# PhonepayPlus

Phone-paid Services: Today and tomorrow

# Executive summary

- This research has been commissioned by PhonepayPlus to provide an overview of the current and future market for phone-paid services. The study will help PhonepayPlus, as well as current or prospective industry participants, to better understand the sector and guide PhonepayPlus's priorities

- The size of the UK market for phone-paid services in 2007 is estimated at £1.08 billion The market has suffered from issues surrounding participation TV during the year, with decline in some activities a result. It is likely to recover in the medium-term, but opinion on the extent of the recovery is divided. Directory enquiries is the largest service segment, worth £207 million – but this is expected to come under pressure from free directory services

- Overall, the market is becoming more mobile, driven by the increasing substitution of mobile for fixed line and the availability of a wider range of mobile services. The industry expects business conducted using traditional premium rate lines to continue to decline

- According to the consumer survey commissioned for this research, 38% of people over 18 had used some form of phone-paid services in the six months to November 2007. Irrespective of age, among those who had used phone-paid services in the last six months, the most commonly used service was taking part in a competition – 46% had done so in the past six months

- There is an opportunity for the phone-paid services industry to create and market more compelling services that better encourage repeat usage, and to take measures to increase consumer trust in phone-payment. Such moves could help convince the fifty-eight percent of respondents to the consumer survey who said that they did not intend to use any services in the next 12 months

  – Phone-paid services have more stringent requirements for how consumers need to be informed about charges than other payment mechanisms, but this fact has not filtered through to consumers

- The growth of internet usage is already affecting the phone-paid services market. Over the next two years, increasing technology take-up and use will change consumer behaviour and be a major driver underpinning a number of other changes that will affect the market for phone-paid services. In particular, convergence will enable services and payment mechanisms to transition between platforms and service offers to be provided over several platforms

- The industry will also be affected by a number of additional drivers and inhibitors, including:

  – Availability of more compelling content and services: Easy-to-use services that serve consumer needs are fundamental to growing the industry

- Consumer confidence: It will be essential to build confidence in phone-payment in order to drive both take-up by a wider range of content and service providers and consumer use
- Mobile data charges: Important to increase consumer awareness of clearer charges in order to build usage of a range of more advanced mobile services
- Regulatory clarity: Regulators need to work together to ensure clarity of regulatory frameworks for new services

- Phone-payment will see increasing competition from other payment mechanisms, but is likely to remain strong in micro-payments for digital or intangible goods. It will also remain important for the under-18s, who are highly attached to their mobile phones and do not have access to credit cards
- To be competitive with alternative payment mechanisms, operators need to focus on improving reporting and revenue share as well as the phone-payment user experience and revenue share
  - But there is an opportunity to enable payment for a wider range of mobile services, where these are not cross-platform or the initial content discovery happens over mobile
- The issues surrounding participation TV have put compliance in focus for the phone-paid services industry
- There has been significant consolidation of companies in parts of the industry in the past few years and this trend is expected to continue

# 1 Introduction

PhonepayPlus has commissioned Fathom to produce an overview of the current and future phone-paid services market. It is intended that this study will help current or prospective industry participants to better understand the sector, as well as to guide PhonepayPlus's remit and priorities. As part of this work, we have carried out:

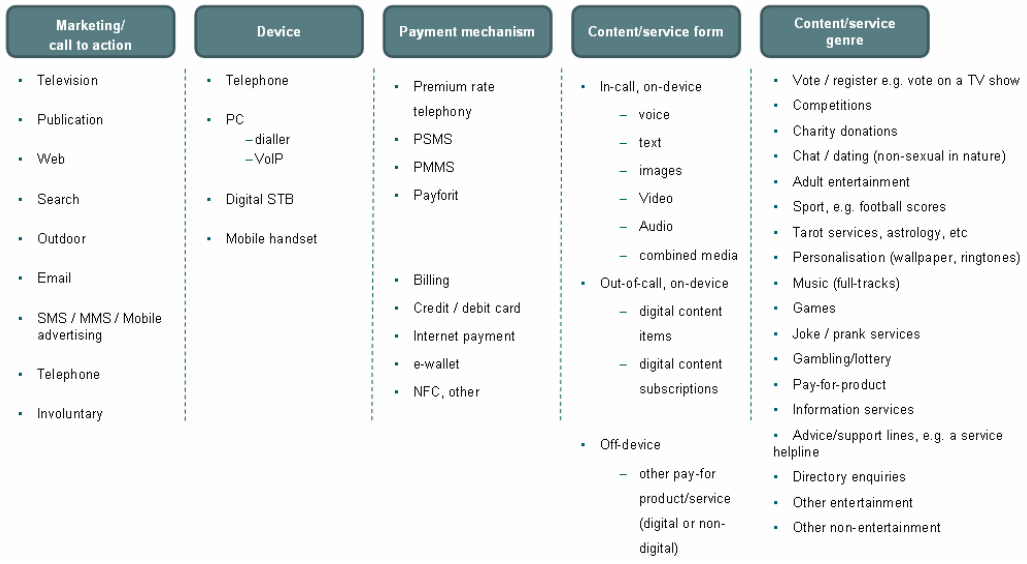
- Interviews with close to 40 executives from companies that are currently involved in the phone-paid services industry, or who may use such capabilities in the future
- An online industry survey (269 responses, of which 84 complete), carried out in November 2007
- Consumer research (online Omnibus questions to 4,000 respondents, through ICM Research), carried out in the first two weeks of November 2007
- Desk research – supporting and validating hypotheses generated by the other research-strands, and gathering information about the current market, data and international examples. This includes reviews of existing PhonepayPlus research.
- Research, analysis and modelling of the current market for phone-paid services

## 1.1 Scope

The scope of this research is the current market and looking ahead at the next 18-24 months. For the future market, we have considered all development that may affect phone-paid services.

Through our interviews, the research has touched on developments around 087-numbers. This area is, however, not a focus of this project since research has been carried out on 087-numbers prior to this project[1].

**Phone-paid services: Taxonomy**




[1] For more information on the change in regulation see the PhonepayPlus press release: http://www.phonepayplus.org.uk/pdfs_news/0871_Services.pdf For research carried out on the 0871 market, please see the report by Analysys, Implications of regulatory changes in the 0871 market, final report, April 2007, available here: http://www.phonepayplus.org.uk/pdfs_research/research_0871.pdf

# 2 The current market for phone-paid services

**Overview of findings:**

- Premium rate voice is in slow decline
- The number and usage of mobile payment mechanisms are continuing to grow
- Payforit has just launched and is in its very early stages of development. So far it has not challenged PSMS and suffers from usability problems.
- There is a significant market that has not yet been fully tapped: 62% of consumers surveyed had not used premium rate services in the past six months
- For industry players, there is a growth opportunity in providing and marketing a wider variety of high-quality services that consumers perceive as offering good value and that encourage repeat usage
  - Of respondents to our survey, only 15% had used phone-paid services more than once or twice in the past six months, which suggests the value they derive from services is not enough to encourage frequent usage
  - The most common reason for non-usage among consumers is a lack of interest in services offered. Either there are not services that appeal to users, or existing services are not marketed effectively
- Despite the problems around participation TV voting (see section 2.2 below), "lack of trust" was not the primary reason for not using services – cited by 26% of respondents as a reason for not using any services.

## 2.1 Premium rate billing mechanisms

There is a set of billing mechanisms that (according to Ofcom's ruling) fall under the definition of Communications Act 2003 as Controlled Premium Rate Services. These are all regulated by PhonepayPlus. They are:

- Premium voice
- 090
- 087 (currently only covers dialler services, but will include all 0871 numbers as of early 2008)
- 118 (directory enquiries)
- Voice short codes
- Video short codes/premium video calls
- Premium SMS
- Premium MMS
- Payforit and WAP billing

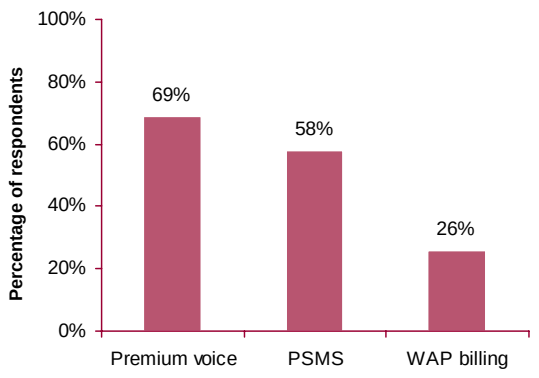
Some mobile operators are currently questioning the inclusion of Payforit, arguing that only the elements of Payforit powered by PSMS should fall into the premium rate category. Ofcom is of the view that the mechanism is a premium function and as such is regulated by PhonepayPlus.

Of these services, the most popular are premium voice and PSMS (see further detail in sections below). Premium voice was the most commonly offered mechanism among respondents to the industry survey conducted for this report. Among

consumers, premium voice and PSMS scored equally in terms of usage, with 45% of phone-paid service users having used the mechanisms.

**Fig. 2.a:**

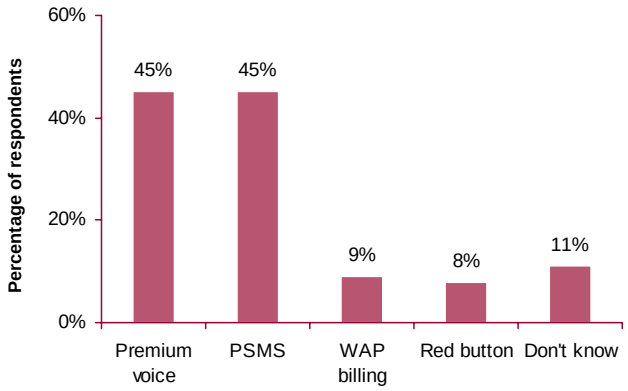
**Payment mechanisms offered (share of respondents)**




Source: Industry Survey, Fathom for PhonepayPlus, October 2007
Base: 85 respondents

**Fig. 2.b:**

**Payment methods used in past 6 months**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 1540 respondents, who had used phone-paid services

### *2.1.1 Premium rate voice*

The traditional premium rate voice market has declined slowly over the past several years, according to our interviewees. Alongside PSMS, it has also suffered a major drop this year due to the problems surrounding participation TV voting and competitions and ensuing issues around consumer trust, but this is expected to recover to some extent.

Premium voice is also under pressure from the prevalence of usage of mobile phones. Networks block access to 090 numbers – in particular from prepaid accounts – and mobile operators (as well as non-BT fixed providers) apply high and variable mark-ups to premium rate calls, which causes confusion around cost for end-users (see section 5.2.2.1)

There are calls from industry players for an increase in the number and range of drop call price-points to boost the market for content and services. In the view of interviewee companies which offer premium voice services, this would provide greater flexibility in services and prices offered and allow premium voice to compete more effectively with PSMS.

According to the consumer research commissioned for this study, 45% of users of phone-paid services are using premium voice to access services. Younger age groups are less likely to use premium voice – 37% or less of those under 34 use it, while 44% or more of those over 35 do so (see fig. 2.c). There is also variation between social classes. Forty-eight percent of the AB segment use voice, but only 41% in the DE segment.

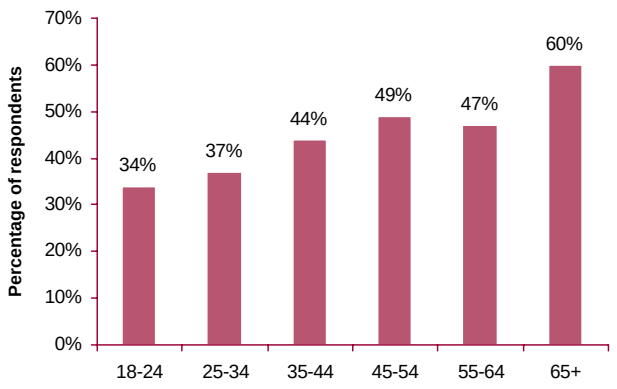
Challenges for the premium rate voice sector include:

- The variable cost of calls - consumers do not necessarily know how much they will pay if they call a phone-paid service. While the price from a BT line is stated, charges may vary from other providers. It may be significantly higher, in particular on mobile. This is important factor because an increasing number of consumers are relying on mobile phones as their main voice line (see section 5.2.2.1)

- Voice services are losing ground to alternative channels for accessing information. Consumers can, for example, increasingly use the internet to access information rather than call a phone-paid information line. Other services, such as voting, have been migrating from voice to SMS. (Currently, however, TV/high volume services are voice-focused due to issues over latency after the participation TV problems.)
  - It should be noted that some services are inherently suited for voice, for example some tarot or adult voice services. These are therefore less threatened by the internet, but could be moving to VoIP.
- Access to 09 numbers – mobile operators automatically block premium rate numbers from being called from mobiles, particularly from pre-pay phones.

**Fig. 2.c:**

**Share of phone-paid users that had used premium voice, by age**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 694 respondents

### *2.1.2 Premium SMS*

Premium SMS (PSMS) is a messaging protocol that has been adapted to provide a premium billing mechanism. While it has advantages of ubiquity and ease of use, it also suffers from problems, including:

- Revenue leakage and reporting problems
- Risk of latency at high volumes
- Unfavourable commercial terms compared to voice

Revenue leakage manifests itself in several ways but most commonly: systems are often unable to verify whether prepaid customers have sufficient credit on their accounts to carry out a requested transaction. Content is then delivered without payment being obtained. It is not unusual for transaction-enablers to see a big discrepancy between the amount they have billed users and the amount operators are reporting as billed and due to be paid to the enabler.

Such discrepancies are obviously a problem, but for phone-paid service content providers, this type of leakage was less costly when mobile phone content was simpler and therefore less expensive to produce. The royalty payments for a real-music ringtone is far higher than that of a polyphonic tone, so content delivered without being paid for is now a much heavier financial burden.

Conversely, payment may go through without the user receiving the content. This may be due to the consumer having an incompatible handset, but regardless of the reason it causes problems with customer trust. Consumers are also often not clear over whom to contact if they have a problem – because of the multiple businesses in the value chain, they may be passed between several different entities.

When high volumes of SMS messages are sent simultaneously, there is a risk of latency due to capacity constraints. This means that although a message is sent and paid for, it may not be delivered immediately. PSMS's latency issues have impacted its use for time-critical services such as TV voting. Broadcasters are no longer using it, largely because it can't be guaranteed that all votes will reach them in time. While the problems appear to have been isolated, the damage to consumer trust caused a complete shut-down of its use for votes. Voice therefore now dominates participation TV – but this may change if issues around PSMS latency can be resolved.

Even before the problems with participation TV voting, some broadcasters did not feature PSMS due to the lower revenue share it yields compared to premium voice. PSMS revenue share is also hindering its use for other services, where providers prefer other options.

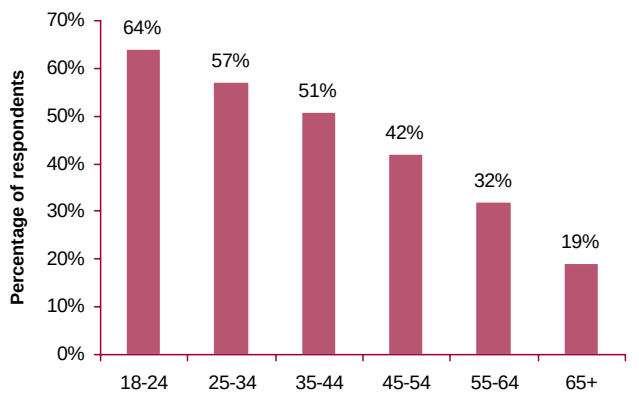
Nevertheless, for many services PSMS has prevailed despite its shortcomings, because of its ease of use and ubiquity, the two key drivers of its success as a payment mechanism. PSMS currently continues to perform well.

PSMS is on a par with voice (45%) in terms of usage as a payment mechanism, according to our consumer research, but the discrepancies between age groups were greater. In the younger segments of phone-paid services user, PSMS dominates, with 64% of 18-24 year olds and 57% of 25-34year olds using it, dropping to 42% of those 45-54. Only 19% of those aged 65+ use PSMS (see Fig. 2.d).

PSMS usage follows the trends of SMS, which is now widely used also in older age groups, but remains more heavily used by the younger segments for whom mobile phones in general and text in particular is second nature.

**Fig. 2.d:**

**Share of phone-paid users that had used PSMS, by age**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 690 respondents who had used phone-paid services in past 6 months

### 2.1.3 Premium MMS

Multimedia Messaging Services (MMS) has seen relatively limited use to date as a phone-paid payment mechanism. From the initial fanfare of MMS's launch in 2001 the messaging format failed to live up to high expectations. This was due to a lack of cross-network access, as well as interoperability and high costs. The technical limitations are now largely overcome and MMS use is growing.

The main function PMMS performs currently is as a billing mechanism for premium content upload, with users uploading content to websites or to TV-shows. The trend for user-generated content is expected to grow and in this area there is potential for PMMS usage to widen as well.

### 2.1.4 Premium mobile calls using voice shortcodes

Voice shortcodes are used by mobile operators as a voice-alternative to SMS shortcodes. They also provide a mobile phone-paid voice alternative with clear costs – regular phone-paid lines are often charged at variable rates by mobile operators (see section 5.2.2.1). Typically, providers can use the same shortcodes for voice and SMS, making the marketing message easier.

The deployment of voice short-codes is currently limited. This is due to a lack of cross-operator availability, which is crucial in order for the service to be marketed more widely. O2 has not yet implemented voice shortcodes. There is a potential for voice shortcodes become the mobile 'alternative' to phone-paid calls, with potential for example for participation TV. Revenue shares may have to be revised by providers to take full advantage of this opportunity.

It should be noted that shortcodes are not accessible from fixed-lines, thus limiting their universality.

### 2.1.5 Premium video calls (may use video short codes)

Using the video calling capabilities of more advanced mobile handsets, premium video lines charge the consumer at a premium to view and/or interact with either live or recorded content. Adult content providers have been in the forefront of offering services using premium video lines. Like premium voice, the payment mechanism is closely linked to the content delivery and therefore unlikely to be replaced by other forms of payment.

However, as the take-up of 3G increases alongside availability of capped or flat rate data charges over mobile networks, the provision of recorded video services is likely to shift to streaming. Continued use of premium video calls is likely for live services featuring interaction with the caller.

### 2.1.6 Payforit & WAP billing

Payforit is a cross-operator WAP-billing scheme developed by all the UK mobile operators *"to promote a consistent and trustworthy standard for paying by mobile"*[2]. O2 is the only operator to have mandated that all WAP 'click to buy' mobile services must be Payforit-compliant, which means existing services have had to migrate onto the Payforit platform.

The scheme is governed by a set of strict rules, the "Trusted Mobile Payment Framework", which sets out how the scheme must be implemented. Merchants who wish to offer Payforit must operate through an Accredited Payment Intermediary (API) as their payment service provider, and these APIs must ensure that the on-screen payment pages are presented to the user in the correct format.

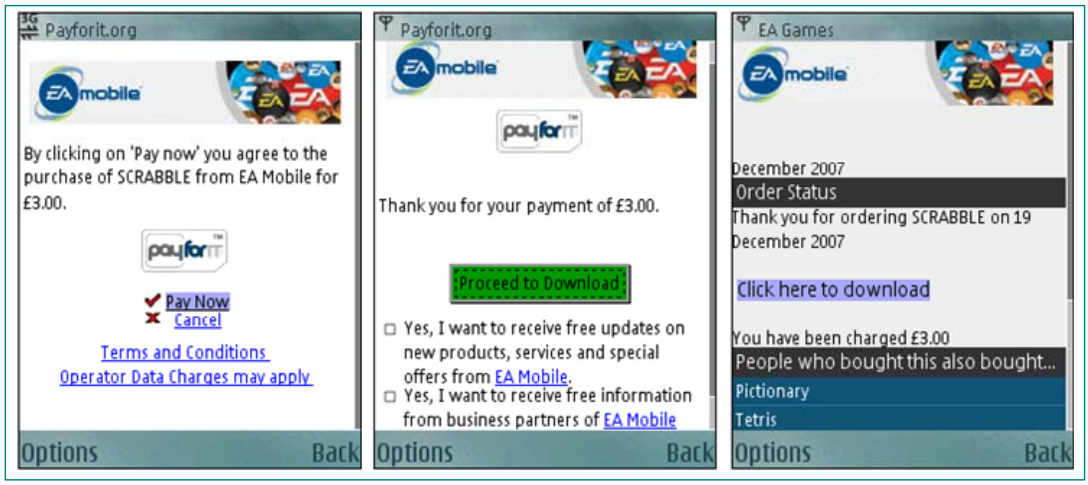
Consumers must be shown additional information prior to making their purchase, including:

[2] Source: Payforit website

- A description of the goods/service being purchased – what exactly it is that they're buying or subscribing to
- The identity of the supplier – who they're buying from
- The price of the goods/service (including tax) – a clear idea of the full price of the service, in pounds
- Data charges – the fact that data charges may apply
- Terms and conditions – a hyperlink for the consumer to view the merchant and payment service terms and conditions
- Clear navigation – 'pay now' and 'cancel' options for the consumer
- Payment success/failure – consumers must be clearly told that their payment was successful, along with the price charged. If it was unsuccessful for any reason, they must be told that they have not been charged
- Marketing opt-in selection – the confirmation screen gives the opt-in option of receiving marketing from the merchant, and optionally from business partners of that merchant[3]

See fig 2.e for an example of a Payforit transaction.

**Fig. 2.e:**




Source: Fathom screenshots

Payforit was launched last year and its use is growing, although it is still relatively small and consumer awareness is very low. Only 9% of respondents to our consumer survey said they had used Payforit or any other form of WAP billing.

The operation of the Payforit system is not uniform. Some operators currently use silent (i.e. not visible to the end-user) mobile-terminated-PSMS to perform the billing mechanism. Payforit is principally a mobile payment system but is also available for the internet, with charges still paid for through the phone-bill.

Payforit has a clear advantage compared to PSMS: It was created as a payment scheme and provides a clear audit trail, improving reporting and reducing leakage. Payment enabler Bango stated that for the first million transactions it had

[3] Source: Payforit, Trusted Mobile Payment Framework, Scheme Rules

enabled using Payforit, 92% of transactions were successfully completed, with an error rate of less than 1% and refund levels below 0.01%[4]. Seven percent of transactions failed due to insufficient funds in the users' prepaid accounts and in a PSMS environment users may still have been able to access content purchased through these transactions.

However, interviewees using the scheme pointed to problems, including:

- Usability and as a consequence, reduced conversion rates
- Reduced ability to capture end-user data and up-sell to customers
- Currently, the brand is unknown

Users have to go through a number of clicks/screens before a Payforit payment is completed to make it absolutely certain that they are clear over what they will be charged. Many suggest that this is negatively affecting conversion rates, causing a drop in revenues. Some service providers have reported sharp drop-offs during the payment process using Payforit - including for safe, branded services - suggesting that consumers may be put off by the process.

The scheme also mandates that on the payment completion screen, consumers must actively opt-in to receive information from the merchant - although this box can be pre-checked if written approval has been granted by the relevant operator. Without this opt-in, merchants have no opportunity to reach their customers following a completed transaction. As a result, some merchants complain that their marketing opportunities are more limited than they were using PSMS and that they are not able to up-sell customers even on-site, since MSISDNs are not visible to them.

Furthermore, payment mechanisms need to be trusted in order to succeed, but Payforit remains largely unknown. Operators appear unlikely to invest in marketing the scheme in itself, and the lack of marketing drive behind Payforit could hinder its ability to become the trusted brand it is intended to be for consumer.

Some implicit trust-building is underway from some operators, including Vodafone, who will use Payforit as the payment mechanism on their portals. This should help build familiarity. However, other operators are continuing to use their on-portal WAP billing systems. This could undermine the development of consumer familiarity and trust in the new mechanism.

As stated above regarding regulation of Payforit, Ofcom takes the view that Payforit is a premium rate mechanism and as such is regulated by PhonepayPlus. Some operators are, however, arguing that Payforit's own consumer protection scheme is sufficient and that only those transactions that are underpinned by PSMS should fall under PhonepayPlus regulation.

### *2.1.7 TV red button services chargeable at premium rate*

Interactive TV has received a great deal of attention since its introduction; however its growth and use has largely failed to live up to expectations. Red button interactive TV services allow users to interact with programmes and advertisements and to purchase phone-paid goods and services, vote on a TV programme or donate to a charity. Red button is principally used on the Sky and digitalcable platforms, so the majority of phone-paid activities using the red button are not available to all consumers.

8% of respondents to our consumer survey said they had paid for phone-paid content using the red button on their remote control.

[4] Source: Bango press release, November 2007. According to Bango, refund levels for PSMS are close to 10%

Broadcasters have currently suspended the use of red-button voting for participation TV due to issues around guaranteeing all votes are counted.

## 2.2 Recent market developments: Problems around participation TV

Much of the participation TV sector has been marred by problems of unfair competitions and vote-counting which has fuelled considerable media attention around consumers being cheated by broadcasters such as Channel 4, ITV and BBC. Many industry stakeholders believe the erosion of consumer confidence brought about by the participation TV problems also affected other parts of the phone-paid industry, in particular competitions and similar activities over other channels, although this effect appears to have been short-lived.

However, these problems follow other episodes that have caused consumer concern - most notably problems with internet diallers and mobile subscription services. Many of our interviewees indicated that in the event of any further problems, it would be extremely difficult to re-gain consumer confidence.

It should be noted that the problems were isolated, and the majority of quiz TV and TV participation formats were not found to be in breach of regulation.

The problems around participation TV have exerted the following effects:

- Caused most broadcasters to abandon Quiz TV formats
- Put the emphasis on compliance
- Removed PSMS as a submission mechanism for TV competitions and votes
- Significantly dented consumer trust
- This has caused votes for several shows to drop to a fraction of previous volumes
- Broadcasters have signalled new and tougher regimes for all participation TV activity

While trust clearly is an issue for end-users – 26% of non-users of phone-paid services say it is one of their main reasons for not using them – it is still a less prevalent reason for non-usage than a lack of interest in services offered.

## 2.3 Consumer use of phone-paid services

For this report an omnibus survey of 4,000 consumers was carried out in November 2007, asking about their use of phone-paid services. This section presents some of the results of that survey, along with other data and research to provide insight into consumer use of phone-paid services.

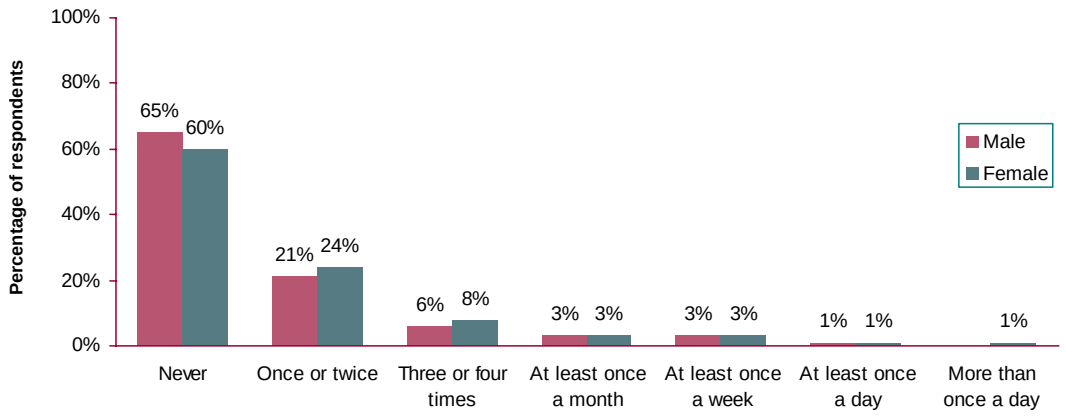
### *2.3.1 Frequency of use and reasons not to use services*

According to the consumer survey, 38% of people over 18 had used some form of phone-paid services in the six months to November 2007. This leaves 62% that hadn't used any; a significant share of the audience remaining to be addressed. Men were more likely than women to have used services and a larger share of consumers in the 18-34 age groups than those in the older groups use phone-paid services. Users were most likely to come from the AB social class – 41% in this segment had used services compared to 35% in the DE segment.

Most of those that had used phone-payment – 23% of all respondents - had only done so once or twice (see fig 2.f). This leaves only 15% that used phone-payment more than twice in six months, suggesting that providers need to create a better user experience, or provide more value to the consumer, in order to encourage repeat usage. The high level of 'once only' users has also been highlighted by some of our industry interviewees.

**Fig. 2.f:**

**Frequency of use of premium rate services**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 4100 respondents (All)

It is important for the industry to address this problem. While the majority of phone-paid services are priced at a low enough level to enable most users to try them out, it is much harder to get consumers to try services again if they found the experience unsatisfactory the first time around.

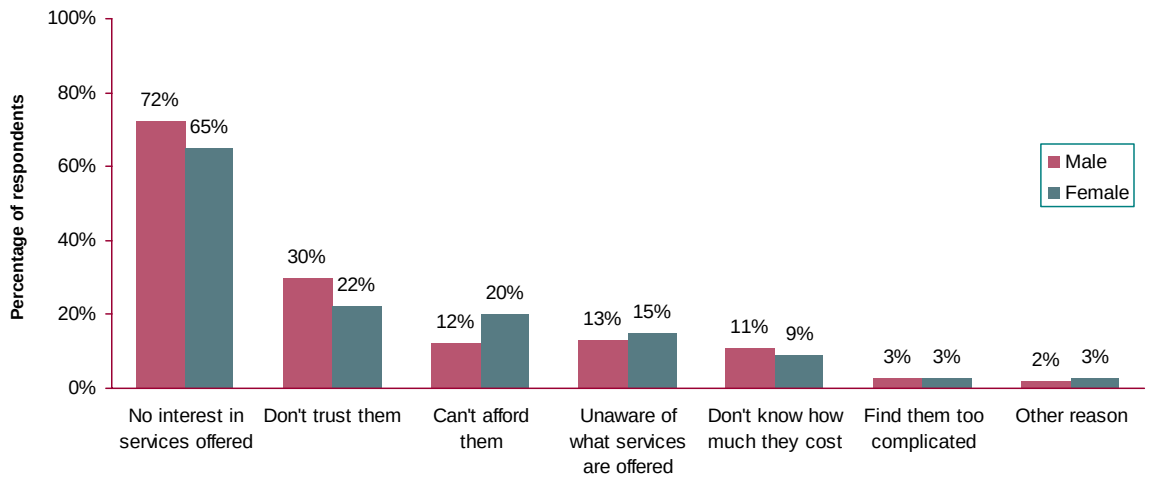
By far the most common reason chosen by respondents for not using services was that they have no interest in the services offered. Sixty-nine percent of those that had not used services said this was one of their main reasons. More men than women feel that there are no services of interest to them.

Fourteen percent overall were unaware what services are available. Combined, these two reasons point to a need to market the variety of services on offer better and an opportunity to provide services that appeal to a greater audience. The 25-34 and 45-64 age groups were most likely to find no interest in services.

Interestingly, despite the participation TV problems during 2007, only 26% of respondents who have not used services said they don't use services because they don't trust them, while 10% found uncertain costs to be a main factor. Lack of trust was significantly higher among men (30%) than women (22%) and the 18-24 age group (32%) were most likely not to trust phone-paid services (see fig 2.g)

**Fig. 2.g:**

**Reasons for not using phone-paid services**



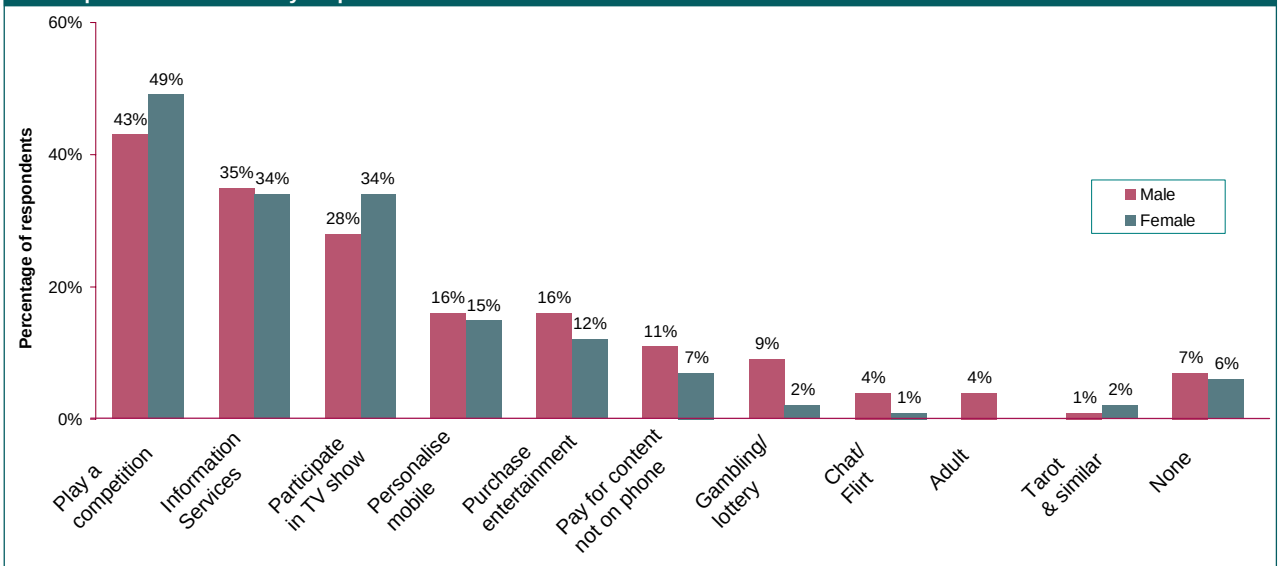

Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 2498 respondents who had not used phone-paid services in past 6 months

## *2.3.2 Services used*

The most commonly used service is taking part in a competition. Forty-six percent of the total base had done so in the six months to November and it was the most used service in all age groups. Note that this segment overlaps with participation in a TV show, which 31% of all respondents said they had done in the past six months. Thirty-four percent of respondents had used some form of information services (this includes directory enquiries).

**Fig. 2.h:**

**Phone-paid services used by respondents**

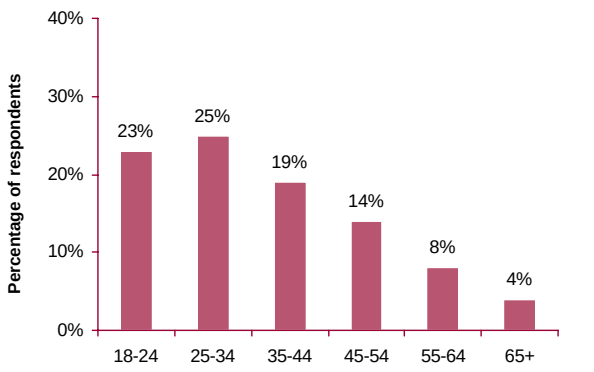



Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 1602 respondents who had used phone-paid services in past 6 months

Unsurprisingly, usage of both mobile personalisation and mobile entertainment services are significantly higher in the younger age groups. Interestingly, however, content-buying habits are much more polarised between age groups than personalisation. The acquisition of entertainment content, including videos, music and games, for mobile phones could be expected to appeal more to a wider audience than personalisation.

**Fig. 2.i:**

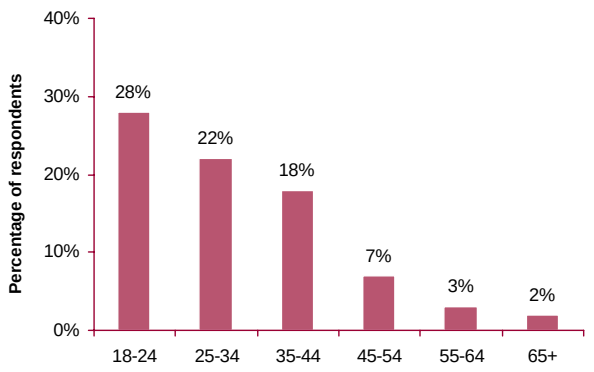
**Share of phone-paid users that had used phone-payment to personalise mobile phone, by age**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 243 respondents

**Fig. 2.j:**

**Share of phone-paid users that had used phone-payment to purchase entertainment for their phones, by age***




*incl. games, music, video downloads
Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 214 respondents

Twenty-three percent of 18-25 year olds and 25% of 25-34 year olds had bought ringtones or other forms of personalisation content, while this drops to 19% among 35-44s, 14% among 45-54 year olds and into single digits for those over 55 (See fig. 2.i). Among 18-24 year olds, 28% had purchased entertainment for their mobile phones, but usage of such services is only 18% among 35-44 year olds and 7% or less for those over 45 (See fig. 2.j).

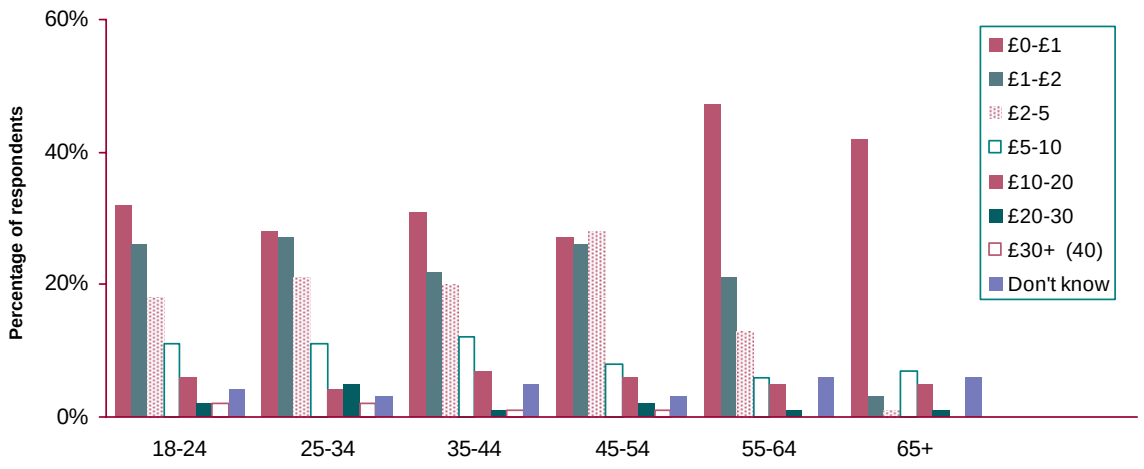
We believe that usage habits of both adult and tarot/horoscope services may be higher than the end-user research shows, due to the reluctance of users to admit using those services.

Participating in a TV show, personalising mobile phones and paying for content not on the phone are the least sticky services, closely followed by playing competitions and purchasing entertainment for mobiles. Gambling/lotteries are encouraging the most repeat usage – but note that these results come from a low base of respondents that had used such services. Tarot/horoscopes, adult services and chat/flirting all also had higher levels of repeat usage.

The survey also asked about the amount that consumers spent on phone-paid services each month. The results show a general tendency for users to spend low amounts. More men than women spend over £5, and ages 25-54 tend to have the highest spenders (See fig. 2.k) It should be noted however that these figures should be treated with caution, as they show what consumers perceive they spend, rather than verifying actual revenues.

**Fig. 2.k:**

**Approximate monthly spend by respondents on phone-paid services in the last 6 months, by age**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base:1602 respondents who had used phone-paid services in past 6 months

# 3 Industry structure

**Overview of findings:**

- The industry is international, varied and fragmented
- Companies are providing a wide range of end-user services that are billed using phone-payment
- Many companies perform several key functions in the value chain
  - But transaction enablement is concentrated among a smaller number of players
- The survey results indicate a lack of insight into the wider industry – companies are generally uncertain about the volume and activity in the competitive environment within which they operate
- One-third of respondents rely on phone-paid services for more than 75% of their revenues

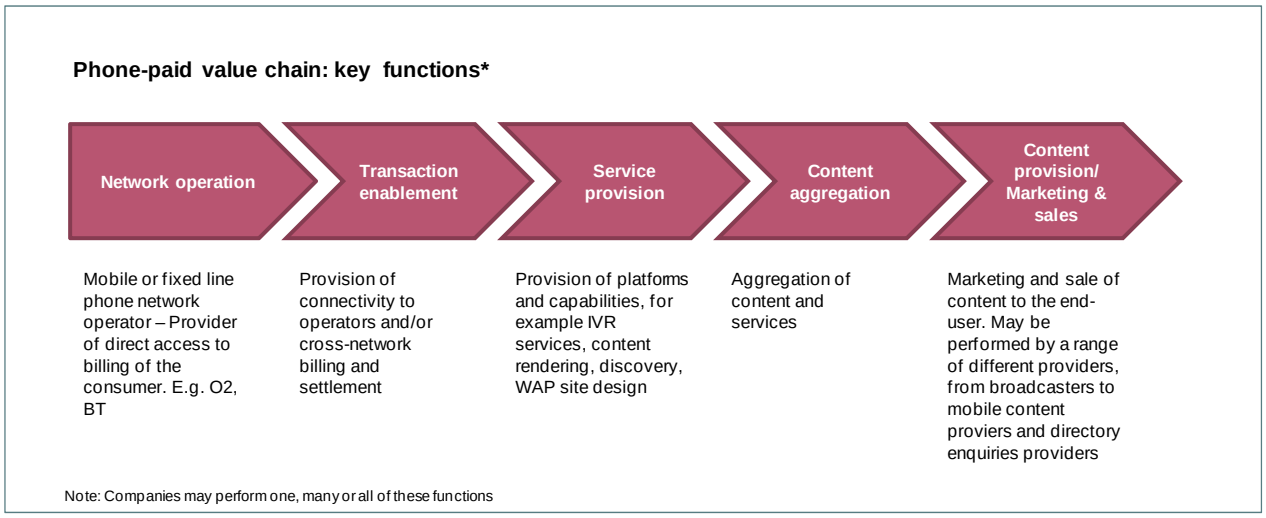
*Please note that the data referred to in this section is sourced from the industry survey carried out for this project. As such, it only reflects the nature of the companies that chose to respond to the survey. Through interviews and desk-research we have in addition been able to gather qualitative insights into the market.*

## 3.1 Where companies fit in the phone-paid services value chain

The value-chain for phone-paid services is complex – some companies supply a range of services while others focus on only a specific function. The differences in how premium voice content services may be provided compared to frequently more intricate mobile value chains also make a coherent description of industry structure more difficult.

We have identified five main functions in the value chain, as illustrated in fig 3.a.

**Fig. 3.a:**



There are multiple variations on the functions that companies provide, depending on each service. For example:

- In the simplest form of value chain, a provider of a premium rate voice service may obtain a number from a network operator, supply their own content and market the line directly to consumers
- A premium rate tipster line may be run and marketed by the company producing the content – but many companies provide either the voice platform (and phone-paid numbers) enabling others to run services for end-users, or turnkey services including content that are provided on a white-label basis to consumer-facing organisations based on revenue share
- For own-branded on-portal services (e.g. Vodafone Live!, O2 Active, Planet 3) provided by a mobile operator, the operator enables its own transactions and no cross-network operation is necessary. A third party may be used by the operator to perform service provision and content aggregation, but the operator performs the function of providing and marketing the content to the end-user
- For a direct-to-consumer mobile content service, a mobile content provider may have its own platform and rendering capabilities, aggregate content and offer this to consumers under its own brand –or white-label it, with a mainstream brand having the relationship with the consumer (performing the marketing and sales function)

Additional parties may also be involved in provision of a service, either directly or indirectly. Content may, for example, be sourced from third parties (e.g. a games developer, film producer, record label). In some cases these are directly involved in managing and controlling the phone-paid service element, as has been the case with TV production companies producing TV shows that incorporate PSMS elements for broadcasters.

This complexity of functions affects the industry and its regulation. Traditional phone-paid voice services were typically provided to the end-user by a service provider, who obtained the phone-paid number from the network operator (BT) and provided the service end-to-end. Now, there may be several different companies involved between what PhonepayPlus defines as a service provider (e.g. the entity which obtains the phone-paid number or shortcode – or performs the transaction enablement function-hereafter referred to as the SP) and the company marketing the service to the consumer.

In accordance with the Communications Act 2003, PhonepayPlus Code of Practice puts the responsibility for compliance on the company that has the deal with the network operator, legally defined as the service provider (SP). This structure puts the onus on the SP to ensure that companies down the value chain comply with the PhonepayPlus Code of Practice. However, the current (11$^{th}$) Code does allow for an information provider (any company to whom a service provider provides services) to take full responsibility for the service if PhonepayPlus accepts this.

In most cases, however, SPs are required to ensure their customers follow the Code, which can be problematic in a competitive commercial environment. A range of interviewees consulted for this report argue that there is a need for greater recognition of the complexities of the value chain. In the past, SPs have also argued that their sole responsibility is unfair. It appears that stringent monitoring of the value chain as a whole is required in order to ensure compliance, given the complexity of many of today's end-to-end phone-payment services.

Following the participation TV problems, the focus is now very strongly on compliance. Many companies who enable high-volume, low-value transactions such as TV-voting have so far been operating with very slim margins. With the added cost of ensuring compliance and providing customer care for consumers whose messages or calls got billed but did not go through in time, margins will need to increase and the commercial environment look likely to evolve. It is important for the industry going forward that this focus on compliance remains.

## 3.2 Functions provided by survey respondents

Among survey respondents, service provision was the most common primary function. It was also the most common additional function for companies to be involved in, with only 25% stating it was not applicable to their company.

Forty-eight percent of respondents did not engage in transaction enablement and 47% carry out no content aggregation. Network operations are, by their nature, also limited to a smaller number of companies.

A key trend on the mobile side over the past few years has been the concentration of transaction enablement capabilities among an increasingly small group of companies. This is a high-volume, low-margin business and many of the content providers that previously chose to interconnect with operators directly now typically work through an aggregator instead. This trend has also been driven by operators' desire to work with a smaller number of partners. Many of the companies involved in transaction enablement also provide service provision capabilities of some sort. The larger players in the mobile transaction enablement space include MX Telecom, MIG, WIN, mBlox and 2ergo.

**Fig. 3.b:**

**Which functions relating to phone-paid services does your business carry out?**

Scale of importance

| | 1 Primary function | 2 | 3 | 4 | 5 Undertake rarely | 6 Not applicable |
|---|---|---|---|---|---|---|
| Network operator | 28% | 2% | 4% | 1% | 2% | 63% |
| Transaction enablement | 18% | 15% | 8% | 6% | 5% | 48% |
| Service provision | 44% | 12% | 10% | 4% | 5% | 25% |
| Content aggregation | 15% | 10% | 13% | 7% | 8% | 47% |
| Content provision / consumer marketing / sales | 29% | 15% | 10% | 7% | 4% | 35% |

Source: Industry Survey, Fathom for PhonepayPlus, October 2007
Base: 142 respondents

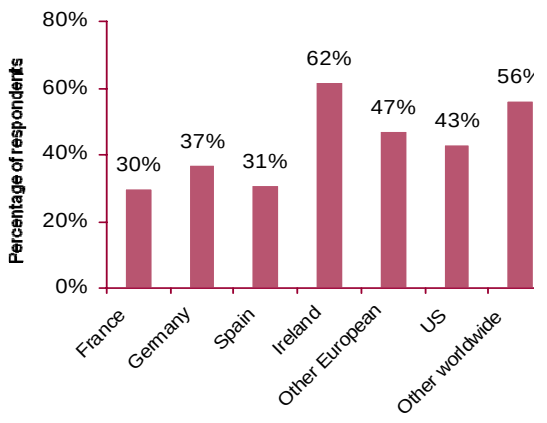
## 3.3 Company sizes and reach

Participants in the UK phone-paid industry are highly international – 47% of respondents to the survey operate both in the UK and abroad. Ireland is the most common market for foreign activity (see fig. 3.c).

The size of companies involved is very diverse, spanning everything from single person content-providers to multinational corporates. Of the respondents to our survey, 37% worked for companies with 1-9 employees while 30% of companies had more than 250 staff.

**Fig. 3.c:**

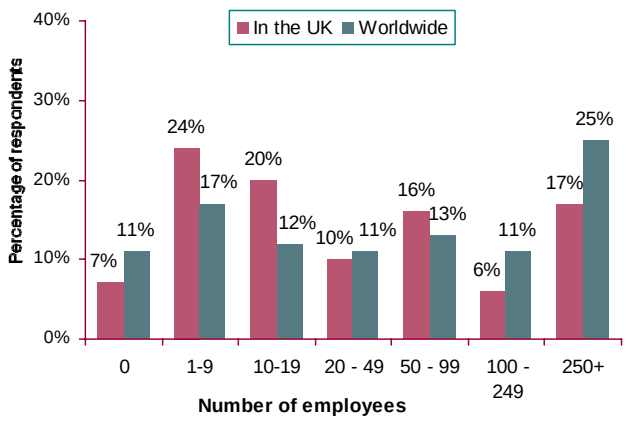
**Which other countries does your company operate in?**




Source: Industry Survey, Fathom for PhonepayPlus, October 2007
Base: 88 respondents

**Fig 3.d:**

**Size of companies responding**




Source: Industry Survey, Fathom for PhonepayPlus, October 2007
Base: 98 respondents

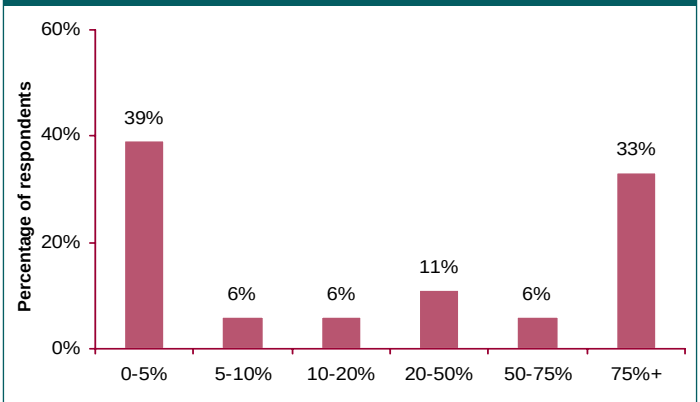
## 3.4 Dependency on phone-paid services

One-third of companies responding to the survey are dependent on phone-paid services for more than half their UK revenues. This figure is close to the 32% who say they are not enabling any non-PRS payment mechanisms. A substantial part of the market therefore appears vulnerable to fundamental changes in or decline of phone-paid services.

Of the respondents to the survey, 45% also enabled transactions using credit cards. Please note that this illustrates the overall payment activities of survey respondents and does not suggest that this share of phone-paid services can also be paid for using credit cards.

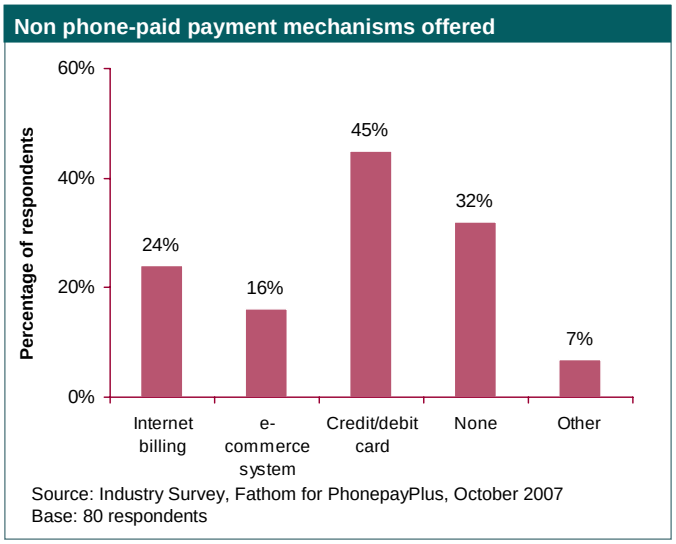
**Fig. 3.e:**

**Approximately how much of your UK revenues are generated through phone payment mechanisms?**




Source: Industry Survey, Fathom for PhonepayPlus, October 2007
Base: 83 respondents

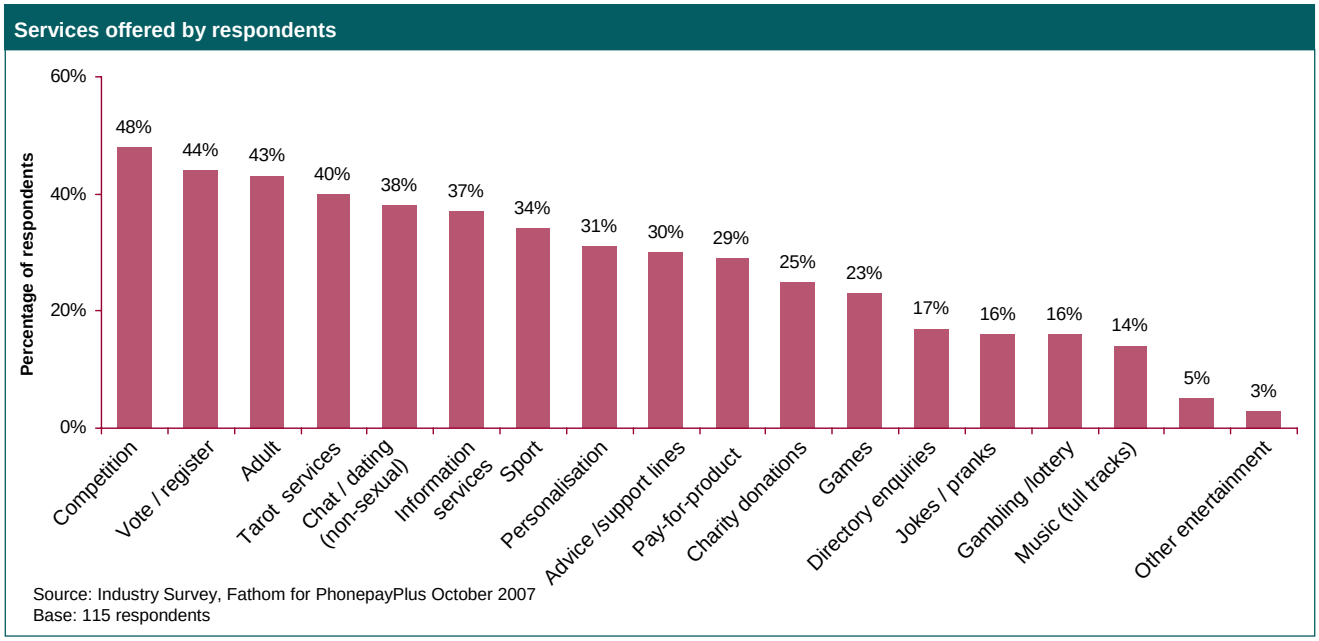
**Fig. 3.f:**




## 3.5 Types of services offered

A wide variety of services using phone-payment are available, in a significant range of mass-market sectors. The widespread consumer perception that "*there are no phone-paid services I'd want to use*" must be attributable to a failure to reach the end-users with marketing message, or services which fail to provide sufficient value for the end-user.

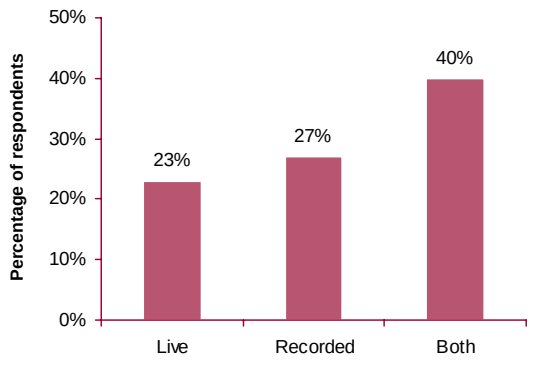
**Fig. 3.g:**



Both live and recorded services are widespread. Live services have a significantly more stringent regulatory framework.

**Fig. 3.h:**

**In general are the services your company offers across all content types live, recorded or both?**




Source: Industry Survey, Fathom for PhonepayPlus, October 2007
Base: 96 respondents

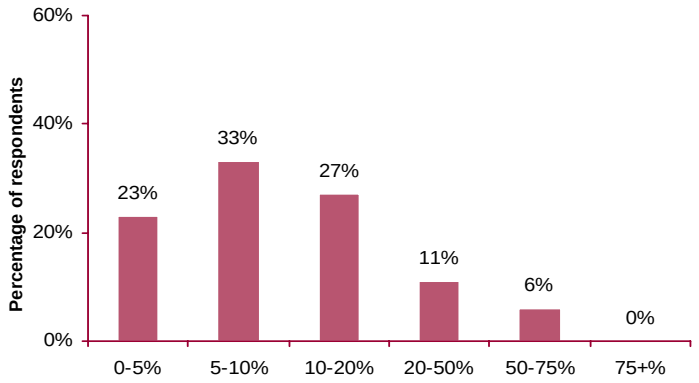
## 3.6 Propensity to innovate

Forty-four percent of companies surveyed claimed that they spend more than ten percent of annual operating costs on research and development. By comparison, the UK's top five fixed line telecommunications companies spent an average of 5.1% of revenues on R&D in 2006 , but apart from BT, none spent more than 2.8%[5]. BT's R&D spend equates to 5.5% of revenues or 24% of its operating costs. The top five fixed telecoms operators globally spent an average of 1.6% of sales on R&D.

**Fig. 3.i:**

[5] Source: Department for Innovation, Universities and Skills, www.innovation.gov.uk, 2007

**What percentage of your annual operating costs are attributable to research & development?**




Source: Industry Survey, Fathom for PhonepayPlus, October 2007
Base: 79 respondents

# 4 *Size of the current phone-paid market*

**Overview of findings:**

- UK consumers spent an estimated £1,082 million on phone-paid services in 2007
- Directory enquiries is the largest segment, with a 19% market share
- Four additional segments are valued at more than £130 million each:
  - Adult services
  - Competitions, voting and participation TV
  - Information services
  - Mobile personalisation

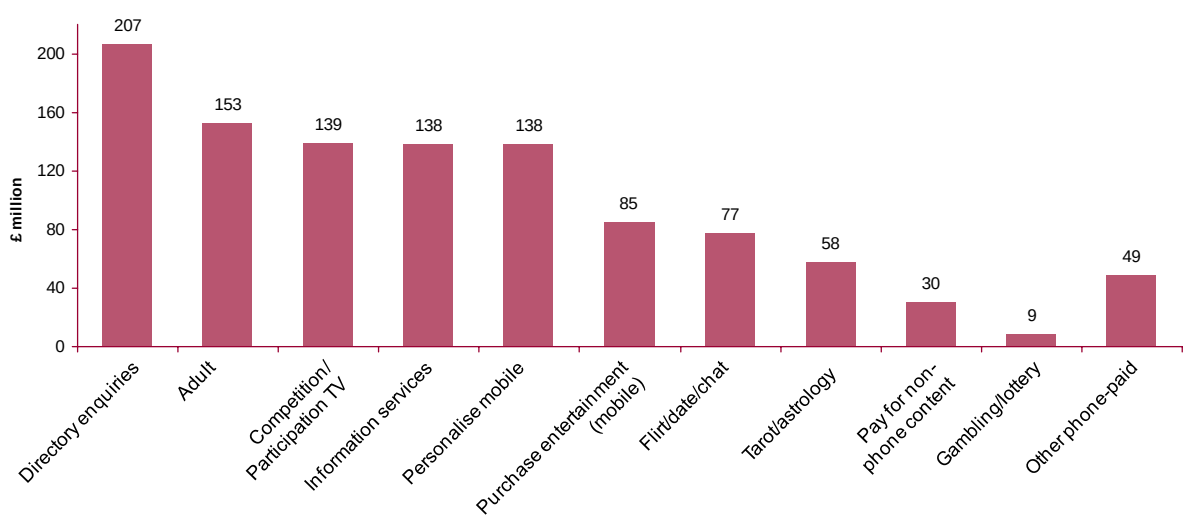
## 4.1 Market value by segment

UK consumers are estimated to have spent £1,082 million on phone-paid services in 2007. This includes services paid for using phone-payment through all phone-paid mechanisms. For the mobile segment, it includes services provided both on- and off-operator portals.

The largest service segment is directory enquiries, with an estimated market size of £207 million. This is followed by adult services, which is estimated at £153 million (see fig. 4.a), but nevertheless only represents 14% of the overall market. The competitions, voting and participation TV segment is estimated at £139 million, despite the drop-off of participation TV revenues, which has caused a dent in the overall market size.

**Fig. 4.a**

**UK market for phone-paid services by sector**




Source: Fathom model

In the mobile segment, the dominating personalisation segment is in decline in its current shape, under pressure from the capabilities of increasingly sophisticated mobile devices. The prevalence of camera-phones has reduced mobile image sales dramatically. Ring-tones are meanwhile in a slow decline – but for the industry, the shift from polyphonic to real-tones has already reduced margins dramatically[6]. In addition to reduced sales, ringtones are suffering from price pressure – with full track downloads over the air priced around £0.99-£1.29, it is becoming increasingly hard to justify ring-tone prices of £2.50-£4.50.

Increasingly capable mobile handsets mean that there are greater possibilities of selling content to mobile users, however. Much of the sales of mobile entertainment currently take place on operator portals, since mobile operators can bundle data charges as part of the consumer-price. Not all such services are paid for through phone-payment mechanisms. While on-portal transactions of content are included in the market-sizing, content acquired through operator bundles of content is not. For example, while 3 retails high volumes of both full tracks and music videos, some of these will be acquired through the allowance of £5 content spend the operator offers subscribers.

## 4.2 Methodology

We used aggregate outpayments provided by PhonepayPlus in order to size the overall phone-paid services market. For the relative size of market segments, we used consumer research and aggregated price-points by type of service. We then sought to sense-check the sizes of market segments by comparing them with other research and statistics as well as getting industry feedback and revised figures accordingly.

A range of mobile phone content is sold through subscription packages which include both ringtones and entertainment, such as games. We have not modelled this segment separately but aimed to factor this into the price-points used for each service category. See fig. 4.b. for a description of each segment.

[6] This is due to additional royalties being due to record labels and artists for real-tones (recording and performance rights), on top of the existing royalties due composers and revenue share due operators for billing.

Fig. 4.b

### Phone-paid service segments – descriptions

| Segment | Description | Phone-paid payment mechanisms | Share of market |
|---|---|---|---|
| Directory enquiries | All directory enquiry services, voice and text-based | Voice and mobile | 19.1% |
| Adult entertainment | All content of a sexual nature, including adult chat, video, images etc. | Voice and mobile | 14.1% |
| Competitions, voting and participation TV | All competitions, votes and registration services regardless of origin of call-to-action.<br>All participation TV activity, including text-to-screen. | Voice and mobile. TV voting currently predominantly voice. | 12.8% |
| Information services | Including sports and news updates, sports scores and tipster lines and a wide range of specialised information services such as legal or technical advice. | Voice and mobile | 12.7% |
| Mobile personalisation | All mobile personalisation services – predominantly ringtones and graphics | Mobile only | 12.7% |
| Purchases of entertainment for mobile phones | Purchases of games, music, video, TV and any other entertainment for consumption on mobile devices | Mobile only | 7.9% |
| Flirt/date/chat | All chat and dating services of a non-sexual nature | Voice and mobile | 7.2% |
| Tarot/astrology | A range of fortune-telling services including tarot, astrology and psychic services | Voice and mobile | 5.3% |
| Payment of non-phone content and services | Payment for all non-phone-based content and services, including online content, WiFi access. | Predominantly mobile but includes voice | 2.8% |
| Gambling/ lotteries | All types of phone-paid gambling and lottery activity, except participation TV | Voice and mobile | 0.8% |
| Other phone-paid | All phone-paid services not covered by other categories, including direct charity donations, non-TV related content uploads and voice-based non-adult entertainment | Voice and mobile | 4.5% |

# 5 Drivers and inhibitors of the future market

**Overview of findings:**

- Areas that will play a key role in determining the future phone-paid services market include the evolution of:
  - Consumer confidence
  - Availability of compelling content and services
  - Marketing channels
  - Mobile data charges
  - Commercial terms for mobile phone-paid services
- Over the next two years, increasing technology take-up and use will change consumer behaviour and be a major driver underpinning a number of other changes that will affect the market for phone-paid services.
  - These changes include convergence, which will enable services and payment mechanisms to transition between platforms and service offers to be provided over several platforms
- Consumer confidence is crucial to the use of phone-paid services and it is currently low after 2007 problems with participation TV. Other payment mechanisms such as VoIP, NFC, credit/debit cards, internet billing mechanisms may increasingly rival phone-payment

Overall, the success of any payment mechanism is driven by a number of needs being satisfied.

For the consumer:

- Ability to pay for services they want using the payment mechanism, e.g. availability of attractive services
- Clarity about how much they will be charged
- Confidence that payment is secure and correct – and that goods/services requested are delivered
- Confidence that there is recourse if there is a problem
- Access to service (ubiquity) and ease of use

For the industry/merchant:

- Clarity on rules and regulation
- Ability to reach a sufficient number of end-users
- Fair/advantageous business models
- Fair/equal regulation

Phone-paid services excel at certain of these areas – in particular **ubiquity** and **ease of use**. They are also highly suited to micro-payments. These aspects enable them to be extremely important, fuelling a sizeable market, despite shortcomings in some of the other needs. Shortcomings include a lack of consumer confidence, current consumer

perception that there are no services for them and a lack of attractive commercial models, in particular for mobile phone-paid mechanisms.

Phone-paid services provided by non-operators direct to consumers are driven by the ability to provide a consistent service at a consistent price across all phone providers. The real value of service enhancing enablers (e.g. location APIs) comes when it is offered by all providers. This significantly enhances the ability to easily market services to end-users.

This section highlights a range of specific areas that, depending on how they develop, will drive or hinder the development of the market for phone-paid services in the next two years. We look at the likely development of different phone-paid mechanisms in Section 6.

## 5.1 The future context

### *5.1.1 Technology take-up and use*

**Likely development:**

- Broadband is already mass-market – by 2009, 3G will be too
- The uptake of higher-speed network access and more capable devices enables new services to be launched
- Usage of both internet and mobile channels to access digital media and services will increase substantially
- Increased technology take-up drives changes in consumer behaviour and makes convergent services feasible (see further section 5.1.5 below)

Technology developments are fast-moving, but the market impact from technology evolution is felt only when a sufficient number of consumers are using a technology. Currently, 61% of UK households have internet access[7], allowing consumers an alternative to phone-paid services when they want to find information and entertainment.

In two years' time, widespread uptake of broadband, 3G and Wi-Fi enabled portable devices (laptops and handheld devices) will begin to bring about a change in the way that consumers use digital services. Users will increasingly be able to access content from a range of devices and payment mechanisms may more easily transition from one type of platform to another (see section 5.1.4 below). Already, 36% of UK adults with internet access use a laptop with wireless connection to access the internet, 35% use their mobile phone and 7% a different handheld device[8].

#### 5.1.1.1 Broadband and Wireless (WiFi)

Broadband penetration in the UK market has already reached mass market penetration. Eighty-four percent of the country's more than 15 million internet households now have a broadband connection[9].

Wi-Fi hotspots are widely available and laptop sales are growing. However, there are some usability limitations around consumer-use of public premium Hotspots. It is not possible for all providers to serve all locations, which means even

[7] Source: National Statistics, August 2007: National Statistics Omnibus Survey, Northern Ireland Omnibus Survey and Survey of Internet Service Providers
[8] Source: The International Communications Market 2007, Ofcom, 12 December 2007
[9] Source: The International Communications Market 2007, Ofcom, 12 December 2007

those that subscribe to a Wi-Fi service may need to go through the process of paying for connectivity on-screen. This does present an opportunity for phone-paid services as PSMS could be used as a payment mechanism rather than credit card for shorter sessions. Some service providers, such as The Cloud, already offer this functionality.

Drives in several international cities to create city-wide Wi-Fi networks have more often than not faltered and assumptions that widespread, single access Wi-Fi networks will be available in the short term look less likely. However, an increasing range of Wi-Fi enabled handsets enable users to choose between Wi-Fi or the mobile network when accessing data services – and also provides a channel for VoIP over the mobile device.

#### *5.1.1.1.1 Mobile networks for laptop connectivity*

While there are increasing opportunities to get content onto mobile devices without using the mobile network, mobile operators are addressing the laptop wireless market with USB Modems which use 3G or HSDPA networks for laptop access, effectively competing with Wi-Fi. Attractively designed USB Modems provide a greater opportunity to target the wider consumer market than the more corporate-focused data-cards. In the UK, 3 has directed its proposition at consumers and other operators are following suit. Operators also embed SIMs directly into laptops.

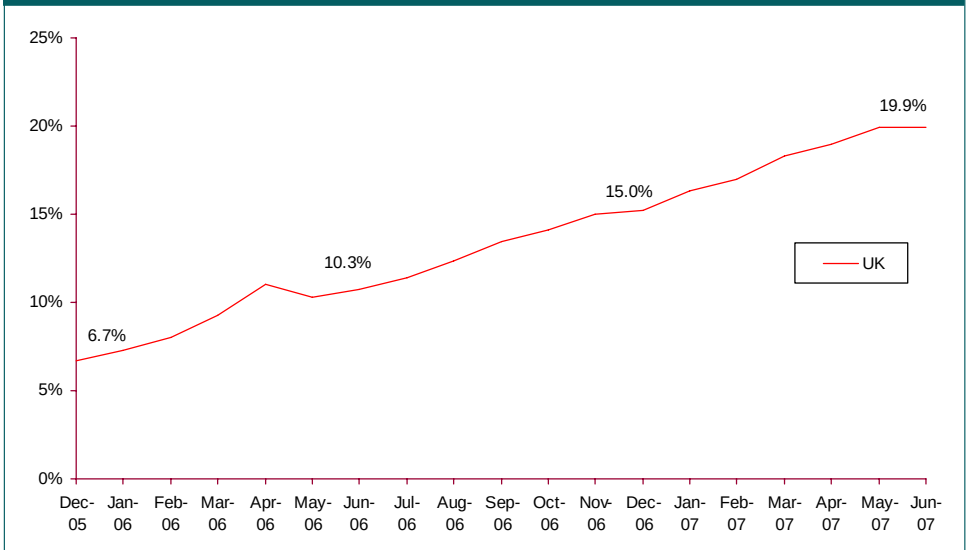
This presents a possibility for operators to transition to deeper involvement with consumers also on a 'fixed' internet screen, which could result in increased opportunities to use mobile transactions capabilities over the fixed internet.

### 5.1.1.2 Mobile & Wireless subscriber transition

Mobile phone users are moving from the 2G GSM technology to more advanced 2.5G (GPRS) and 3G handsets. Nevertheless, Informa Telecoms & Media expects a total European 3G subscriber base of 186.5 million in 2009, with a substantially greater amount, 335.5 million still using 2G and 2.5G technologies.[10]

**Fig. 5.a:**

**3G penetration, UK mobile subscribers, 13 years or older, Dec 2005-June 2007**




Source: M:Metrics Ltd MobiLens

[10] Source: Informa Telecoms & Media, Future Mobile Broadband, 2007

HSDPA is the only cellular technology beyond 3G that will make an impact on the market in the next two years. Informa expects that across Europe, there will be 57.3 million 3.5G subscribers in 2009, 89% of which will be HSDPA.

WiMAX, which has long been promoted in the mobile industry as a Wi-Fi challenger, is only expected to garner 2 million subscribers across all of Europe by the end of 2009.

In the UK, M:Metrics end-user research registered 19.9% of mobile users over 13 years of age as 3G users at end-June. Growth in the UK 3G subscriber base is likely to accelerate over the next two years – providers typically regard it as possible to target mass-market marketing campaigns of services to user-bases of 30-35%.

#### *5.1.1.2.1 Increased mobile internet and multimedia content usage*

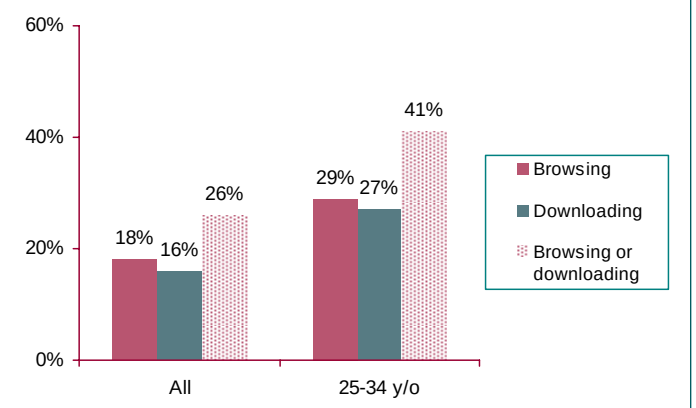
Overall, the usage of mobile data services beyond SMS and personalisation is increasing. For example, Vodafone reported a 37% increase in non-messaging data revenues for the Group in the six months to September 2007[11]. Billing enabler Bango has noted that consumers are now aware of mobile internet services, enabling providers to switch from focusing on customer education to customer acquisitions[12].

M:Metrics consumer research found that 18% of UK mobile users browsed mobile content in the three months to September 2007. In the 25-34 age segment, 29% browsed on their mobiles (see fig. 5.b).

Some of the usage of mobile browsing and other mobile content services can be attributed to the take-up of 3G. 3G handsets have better usability, are more feature-rich, enable users to more quickly access content and they are currently used by more early adopters. M:Metrics research shows that consumers with 3G handsets use mobile content services far more frequently than non-3G users[13].

**Fig. 5.b:**

**UK browsing and downloading, users as share of total user-base, 3 months to Sept. 2007**




Source: M:Metrics Ltd MobiLens

[11] Source: Vodafone financial result announcement, 13 November 2007
[12] Source: Bango press release, 21 November 2007
[13] Source: Variety of M:Metrics research, including presentation at mobile advertising educational series, November 2007

But there are a range of reasons for increased mobile internet take-up in addition to the growth in 3G penetration and the improvement in handset capabilities, including:

- Increased ease of use of mobile handsets – the increased functionality on mobile phones has led many models to become too complex. The launch of Apple's iPhone has brought usability back into focus and this emphasis is expected to continue
- Marketing efforts focused on mobile internet usage, including significant campaigns such as those from Vodafone for Mobile Internet and T-mobile for Web'n'Walk, promotions for internet access on Nokia and Windows Mobile handsets as well as both marketing and media coverage around the iPhone
- Increasing focus on and publicity around the mobile internet by large internet brands such as Google and Yahoo!
- Intensified mobile content efforts from media brands, including broadcasters and publishers
- Increasingly capable mobile phone browsers, including open-source products from groups such as Mozilla

These trends will only become stronger over the next two years – for example, handsets based on Google's Open Handset Alliance are expected to reach the market within this timeframe.

#### 5.1.1.3 VoIP

VoIP can be provided on a basis close to traditional telephony, where for example corporate users use the technology for what to the end-user appears close to a traditional phone network. But there is significant growth of internet-based VoIP providers offering cut-rate or free calls. Typically calls that are charged for (e.g. SkypeOut) are billed through a stored value account, which increasingly provides a mechanism for other transactions (see point 5.3.2 below). Skype has some 220 million registered users worldwide[14], but it is not clear how many have available credit for SkypeOut calls.

According to research by IDATE, cited by Ofcom, only 1.2% of the UK population used VoIP in 2006 (this excludes PC-to-PC calls), far less than the reach of VoIP in France (10.5%) or Germany (4.2%)[15].

### *5.1.2 Out-of-network content access*

**Likely development:**

- Growth in side-loaded content to mobile, potentially diminishing importance of mobile networks in delivering services
  - This presents a potential threat to phone-paid services

Phone-paid payment mechanisms are particularly dominant where the content is delivered in-call (e.g. phone-paid phone lines where content and payment is intrinsically linked) or on-device (e.g. on-device discovery and payment by PSMS for a mobile game). However, sideloading[16] of certain types of content, in particular music, is now far more prevalent than access and delivery via the network. M:Metrics research found that while 13.4% of UK users listen to sideloaded music,

[14] Source: Digital Media Asia
[15] Source: International Communications Market 2007, Ofcom 12 December 2007
[16] Transfer of content to a device not using the network – e.g. from a PC, directly from other device etc.

only 3.5% listened to music downloaded from their operator[17]. This is due to a range of factors, including uncertainty over data costs, familiarity with loading content onto other portable devices (e.g. MP3 players and iPods), mobile usability issues and the availability of free content on the internet.

Music is the predominant category of content used in this way, but further types may follow. For example, games provider Electronic Arts' CEO, John Riccitello, recently said that side-loaded mobile games would be a significant growth area going forward[18].

A growing number of mobile phones are also Wi-Fi enabled – enabling access to the full internet, any content in 'personal storage' and internet payment mechanisms. However these are currently high-end devices. Bluetooth is, however, widely used, in particular by the younger demographic, in order to transfer content.

Side-loading presents problems for rights-holders – content is frequently shared between mobile phones without copyright protection and payment. It may also mean an increased emphasis on ad-funded content – if an advertisement is embedded in content, viral spread is welcomed rather than resisted as it means the ad reaches more users.

### *5.1.3 Mobile data charges*

**Likely development:**

- Increased take-up of flat-rate data or bundling of data with subscription by operators in order to increase usage
- Operators have a vested interest in making the message around flat-rate data clearer to users of more advanced handsets

The direct-to-consumer mobile content industry has consistently argued that many types of mobile content services, in particular those relying on rich media, are not feasible unless mobile data is zero-rated or provided on a flat-rate, all-you-can eat basis. This is due to the fact that consumers currently are *uncertain about how much they will be charged* for using a mobile data service. Charging has typically been per-MB, which is not readily comprehensible to end-users. Furthermore, tariffs have been high.

Operators are tackling the problem by providing flat-rate bundles of data, or imposing daily charge caps on data usage (e.g. T-Mobile will not charge users more than £1 per day). What appears to be lacking is consumer-awareness of these initiatives.

Another option is for a content provider to bundle the data-cost with the charge for a service. This requires data to be available on a wholesale basis and this capability is currently only offered by one operator in the UK.

Whilst flat-rate data bundles help clarify costs to consumers, they do not solve all problems:

- They only enable mass-market rich media services once they are adopted by a sufficient number of users
- Where there is an upper data limit, the risk remains that a user will surpass their limit and so be charged

In the opinion of industry interviewees, richer-media services will become feasible for operators to provide and promote once 30-35% of users have tariff plans which make them confident that data costs will not be an issue. Expectations for when this will be the case for the mass-market vary. Developments that would help build the user-base include:

[17]Source: M:Metrics MobiLens, average 3 months to June 2007. Note that operator downloads of music may be fuelled by free offers,e.g. 3's £5 free content bundle.
[18] Source: Moconews.net, 29 November 2007

- Consumers finding enough need or want for services offered to pay an incremental charge per month
- The monthly charge being low enough to encourage take-up
- Operators bundling data with existing price-plans
  - This would make users regard the data as a 'free add-on'
  - Operators already do this to some extent, for example O2 offers 0.5-1 MB inclusive data in its post-paid plans

### *5.1.4 Commercial terms for mobile phone-paid mechanisms*

**Likely development:**

- Competition will increase for phone-paid payment mechanisms. In order to stay competitive, it will become more important for mobile phone-paid mechanisms to offer more generous terms
- It is likely that there will be downward pressure on revenue share arrangements for mobile phone-paid services over the next two years

Mobile operators offer considerably lower revenue shares than fixed operators for phone-payments. There is some justification for this in the cost carried by operators when providing pre-paid accounts, but operators have also been able to operate on higher margins due to a lack of competition for on-phone transactions. The ubiquity and ease of use of mobile phone payments has made this payment mechanism attractive to content and service providers despite the commercial model attached.

It is likely that increasing 3G take-up and mobile data usage will bring other payment mechanisms onto the phone (see further section 5.3 below). This will create a more competitive environment and in the medium-term, commercial pressures may force a reduction in revenue share retained by operators. That would, in turn, make phone payment a more attractive payment mechanism.

### *5.1.5 Convergence and its implications for phone-paid services*

**Likely development:**

- Convergence will enable multi-platform service offers, which will become increasingly prevalent
  - Services may be tailored to each platform, but are likely to have a single cross-platform billing/payment framework wherever possible
- It also enables users to access the same services over several platforms (e.g. the full internet on a mobile device)
- Users are accustomed to free digital content on the internet – and will increasingly expect it on mobile if they view the mobile internet as 'internet on mobile'
- Phone-payments will need to improve reporting, user experience and revenue share to be competitive with alternative payment mechanisms
  - However, there remain substantial opportunities in the market for micro-payments
  - Also increased opportunity to enable payment for a wider range of mobile services, where these are not cross-platform or the initial content discovery happens over mobile

The idea of convergence has been hyped in the telecoms and media sectors for some time, but service delivery and content upload via multiple platforms is now becoming reality. It is underpinned by the technology take-up detailed above, including mass-market UK broadband uptake, high 3G penetration enabling more services to be pushed over mobile devices and proliferation of Wi-Fi enabled laptops which further link wireless networks with fixed internet use.

This will have a fundamental impact on the market and the way it is regulated due to the **blurring of lines** between devices, services and payment mechanisms that have previously been clearly demarcated. These will increasingly play in the same space, making separate conditions harder to maintain as these may create an un-equal marketplace.

#### 5.1.5.1 Transition of services between platforms

The increased take-up of digital access mechanisms allows services to transition between platforms. For example, the rise in broadband penetration allows a wider audience for video services over the internet, bridging the gap between TV and online services. According to research carried out by Ofcom in October 2007, 49% of UK adults with internet access watch short video clips online, while 20% watch longer video content[19].

UK broadcasters have rolled out on-demand IPTV services – such as 4oD from Channel 4 and iPlayer from the BBC - and UK terrestrial channels have recently come together to work on a joint platform for their offers. Alongside activities from UK players, global IPTV efforts come from a range of new providers including Joost, who are overlaying a TV viewing experience with interactive features and chat. Joost is using advertising as a revenue stream, but Jalipo, for example, has set up a prepaid wallet system for payment for access.

These efforts, aimed at the PC, now look more likely to succeed than interactive TV, which hasn't lived up to initially high expectations. It may therefore affect red-button commerce until the online viewing experience in turn transitions onto the TV screen.

[19]Source: The International Communications Market 2007, Ofcom, 12 December 2007

Broadcasters are also adding mobile video and TV services to their line-ups, while internet brands are pushing mobile versions of their portals and services, such as Yahoo! Go or Google Maps and mobile search.

The approach to mobile service launches varies, but where subscribers are acquired through other platforms, mobile becomes an extension of the brand. For example, Sky offers its subscribers access to both broadband and mobile. Yahoo! markets Yahoo! Go via its internet portal to existing users. For non-subscribers, brands may tailor specific services: the mobile TV package Sky offers through several operators is an example of this.

An additional trend is the linking of services between platforms. For example, Vodafone's mobile internet service is most easily personalised by users through an online interface, by dragging and dropping the services they want on their phone. An increasing amount of user-generated content, including both blogging content and uploads to video and photo sharing sites, originates from mobile phones.

#### 5.1.5.2 User-generated content and social networking

User-generated content has become a significant phenomenon on digital media and an increasing amount of users blog, share videos or photos, or contribute to mainstream media as 'citizen journalists'. This trend looks likely to continue and it is changing the media landscape.

Social networking and forms of digital interaction with other consumers has become an extension of face-to-face social interaction. This fast-growing trend is evident on a range of services - from business networks such as LinkedIn to lifestyle networks such as MySpace, Facebook or ASmallWorld and virtual worlds such as Second Life. According to research carried out by Ofcom in October 2007, 39% of UK internet-users use the web to access social networking sites[20]. This represents the start of a potentially significant shift in how consumers interact and communicate with each other and as such could have an impact on other communications mechanisms.

Second Life, which has a much smaller user-base than the social networking sites, has developed its own currency system, but like most other of these sites, it enables basic interactions for free on the Internet. The sites are funded by a range of increasingly innovative advertising models.

Social networking services are transitioning to mobile. Some - for example MySpace - initially carried a fee and are now free. Consumers are expecting to be able to use basic functionality without specific charges. However, users are up-sold digital goods online. Facebook users, for example, can send each other digital gifts that carry a charge. This type of up-sell, and potential charging for up-loading content, is likely to be the greatest opportunity for phone-payment for the mobile versions of these services.

#### 5.1.5.3 Multi-platform offers shift payment for mobile services

We expect the availability of content offers across multiple channels to shift payment for mobile services – which is currently typically via Premium SMS or WAP billing –away from phone-paid payment in many cases where services have their primary outlet on a non-mobile channel. This shift will occur in different ways depending on the service:

- Billable multi-platform offers will be charged for via payment mechanisms originating over the internet, or via a TV/online bill
  - Driven by:

[20] Source: The International Communications Market 2007, Ofcom, 12 December 2007

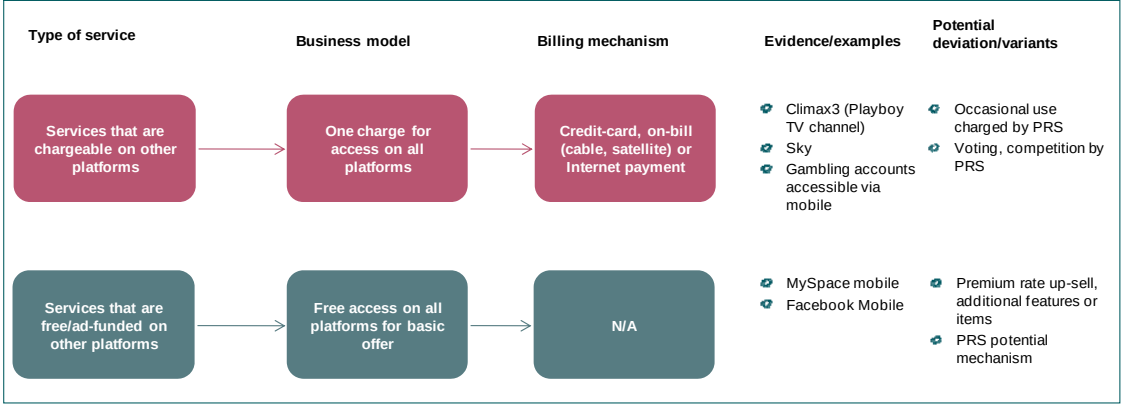
- Better revenue share arrangements for non-mobile payment mechanisms
- Lack of consumer confidence in premium payment mechanisms
- Phone-paid services having a separate regulatory environment placing additional requirements on advertising

- Services that are free on other platforms will also have a free mobile offer
  - Driven by:
  - Consumer reluctance to pay for services they get for free over other platforms
  - Accessibility of the full internet on mobile or TV platforms, which makes separate charges for mobile even more difficult to justify to consumers
- In both cases, there is potential for up-sell/retailing of additional items and services which may be billed for through phone-paid services

Services are already in the market demonstrating this shift, including Sky's mobile services for existing subscribers, MySpace mobile shift from paid to ad-funded service and Playboy TV's multi-platform offer of Climax3 across TV, broadband and mobile for £12 per month.

**Fig. 5.c:**

**Likely evolution of business and payment models of multi-platform services**



### *5.1.6 Service discovery/marketing*

**Likely development:**

- Print media is likely to remain important for many providers, but there will be a need to tap into new marketing channels
- For mobile services, discovery mechanisms over mobile devices, including mobile marketing, advertising, search and discovery will be important
- The range of 'real-world' discovery and access mechanisms for mobile services will increase. SMS shortcodes followed by WAP Push will continue to be important, but use of QR-/2D barcodes will grow, particularly in the latter part of the period considered, when a greater number of phones have built-in readers

Reaching new users with marketing of services will always be important. There is currently concern among providers of traditional premium voice services that the slow decline in readership of print media will make it harder for them to market services in the future.

Digital channels clearly present an opportunity – in particular for marketing digital services. Mobile advertising is an alternative revenue stream to phone-payment, but it also enables providers of phone-paid services to reach a mobile audience. However, the internet may be a more difficult channel to use to promote premium voice services, since it already provides immediate access to a wide range of content and information.

The evolution of several service discovery/marketing channels over the next two years have to be considered:

**Print media**: traditionally the most important marketing channel for traditional phone-paid services, yet declining as reach and ad expenditure (particularly on classified ads) fall:

- The continuing decline in readership of newspapers is reducing the role of a key marketing channel, in particular for traditional voice-based phone-paid services
- Total press advertising for Q1 2007 was 3.3% down year-on-year - display fell 2.1% and classified 4.8% [21]
- Concern from publishers around phone-paid services, fuelled by consumer trust issues such as those around participation TV, also means some advertising spaces are being withheld from phone-paid. This tendency is likely to be short-lived

**Digital marketing**: digital channels are accessible and offer opportunities, but they also:

- Present a new challenge as digital discovery mechanisms are not always as straightforward
- Can be a more difficult use-case, since unless users are specifically searching for phone-paid services, a range of content is already available on the internet

**TV:** Providers of phone-paid services are using TV advertising to reach end-users – typically on niche channels. However, the cost of TV as an advertising channel means that the channel is viable mainly for services that encourage repeat usage, such as chat/flirt. Digital TV channels could be a viable future marketing channel for compelling services expected to yield higher returns per user

[21] Source: The Advertising Association

**Mobile advertising and marketing**: mobile advertising is growing and providing a new and unique opportunity to market mobile PRS services

- Push-based mobile marketing can work well to targeted, opt-in user bases, but needs to be relevant to the end-user in order not to be intrusive
- Mobile advertising can be used to promote phone-paid services – most current advertisers are providers of mobile content[22]
- Reaches a key target audience – e.g. existing users of mobile content
- But advertising space may be harder to come by as interest in the medium grows

**Search** : the major internet players are investing heavily in the area of mobile search, but ease-of-use remains an issue

- In mobile search, top placement is even more important than on the fixed internet – this is likely to favour bigger brands or those with deeper pockets

**Affiliate marketing**: seen as an important growth area for marketing phone-paid services. Revenue-share models are an increasingly important part of the marketing mix

**QR codes/ 2D bar codes**: barcodes, placed for example on in print or outdoor media, that users take a photo of or scan with their phone in order to launch a WAP site, video or other content

- Potential to be a new call-to-action
- Usability is currently an obstacle to uptake – code readers need to be integrated into the phone in order to work easily and intuitively. Given handset replacement cycles, this will take some time to achieve
- 2D barcodes are of significant interest to advertisers and content owners. News International is now putting QR codes in The Sun, for example[23] . The Mobile Code Consortium, whose members include advertising giant Publicis Group and handset vendor Nokia, is aiming to build a 2D barcode standard

### *5.1.7 Regulatory structure and regulation*

**Likely development:**

- A range of convergent services means that it will become more important for regulators to have a dialogue between themselves and with industry
- The additional mechanisms for guaranteeing consumer trust in phone-paid services are important, especially in the short-term, as consumer confidence is currently low
- It is possible that requirements around other payment mechanisms will increase to meet those of phone-paid services

[22] Source: M:Metrics presentation, November 2007
[23] Source: New Media Age, December 2007

Regulation helps to underpin a healthy market when it is

- Clear
- Consistent
- Proactively enforced

By their nature, regulators constantly have to balance the need for consumer protection with the risk of over-regulation that could harm the industry. In our research, we received feedback highlighting a number of concerns within the industry. While not all criticisms of the regulatory environment are wholly justified, we have briefly considered concerns around:

- Lack of joined-up thinking and, as part of that, insufficient industry consultation from regulators
  - This creates uncertainty, which limits innovation as companies are uncertain about what is and is not permitted
- Phone-paid services are regulated slightly differently from other payment mechanisms – for example around the way services are advertised
  - Codes of practice created by operators in practice constitute an additional layer of regulation for other parts of the phone-paid value chain
- Insufficiently proactive engagement by regulators to combat problems before they cause consumer harm
- Regulation not being 'future-proof' for fast-moving industries

#### 5.1.7.1 Regulatory clarity – joined-up thinking

Depending on the service offered, there are often several regulatory bodies involved in setting regulation for different aspects of services. Regulators whose remits may have to be considered include Ofcom, PhonepayPlus, the Gambling Commission, the Advertising Standards Authority and the Information Commissioner (see further below). Directives from the European Union will also affect UK legislation.

**Fig. 5.d:**

**Regulators whose remit may affect phone-paid services (examples)**

| Regulator | Remit |
|---|---|
| Ofcom | Regulator and competition authority for the communications industries, across TV, radio, telecoms and wireless communications services |
| PhonepayPlus | The industry-funded regulatory body for all premium rate charged telecommunications services |
| FSA | An independent organisation responsible for regulating financial services in the UK. |
| Gambling Commission | Regulatory body for casinos, bingo clubs, gaming machines, remote gambling , the larger society and all local authority lotteries in Great Britain |
| ASA | The independent body set up by the advertising industry to police the rules laid down in the advertising codes |

This range of regulatory considerations causes confusion in the market. Many players are uncertain about what regulation applies to them and find it problematic to ensure compliance since each regulator typically acts independently. Where this problem persists, services are less likely to be launched or require more investment due to a need to investigate uncertainties.

### 5.1.7.2 Specific regulatory framework for phone-paid services

Phone-paid services have their own set of regulation that differs from generic legislation governing payment systems or advertising standards. In certain aspects – such as rules stipulating how services are advertised – the rules for how consumers must be informed about pricing and warned that they are about to make a payment are more stringent for phone-payment than for other payment mechanisms. Users are therefore better informed, but may also be more likely to abort a purchasing process. For this reason, providers may be more reluctant to use or promote a phone-payment mechanism, despite the fact that they have the ability to provide a safer environment for the consumer.

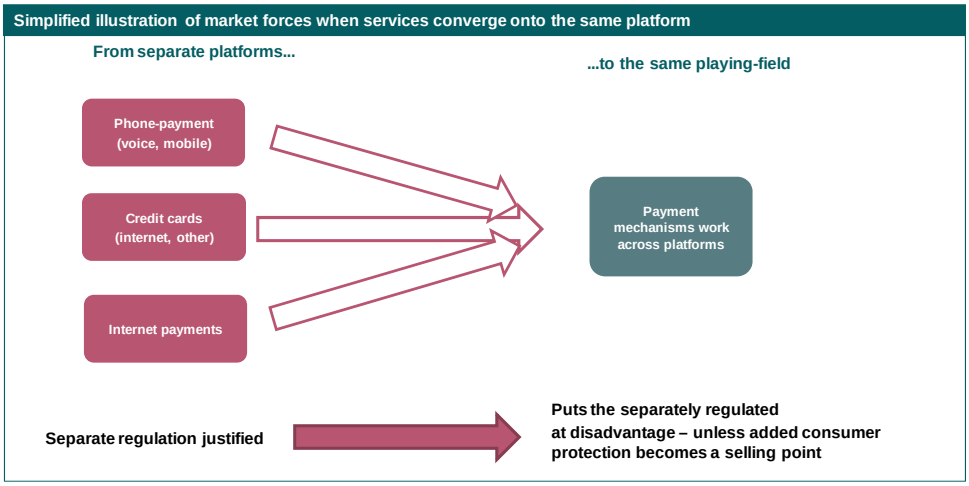
On the other hand, with more than a quarter of consumers not trusting the channel, the stringent rules for phone-payment currently appear necessary in order to re-gain consumer trust.

With a more converged environment, an increasing number of payment options are available for payments both on the phone and on the web. This means that phone-payment will in many cases lose its position as the only payment mechanism available to merchants and consumers. This makes differences in regulatory frameworks harder to maintain.

Phone-paid services may be at a disadvantage to other services if regulation remains un-equal. It is up to all regulators of payment services to determine what level of consumer protection is required for all services – from a consumer protection stand-point, the incremental information offered for phone-paid mechanisms may be desirable for all types of digital payment. There may be an opportunity to turn the more stringent requirements into an advantage by showing that phone-payment are more transparent than other payment mechanisms if there is active promotion of the additional consumer protection and build-up of trust. But currently, this is unfortunately not the image of phone-payment among consumers.

If this consumer perception of advantage cannot be built, it will be important that the rules are the same for all payment mechanisms operating on a platform. If they are not, there is a risk that phone-payment will be at a disadvantage.

**Fig. 5.e:**



#### 5.1.7.3 Proactive and future-proof regulation

Developments in technology for telecoms and media provide increasing opportunities for the creation of new services. Some of these will have features and functionality that have not been included in previous phone-paid services. Changes are happening fast and it is important for regulation to be flexible enough to enable regulators to deal with new types of consumer-protection issues without the need to revise regulation or legislation.

It will also continue to be important for regulators to take a proactive approach to any potential problems, both in order to protect consumers and to protect the market itself. A large number of interviewees thought that the phone-paid industry would suffer badly if further problems occur.

## 5.2 Drivers of demand for content & services

### *5.2.1 Availability of compelling content and services*

Likely development:

- As the addressable market of users of mobile data services increase, it will become increasingly attractive for providers to offer mobile services.
- More mainstream brands will move onto phone-paid platforms
- Increased competition is likely to drive innovation and quality of services
- There is also opportunity for innovation in voice-based services

In order to be successful, a payment mechanism must enable consumers to use it to pay for content and services that they want. Currently, a substantial share of UK consumers believe that there are no phone-paid services for them: of the 62% of respondents to our end-user survey that had not used phone-paid services in the past six months, 69% said they had no interest in services offered and 14% were ‘unaware of services offered’.

While the reason for this may in part be that users are not aware of the range of services offered, the fact that more than half of those using services only did so once or twice in six months suggests that users don’t find services valuable or compelling when they do use them.

Over the next two years, it is likely that a wider range of content and services will become available. In particular, we expect an expanding range of mobile services, but there is also opportunity for phone-payment to be used further as a micro-payment mechanism for internet and other types of content and services.

Drivers of an increased variety of services that could be billed through phone-payments include:

- **Availability** of information about what works as a mobile or voice service helps give more providers confidence to launch services
  - Some mobile operators already share this type of information with third parties. There is an opportunity for the whole industry to share more information about what services are most successful
- **Increasing use** of mobile content and services, which would create a virtuous circle by fuelling service development to the increased audience (see section 5.1.1.2.1)

- However, an increasing range of services will also be free to end-users, funded through advertising

- **Better commercial terms** for phone-payment (e.g. mobile payment) would give more confidence in it as a payment mechanism
  - It is likely that mobile operators will have to improve revenue share as the range of available forms of payment on mobile phones increases
  - Transfer of payment for services from PSMS to WAP billing or Payforit helps remove some of the problems with revenue leakage
- **New** and improved ways to discover content
  - Recommendation services as well as improved mobile search will help users find what they are looking for on mobile
  - Orange, for example, is launching personalised portals with recommendations based on usage on OrangeWorld
  - Vodafone is making available on-portal sponsored links to third parties[24]

### *5.2.2 Consumer confidence*

**Likely development:**

- Changing the 'label' from premium rate to phone-paid services can help change consumer perception
- Support from industry and regulators can help build confidence and avoid further problems

Consumer confidence in phone-paid services is currently low. Twenty-six percent of consumers that don't use phone-paid services say this is because they don't trust them, according to our survey. A wide range of the industry executives interviewed for this project identified the lack of consumer confidence as the main obstacle to growth in the market.

Early problems with phone-paid services occurred as a result of internet dialler scams. In 2005, mobile subscription services alienated users and this year, the phone-paid activities of prominent broadcasters have been scrutinised and sizable fines issued for wrongdoing. Some industry interviewees saw a ripple-effect following the Participation TV problems, with a temporary decline in some other phone-paid services.

In each of these cases, confidence has been eroded for a sector as a whole through the wrong-doing by some companies. For example, paying for mobile services through subscriptions is the basis of the enormously successful mobile data frameworks offered by mobile operators in Japan. The problems have been fuelled by extensive media coverage, causing ripple-effects throughout the industries affected. This has been most obvious in the area of participation TV as the large broadcasters have sought to protect their brands from being dented.

In addition to these problems, the term 'premium rate' for consumers has negative connotations as it is linked to adult and similar services. It is expected that some brands will, for example, shift customer services lines away from 087-numbers as these become labelled 'premium rate' to ensure they are not tarnished by the label.

[24] Source: www.msearchgroove.com, 12 November, 2007

Consumer confidence needs to be regained and remain strong in order for phone-paid services to continue to flourish and for established brands to use them. Many think that the industry would struggle should it see many further high-profile problems.

#### 5.2.2.1 Discrepancies between operators' call charges creates price confusion

There is a risk of further problems around consumer trust in the pricing of calls to premium rate lines from non-BT networks, in particular mobile phones. The price payable from non-BT lines is not clear and immediately available to consumers.

This is a problem since mobile handsets are increasingly used as primary telephone lines by many users and a substantial number of households use non-BT fixed lines. Research shows that there were as many mobile-only households as fixed-only households, 10%, by the end of 2006.[25]. In 2006, 35% of the UK's voice traffic was over mobile networks (up from 31% in 2005)[26].

Prices for premium rate line calls are advertised with specific charges from a BT line, with the addition that charges from mobile phones and other networks may vary. The additional charges placed on these calls by other operators can be substantial (see below), and it is not easy for TV viewers or other users of premium phone lines to determine what they will be charged for the call.

The differences can be substantial and there is no simple or immediate way for users to find out what charge a call will carry from their handset. Web information from operators, where available, often consists of price points for each number, rather than a simplified pricing structure (e.g. operators could choose to have standard pricing – e.g. 'Any call that costs £1.50 from a BT line will cost £1.70 from our network'). One operator also urges users to 'check back frequently' as rates may change.

**Fig. 5.f:**

**Examples of prices for premium rate calls, selected numbers and providers**

| Operator | 090074 | 090111/2 | 090404 | 087132 | 0871493 |
|---|---|---|---|---|---|
| **BT** | 10.2 ppc | 24.7 ppc | 80.1 ppc | 6ppc | 8ppc |
| **O2** | 50ppc | 50ppc | 200ppm | No info | No info |
| **Orange** | 6ppm (3ppm offpeak) | 25ppc | 150ppc | 6ppc | 8ppm |
| **Talk Talk** | 10ppc | 25ppc | 150ppc | 6ppc | 8ppm |
| **Sky Talk** | 10.2ppc | 24.7ppc | 150.1ppc | 6ppc | 6p connect fee, 8ppm |

Note: ppc= pence per call; ppm= price per minute
Source: Operator websites, Nov. 2007

[25] Source: Ofcom, The Communications Market Report, August 2007
[26] Source: Informa Telecoms & Media, Mobile industry outlook survey, November 2007

### *5.2.3 Mobile advertising*

**Likely development:**

- Mobile advertising inventory is now available on a range of sites and portals, but growth will be slow until a range of issues hindering development are overcome
- Growth is then likely to accelerate. Advertising will enable providers to monetise services that are currently free and an increasing amount of paid-for content is also likely to migrate to an ad-funded model
  - Ad-funded content will at times be accompanied by up-sell to paid-for items and additional services

By providing an alternative revenue stream for content and enabling companies to offer services to end-users for free, mobile advertising is a service demand-driver.

Many in the mobile content industry maintain that mobile advertising will be a major new revenue stream. Currently, however, the marketplace is highly fragmented and inventory is limited. In order to sell advertising, content first needs to be accessed by enough users to enable advertisers to have sufficient reach.

Further requirements from advertisers for a media channel also remain unfulfilled, including essential tools to determine return on investment such as measurement and response tracking. In addition, while mobile is touted as a unique advertising medium due to the ability to very narrowly target advertisements at the right end-users, these abilities are in most cases not yet available. The advertising industry is also typically not yet accustomed to purchasing advertising inventory in this way.

However, an increasing number of advertisers are testing the mobile channel, with budgets growing for experimentation. A number of industry initiatives are underway to tackle some of the inhibitors, while commercial products may help alleviate others. For example, the Mobile Marketing Association has defined standard advertising sizes for banners and consumer research firm M:Metrics is releasing an ad-tracking tool as well as integrating its end-user data with that of TGI, which supplies data to the advertising industry. Research firm Strategy Analytics expects mobile advertising to generate close to £300 million in the UK by 2011.

Mobile advertising is likely to affect the paid-for mobile content and services market in two different ways:

- Replace payment as a revenue stream for mobile content and services
  - Services driving significant usage such as chat or social networking capabilities (e.g. MySpace Mobile, Flirtomatic) are already provided for free
  - But such services may also have up-sell features that are paid for using premium rate – e.g. ‘digital gifts’, designed avatars - e.g. Habbo hotel uses PRS to buy “Habbo credits”, Flirtomatic for “Flirt points”
- Drive growth as a discovery mechanism for mobile content
  - Currently, the majority of mobile advertisers are suppliers of mobile content – the channel provides an ideal target audience (existing mobile content users)

## 5.3 Substitutes: Non-phone-paid payment mechanisms

**Likely development:**

- There is no single clear leading online challenger to phone-paid payment mechanisms, but a group of potential competitors
  - However one or several will be a competitive threat
- NFC is not likely to impact phone-payment as currently defined within the next two years, but it will inhibit possibilities for phone-payment to transition to become a point-of-sale payment mechanism

For a payment solution or technology to make an impact on the market, sufficient numbers of both consumers and merchants are required to use a scheme. Consumer take-up is driven by ease of use, trust in the scheme and availability of the scheme at preferred merchants and over preferred channels.

Merchant take-up is, in turn, driven by consumer use of a scheme, as well as financial rewards (e.g. fees, revenue share) and investment required to join a scheme.

The future success of phone-payment as a form of payment mechanism will be dependent on the prevalence of alternatives for consumers to use and phone-payment's position versus these alternatives. A wide range of potential other mechanisms are available – we outline some examples in this section.

PRS will in particular be under pressure from:

- Internet-based payment mechanisms - more advanced mobile handsets and prevalence of laptop use allows these to encroach on areas where phone-payment is now prevalent in two main ways:
  - Will provide an alternative payment mechanism on mobile devices
  - May also encroach on PSMS by using pre-registration, allowing SMS transactions without a premium
- VoIP providers, such as Skype
  - Also internet-based, but have had a focus on providing communication services in direct competition with operators. Increasingly aiming to use its pre-paid telephone accounts as 'wallets' and also provide premium rate lines. While initial deployments are said to be wanting, the sector is ready to innovate

It is important to note that competition from internet payment providers comes from a wide range of players. There is currently no clear winner but a number of different front-runners. This may limit the competitive threat as merchants may not want to manage relationships with a whole host of providers.

Most providers in the internet payment space are not focused on micro-payments. PRS has a significant opportunity to retain its importance in this area even on the internet – perhaps even more so as internet use moves onto mobile phones.

### *5.3.1 Internet-based payment mechanisms*

The section below briefly describes some internet-based payment mechanisms that are looking to expand into the mobile payments space. Some of these payment mechanisms are very large in size, PayPal claims over 150 million account holders worldwide, however their mobile payment offerings remain very small.

**PayPal (mobile)**

PayPal offers both text and WAP services for mobile phones, using the same account as for online, with no need to enter card details. The service also allows users to send money to other people and donate to charity. In terms of usage PayPal estimates it currently has around 20 million general accounts in the UK, although many of these will not be active on a regular basis.

PayPal Mobile seems likely to have an impact on larger purchases, but it is less likely to affect micro-payments. However, an improved revenue share may encourage service providers to use PayPal Mobile more and more.

PayPal Inc is based in the USA and was acquired by eBay in 2002.

**Google Checkout**

Google Checkout consists of a WAP service for those with Checkout accounts which stores a cookie on the user's phone with login details, the user just needs to enter their PIN number. The service is currently live in the US and in an early/testing phase in the UK. Again, its impact seems most likely to be on larger purchases.

**ClickandBuy**

ClickandBuy is an internet billing system that offers a variety of ways to pay – including credit/debit cards, direct debit, phone-paid, and topping up accounts in-store. It raises a number of regulatory questions, as depending on the payment method used, under current structures, the system may be regulated in different ways.

The exact means of regulation for ClickandBuy is currently work in progress as it is still not widely used, but potentially, the payment method that consumers choose to use for ClickandBuy could affect the type of regulation for that payment.

ClickandBuy launched in Germany in 2000 and has been commercially available in the UK since 2002. It was offered by BT until the end of 2006 when ClickandBuy took control of its UK operations. Over 7,000 merchants around the world offer ClickandBuy payment, including Apple iTunes, Skype, msn, AOL, and Electronic Arts[27].

**LUUP**

LUUP is a payment system where customers can pay, send and receive money via the mobile phone or online using their LUUP wallet. On their mobile phone, users can choose between SMS, WAP, IVR or a java application as ways to pay for goods and services, send money to another person or check account balances. Like PayPal it also allows charity donations using the phone, SMS, without making payment to mobile operators.

The vision for LUUP is to build it "*into the number one payment alternative in Europe, providing new purchasing freedom for consumers"*[28].

Contopronto is the company behind LUUP, and is based in Norway. The LUUP mobile payment system first launched in 2002 under the Contopronto name. It is worth noting, however, that these types of payment schemes do not have the marketing power and ability to create reach that, for example, PayPal has achieved through its association with eBay.

[27] Source: ClickandBuy website, December 2007
[28] Source: LUUP website, December 2007

### 5.3.2 VoIP

Use of VoIP (Voice over IP) in the UK is increasing with an estimated 2.4m households having used a VoIP service. Ofcom research found that 17% of adults with broadband have used VoIP at least once. However its use remains relatively low frequency with only 14% of VoIP users saying they use it every day[29].

VoIP providers such as Skype, MSN, BT/Yahoo!, Tesco, Orange, Google Talk and others rely on pre-paid credits kept in digital wallets. It is a question of definition whether calls made from such lines will fall within the scope of phone-paid services. These online wallets for VoIP have the potential to become another means of accessing and paying for content and as such be a potential rival to phone-paid services.

**Skype**

Skype already collects payment from SkypeOut users which it is looking to use for payment for other services. It already offers calls to premium rate numbers, currently only UK and French numbers, at “standard premium call rate”. The Skype Prime service, currently in beta, allows users to set themselves up as a call provider and earn money through offering a service. A directory lists the available Skype Prime services. Skype takes a 30% fee for this service. Current providers on this service include for example language teachers who can now benefit from a global audience and charge on a premium basis.

Skype’s aim for premium rate services is to pursue a platform strategy, with Skype providing the infrastructure and partners providing the content and wider distribution.

Skype is also moving onto mobile - 3 now offers a Skypephone, allowing calls and messaging, although it does not currently offer SkypeOut. Handset clients such as Fring allow access to Skype on mobiles, however.

Ofcom research in October 2006 found that 67% of VoIP users were Skype customers[30].

Skype may have a significant impact on traditional voice PRS, but there are clearly a number of as-yet-unresolved issues around regulation and the risks of fraud. Furthermore, users calling premium numbers will not be charged less than calling them any other way, which could upset unwary consumers who naturally associate Skype with free or very cheap calls.

### 5.3.3 Near-field communications (NFC) used for payment

NFC technology is being adopted increasingly in the UK. For example, Transport for London’s Oyster card is widely used in London, and the Visa Wave credit card now incorporates an Oyster chip. Barclaycard has launched the OnePulse contactless card, which combines a credit card and oyster card with its contactless technology. However Oyster is not using standardised technology, limiting its use for other purposes. MasterCard has started a roll-out of its PayPass technology in 4Q07 and will continue during 2008.

NFC in cards looks likely to make an impact in micro-payments at point of sale or for bricks-and-mortar services such as parking meters. As such, it may hinder the ability for phone-paid payments to enter these markets.

However, NFC in devices is dependent on the technology being incorporated in a sufficient range of phones to impact the market for phone-payment for digital content and services. In Japan, where NFC in handsets is mainstream, leading operator NTT DoCoMo was able to single-handedly drive the development of NFC payment system Felica by promoting

[29] Source: Ofcom, The Communications Market Report, August 2007
[30] Source: Ofcom, Voice over Internet Protocol (VoIP), July 2007

handsets with the technology and taking on the role of bank when launching the service in 2004. This directive approach is unlikely in the fragmented UK mobile market.

Instead, in most markets, it is unclear exactly what the relationship will be between mobile operators and banks and what benefits operators may reap from incorporating NFC into handsets they subsidise. In addition, it is not clear who will be in control of the secure storage components in NFC-enabled devices.

Take-up of NFC-enabled mobile devices is highly unlikely to reach critical mass until after 2009 – analysts do not expect in-device NFC to have an impact on the European market until 2011. It is currently only featured in a small number of high-end devices.

The current range of trials of handset-embedded NFC does not change this prediction. Nokia itself, which is the handset vendor involved in most trials, expect NFC to be mass-market in mobile phones in 2010-2011[31]. Current and planned trials include:

- An NFC-based mobile wallet system being trialled by O2 and Nokia until May 2008
- A trial of mobile NFC based around Barclaycard's OnePulse which already has around 1,000 merchants NFC-enabled in London
- A trial of Mastercard's PayPass in the US and France, which may be expanded to the UK
- Royal Bank of Scotland is trialling mobile contactless payments with the bank's staff able to pay for items under £10 using MasterCard's Maestro 'tap and go' technology by touching their phone on a terminal
- Other activities in this sector include a joint venture between Sony and NXP Semiconductors to develop a chip that incorporates both companies' contactless payment formats – MiFare and Felica. Handset vendors including Nokia, Samsung and LG have signed up to the standard

### *5.3.4 Credit card providers and banks*

**Pay using bank card** - Authorising payment from a debit/credit card from mobile is currently hampered by usability issues, and consumer trust in entering their details on their phone. However, this type of payment is likely to increase, especially as input methods improve.

As an example, Bango offers debit/credit card as a payment option on WAP sites. Goods and services purchased using these systems overlap with but are broader than typical PRS goods and so this is expected to have a small impact for example on the purchasing of mobile content.

In general credit and debit cards are being used for increasingly small transactions, and outdoor advertising for the Maestro debit card in 2007 has been proclaiming it as "the new cash". For merchants however, low-value transactions using cards can be prohibitively expensive. Legislative intervention may help change this – the European Commission ruled in December 2007 that interchange fees for MasterCard and Maestro, which are paid by merchants to card issuers, are illegal if there is no benefit from them for consumers[32]. If consumers are increasingly likely to use credit/debit cards for micro-payments, some of these frameworks may also have to change for purely commercial reasons.

[31] Source: The Guardian, 25 November 2007, quoting Richard Humbach, Manager of mobile payment systems, Nokia.
[32] Source: MarketWatch, 19 December 2007

# 6 Future of phone-paid payment mechanisms and the phone-paid industry

**Overview of findings:**

- Overall the market is becoming more mobile, with increasing substitution of fixed line for mobile
- As a consequence, premium rate voice is expected to continue a slow decline – but in the short term, there may be some increase due to it being the sole mechanism used for TV-voting activities
- PSMS will remain a key payment mechanism, but for a range of services it could be substituted for Payforit, if that mechanism becomes widely adopted by merchants and consumers
- Voice shortcodes and premium video calls are expected to grow, although video call activity for recorded content will in the medium-longer term be substituted by video streaming. Voice shortcodes offers a possible opportunity to solve the price differential between calls from fixed and mobile
- Payforit has significant potential, but currently faces a number of issues that must be resolved
- TV red button services are not currently used for participation TV. The Gambling Act offers the prospect of new opportunities for phone-paid services
- There is an increasing emphasis on compliance which means that in the industry, bigger brands may come to dominate more and consolidation is likely to increase

A number of trends are emerging for the future of phone-payment mechanisms as a result of the drivers and inhibitors discussed in section 5. Overall, the market is becoming more mobile, driven by the increasing substitution of mobile for fixed line. The industry expects business conducted using traditional premium rate lines to decline.

The market has suffered from the problems around participation TV voting. However, this is likely to recover in the medium-term, though opinion on the extent of the recovery is divided. A longer-term decline is due to increased competitive pressures from mobile and internet channels. Still-growing broadband penetration and internet use over both fixed and mobile will impact many phone-paid services.

PSMS is likely to grow slowly, although in the longer term may increasingly be replaced by Payforit, if that mechanism becomes widely adopted. There is pressure from operators on providers to embrace it.

Phone-payment will see increasing competition from other payment mechanisms, but is likely to remain strong in micro-payments for digital or intangible goods. It will also remain important for the under-18s, who are highly attached to their mobile phones and do not have access to credit cards. However, even in this bracket, there is a risk for competition from the expansion of other, predominantly online, payment mechanisms with stored accounts onto mobile phones.

We will consider the development of each of the phone-paid mechanisms as currently defined. It should be noted, however, that the impact of convergence means that additional payment mechanisms may be added to the range of phone-paid services – given increasing convergence, definitions may have to be re-defined. For example, premium voice lines are currently defined by number ranges, but this may have to be re-evaluated as VoIP becomes more prevalent.

## 6.1 Premium rate voice

- Expected to recover to some extent from the problems around participation TV voting of 2007, but overall, it faces a slow decline under pressure from the internet, the mobile internet and mobile phone-paid services

- The overall trend is for a shift among consumers from fixed to mobile voice – this will also affect the premium rate voice market as it is currently defined
- Opportunity around features such as call queuing, call recording and voice2email
- Growth potential from increasing use by companies looking to recover their costs for customer services and using low-cost premium voice to do so
  - But there is concern among companies about being associated with 'premium rate' numbers, which also looks likely to shift activity away from 0871[33]
- Many interviewees say that higher-cost drop-call charges are required to ensure a wider range of services can be offered

## 6.2 Premium SMS

- PSMS is likely to continue growing, but we expect a shift in of the profile of the services for which it is used
- PSMS is not currently being used for participation TV, due to issues over latency. If issues can be resolved, it will be used again. While the problems with PSMS may have been over-stated, investment from operators in increased capacity will be required in order for broadcasters to be convinced that the mechanism is safe for them to use
- Some of the PSMS spend is likely to shift away from PSMS to Payforit, if that becomes widely adopted by merchants and used by consumers. This is underpinned by the trend in increased mobile internet usage – if users browse to a site to buy, rather than respond to a call to action elsewhere, Payforit will be a more natural phone-paid channel
  - But not all mobile content and services usage will be reached through browsing or even WAP connections
  - Migration to Payforit also requires changes to user-behaviour and improvement around the issues industry participants currently see around the scheme (see section 6.6)

## 6.3 Premium MMS

- Little used to date, but potential for the future, particularly as user-generated content (UGC) grows
  - For example with increasing use of social networking on mobile phones
  - Also as a means of greater interactivity for viewers , e.g. for participation TV

## 6.4 Voice shortcodes

- Voice shortcodes have significant potential once they are available cross-operator. This is fuelled by the increasing use of mobile as a primary voice line. However, in order to take off they require cross-operator reach
- May have potential to become the 'mobile alternative' to premium voice, and clarify pricing structure for the mobile side
  - But under current commercial terms, which are less favourable than for premium voice, companies will be more reluctant to adopt it.

[33] Source: Analysys Research: Implications of regulatory changes in the 0871 market, April 2007

- Shortcodes are not available over fixed lines, so at least two numbers will still have to be posted in order to ensure universality.

## 6.5 Premium video calls (may use video short codes)

- Likely to remain in use for live calls – there is potential for example in adult and tarot services
- For recorded video, it is likely to be increasingly phased out by streamed video out-of-call, which may or may not be charged for using phone-payment

## 6.6 Payforit

- Cross-network WAP billing has helped fuel mobile content markets in international markets and Payforit has good potential to help grow the UK market in the long-term
  - Also has potential for use with internet micro-payments, but only if its terms and those of other online payment mechanisms are equal
- If it can become a trusted brand, it should help grow revenues by boosting consumer confidence in phone-payment
- Better audit trails will help the industry as a whole
- But significant concerns around Payforit are currently holding it back and needs to be resolved:
  - Consumer awareness of the payment mechanism is very low, brand- and trust-building is essential
  - Usability resulting in high drop-offs during the payment process
  - Revenue share offered by some operators are said to be worse than for PSMS
  - Inability for service providers to know their customers unless consumers agree to accept marketing

## 6.7 TV red button services chargeable at a premium rate

- Red button voting for participation TV is currently suspended and this is likely to have greatly reduced its use overall
- The Gambling Act 2005, which came into force on September 1st 2007, offers new opportunities for gambling and lotteries, marketing possibilities for gambling services and improved revenue shares for providers
- However, uncertainty around the Gambling Act and its implementation, for example how to define “skill”, will in the short-term hinder the launch of new services

## 6.8 Future industry developments

The phone-paid industry is maturing as the range of services enabled by phone-payment increases and a host of well-known brands are taking advantage of phone-payment. But the problems around participation TV have undermined confidence in a sizable part of the phone-paid services industry and have caused some companies to collapse while others have undergone significant restructuring and loss of revenues.

The emphasis on compliance in the future will favour larger transaction enablers or service providers that are able to better absorb the increasing costs of ensuring all activities it enables are compliant with regulation. This points to consolidation and increased transparency in business practices. Overall, interviews conducted for this report pointed to increased maturity in the phone-paid services industry.

Convergence will also impact the shape of the industry. Mobile specialists, for example, may be likely to work for a third-party that aggregates the payment, access and distribution mechanisms for content and services across platforms. For some companies, it will be difficult to stay mobile-only and a broadening of offers across platforms is likely.

Many companies interviewed also say they will look to enable or use a wider variety of payment mechanisms, as well as tap into advertising as an additional revenue stream.

# 7 Development of content and services, by category

**Overview of findings:**

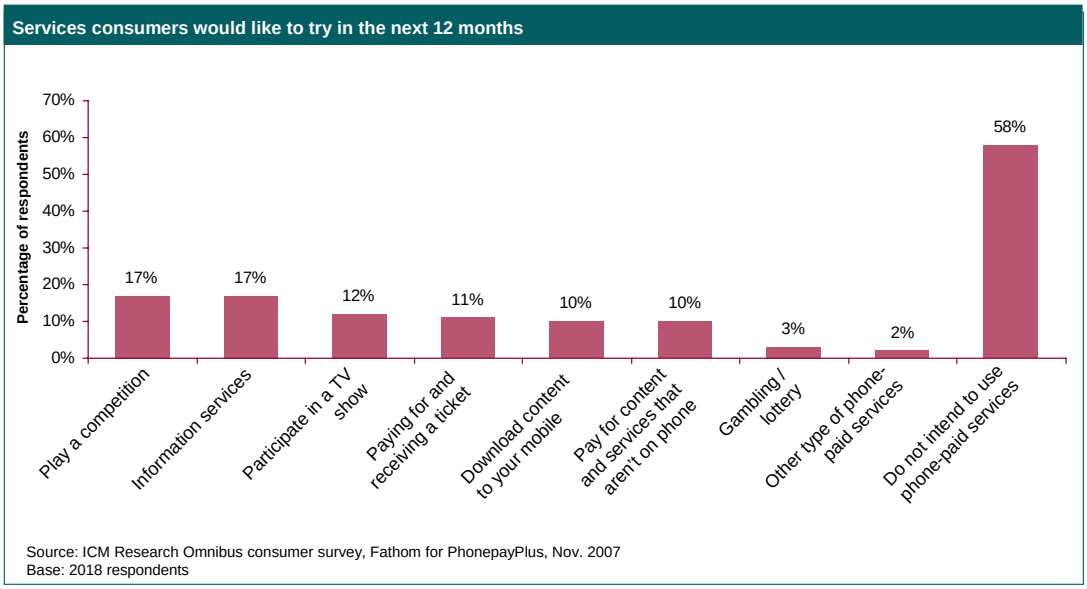
- Competitions, voting and participation TV – facing major problems after problems in 2007, but can recover
- Chat/dating – a traditional PRS service, activity in area now growing rapidly online and on mobile
- Adult entertainment services – typically a trailblazer for other service types, services on mobile shifting from marketing of and sales per item to a more contextual experience where up-sell is encouraged
- Personalisation – graphics and ringtones in decline, opportunities for the sector focus on social networking and 'virtual jewellery'
- Music (download and full streaming of tracks) –receives a great deal of attention as a sector, number of high-profile launches in Q407, but difficult to make economics work
- Games - growing sector but remains a relatively niche market in terms of audience reach
- Gambling & lotteries – wide opportunities for sector with new Gambling Act, but currently hampered by uncertainty over its implementation
- Tarot, horoscopes and psychic services – one of the more traditional phone-paid offerings, likely to remain a relatively small market but has loyal users
- Information - one of most popular phone-paid activities, but directory enquiries will face a number of pressures in the next few years, e.g. increasing use of fixed and mobile internet and from ad-funded models
- Charity donations – small sector but growing, faces a number of issues to resolve
- Pay-for-product or non-phone content - Currently a niche activity, but scope for increasing use for micro-payment for different types of remote content

This section addresses the expected development of different service segments in the phone-paid industry. For each service, we will evaluate its likely development and to what extent it is likely to remain a phone-paid service.

There is an opportunity for the phone-paid services industry to create and market more compelling services and take measures to increase customer trust in phone-payment. Such moves could help convince the 58% percent of respondents to the consumer survey said that they did not intend to use any phone-paid services in the next 12 months. However, the share of users with no intention to use is slightly lower than the 62% who had not used services in the last 6 months, suggesting a potential for growth.

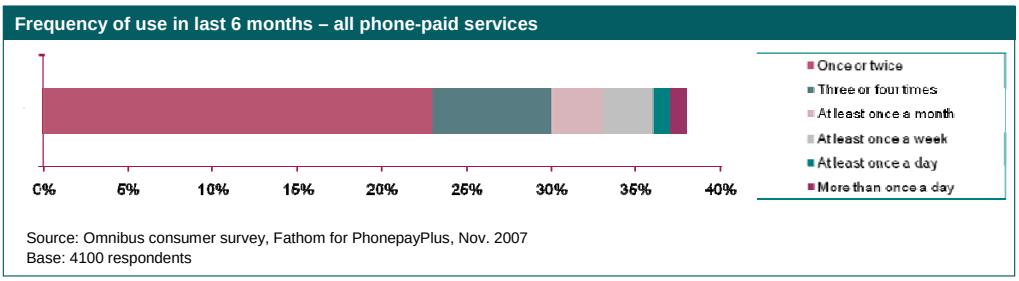
The types of services users are interested in also suggest the market could grow through innovation. For example, eleven percent of respondents said they'd like to be able to pay for and receive a ticket using phone-payment and ten percent said they'd like to use their phone to pay for content and services that are accessed separately from the handset. This is on a par with what are currently much more common phone-paid activities, such as mobile content download and participation TV.

**Fig. 7.a:**




Phone-paid users currently use services only infrequently. The consumer survey found that in the last 6 months, more than half had used them just once or twice. When exploring future opportunities for phone-paid services, an important area to consider is how to encourage repeat use.

**Fig. 7.b:**




The following sections deal in turn with different service sectors for phone-paid services.

## 7.1 Competitions, voting and participation TV

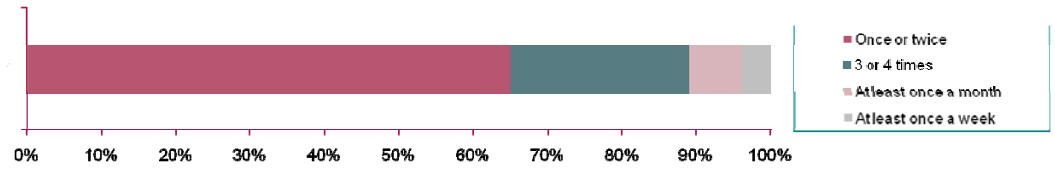
Competitions, voting and participation TV are some of the most commonly-used phone-paid services and they reach a more diverse range of consumers than many other service-types.

Participating in a competition is the most popular activity among users of phone-paid services, with 46% having done so in the last 6 months. These include competitions on TV, e.g. Quiz Call or Richard and Judy's "You Say, We Pay", but it also a range of other competitions, e.g. in newspapers or magazines.

Of respondents to the consumer survey who had played a competition in the last 6 months, the vast majority had done so only a few times.

**Fig. 7.c:**

**Frequency of use in last 6 months - played a competition**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 708 respondents

Only 17% of consumers said that they would like to play a phone-paid competition in the next 12 months.

Print competitions are likely to remain significant. The call to action may move onto digital platforms, including both web and mobile, along with news-consumption switching to these channels.

Phone-paid voting and registration activity is dominated by participation TV, which we address separately below.

### *7.1.1 Participation TV*

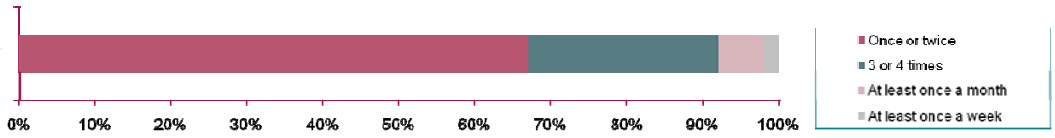
Participation TV activities include voting on a show such as X Factor and registering for the opportunity to be a contestant on Who Wants to be a Millionaire?, but also TV-interaction features such as text-to-screen.

Thirty-one percent of consumers who had used phone-paid services in the last 6 months said that they had participated in a TV show. This corresponds to 11.75% of the total base of respondents. Despite the publicity around the problems with participation TV voting, only one percent less, 10.75%, said they would like to use or try participation TV services in the future. While this is encouraging, the industry has seen responses to some programmes reduced to a fraction of previous levels.

Furthermore, the vast majority of respondents to the consumer survey who had participated in a TV show in the last 6 months had only used it once or twice, suggesting that the activity needs to be made more engaging.

**Fig. 7.d:**

**Frequency of use in last 6 months - participated in a TV show**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 482 respondents

The problems of 2007 have resulted in a number of changes for the industry. The general consensus in the industry is that the market will recover, but perhaps not to the levels previously seen, and that the industry is becoming more mature as a result.

Above all there is now an overriding emphasis on compliance and the price-versus-quality dynamic has changed. Service providers in the industry had been working on ever-thinner margins, competing with each other on price. Now the cost of comprehensive compliance means that service providers will need higher revenue shares than before. Many broadcasters, including ITV, are taking participation TV services in-house in an effort to ensure compliance. Many in the industry argue that this is likely to be only a temporary measure due both to the skill and cost involved in ensuring compliance as services become more diverse. They expect services to be outsourced again in coming years to more tightly overseen, trusted providers.

Broadcasters are, however, reliant on finding new revenue streams as traditional TV advertising is in decline. Therefore, phone-paid interactive services will play a part going forward, but the formats and ways in which it is used will change.

Much participation TV activity so far has been focused on simple interactions such as voting or quiz TV. Quiz TV was a significant revenue generator for the broadcasters that offered it. Going forward, it is expected that phone-paid services will be more deeply integrated with editorial content and formats expected to reinvigorate the industry.

Many broadcasters are no longer offering quiz TV. ITV, for example, has recently discontinued ITV Play. Channel 5's Quiz Call is currently the only terrestrial quiz TV offering.

Phone-in competitions are still being used. ITV has confirmed that it will continue to use phone-in competitions, but these may or may not be premium rate. The BBC has recently confirmed that it will reintroduce some of its phone-in competitions before Christmas.

The BBC's new Code of Conduct for competitions states that phone-paid telephone services will be used when the size of the likely response to votes or competitions requires large numbers of calls to be handled. The Code insists that competitions and voting must be handled with "rigorous care and integrity". Channel 4 is currently not using any premium rate for its programmes.

The Gambling Act will also have a major impact on the industry and offers much wider opportunities around gambling and lottery on the TV. However, it also imposes an element of skill on competitions, ensuring that lotteries cannot be masked with very easy questions as 'skilled'. However, the exact definition of what is and what is not a skilled question remains unclear at present to many in the industry.

**Drivers & likely development:**

- The recent problems have had a major impact on margins, and service providers now need higher revenue share due to the need to ensure compliance – this will change the dynamics of how high-volume phone-paid business is being conducted
- A wide range of participation TV activity has not been in breach of regulation. These are typically formats with lower volumes that are not linked to competitions or votes, for example text-to-screen participation TV. As long as information around services is clear to consumers, there is no reason why these activities won't continue to flourish and evolve towards multimedia, e.g. from text-to-screen to photo-to-screen or video-to-screen.
- SMS entry or voting is currently not offered by broadcasters, largely due to issues over latency. Many feel that this is an issue that is up to the operators to resolve by investing in greater capacity
  - Voice shortcodes will offer a potential solution for the future if SMS voting is not reintroduced, once they are available cross-operator
  - Improved commercial arrangements could help fuel this

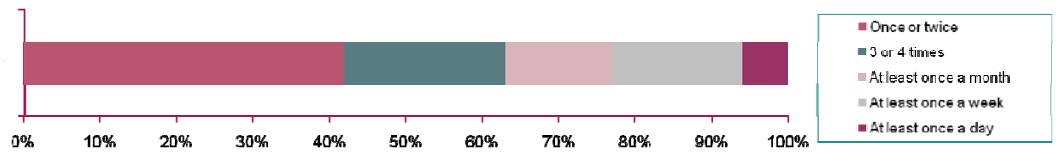
- There is currently nervousness around new formats – the problems and attendant publicity affected corporate assurance as much as consumer
  - New formats will be introduced but it will likely take some time before we see wide-spread uptake
- Innovation is likely – the market is "broken" so will need to be fixed
  - Rich, editorial formats are believed to be the future
  - Sponsored voting, which is how votes are typically run on US TV show, is a potential model which avoids financial risk for consumers
- Quiz TV is widely felt to be unlikely to recover to anything like its former size and many feel that it is effectively "dead" as a format; however more general competitions, for example where they are part of the editorial ware regarded as having a bright future
- Gambling and lotteries under the Gambling Act are thought by many to hold potential for the industry (see section 7.7)

## 7.2 Chat/dating

Chat and dating services are part of the more traditional range of phone-paid services. Activity in this area is now growing rapidly online and on mobile. Only 2% of phone-paid service users in the consumer survey commissioned for this report stated that they had used chat, dating or flirt services in the last 6 months, however because of the stigma sometimes attached to usage of these services, this figure is likely to be under-reported. Those who do use chat and dating services also appear to be more frequent users than those using many other phone-paid services.

**Fig. 7.e:**

**Frequency of use in last 6 months - chat, flirt and dating**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 35 respondents (note low base)

**Drivers & likely development**

- As a traditional voice-based phone-paid service, chat and dating is likely to decline to some extent as mobile and internet becomes increasingly popular
  - The basic function of chat on mobile is likely to be free rather than paid-for
- Social networking is a growing area – new services such as Flirtomatic combine this with chat/flirting
- Increasing number of online chat services are likely to be free to the user and these could rival phone-paid chat and dating services
  - However premium rate can be used for up-sell of additional services - Flirtomatic for example is free for users to chat and flirt, but they can opt to buy, by premium or non-premium means, Flirt Points to perform certain actions (see section 5.1.5.2)

- PMMS is likely to be used increasingly for upload of user-generated content and may offer a significant revenue stream in the sector

## 7.3 Adult entertainment services

Adult entertainment services have traditionally been a significant part of the phone-paid market. There are a wide range of adult services - from traditional PRS adult offerings such as chat services, through to image downloads and interactive video calls. The adult industry often pioneers new revenue and service models, so can be seen as a bellwether for trends.

Adult services on mobile are shifting from marketing of and sales per item to a more contextual experience, where users are invited to visit portals which may be free, or charged by subscription, and up-sold additional, richer media content. Adult images are increasingly charged at very low rates or offered free, while video is the growing paid-for content category. The industry expects that video will continue to grow in importance as the share of users with video handsets increase.

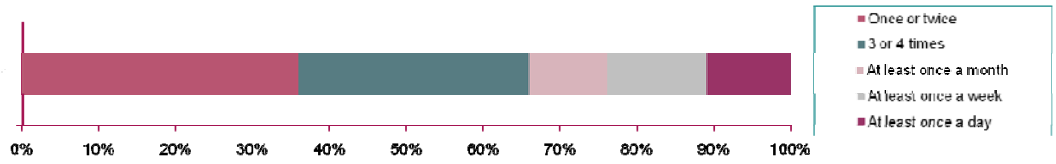
Video services are either recorded or live – in the current market, recorded services are more dominant. In both cases, many current services are delivered via video calls as this method of delivery has a clear pricing mechanism and does not incur video streaming charges.

Amongst users of phone-paid services in the consumer survey, just 2% said they had used adult services in the last 6 months. However, this is likely to be under-reported. Those that do use adult services tend to spend more than users of other services. Adult is also a segment that is likely to continue being paid-for rather than advertising-funded, due to many advertisers' reluctance to associate their brands with adult content.

Compared to many other phone-paid services, adult tends to be used more frequently.

**Fig. 7.f:**

**Frequency of use in last 6 months - adult entertainment**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 29 respondents (note low base)

Parts of the adult industry are seeing growing returns from investment in the mobile channel. For example, Private Media Group reported that in the third quarter of 2007 mobile sales increased by 19% to €0.7 million across all countries, about half of the revenue Private received from internet sales. Mobile TV, increased uptake of 3G handsets and the implementation of age verification systems were seen to offer additional growth potential.

Adult providers say that uptake of hardcore content surpasses softer adult offering where both is available. The area requires good age verification systems in order to ensure child protection.

**Drivers & likely development**

- Adult as a category is frequently a trailblazer for new business models and service types

- Multi-platform charging, whereby a user is able to access content across a number of platforms but pays only once for the content, irrespective of platform, has been launched in the adult sector - e.g. Playboy's Climax3 which offers services on 3 platforms, TV, online and mobile, billed by credit card
- Voice: the traditional PRS services of adult chat are likely to be only static or declining
- As ever-more voice traffic moves to mobile phone lines, it is likely that traditional adult audio services will increasingly be migrating to video calling services
- Premium adult entertainment on mobile is already shifting heavily towards video
- Increasing 3G penetration and the adoption of flat-rate data charges are likely to boost adult mobile services, for example out-of-call video streaming, however this may mean that other payment mechanisms come into play
- UGC could be another important driver, as a significant proportion of UGC content is adult in nature
- Mobile adult services is a growing area:
  - Premium adult entertainment is already shifting heavily towards video, driven by the uptake of 3G handsets
  - Contextual environments, not 'one-off' sales
  - Images already free or very low price

## 7.4 Personalisation

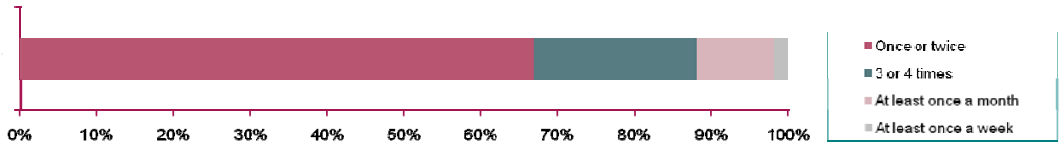
Personalisation has long been the main revenue-driver for mobile content sales. However, sales of graphics such as wallpapers have almost ceased since users are taking images with their camera-phones to use instead, or sharing photos with friends, often via Bluetooth.

Revenues from ringtones are in decline. This is due both to a decrease in sales and downward price-pressure. As many devices can now play music, an increasing number of users are side-loading music onto their mobile devices and some choose to use these as ring-tones. With full track downloads over the air priced around £0.99-£1.29, it is becoming increasingly hard to justify ring-tone prices of £3.50-£4.50, as was previously the case.

The shift from polyphonic ringtones to real-tones further puts pressure on industry margins, making them a less attractive proposition. This is due to a wider range of royalty payments being due for real-tones, to take into account recording and performance rights, while for polyphonic tones, royalties were only due composers.

**Fig. 7.g:**

**Frequency of use in last 6 months - personalised phone**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 243 respondents

M: Metrics data for the three month average ending August 2007 shows that 3.4% of mobile phone users had purchased a ringtone in the last month and 1.6% had purchased a graphic. Ringtone purchasing was highest amongst 18-24 year-

olds and 25-34 year-olds. The consumer survey carried out for this project found that a relatively low frequency of use amongst those who paid to personalise their phones.

New forms of personalisation of phones, such as video ringtones, are becoming available. Ringback tones have also been launched by operators, but failed to make a big mark in the UK so far. Going forward, personalisation is expected to be carried out in different forms, within content and communications - for example through the purchase of personalised avatars for use within social networking services.

**Drivers & likely development:**

- Audio ringtones and graphics will only continue to decline
- Driven by sideloading, multiple uses for downloaded tracks and use of cameraphones to capture images
- Potential for more innovative services that use more advanced handset capabilities that are harder for consumers to replicate:
  - Video ringtones
  - Avatar ringtones
  - Video graphics
- Also strong potential for server-side personalisation, such as 'virtual jewellery' features that are well-suited to phone-payment
  - Much of this content may come from social networks, for example Facebook gifts, Habbo Hotel's "Habbo credits", and Flirtomatic's "Flirt points"

## 7.5 Music (download and streaming of full tracks)

Digital music sales in general in the UK are growing, however they are not sufficient to stop the decline in CD sales. In Japan overall music sales actually grew 1% in 2006 with digital music sales, a large part of which were mobile, sufficient to offset the slump in CD sales[34].

In the UK, mobile music is an area that sees a great deal of activity. High-profile launches in Q407 include Apple's iPhone, tied to the iTunes store, Vodafone's launch of Omnifone's MusicStation service and current and planned roll-outs of music offers from handset vendors such as Nokia and Sony Ericsson.Mobile music services have also long been advertised as something of a 'natural' next big thing on mobile.

But despite the level of attention it receives, phone-paid music sales volumes remain relatively small and it is a sector where it is difficult for providers to get the economics to work, even for operators, due to the revenue share arrangements with record-labels. While an increasing number of handsets have music playback functionality and a range of handsets are geared towards listening to music (e.g. Sony Ericsson's Walkman range), consumers typically sideload songs rather than buy them over the air.

In terms of volume of music sales, 3 is an exception – it claims to be the UK's second-largest digital download service after iTunes. Like most mobile music download services, it is available over both mobile and online. It is not clear how large a share of 3 music downloads come as a result of its inclusion of a free £5 content bundle to subscribers – these downloads would not be regarded as phone-paid.

[34] Source: BBC News, December 2007

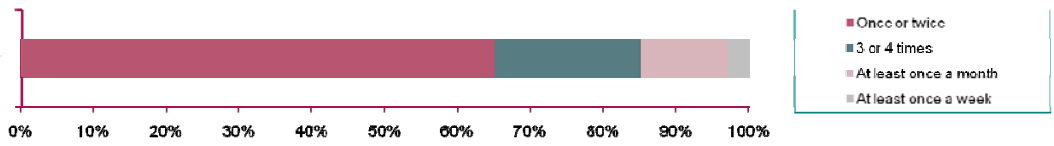
The mobile music download business is, however, growing as services have moved from mobile-download to dual-download to both PC and Mobile. Orange UK reported 203,000 downloads in October compared to 105,000 in January. 3's success is likely driven by its 'content allowance' of £5 per month for users. Orange's research has shown that, amongst its user base, subscribers with SonyEricsson Walkman phones listen to 50% more music than customers with average phones[35]. Two million Orange subscribers have Walkman phones.

M:Metrics data for the three month average ending June 2007 shows that 3.5% of mobile phone users had listened to music downloaded from their operator. Sideloading is becoming increasingly popular however, M:Metrics shows that 13.4% of mobile users had listened to sideloaded music. The latter does not involve any form of phone-payment.

The consumer survey conducted for this report found that purchasing entertainment was largely infrequent.

**Fig. 7.h:**

**Frequency of use in last 6 months - purchased entertainment**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 211 respondents

**Drivers & likely development**

- Sideloading is having a big impact on the industry
- The sideloading of music may also be a pre-cursor to the side-loading of other content
- OTA/Dual download is mainstream for mobile offers and this is only likely to continue
- Currently a mix of subscription and ownership models
- Strong Digital Rights Management (DRM) is an issue for consumer adoption – but there is a trend for non-DRM protected music for digital services overall
- Music video downloads are likely to grow in popularity, especially if data charge issues can be resolved
- Growth in 3G penetration may boost both OTA music and video downloads

## 7.6 Games

Mobile gaming is a growing sector but remains a relatively niche market in terms of audience reach. It is unusual compared to many other forms of mobile content in that sales of games remain predominantly on-portal, e.g. on O2 active or Vodafone Live!. The mobile games sector is dominated by a number of large aggregators of content, including mobile specialists such as Glu and mobile divisions of games providers, such as EA Mobile. Given that discovery and purchase of mobile games predominantly takes place on the handset, phone-payment is the natural payment method.

[35] Source: Mobile Media, April-October 2007

M:Metrics data for the three month average ending August 2007 shows that 4.8% of mobile phone users had downloaded a game in the last month. A far higher proportion of users play games on mobile than buy games, however, suggesting that there is potential to use advertising as a revenue stream for mobile games.

**Fig. 7.i:**

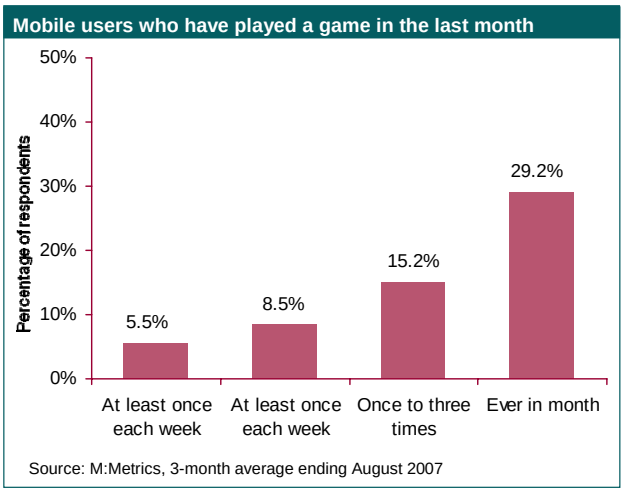
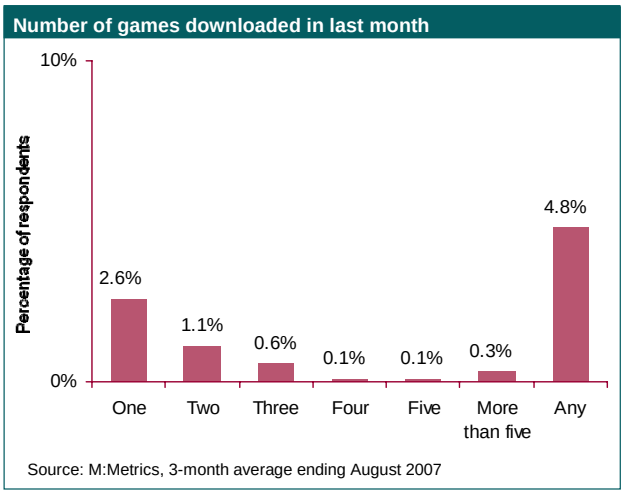



**Fig. 7.j:**




Games downloading and use are particularly high in the younger demographics, with 9.3% of 18-24s downloading at least one game and 51% if those aged 13-17 having played a game in the last month.

**Drivers & likely development**

- Games are available off-portal and share of games transactions will shift to this channel. However, there are issues over the uncertainty of data charges and how direct-to-consumer offers can be effectively marketed to end-users. D2C games offers are more likely to be driven by providers who are currently less strong or absent from operator portals
- Advertising is likely to become an alternative revenue-model for mobile games as providers aim to capture users beyond the game-buying audience
- Sideloading could become prevalent for the more hard-core game segment. Providing side-loaded games can bypass data charges and enable users to download games that are larger in size. As 3D and other richer games-features become more common, games will become larger and OTA downloads can be cumbersome and costly. While results from attempts to sell games on memory cards have been disappointing, sideloading could be more intuitive to the younger, game-playing demographic. Phone-payment could still play a role depending on who is the provider of side-loaded games and the age of the audience. However any transaction carried out over the internet is more competitive in terms of payment method.

## 7.7 Gambling & lotteries

Gambling encompasses a wide range of services, from premium rate sports betting such as BetNow which uses £3 stakes or Million 2-1's How Lo reverse auction, to more mainstream lotteries that are games of chance. Gambling as defined by the Gambling Act means gaming, betting and lotteries.[36]

[36] For more information on the Gambling Act 2005 and the exact definitions used, please see: http://www.opsi.gov.uk/acts/acts2005/ukpga_20050019_en_1

Major gambling companies such as William Hill and Ladbroke's currently offer mobile gambling applications; however these are not phone-paid and use a separate account structure. In the case of many services supplied by traditional book-makers and online gambling providers, mobile services are marketed as an extension of existing services (e.g. part of a multi-platform offer). As such, discovery occurs through non-mobile channels and existing accounts are extended to the mobile platform.

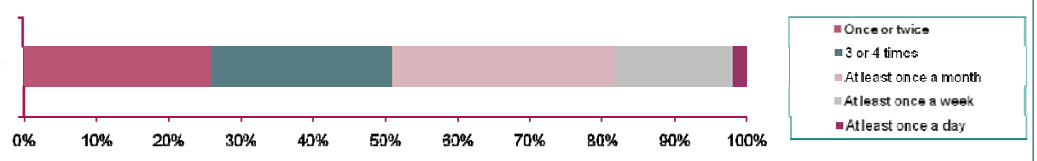
Even services provided on operator portals are not charged by phone-payment – while the operator collects a revenue share on all on-portal services, they are choosing not to provide the billing mechanism for gambling applications. The reasons behind this are likely a mix between a desire to disassociate the operator brand from gambling activities as well as protection from potential bad debt. If they do not already have an account with their gambling provider, users can set up an account via the mobile portal.

We expect these types gambling services to remain charged for primarily by non phone-payment mechanisms. In addition to the principles of multi-platform chargeable services, the revenue share arrangements on premium mobile services are not conducive to a move to mobile phone-payments. Currently, services on mobile are also hindered by the operator practice of withholding VAT on premium rate outpayments. Since gambling services do not pay VAT, but instead pay charges to the gambling commission, this puts gambling services at a further disadvantage.

Phone-paid gambling is currently a relatively small activity with 5% of users of phone-paid services saying they had gambled on their mobile phones, although this figure may be under-reported to some extent. It is not clear what share of these users gambled using phone-payment. Gambling users tend to have a much higher frequency of use than other phone-paid services.

**Fig. 7.k:**

**Frequency of use in last 6 months - gambling and lottery**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 79 respondents

Three percent of consumers said that they would like to use gambling or lottery services on their phones in the next 12 months. The sector, which includes more simple lotteries, is seen as having great potential for growth under the new Gambling Act 2005, which came into force on the 1st September 2007.

Currently the general industry view is that phone-paid gambling services are held back by lack of regulatory clarity. The Gambling Commission has not yet got legal precedent upon which to base advice, which means that there is uncertainty in the industry over what services require a license and what practices will be allowed or not. Further, if gambling is charged for through phone-payment, the issue of regulatory uncertainties due to several bodies regulating the space (see section 5.1.7) comes into play.

**Drivers & likely development**

- Great potential with the new framework under the Gambling Act, which allows new services to be launched, along with the ability to advertise and market these
- However, issues in the sector include:

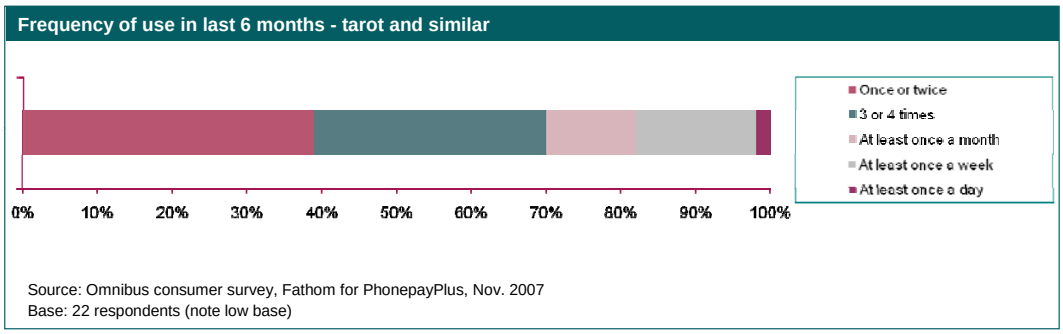
- Unclear regulation under the new Act, as no-one is yet clear on the exact implications. For example the definition of "skill" in a question as opposed to it being regarded as a game of chance
- There are a number of regulatory bodies involved in the regulation around a phone-paid gambling sector, adding to the uncertainty
- Operators currently withhold VAT as part of the phone-payment billing and payment cycle, which is a problem for providers since they do not pay VAT but instead pay a levy to the gambling commission (20% is due to charity)

- Wide range of services likely to be launched, but phone-payment is not necessarily the best method of payment
- However, phone-payment is likely to be widely used by 'softer' gamblers, who partake in lotteries that are paid for using micro-payments.
- Lotteries overall are seen as a potential area of growth:
  - TV opportunities for lotteries that help replace PTV revenues
  - Mobile opportunities
  - Smaller/ local lotteries

## 7.8 Tarot, horoscopes and psychic services

Tarot services are one of the more traditional phone-paid offerings. It remains a relatively small market but has loyal users. The survey commissioned for this report found that just 1% of users of phone-paid services had used tarot or horoscope services in the last 6 months, although again this sector is likely to be underreported.

**Fig. 7.I:**

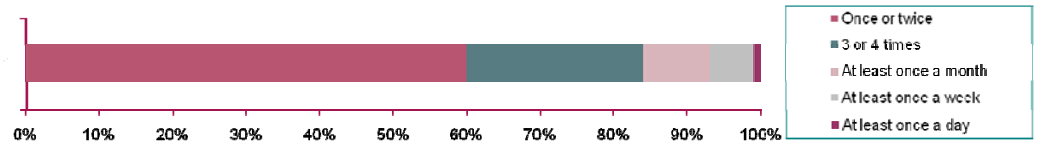



## 7.9 Information services

Information services in general are among the most popular phone-paid activities for consumers. The survey commissioned for this report found that 34% of phone-pay users had used information services in the last 6 months. Such services include directory enquires, advice/support lines charged at a premium rate, weather and travel info, sports scores, tipster lines, etc. The frequency of use of these services was relatively low. Thirteen percent of respondents to the consumer survey commissioned for this report stated that they would like to use some kind of information service in the next 12 months.

**Fig. 7.m:**

**Frequency of use in last 6 months - information services**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 518 respondents

### *7.9.1 Directory enquiries*

Directory enquiries is currently one of the most popular phone-paid activities, but will face a number of pressures in the next few years.

The directory enquiries market is likely to stay stable in the near future. It remains an easy and relatively cheap way of accessing information and so is likely to remain an important sector. In the medium-to-longer term, pressures will increase. A slow decline is likely as consumers increasingly look for information online, both on the mobile and fixed internet, either through browsers or widgets. Additional pressure will come from free-to-user models, such as the 411 services that Google has launched in the US.

On mobile, however, free directory enquiry services can be enhanced by a variety of value-added services, some of which can be phone-paid. There are already examples in the market of some of these, but the range includes location-based services with maps, directions, images of the place you're looking for and so on.

**Drivers & likely development**

- Increasing use of mobile internet likely to affect use of paid services
- Potential impact of advertising-funded models on phone-paid directory enquiries
- Voice-based directory enquiries are likely to decline , principally due to mobile internet and the emergence of mobile widgets
  - Price sensitivity is an important issue– searches on directory enquiry websites spiked after the introduction of 118 numbers because costs were now more transparent
  - Google has launched Google 411 in the US, an entirely free, and ad-free, automated directory enquiries service – this or similar services are likely to emerge in the UK

### *7.9.2 Advice/support services*

The range of services in the advice/support category is extremely broad. Examples include customer helplines, computer technical advice, premium rate medical advice such as Talk to a Doctor and legal advice over the phone.

A number of companies' support lines have become premium rate in order to become more 'self-liquidating', for example Virgin Media's broadband helpline. There is likely to be a degree of consumer confusion over whether they actually paid for some advice/support lines, since some customer support services are offered using low-cost phone-paid lines.

From early 2008 PhonepayPlus will regulate all 0871 numbers. Typical services on this range include large corporations (such as easyJet, ODEON) call centres, ticketing services and insurance claims. Migration from 0870 numbers is likely to occur, to both 0871 and other ranges, as companies re-evaluate their use of 0870 numbers[37].

**Drivers & likely development**

- Potential to be used for low cost customer services, using the cost of the call to cover the cost of the call centre so that it becomes self-liquidating
  - Some suggestions that companies will not want to be associated with premium rate content and any negative connotations attached to it
- VoIP – could offer significant potential for the sector, principally for amateurs and semi-professionals by allowing them to reach a worldwide audience for their premium-rate offering, for example language teachers can use it to teach students on a per-minute basis anywhere in the world

## 7.10 Charity donations

Phone-paid donation to charity is a small but growing area, but in order to reach its potential, a number of issues need to be tackled.

Many charities offer the opportunity to donate by SMS. For example, with Sightsavers International givers can make a one-off or monthly donation adding £1.50 to their phone-bill (of which the charity receives £1), whilst Breast Cancer Care has a text "pink" offering to download a pink ribbon to your phone, making a £1.50 donation in addition to the normal cost of a text. Other use non-premium means of donating by text, e.g. the British Red Cross using PayPal Mobile to allow individuals to donate any amount they please.

Charities also benefit from other forms of phone-paid services, since a charity payment often form part of a vote or competition. The BBC donates any profits from premium rate phone-in competitions to charity, whilst ITV is donating to charity any unclaimed money from phone-ins which it has tried to refund. In France Orange donated 0.05 per text message sent on September 15th to UNICEF.

The Gambling Act is expected to facilitate gambling and lotteries using phone-paid services and it stipulates that 20% of consumer spend must go to charity.

Although an increasing number of charities offer donation by SMS, it is currently a small area. PSMS donation has some key advantages: it can be set-up very quickly; is good for any campaigns with a youth focus; easy to market to a mass-audience and very good at events – e.g. getting the crowd at a concert to donate – a format that has been used at the Glastonbury Festival. Some charities advertise for SMS donations on beer mats, apparently with some success. Also, one success story was around the Tsunami appeal, where millions was raised through SMS, but this was an isolated example due to the scale of public response. The disadvantages are numerous, however. A number of factors reduce the size of the donation that reaches the charity, including:

- Revenue share – charities spend on average 7% on costs, so SMS is seen as a wasteful donation method
- VAT is levied on PSMS but not on other forms of donations
- Leakage levels are too high – it is hard for charities to stomach the fact that someone might have thought they had given but then the transaction fails

[37] Source: Analysys Research: Implications of regulatory changes in the 0871 market, final report, April 2007

- Gift Aid – it is relatively hard for charities to claim Gift Aid using SMS

Some of these issues could be resolved through Payforit. The scheme reduces the risk of leakage and the operators involved could enable a framework for users to, for example, tick a box to agree to Gift Aid. However, this would only be effective if usability issues around Payforit could be overcome. It also does not change the currently un-favourable revenue share arrangements.

**Drivers & likely development:**

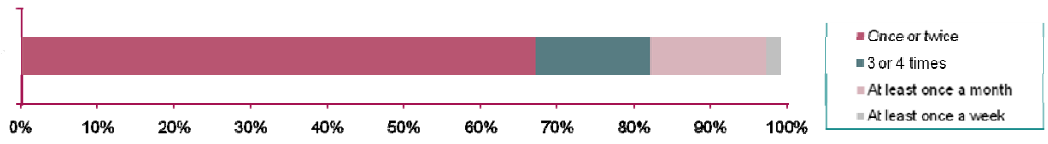
- The key benefits of donation by SMS are that it is:
  - An immediate and ubiquitous method of giving, appealing particularly to younger demographics
  - Easily compatible with mass market media channels
  - Effective for repeat giving
- The issue around VAT on phone-paid donations is said to be on track to be addressed in legislation – it is important that any rulings cover all forms of such activity
- Until some or all of the issues around phone-paid donations are overcome, this will remain a relatively small segment, targeted at specific campaigns and in order to reach a younger market. Charities are keen to offer as many methods of donation as possible, however, and all issues may not need to be solved before phone-paid donations get more widely used
- Non-premium SMS is likely to be increasingly used by charities for marketing, as a call-to-action for a database of donors to trigger donation using credit/debit cards, or other payment types. Such uses of the phone as a channel may also ultimately help drive the use of phone-payment as a channel for donations

## 7.11 Pay for product or non-phone content

Nine percent of respondents to the consumer survey stated that they had used their phones to pay for content that was not on their phone. Services include buying content on the internet and charging it to their phone bill, paying for Wi-Fi access using phone-payment or other services. The segment may be overstated by consumers as there is a risk that they view SMS payment confirmations of parking or congestion charging as a phone-paid transaction. Frequency of use, however, appears to be relatively low.

**Fig. 7.n:**

**Frequency of use in last 6 months - pay for content/product**




Source: Omnibus consumer survey, Fathom for PhonepayPlus, Nov. 2007
Base: 133 respondents

While it is not likely that phone-payment will be prevalent for point-of-sale transactions, there is scope for increasing its use for micro-payment for different types of remote content. For example, respondents to our survey were interested in paying and receiving tickets on their handsets. While some of these transactions may be larger and payment more likely to be driven through non-phone-paid mechanisms, delivery of tickets onto handsets could drive add-on sales around performers or events.

**Drivers & likely development**

- Paying for content on the internet or elsewhere by charging it to your phone bill has potential going forward, particularly around micro-payments
  - Limitations versus other payment mechanisms may be an issue. It is not necessarily intuitive to switch to the mobile to pay for an online service and may make less sense from a user-experience point of view
- Mobile ticketing is likely to grow in the future. It is currently being trialled in the O2 Arena, and also with Transport for London using Oyster and mobile phones. However this is not necessarily likely to be premium rate
  - For example Chiltern Railways plans to text barcodes to passengers who buy tickets online. A three-month trial saw 6,000 mobile phone rail tickets sold
  - However there are international examples, such as public transport in Stockholm, Sweden and Helsinki, Finland, where services are phone-paid
- Use is growing for other types of services such as parking meters, although these types of services are typically not phone-paid and use an account previously set-up online
  - Westminster Council recently replaced its parking meters with a mobile-service which uses SMS but is not phone-paid

# 8 Appendix: Methodology and interviewees

This report is based on evidence gained from desk research, an industry online survey, consumer research and a wide range of industry interviews, all carried out by Fathom Partners in September-November 2007.

## 8.1 Interviews

Nearly 40 in-depth interviews were carried out for this research. Companies and industry bodies that we spoke to included, but were not limited to:

| | | | |
|---|---|---|---|
| **3** | **BT** | **BT agilemedia** | **Channel 4** |
| **Cherrysauce** | **D2see** | **Eckoh** | **Flirtomatic** |
| **Fremantle** | **Mobile Entertainment Forum** | **MX Telecom** | **Million-2-1** |
| **Minick** | **Mobile Interactive Group** | **Netcollex** | **Netsize** |
| **NOC** | **O2** | **Ofcom** | **Opal Telecom** |
| **PayPal** | **Playboy** | **Square1** | **Yell** |

## 8.2 Surveys

Two surveys were commissioned for the purposes of this report. An industry survey was carried out from October to November 2007 and had 269 responses, of which 84 were complete. 42 respondents gave free text feedback on their views of the market, for example on drivers and inhibitors. An omnibus consumer survey was conducted in November 2007 with a range of questions put to 4,000 consumers, addressing use in the past 6 months of phone-paid services, and intention to use in the next 12 months. Both these surveys are referred to throughout the main body of this report and brief definitions of the terms and service descriptions used in each follow below.

### *8.2.1 Industry survey*

The different types of phone-paid services that industry respondents were asked to select from were as follows:

- *Vote / register e.g. vote on a TV show*
- *Competitions*
- *Charity donations*
- *Chat / dating (non-sexual in nature)*
- *Adult entertainment*
- *Sport, e.g. football scores, racing tipster service*
- *Tarot services, astrology, etc*
- *Personalisation (wall-paper, ringtones, etc)*

- *Music (full-tracks)*
- *Games*
- *Joke / prank services*
- *Pay-for-product, e.g. pay for an item using phone bill*
- *Information services e.g. weather, financial advice*
- *Advice/support lines, e.g. a service helpline*
- *Directory enquiries*
- *Other entertainment*

### *8.2.2 Consumer survey*

Consumers who had stated that they had used phone-paid services in the last 6 months were offered the following statements for the types of services that they had used:

- *Play a competition (e.g. submitting answer to a newspaper or TV competition or quiz by phone or text)*
- *Information services including directory enquiries, advice/ support lines charged at a premium rate, weather and travel info, football scores, etc*
- *Participate in a TV show (e.g. voting on a TV programme such as XFactor, sending in comments or images to a TV show)*
- *Personalising your mobile phone (bought wall-papers, ringtones, etc)*
- *Purchasing entertainment such as games, music or video downloads for mobile (e.g. using phone to pay for games, whole music tracks, video clips, that you download to your phone)*
- *Pay for content that's not on your phone (e.g. buying content on the internet and paying using your phone, or making a direct donation to charity)*
- *Gambling/lottery (e.g. betting using your phone)*
- *Chat / flirt / dating & meet-up services*
- *Adult entertainment (sexual content and chat lines etc)*
- *Tarot services, astrology and similar*
- *None of these*

## 8.3 Desk research

We have used desk research to underpin all other research. We have mined research available to PhonepayPlus as well as publicly available sources for information, data, insights and international examples.

## Contact information

**Fathom Partners**

23-25 Eastcastle Street

London W1W 8DF

United Kingdom

Telephone: +44 20 7636 0468

www.fathompartners.com

Jessica.Sandin@fathompartners.com

Jonathan.Wood@fathompartners.com