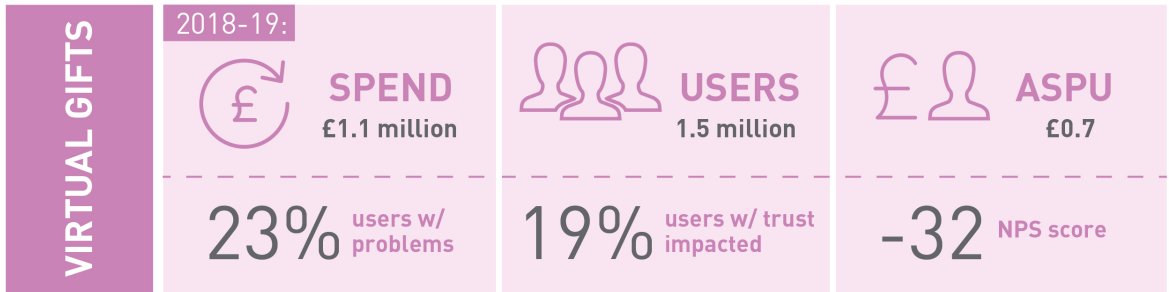
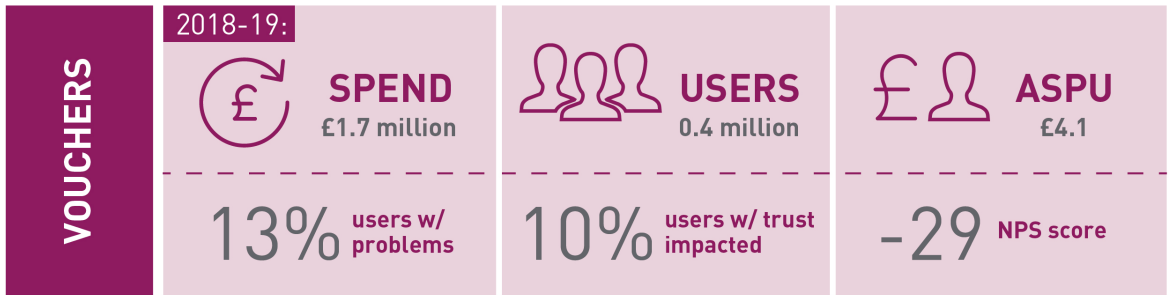
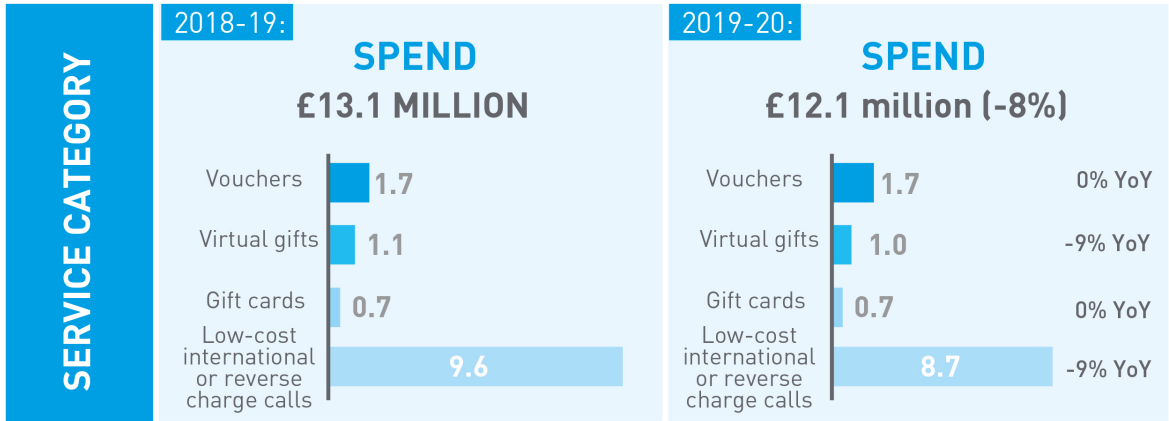
COMPETITIONS AND QUIZZES






DEVICE PERSONALISATION AND SECURITY



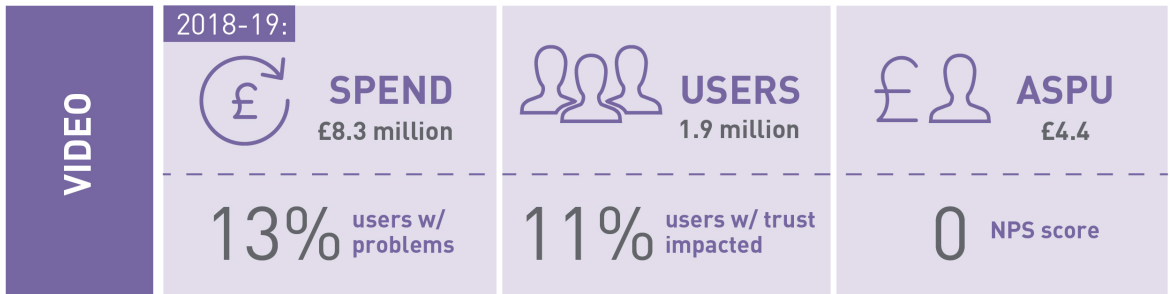
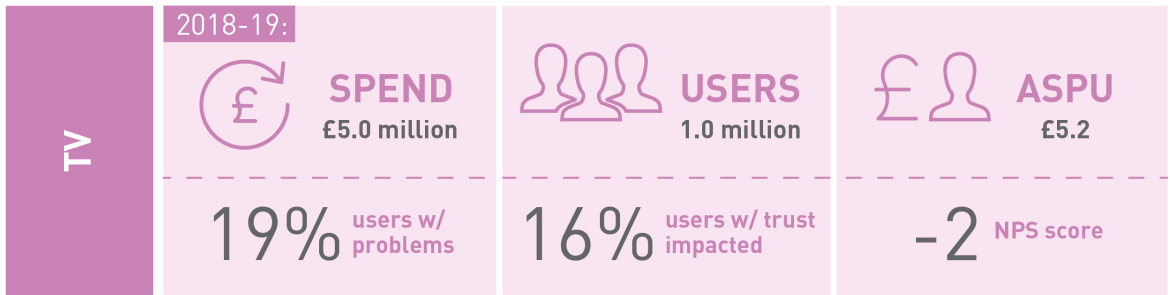
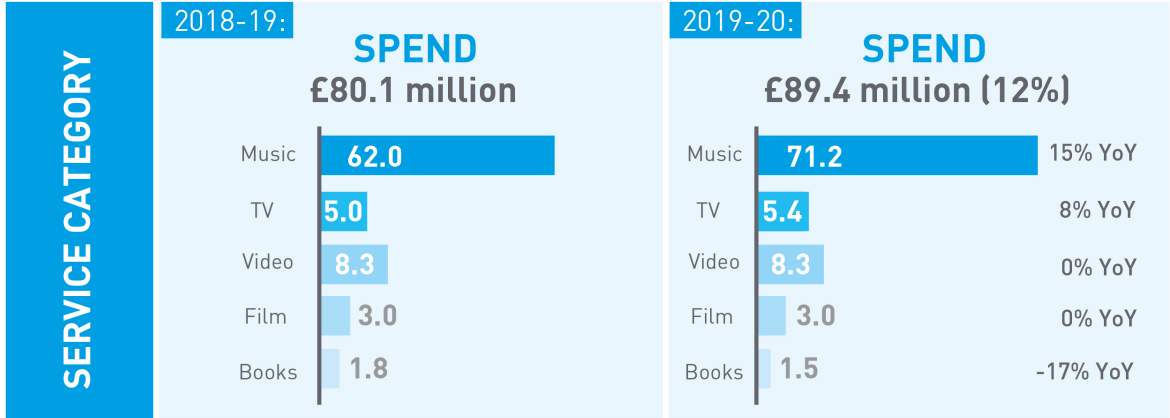
DIGITAL PAYMENTS









DIGITAL PAYMENTS

LOW-COST INTERNATIONAL OR REVERSE CHARGE CALLS	2018-19:	 SPEND £9.6 million	 USERS 0.9 million	 ASPU £10.2
	36% users w/ problems	29% users w/ trust impacted	-27 NPS score	

ENTERTAINMENT



ENTERTAINMENT

	2018-19:		
FILM	 SPEND £3.0 million	 USERS 1.2 million	 ASPU £2.6
	18% users w/ problems	15% users w/ trust impacted	-1 NPS score
BOOKS	 SPEND £1.8 million	 USERS 0.4 million	 ASPU £4.5
	15% users w/ problems	11% users w/ trust impacted	-9 NPS score

GAMES







SERVICE CATEGORY	2018-19:	2019-20:
	SPEND £143.8 million	SPEND £157.4 million (9%)
Games downloaded from App store	46.8	53.8 15% YoY
Games played on social media	13.3	12.8 -4% YoY
Games bundled as part of monthly subscription	29.5	29.7 1% YoY
In-game purchases	12.6	14.2 13% YoY
In-game credit top-ups	41.6	46.9 13% YoY

GAMES DOWNLOADED FROM APP STORE	2018-19:	USERS	ASPU
	SPEND £46.8 million	7.3 million	£6.4
	13% users w/ problems	10% users w/ trust impacted	-32 NPS score

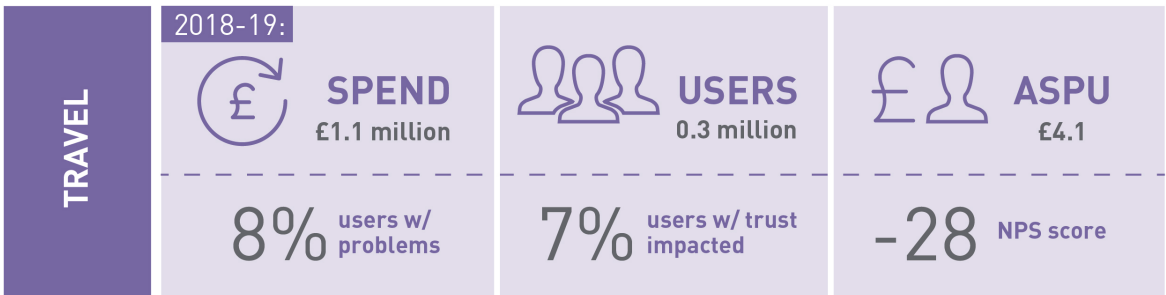
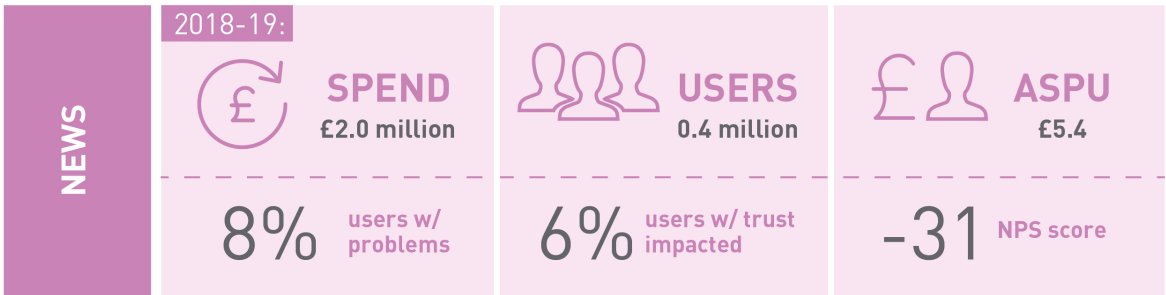
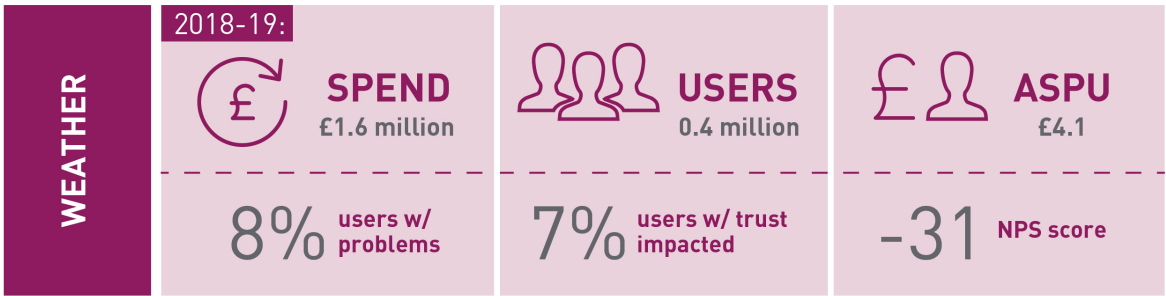
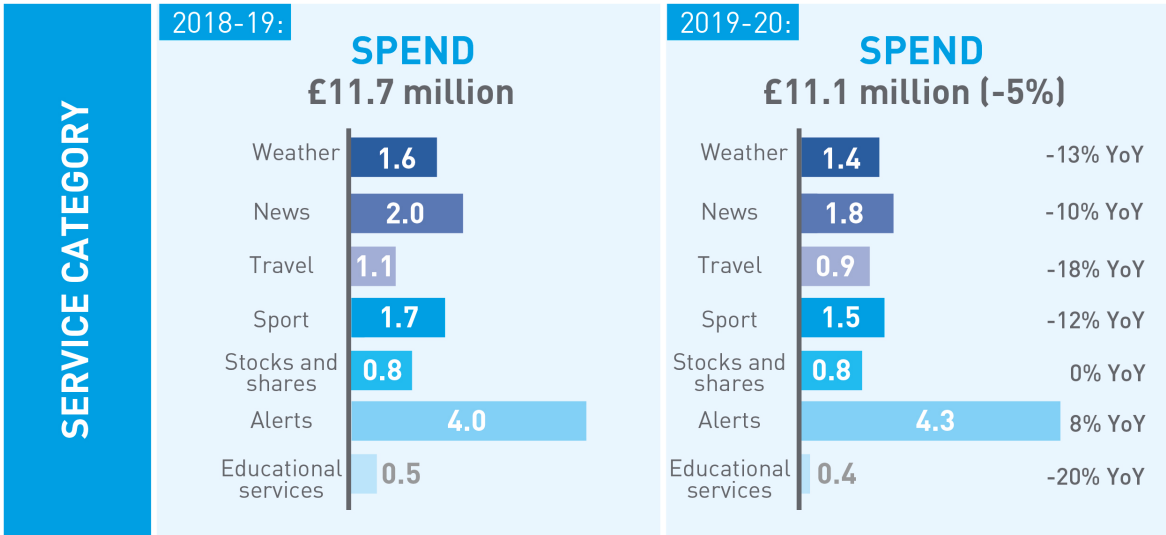
GAMES PLAYED ON SOCIAL MEDIA	2018-19:	USERS	ASPU
	SPEND £13.3 million	4.5 million	£3.0
	18% users w/ problems	14% users w/ trust impacted	-30 NPS score

GAMES BUNDLED AS PART OF MONTHLY SUBSCRIPTION	2018-19:	USERS	ASPU
	SPEND £29.5 million	1.0 million	£30.7
	28% users w/ problems	25% users w/ trust impacted	-22 NPS score













GAMES

	2018-19:			
IN-GAME PURCHASES	 SPEND £12.6 million	 USERS 3.8 million	 ASPU £3.4	
	17% users w/ problems	14% users w/ trust impacted	-39 NPS score	
IN-GAME CREDIT TOP-UPS	 SPEND £41.6 million	 USERS 4.0 million	 ASPU £10.5	
	18% users w/ problems	14% users w/ trust impacted	-42 NPS score	

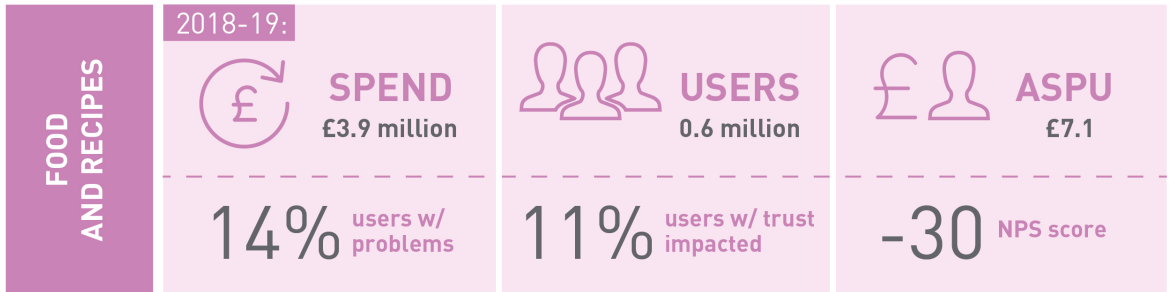
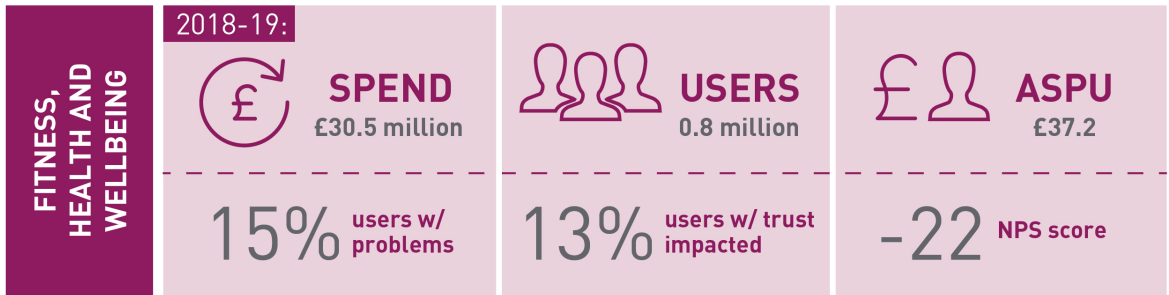
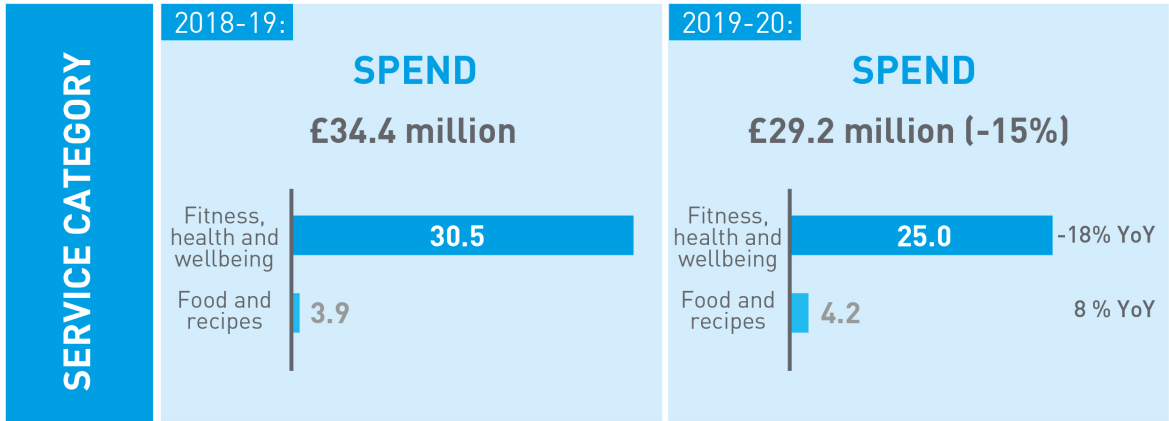
INFORMATION, NEWS AND EDUCATION



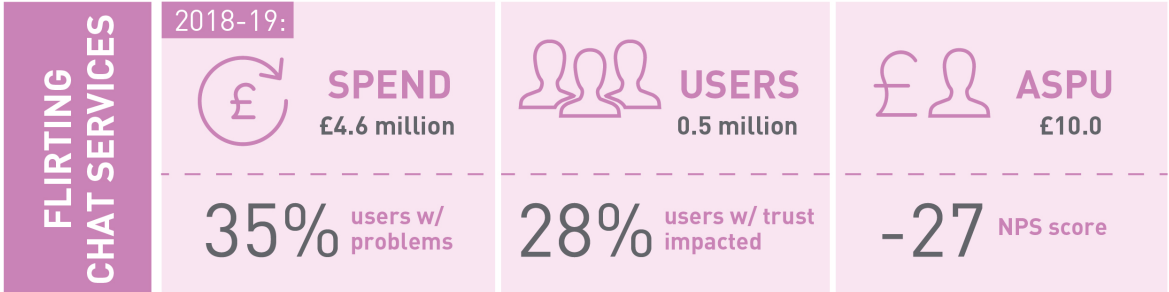
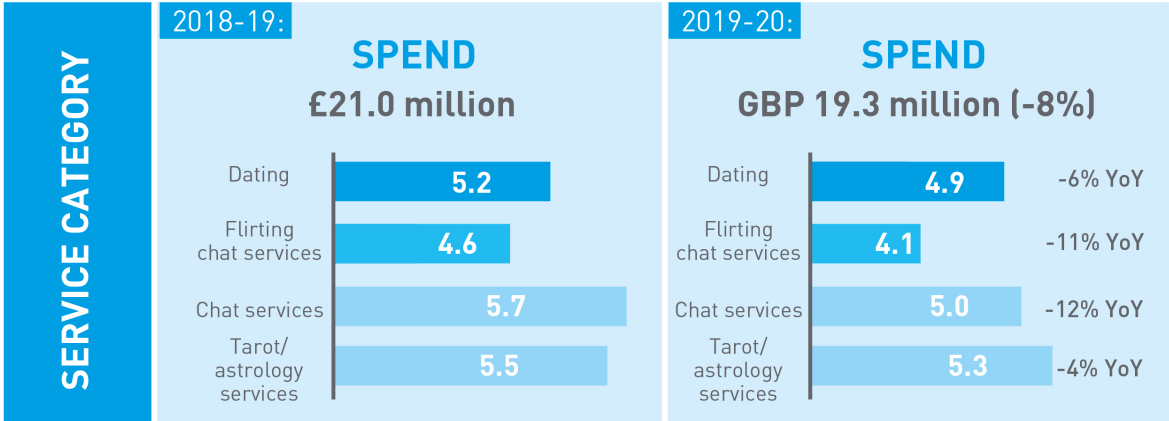
INFORMATION, NEWS AND EDUCATION

SPORT	2018-19:  SPEND £1.7 million	 USERS 0.2 million	 ASPU £7.4
	10% users w/ problems	9% users w/ trust impacted	-21 NPS score
STOCKS AND SHARES	2018-19:  SPEND £0.8 million	 USERS 0.1 million	 ASPU £10.0
	17% users w/ problems	15% users w/ trust impacted	-22 NPS score
ALERTS	2018-19:  SPEND £4.0 million	 USERS 0.6 million	 ASPU £6.7
	13% users w/ problems	11% users w/ trust impacted	-34 NPS score
EDUCATIONAL SERVICES	2018-19:  SPEND £0.5 million	 USERS 0.1 million	 ASPU £4.5
	17% users w/ problems	14% users w/ trust impacted	-18 NPS score







LIFESTYLE



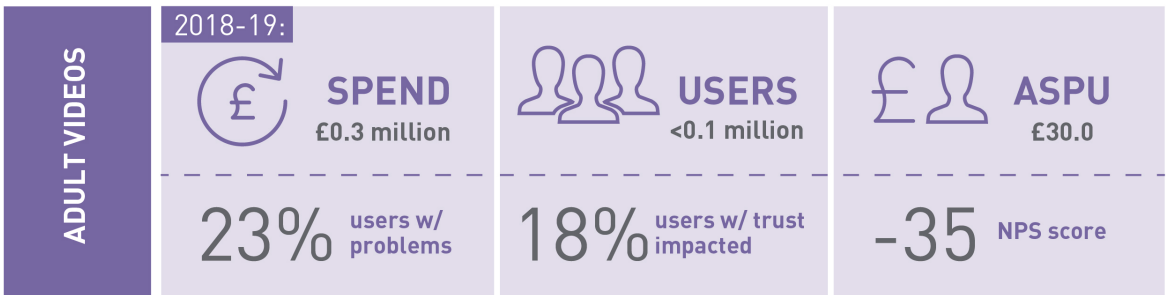
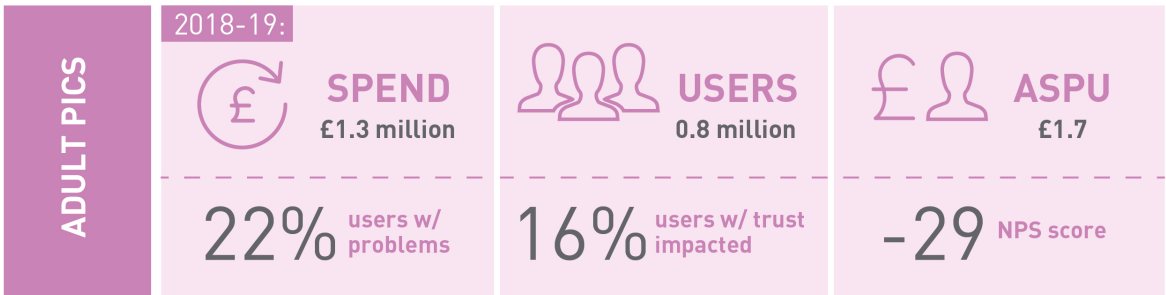
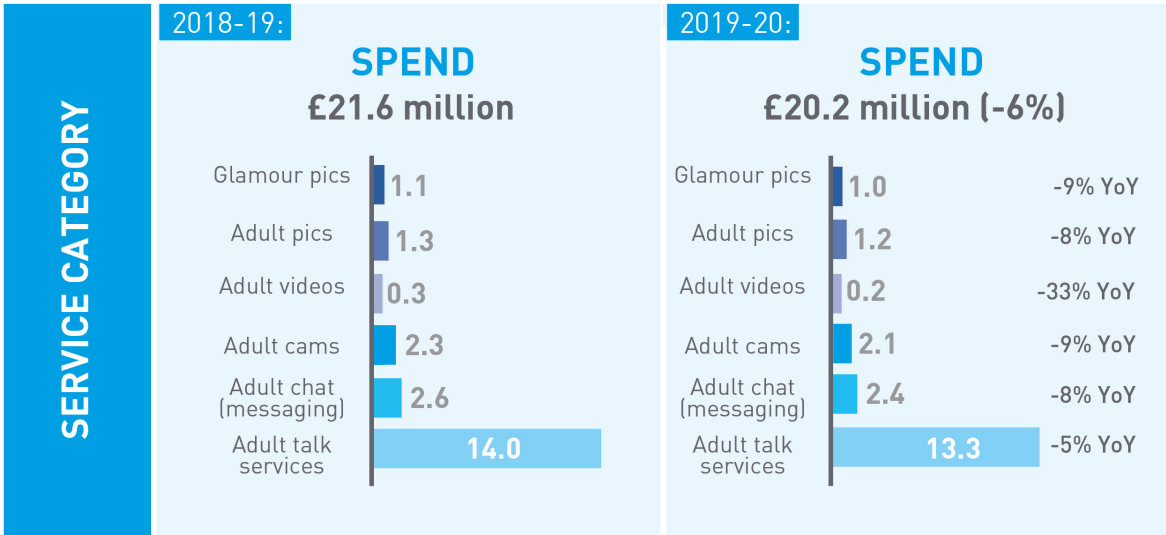
PERSONAL AND RELATIONSHIP SERVICES












PERSONAL AND RELATIONSHIP SERVICES

	2018-19:		
CHAT SERVICES	 SPEND £5.7 million	 USERS 0.7 million	 ASPU £7.8
	31% users w/ problems	25% users w/ trust impacted	-26 NPS score
TAROT/ ASTROLOGY SERVICES	 SPEND £5.5 million	 USERS 0.3 million	 ASPU £21.2
	33% users w/ problems	24% users w/ trust impacted	-15 NPS score

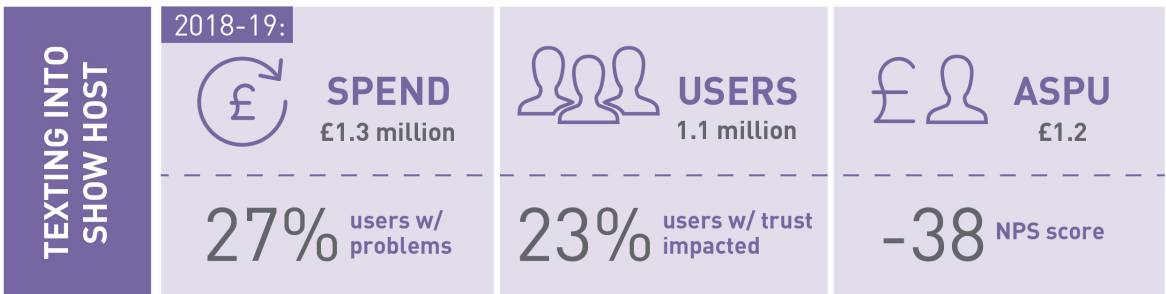
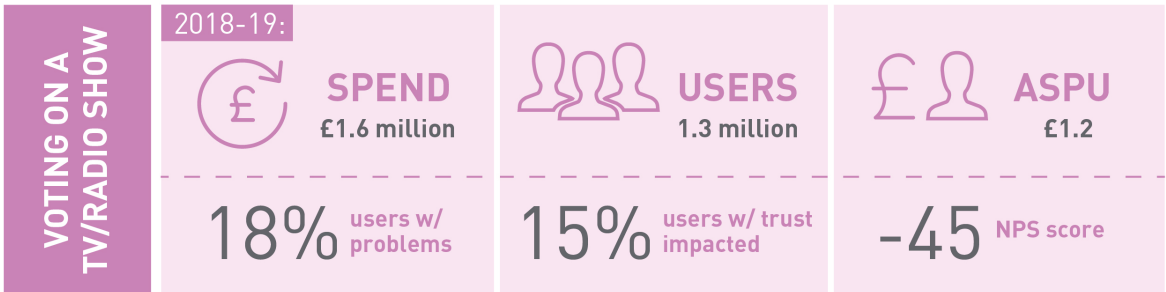
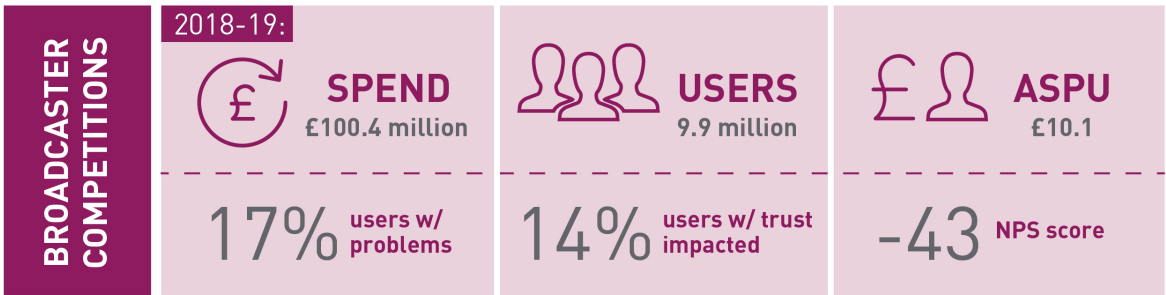
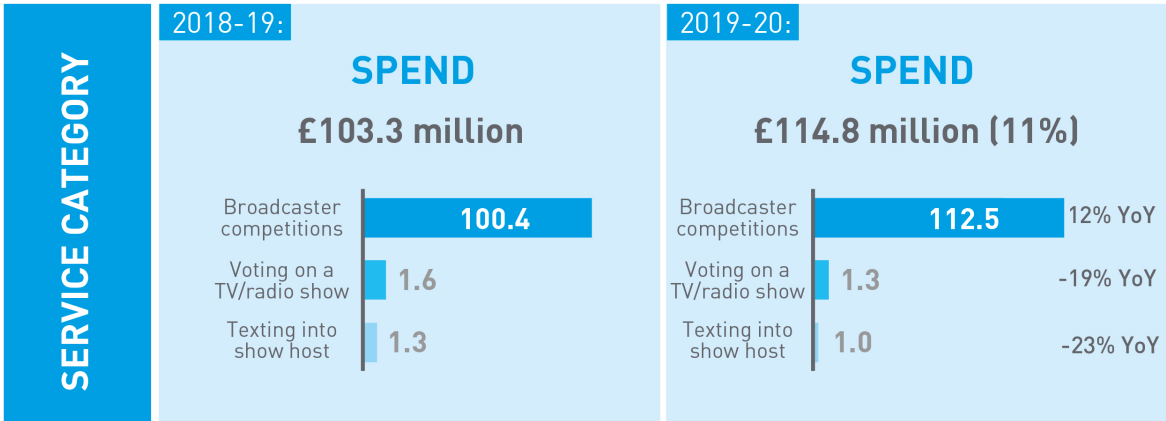
SEXUAL ENTERTAINMENT



SEXUAL ENTERTAINMENT

ADULT CAMS	2018-19:	 SPEND £2.3 million	 USERS 0.6 million	 ASPU £4.0
	34% users w/ problems	27% users w/ trust impacted	-34 NPS score	
ADULT CHAT (MESSAGING)	2018-19:	 SPEND £2.6 million	 USERS 0.6 million	 ASPU £4.6
	38% users w/ problems	29% users w/ trust impacted	-31 NPS score	
ADULT TALK SERVICES	2018-19:	 SPEND £14.0 million	 USERS 0.5 million	 ASPU £27.5
	40% users w/ problems	28% users w/ trust impacted	-22 NPS score	

TV AND RADIO ENGAGEMENT



Annex B Market sizing methodology

Our approach to estimating the end-user spend in phone-paid services in 2018–2019 and in 2019–2020 was based on the following four-step process.³¹

- Step 1: collection of network returns data
- Step 2: online consumer survey
- Step 3: in-depth interviews with industry participants
- Step 4: market modelling.

B.1 Step 1: collection of network returns data

Network operators report revenue (and outpayments to value chain participants) by spending channel on a quarterly basis to the Phone-paid Services Authority. This data was used to derive the overall end-user spend (excluding VAT) in phone-paid services for 2018–2019 and previous years, broken down by spending channel. Consumer spend on charity donations does not generate revenue for network operators and is therefore not reported in their network returns. However, since 2017–2018 network, operators have reported the total value of charity donations passed through their networks to the Phone-paid Services Authority.

To further break down the end-user spend across spending channels by service category (13 categories) and service type (47 types) and estimate the size of the market in 2019–2020, several additional steps were followed, as detailed below.

B.2 Step 2: online consumer survey

A consumer survey was conducted to generate quantitative data on the adoption of phone-paid services, reasons for use/non-use of phone-paid services and the key underlying factors affecting usage and overall satisfaction. The survey was conducted online by Luc.id between April and May 2019. The survey included 38 questions overall and took approximately 20 minutes for survey respondents to complete. The survey questionnaire was designed to maintain continuity with previous Annual Market Reviews, although changes have been included to address the continuous evolution of the phone-paid services market.

³¹ While steps are presented sequentially for clarity purposes, some activities such as the market modelling exercise spread across the duration of the project.

The total survey sample was 8724 respondents and was representative of the UK population aged 16 years and above, by gender and age.³² Figure B.1 and Figure B.2 provide a comparison of the distribution by age group and gender of the UK population and the 8724 individuals surveyed.

Figure B.1: Distribution by age group of the UK population and of survey respondents (2018–2019)

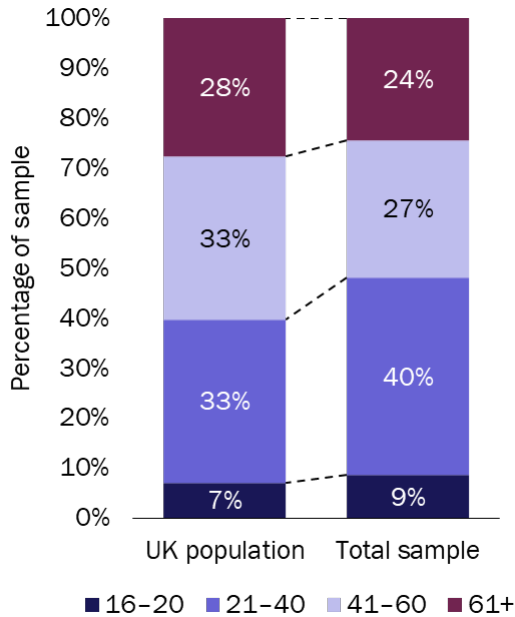
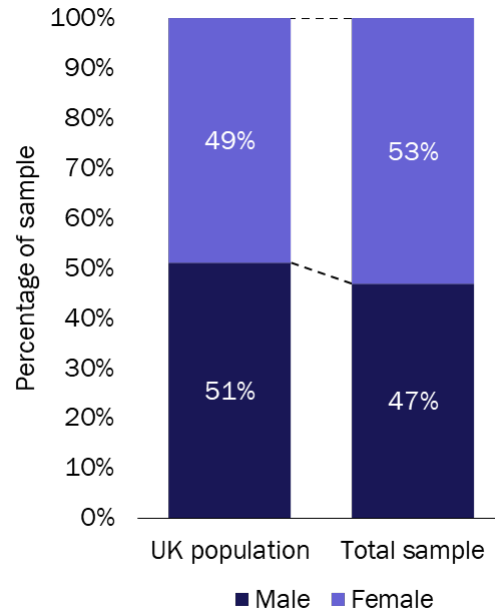


Figure B.2: Distribution by gender of the UK population and of survey respondents (2018–2019)



Sources: Analysys Mason, Office for National Statistics, 2019

Out of the 8724 individuals surveyed, 5041 used at least one phone-paid service in the past 12 months (equivalent to a 58% incidence rate), and were asked about their usage (including the types of service used, spending channels, frequency of use, and spend levels), underlying key drivers (for example, their own preferences, key issues faced, and levels of trust) and overall satisfaction with phone-paid services. Further detail on the demographic segmentation of these respondents is provided in Figure B.3 below.

For those individuals surveyed that had not used any phone-paid service over the past 12 months, we asked the reasons for not using these.

³² Office of National Statistics (28 June 2018), *Population estimates for the UK, England and Wales, Scotland and Northern Ireland: mid-2017*. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2017#uk-population-reaches-66-million>.

Figure B.3: Demographic segmentation of phone-paid services users, 2018–2019

Age group	Gender	Region	Household	Employment	Household income
9% 16–20	53% Female	37% England (South)	49% Couples with children	49% Full-time employed	29% < £20k
25% 21–30	47% Male	26% England (North)	24% Couples without children	15% Part-time employed	21% £20k–29k
22% 31–40		23% England (Midlands)	15% Alone	6% Self-employed	26% £30k–49k
17% 41–50		8% (Scotland)	7% Single parent with child	11% Retired	16% £50k–99k
11% 51–60		5% Wales	5% House share	7% Student	3% £100k+
16% 61+		2% Northern Ireland		12% Unemployed	4% 'I don't know'

Sources: Analysys Mason, 2019

B.3 Step 3: in-depth interviews with industry participants

In-depth interviews were conducted between April and July 2019 with 19 executives in senior positions across 17 organisations with activities in the phone-paid services industry, including mobile operators, fixed operators, intermediaries, Level 1 providers, Level 2 providers and trade associations. The objectives of these interviews were two-fold.

- To collect additional historical revenue data to cross-check the adoption and spend level implied by the consumer survey in Step 2 at the service category and service type level.
- To develop a broader understanding of the main trends impacting the adoption of phone-paid services, frequency of usage and spend level over the next 12 months to inform our modelling assumptions and estimate of the size of the market in 2019–2020.

Interviews were conducted as an open-ended discussion but aimed to cover the following areas: market trends by segment of operation, market outlook, impact of regulation on business, issues affecting consumer confidence, and top-line financials. Figure B.4 below provides an overview of the number of interviews completed by type of industry participant.

Figure B.4: Number of interviews completed, by type of industry participant (April 2019–July 2019)

Type of participant	Number of organisations interviewed
Mobile network operator	2
Fixed network operator	3
Intermediary	2
Level 1 provider	5
Level 2 provider	4
Trade association	1

Source: Analysys Mason, 2019

B.4 Step 4: market modelling

As outlined in Step 1, the overall purpose of the market modelling exercise was to further break down the end-user spend across spending channels by service category and type.

- Firstly, we used the output of the consumer survey (Step 2) to generate initial assumptions about key spend drivers (including service adoption, frequency of usage and spend level) and to estimate draft distribution of end-user spend by service category and type (referred to as a ‘bottom-up’ approach).
- Secondly, we leveraged additional revenue data provided by Level 1 aggregators combined with insights obtained during interviews with industry participants (Step 3) to segment the total reported end-user spending by service category and type (also referred to as a ‘top-down’ approach).
- Finally, both approaches were used to derive the final spending figures by channel, service category and service type, using the top-down approach to account for under- or over-reporting from survey respondents, and the bottom-up approach to estimate the market where little data or insights had been provided.
- We then forecast the market size for 2019–2020. This exercise was primarily based on the insights generated from our interviews with industry participants, including their views on the evolution of the market segments that they are operating within, as well as additional information collected from desk research on likely upcoming market developments.

The final output of the market modelling exercise is an estimate of end-user spend (excluding VAT) on phone-paid services, split by service category (13 categories), service type (47 types) and spending channel (7 spending channels), for the periods of 2018–2019 and 2019–2020.