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# Moments of Need

## Factors affecting mobile service uptake

Josie Sephton and Dale Vile, June 2009

*With high speed networks, sophisticated devices and a myriad of services and content available, mobile users would seem to have everything they need, but how much are they taking advantage of all this, and what can be done to ensure maximum value for the user and a good return for the mobile operator?*

### **KEY FINDINGS**

#### **Uptake of mobile services beyond telephony and SMS is still pretty patchy**

While mobile email for business use is becoming more popular, and advanced devices are increasingly being used to listen to music or play games, relatively few of the 362 respondents interviewed in a recent survey are yet taking advantage of information, navigation and social networking services. Indeed, around 60% say they rarely or never use such advanced services.

#### **Yet scenarios frequently occur in which advanced services are seen as valuable**

When presented with a range of scenarios, such as a shopping trip, a night out, a working day out, or an extended trip away from home, respondents not only acknowledge the relevance of these to their lifestyle, but also confirm the appeal of key mobile services when moments of need occur within them. Services enabling person-to-person communication, such as email and social media, are appealing across the board with a high willingness to pay associated with them. The strength of interest in other services often varies by context, and while some, such as mobile gaming, have strong appeal in certain situations, willingness to pay is not always there.

#### **The most common moment of need is when you have time on your hands**

Beyond the specific scenarios mentioned above, the most common context in which moments of need for mobile services occur is when people are killing time. This may be when travelling, waiting for transport, waiting to meet up with friends or colleagues, grabbing a coffee between meetings, etc. These are the times when people are most interested in information and entertainment services, as well as services that help them communicate with others. Such observations highlight the prevalence of *ad hoc* or opportunistic use, which in turn shines the spotlight on access mechanics such as device navigation and service discovery.

#### **Device capability and habit forming are key to unlocking the potential**

Compared to more casual users who may dip lightly into many services, those who form a deep habit around one particular service are much more likely to extend their use to other services in a more committed manner. Device capability, however, including ease of navigation as well as physical input and display characteristics, has a significant role to play in encouraging such use at a deeper level. Those with more capable and accessible devices take more advantage of advanced services today, and, looking ahead, have a higher affinity for new service adoption in the future.

### **CONCLUSION**

Encouraging more advanced service use represents a good win/win for subscribers and operators. To achieve this, however, requires a more targeted customer-centric approach to service delivery, a shift in emphasis from individual services to service portfolios and customer level profitability, and a particular focus on device navigation and service discovery to drive habit forming behaviour.

*The research upon which this report is based was designed, executed and interpreted on an independent basis by Freeform Dynamics. Feedback was gathered via in-depth telephone interviews of 362 business professionals in USA, UK, Spain and Germany. Input also came from an online survey of 1271 respondents, predominantly IT professionals, in UK, USA, Rest of Europe, Rest of World. The study was sponsored by Nuance.*



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## Introduction

It is common to hear the demand for mobile services discussed in a generic sense; design a great service, and there will be great uptake. But is the service itself and the service-centric view of development and delivery traditionally taken by mobile operators adequate for maximising the potential of new offerings? The reality is that subscriber bases are not homogenous and, therefore, neither is demand. An offering that is compelling to one market segment may miss the mark with another. Beyond this high level principle, a range of other factors exist that affect which services are considered interesting to different types of subscriber and to what degree.

The study described in this report was designed to investigate the nature and importance of these dependencies, from age, gender and lifestyle, through the context in which services are used, the impact of accumulated experience, and ultimately the role of the device in the overall mix. Along the way, a number of questions were considered: Is a user with an advanced device, for example, more likely to use a particular type of service in a given scenario, or will the uptake of the service shine through regardless of the device? And at a higher level, if the user has developed a 'habit' around some initial lead services, does that make them more likely to make use of other services in other situations?

Such considerations and questions have a potential impact on pricing, bundling, cross selling and loss leading. They also allow an objective examination of the relative merits of the traditional product/service management approach of focussing on individual offerings in isolation, versus thinking more in terms of coordinated customer-centric service portfolios and overall relationship management.

While many operators express a desire to move in the direction of the latter, we know from recent research<sup>1</sup> that it's not always that easy, hence the need for as much in the way of the kind of insights presented in this report as possible.

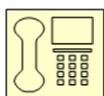
Before we get into the meat of this, however, it is worth saying a few words about the research methodology used in the study underpinning this report.

## Methodology

Telephone interviews with 362 professional users across four geographies (USA, UK, Spain and Germany) were used to gather feedback on how needs and wants vary for different types of user from a mobile service perspective. During these interviews, we explored 'service affinity', i.e. the appeal of particular services, in a range of different contexts. Beyond this, we looked at the constraints that apply when considering the potential fulfilment of needs in each given context, e.g. device/service limitations, cost/value expectations, and so on.

Suspecting that the nature of handsets was going to have a particularly significant impact on service uptake, we also conducted an online survey in collaboration with a major IT news site looking at the issue of device navigation in more detail. This generated a larger sample of 1271 respondents, largely comprised of technology savvy users of more advanced devices.

Details of study design and sample composition for each of the two surveys are provided in Appendix A. Meanwhile, in order to be clear about the origin of information presented in this report, all research charts are marked with one of the following two icons:



Indicates that the data presented on the chart was derived from the telephone survey of 362 respondents representing a good cross section of business professionals with no bias towards any aspect of mobile related behaviour.



Indicates that the data presented on the chart was derived from an online survey of 1271 respondents conducted via a major IT news site. Respondents represent a sample of technology savvy users of more advanced devices.

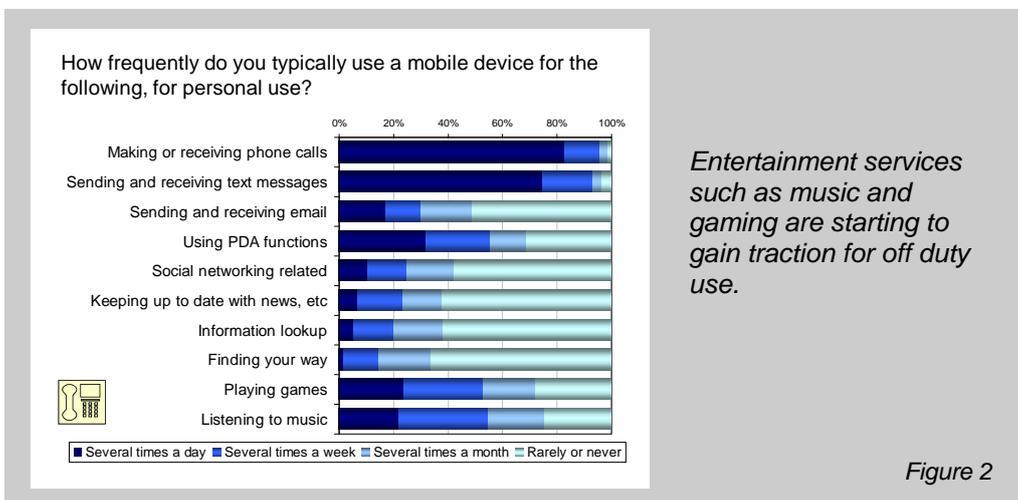
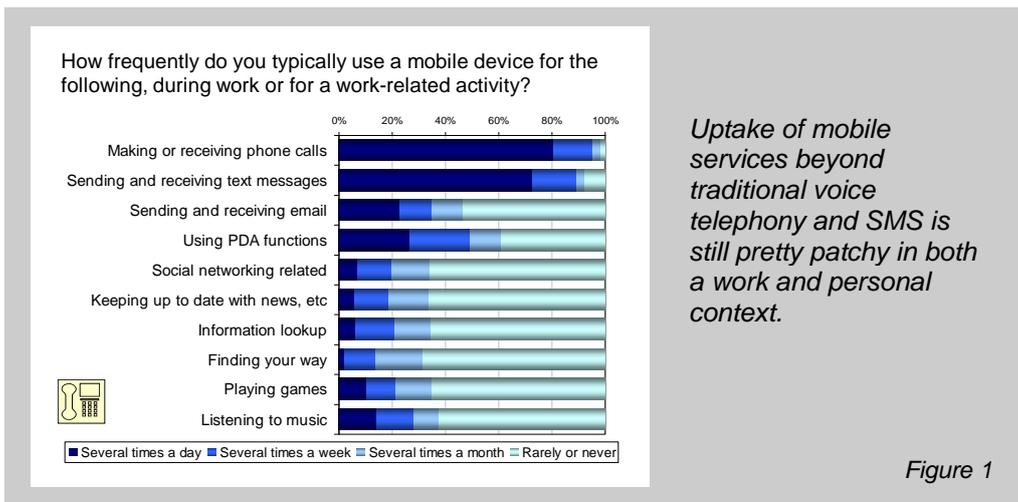
The study was designed, analysed and interpreted on an independent basis by Freeform Dynamics. Our thanks go to Nuance for sponsoring the work under the Freeform Dynamics Community Research Programme ([www.freeformdynamics.com/services.asp](http://www.freeformdynamics.com/services.asp)).

## The current state of play

Over the past five or six years we have seen the emergence of high speed networks and sophisticated devices to exploit them. A myriad of services, ranging from messaging of various kinds, through information access and delivery, to gaming and multi-media entertainment have also appeared. Anyone looking in from the outside could be forgiven for thinking that we have reached a state of maturity in terms of meeting the needs and wants of subscribers.

But how much are those subscribers taking advantage of all this?

Well the reality is that while activity among subscribers has increased significantly, particularly over the past two to three years, uptake of mobile services beyond voice telephony and SMS is still pretty patchy (Figures 1 and 2).

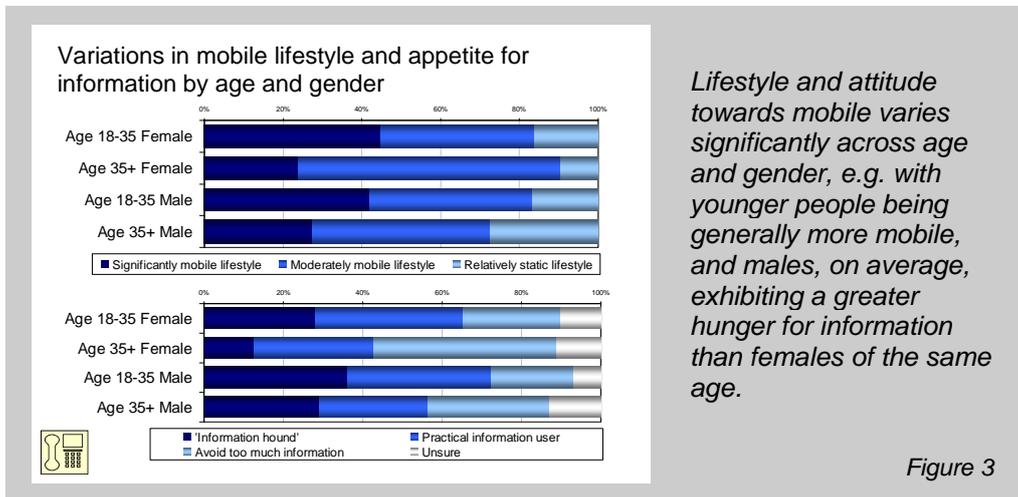


Advanced services gaining the most traction are mobile email, particularly for business use, and multi-media entertainment services such as music and gaming for personal use. The degree to which information, navigation and social networking related services are used is still relatively low, though it is notable that each is accessed by one in three respondents, even if only on an occasional basis.

This picture suggests that the potential for mobile services remains largely untapped. When considering how to drive further activity, however, it is useful to go back to some basics.

## The impact of mobile lifestyle

Before exploring mobile services further, it is important to acknowledge the significant differences in lifestyle and attitude across the mobile user community. To explore this area we allocated respondents to one of 3 categories; significantly mobile lifestyle, moderately mobile lifestyle and relatively static lifestyle, based on the frequency they found themselves in a defined set of scenarios involving time spent away from their home or work base (see appendix B). The relationship between mobility and the age of our respondents is shown in Figure 3 below.



A significant difference between age groups is apparent. 18-35 year olds, for example, have a significantly more mobile lifestyle than the over 35 group. Hardly a surprise, as those in the younger demographic have more of a propensity to be socially active and tend to have fewer home-based commitments to reduce their mobility. Nevertheless, this is an important observation as the level of overall mobility will clearly have an impact on the need for and/or interest in mobile services.

A similar age-related difference is seen in relation to appetite for information, though overlaid on this is a gender difference, with males being hungrier for information than females. This is another factor to bear in mind when considering likely demand.

These are just a couple of examples. If we were to look more broadly at social behaviour, attitudes to fashion and image, etc, we would see similar differences.

The point is that we do not have to look far to see examples of heterogeneity that are likely to affect mobile service uptake, which is the first major indicator of the need for operators to think and act in a more targeted manner through the service design, promotion and delivery lifecycle.

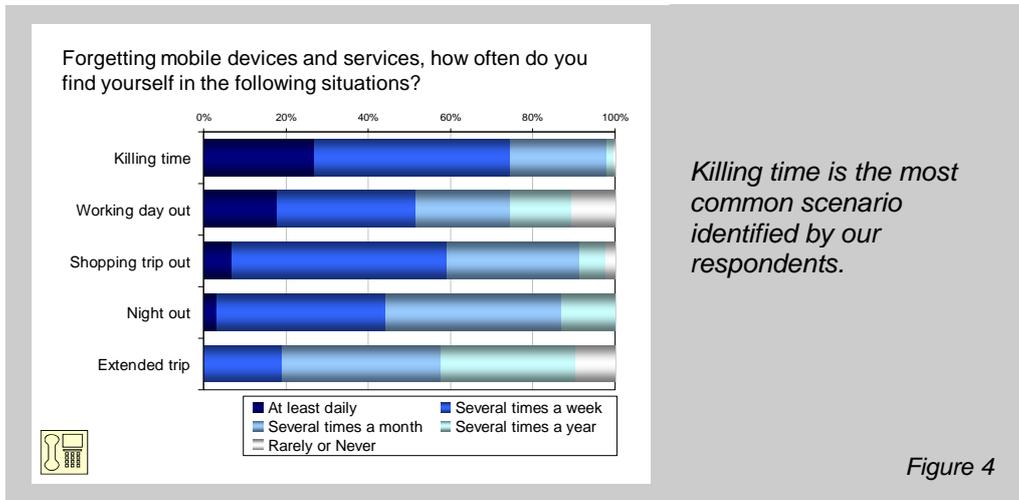
But even such demographic analysis is only a starting point for understanding what determines demand.

## A day in the life

Beyond demographics, lifestyle and attitude, how is mobile service affinity impacted by context, such as the day to day situations in which people find themselves? During the study we discussed with respondents a range of scenarios in which 'moments of need' for access to mobile services might arise:

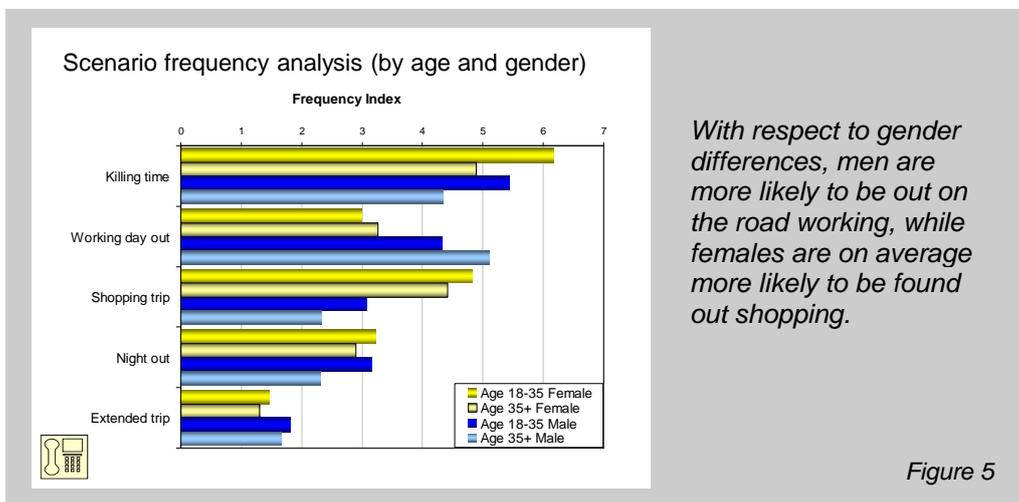
- **Shopping trip:** particularly when out and about in the high street or a shopping centre/mall
- **Night out:** with friends or family, whether in a bar, restaurant, show, etc, or all of these!
- **Working day out:** visiting clients, partners, suppliers or otherwise out doing your job
- **Extended trip:** travelling away from home on a business trip, vacation, weekend away, etc.
- **Killing time:** e.g. waiting for or travelling on a bus, train, plane, or generally at a loose end

While not exhaustive, this list contains a representative range of scenarios to which most people can relate. In the first instance we asked our respondents how often they find themselves in each of the scenarios. The order of frequency revealed some significant differences (Figure 4).



Top of the list is 'killing time'. This is interesting because it suggests that a significant amount of mobile service access could be opportunistic or *ad hoc* in nature rather than premeditated or proactive. At the other end of the spectrum is the 'extended trip' - a business trip, vacation, weekend away, etc.

The frequency with which some of our moments of need scenarios are encountered varies by demographic. To help us compare different groups more easily we have converted the raw survey responses for each scenario (from figure 4 above) into a 'frequency index' number (see Appendix B). Some differences by age and gender then become very obvious (Figure 5).



At the risk of reinforcing some common stereotypes, the data shows quite clearly that while men are more likely to be out on the road working, females are more likely to be found out shopping. Variations by age are less marked, but those in the 18-35 age group are more likely to find themselves killing time or on a night out than over 35s, for example.

Taking such differences in likely moments of need into account could enhance the degree to which mobile operators and independent services providers are able to match services and campaigns to different subscriber groups, to the benefit of both the provider and the customer.

But how do we form a view of which services map onto which scenarios?

## The importance of context

Having established the frequency with which our respondents found themselves in each of the moments of need scenarios, we moved on to explore the relevance and appeal of specific service capabilities in each context.

In order to minimise any skew relating to technology related experience or preconceptions, respondents were asked to imagine that they had 'the perfect handset', with the right sized screen, an effective user interface, good internet connection and so on. With that in mind, respondents then rated how useful and/or attractive the following service related capabilities would be in each scenario on a scale of 1 to 5:

### **MOBILE SERVICE CAPABILITIES EXPLORED**

#### **Communicating with others (non voice)**

*Using email, text, MMS, chat or social media*

#### **Browsing content on the internet**

*News, magazines, special interest content, retail sites, etc – just out of interest or to keep up to date rather than looking for something specific*

#### **Looking for a specific piece of information on the internet**

*Could be something you are reading about, were thinking of doing, a stock quote, train or bus schedule, something you are considering buying, etc*

#### **Entertaining yourself**

*By playing games, listening to music, watching videos, TV and so on*

#### **Accessing mapping or navigation services**

*To find your way, look up points of interest at a location, etc*

#### **Buying or paying for something with your phone**

*Whether online content (ring tones, tickets, gifts, etc) or just using your phone as a means of payment (tickets, vending, parking, congestion charge, etc)*

The raw responses provided by our respondents to this line of questioning were used to derive a service affinity rating for each capability in each scenario (see Appendix C). Combining this with the frequency of scenario occurrence, we then created a matrix which highlights the service capabilities with the highest potential usage (Figure 6).

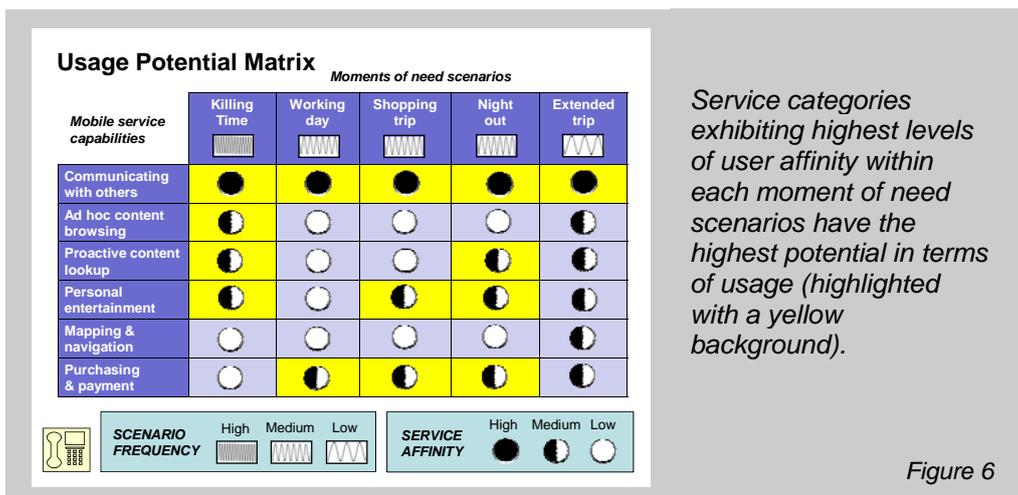


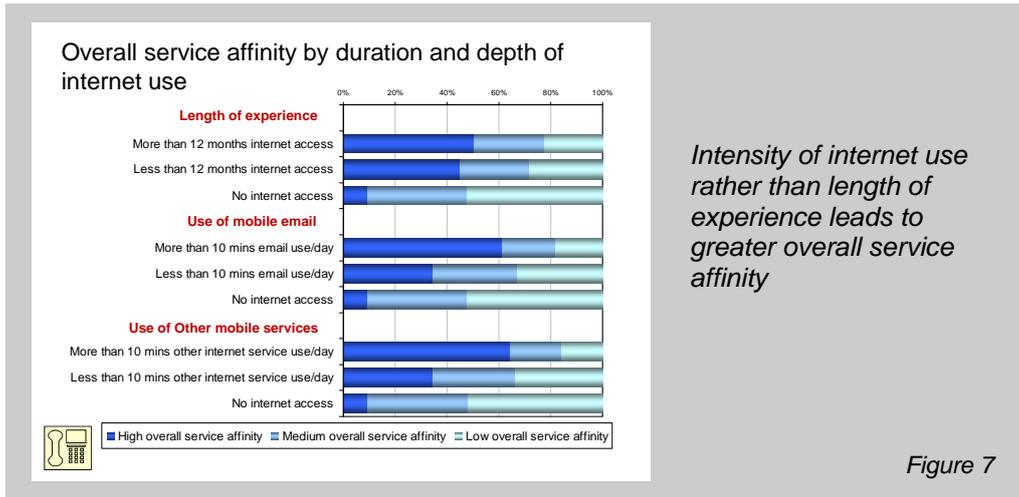
Figure 6

Looking at the matrix, one category of service really stands out. 'Communicating with others' has the highest service affinity across all of the scenarios examined; no other service category comes close. Having said this, information lookup and entertainment services also show a reasonable affinity across a number of scenarios, with significant numbers of users further expressing an interest in mobile commerce.

While we can conclude from this that at an overall level all of the service categories examined are perceived to have their place, it is also apparent that mobile devices and the services that drive them are still very much considered to revolve around inter-person communication today. With this in mind, it is useful to consider how the broader potential can be unlocked.

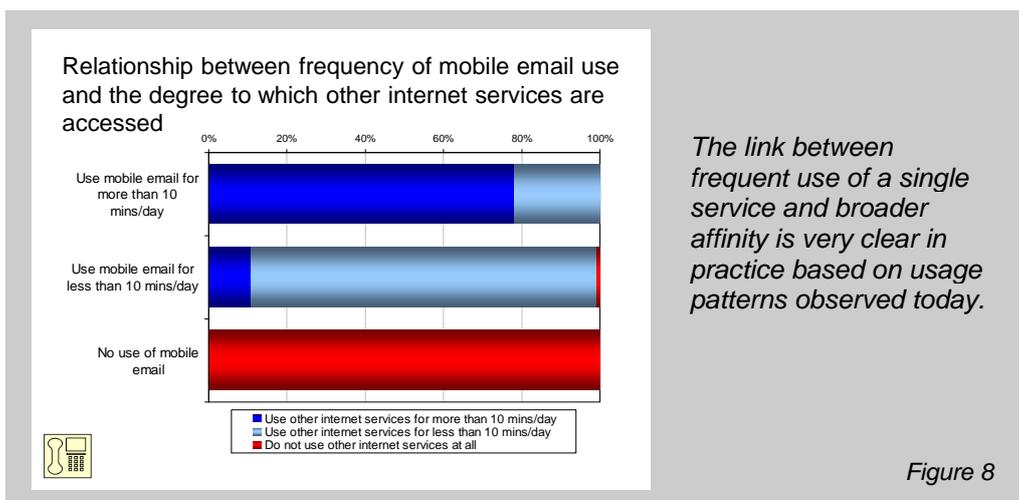
## Unlocking the potential

When looking at driving activity, it is interesting to look at how usage patterns evolve from initial use. To explore this, we categorised our respondents by their appetite for mobile service capabilities (based on their average overall service affinity scores – see appendix C) and looked at the relationship between this and both the length of internet access and intensity of use (Figure 7).



The first three bars on this chart ('Length of experience') tell us that the period of time a subscriber has been using internet services on their device does **not** significantly impact their likely uptake of other services. The remainder of the chart, however, illustrates that frequency of use of mobile email or other mobile internet services impacts affinity very strongly, i.e. intense users exhibit a higher degree of interest in a broader range of service capabilities.

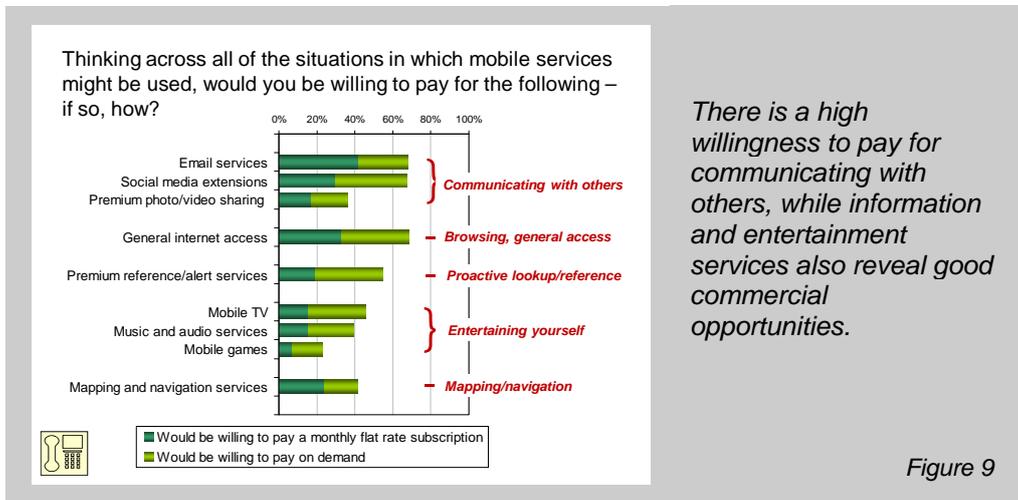
Reinforcing this observation, we can see the principle of habit forming around one service driving broader adoption in practice when we look at the correlation between actual use of email and other services today (Figure 8).



The lesson here is that it won't be enough in many cases for the mobile operators to just offer the subscribers a set of services that broadly match their needs then rely on them experimenting casually. The more proactive encouragement of initial habit forming behaviour around lead services

is much more likely to unlock incremental value for the subscriber as well as driving better service uptake as part of improving overall business performance for operators themselves.

Picking up on this last point, business performance is not just about driving the use of mobile services, it is important to consider the subscriber's willingness to pay for what's offered (Figure 9).



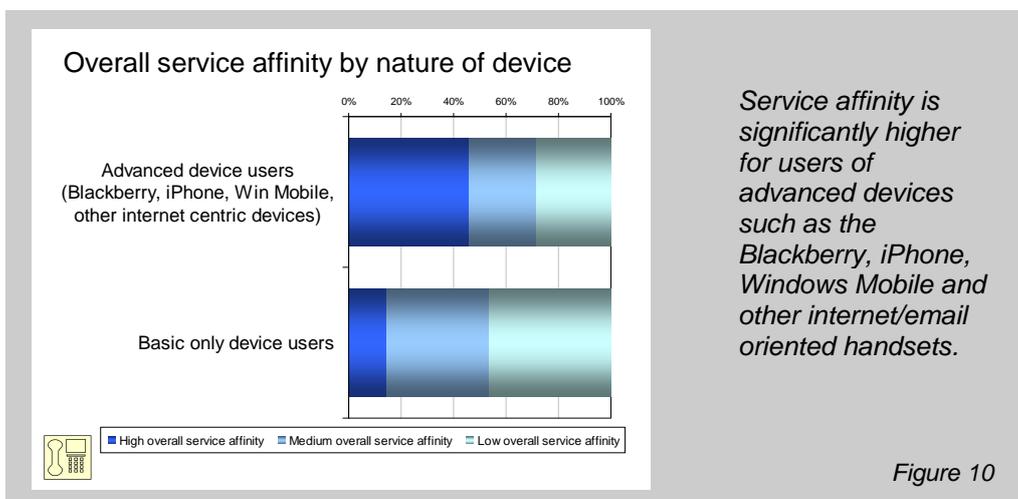
*There is a high willingness to pay for communicating with others, while information and entertainment services also reveal good commercial opportunities.*

Figure 9

While we haven't shown it here, it will be no surprise that if you looked behind this chart you would see that willingness to pay for a particular service can vary significantly by type of user. Younger males, for example, are more inclined to pay for mobile gaming, even though the general population is not. The point is that each group of subscribers exhibits an interest in a different mix of services and within that mix, they are prepared to pay for different elements in different ways.

This finding is significant in a couple of important ways. Firstly, it underlines the need for mobile operators to continue their journey away from a service centric view of the world to more of a customer centric one in which the needs and behaviour of the subscriber are considered holistically. Secondly, from an investment and measurement perspective, operators are more likely achieve success by focussing on building capability and driving performance at a portfolio level rather than trying to drive and make sense of things at an individual service level. The reality is that unprofitable services, loss leaders and services that round out and maintain the overall customer experience, are as important as profitable ones.

Beyond the factors we have discussed, there is one more critical element, device capability that as we can see has a significant impact on service affinity (Figure 10).



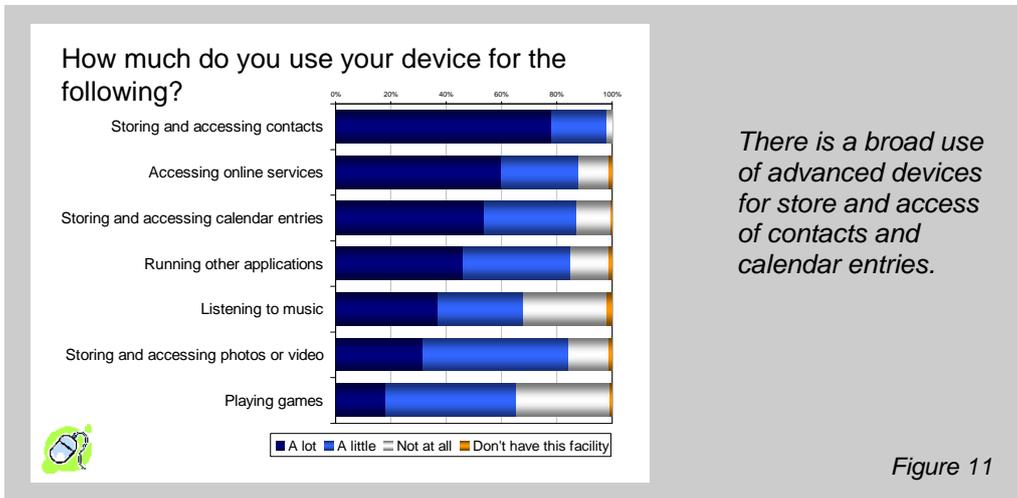
*Service affinity is significantly higher for users of advanced devices such as the Blackberry, iPhone, Windows Mobile and other internet/email oriented handsets.*

Figure 10

With this in mind, it is worth exploring the device features, navigation and usability in more detail.

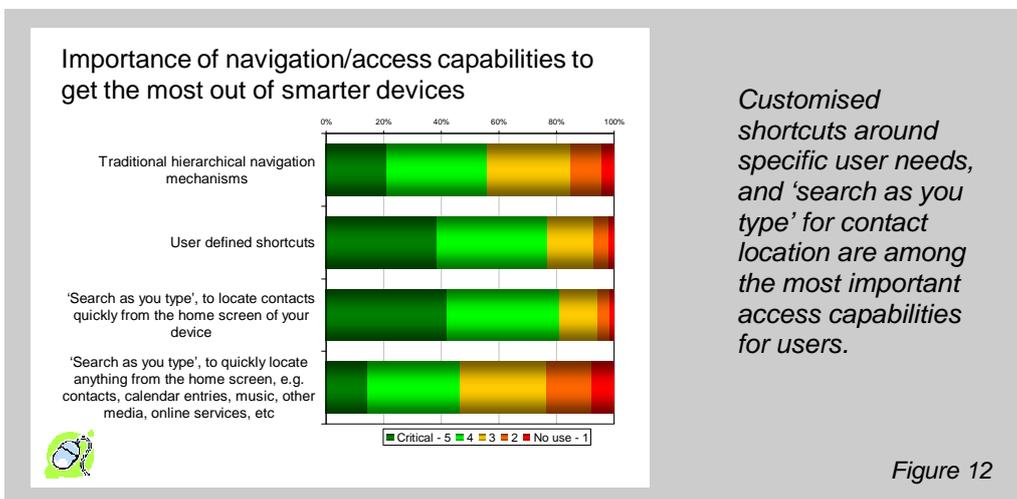
## Drilldown on navigation and usability

While it may seem obvious, mobile devices, in particular advanced devices, are much more than a simple voice communications tool, even without considering online data services. Storing and accessing contacts, calendar information and other forms of local content is now a routine part of device use for many (Figure 11).



But from a user perspective, it isn't just about the capabilities of the device. The smartest device in the market would hold little appeal if the functionality, whether on board or available over the network, was complex to access or navigate. Indeed, users of advanced devices have pretty firm views of what's important from an access point of view.

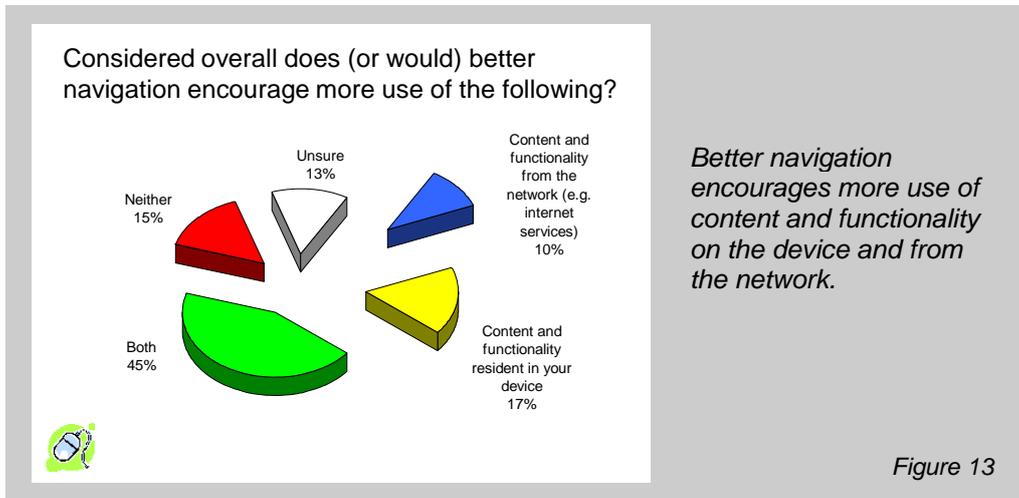
In terms of detail, user-customised shortcuts and 'search as you type' functionality for quick contact location, for example, are seen as particularly important, for example (Figure 12).



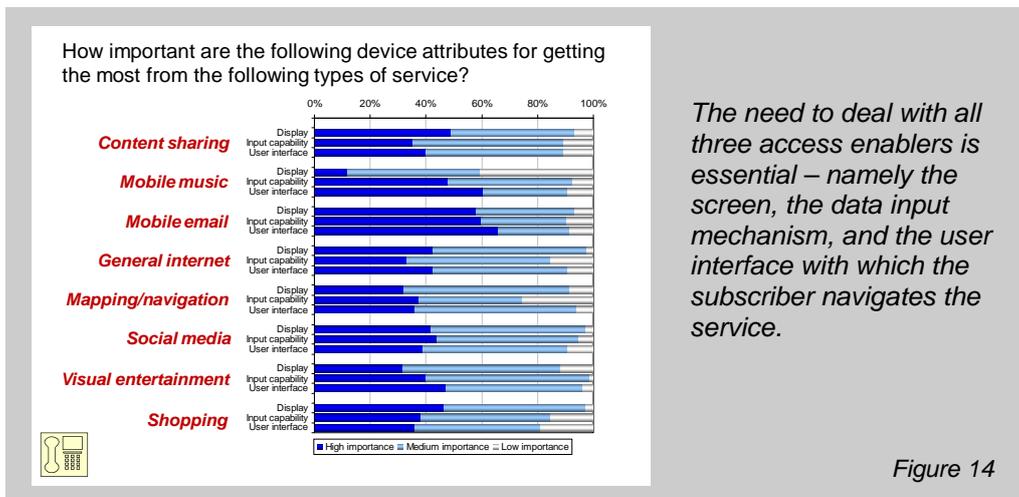
In addition, around one in three online respondents also indicate that some form of voice controlled access is important, e.g. to enable hands free navigation and/or input, or even more advanced audio output (e.g. having messages read to you). A similar number also highlight predictive text capability as a desirable feature.

While good navigation and access are clearly valued highly by subscribers, it gets much more interesting for service providers when we consider the impact of good navigation on the extent to which users will access content and functionality both on the device itself and from the network (e.g. internet services).

And when we look at this, the picture we see shows overwhelmingly that better device navigation capability has a tendency to encourage users to take more advantage of what's offered to them. In particular, over half of the respondents providing feedback online feel that better navigation would lead to increased use of all forms of content and applications (Figure 13).



Corroborating this drill down data from the tech-savvy respondents to our online survey, the more general sample interviewed on the telephone (that we have been concerned with throughout most of this report) also provided a view of the importance of good navigation. The general opinion was that this sits alongside physical device characteristics such as screen size and input capability as being necessary to facilitate optimal access to a range of specific services (Figure 14).

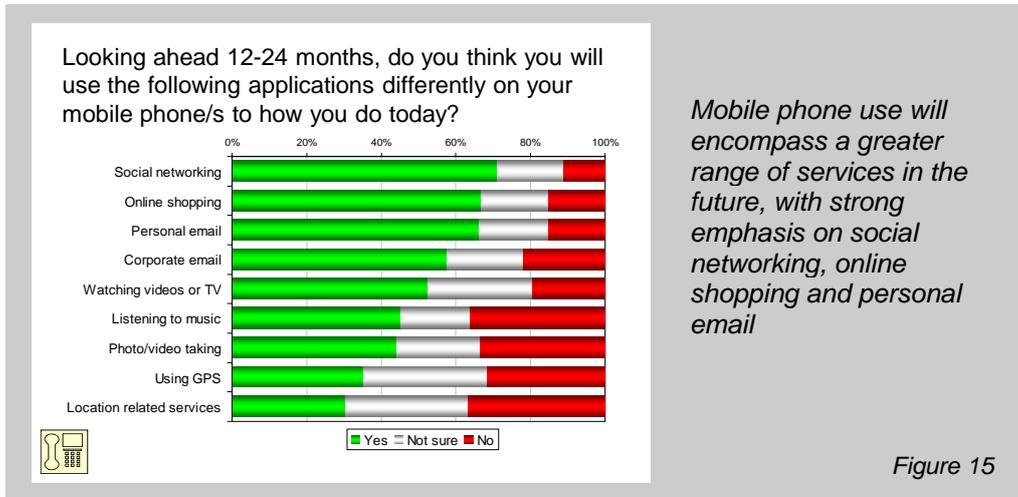


Whichever way you look at it, the capability of the device clearly has a direct impact on service affinity and thus both the value of services realised by the subscriber and the revenue generated by the mobile operator. The importance of getting advanced devices into the market is therefore pretty clear, but so too is paying particular attention to ease of navigation on more basic devices with smaller screens and limited input capability. The reality is that top end handsets are simply not affordable to some subscriber segments, so optimising access on less expensive equipment is key.

## Evolution of activity and expectation

While subscribers today are happy to provide their best guess as to what will be appealing and important to them in the future, we must be conscious of the fact that much of this will be coloured by their experiences to date. Some of the research results we have been looking at show quite clearly that those experiences, whether from in-depth use of existing services, or through familiarity with more advanced devices, can have a huge impact on perceptions of relevance and value.

Regardless of their current usage, however, it is notable that the majority of subscribers see their use of mobile devices and services evolving significantly over the coming 12-24 months (Figure 15).



While some these expected changes will relate to expectations of newer and more compelling ways of doing things, given the relatively modest level of use in many service categories at the moment, much of this picture will simply equate to increased uptake.

Either way, as experience is accumulated and both behaviour and expectations evolve, it will be imperative for mobile operators to keep up with subscriber needs and demands, both at an aggregate and individual level. And as per many other findings of the research outlined in this report, the importance of tuning into the customer and managing the customer relationship effectively is highlighted yet again.

## Discussion and Conclusion

The research outlined in this report identifies factors which drive potential service uptake across a clearly heterogeneous subscriber population. The influence of market segment and lifestyle is obvious, but carving up the subscriber base by age, gender, level of mobility, information hunger and so forth is only the starting point for understanding what determines demand. Three other important factors are evident:

- Intensity of experience with mobile services has a significant impact on service uptake. In particular, getting a subscriber hooked on one habit forming service drives broader and deeper usage of other services – in essence, creating a snowball effect.
- The nature of the device drives both interest in future activity as well as current usage. If you put a more capable device in the hands of a subscriber, their propensity to make use of advanced services increases as a result of better accessibility and easier navigation.
- Context, namely the day to day situations people find themselves in, has a significant impact on the perceived relevance and appeal of specific services. Mobile services are used differently in different scenarios – our so-called moments of need.

While this is all interesting and may allow us to ‘see the wood for the trees’, given the logic borne out by the research findings, the key question is what does this mean for a mobile operator?

To begin with, these findings add yet more evidence that taking a purely service-centric view of the world is not the best way to drive service uptake and performance. A customer-centric approach is required based on a clear understanding and appreciation of the factors driving the user's perception of relevance, interest and accessibility. While some operators have clearly started to take this on board through demographic targeting, our findings highlight that genuine customer centricity needs to go deeper than this, with more attention paid to how moments of need arise in the typical day. To put it another way, it is not just about tapping into the high level values of each

customer segment, but empathising with the way in which people live their lives and presenting the right kind of services to them in context and in a very accessible manner.

The other key take-away from the research is the importance of taking a portfolio view of service performance. As we have seen, individual services vary in terms of their level of appeal, the frequency with which they are viewed to be relevant, and the subscriber's willingness to pay. While it would be easy to focus on just those services that are easily monetisable and have a high demand in frequently occurring scenarios, it is clear that more mature users expect a blend of capabilities, some of which they only require occasionally, and some of which they expect to be delivered for free or at a nominal cost. It is therefore necessary to think in terms of the overall customer relationship and overall service proposition, mixing and bundling service components to maximise subscriber value and operator profitability at an aggregate level.

Such changes in behaviour may present some significant challenges for operators from a process, systems and even cultural perspective, but the imperative is clear if a good return on investment in networks and services is going to be made.

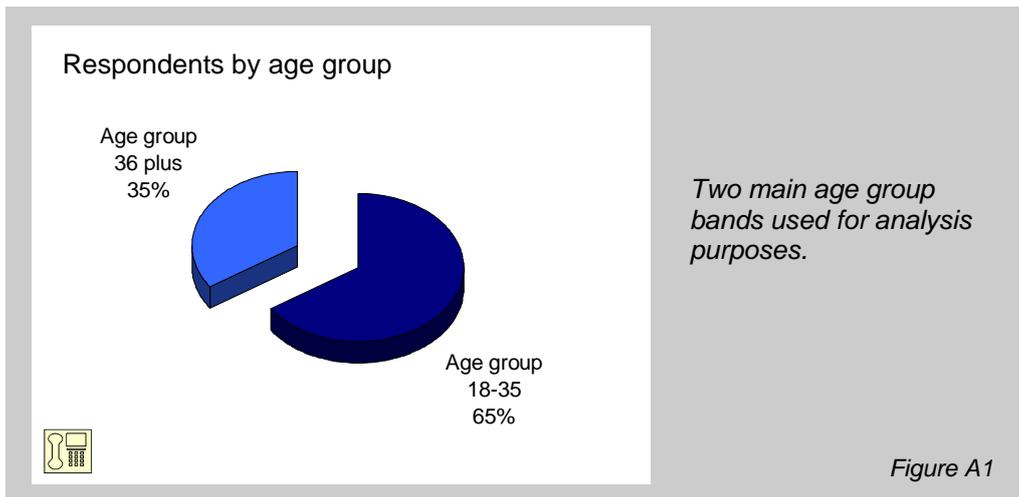
## Further reading

- 1 **Mobile Marketing Imperatives**  
Transitioning to a customer-centric approach  
*Freeform Dynamics, November 2008*  
<http://www.freeformdynamics.com/fullarticle.asp?aid=532>

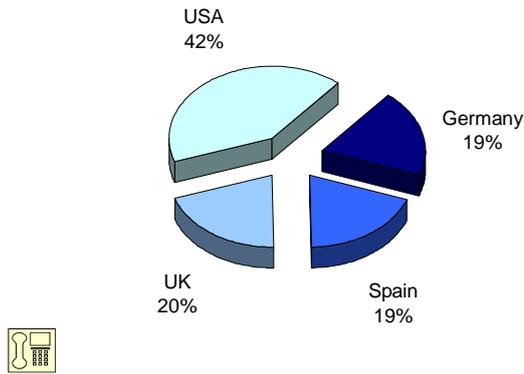
## Appendix A

### Research Sample

The charts presented in this report were derived from two sources. The main source was a telephone survey of 362 respondents representing a good cross section of business professionals with no bias towards any aspect of mobile related behaviour. Work on the study was completed in the first quarter of 2009. The sample was composed of the following:



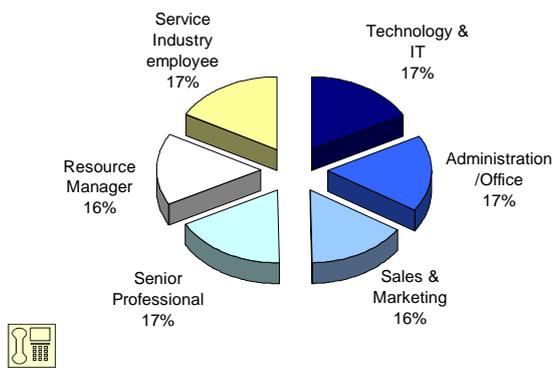
### Respondents by geography



*Focus on four key developed markets.*

Figure A3

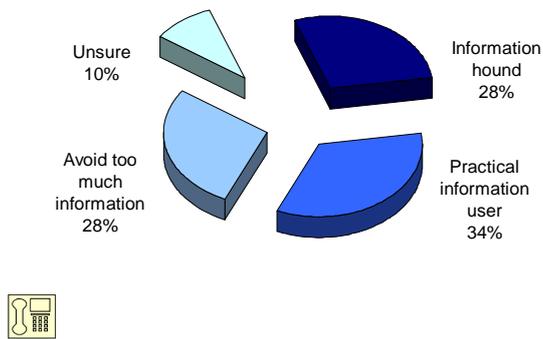
### Respondents by job description



*Cross section of occupations, but with a focus on office based workers.*

Figure A4

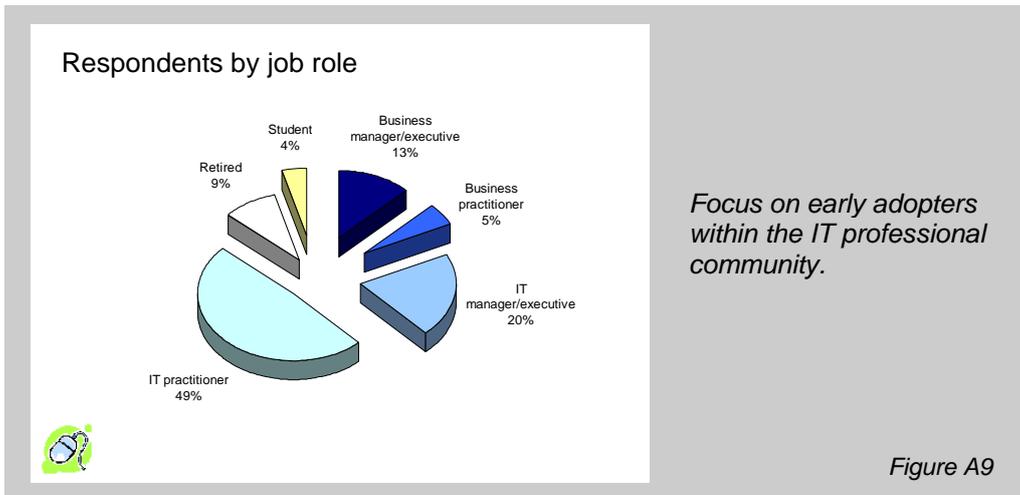
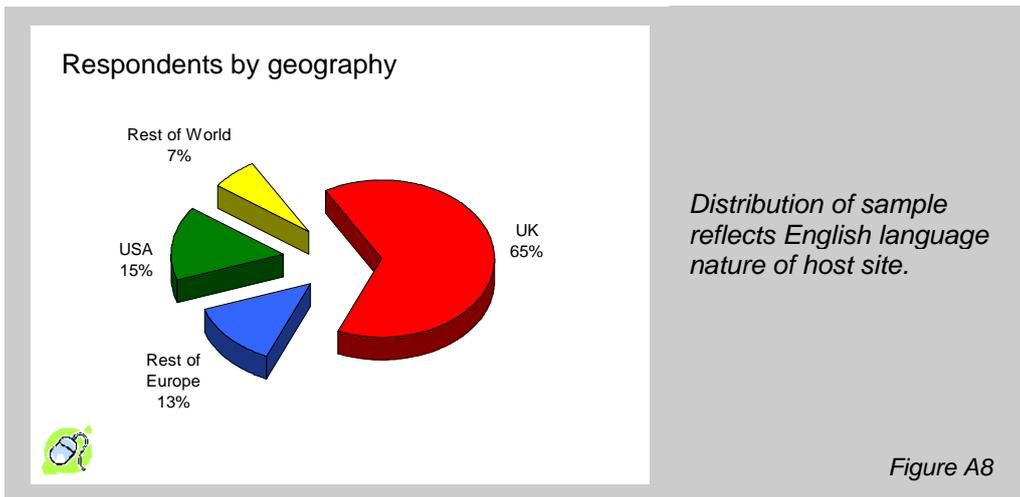
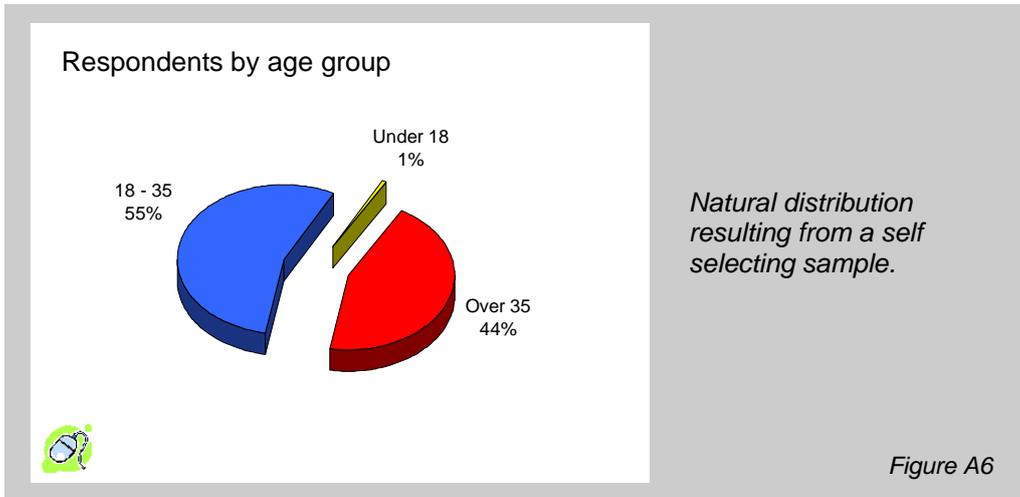
### Respondents by appetite for information



*This was based on respondent's perception of themselves, independent of mobile phone usage.*

Figure A5

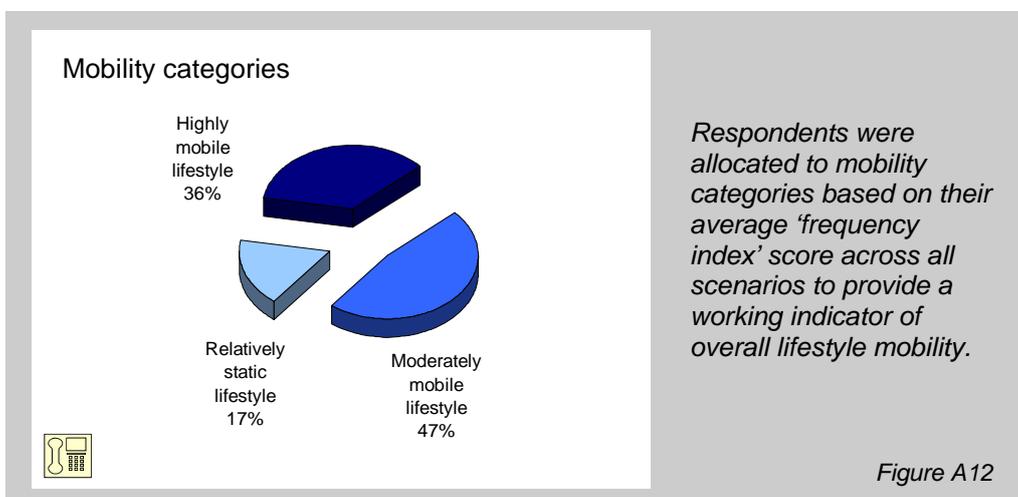
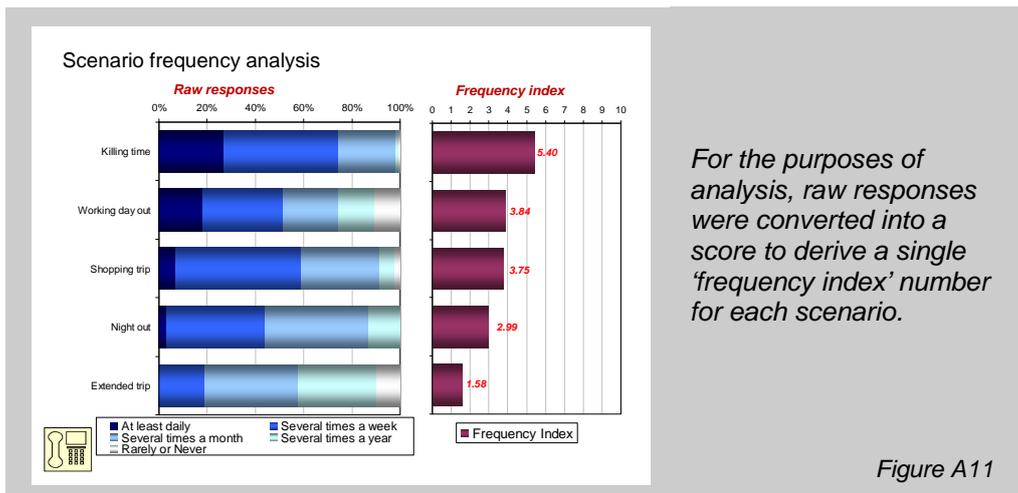
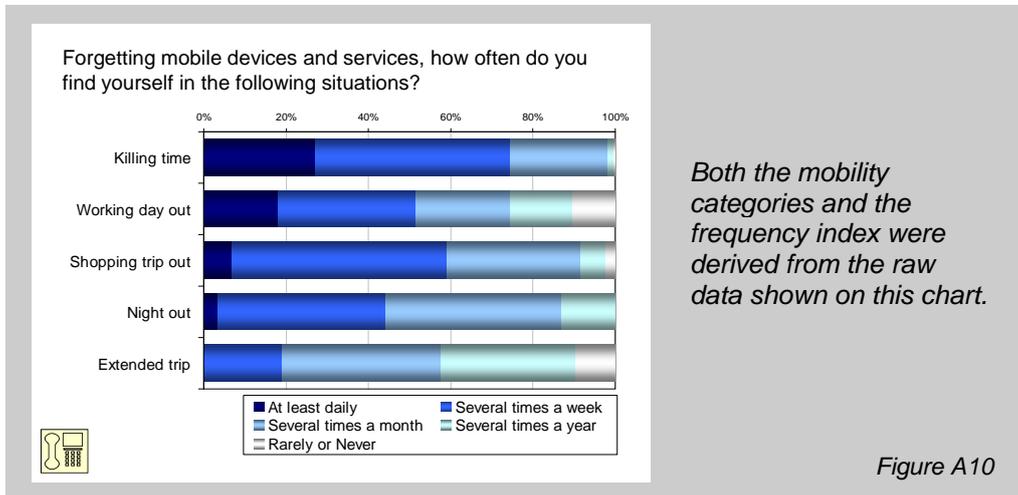
The supplementary source was an online survey of 1271 respondents conducted via a major IT news site. Respondents represent a sample of technology savvy users of more advanced devices. Work on the study was completed in February 2009. The sample was composed of the following:



## Appendix B

### Frequency Index and Lifestyle Mobility

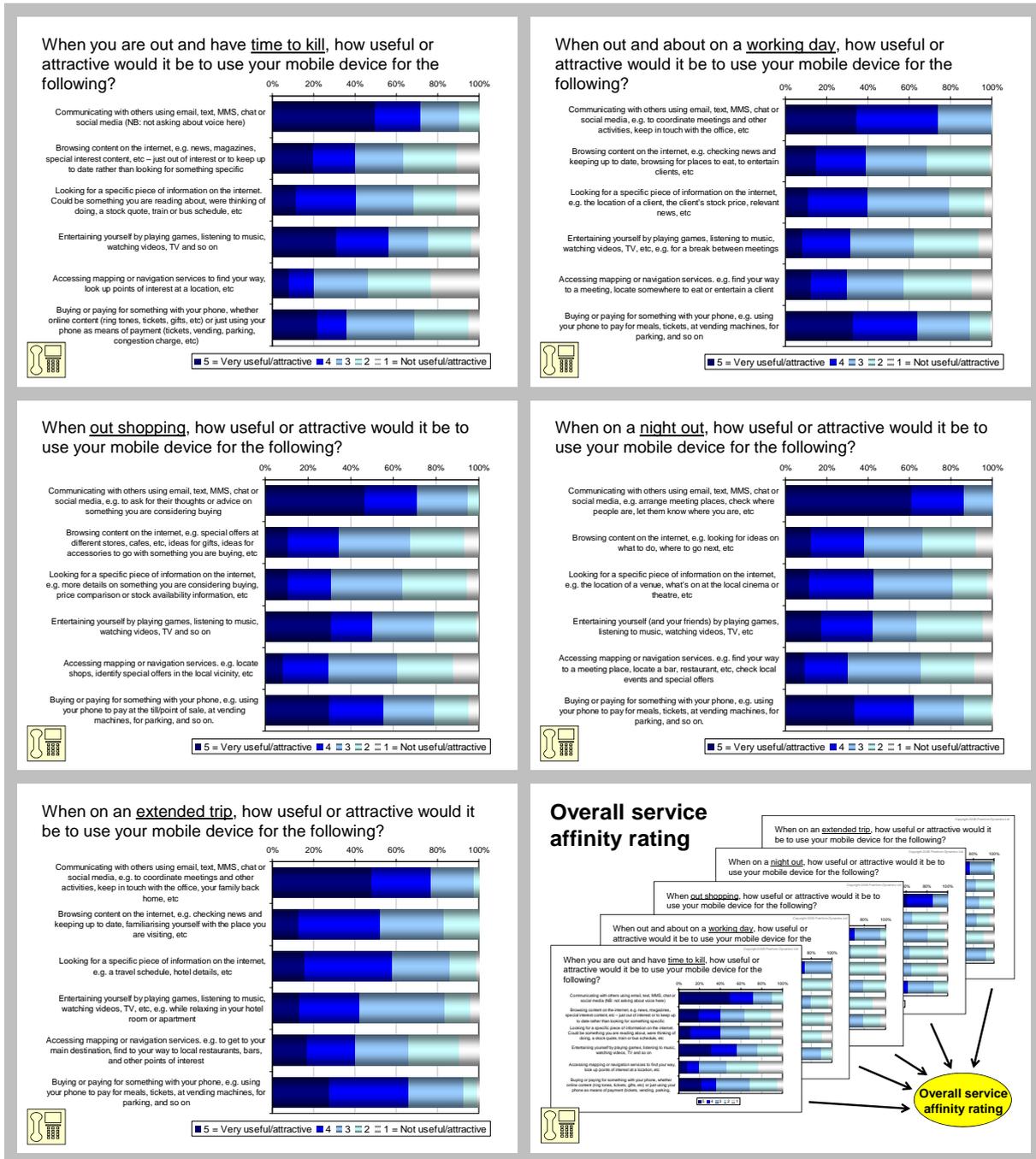
For the purposes of analysis, raw responses gathered during the research were used to calculate a 'frequency index', which was in turn used to compare and contrast between segments.



## Appendix C

# Service Affinity Ratings

Appeal ratings on a 1 to 5 scale for various mobile services in the context of each of the scenarios investigated were averaged to derive overall service affinity ratings (Figures A13-A18). These were in turn used to analyse the impact of various factors on the general appetite for mobile services as discussed in the main body of this report.



Based on this approach, respondents were allocated to one of three service affinity categories (High, Medium and Low) with approximately one third of the sample ending up in each category.



## About Freeform Dynamics

Freeform Dynamics is a research and analysis firm. We track and report on the business impact of developments in the IT and communications sectors.

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## About Nuance Communications, Inc.

Nuance is a leading provider of speech and imaging solutions for businesses and consumers around the world. Its technologies, applications and services are designed to transform the way people interact with information and how they create, share and use documents. In the mobile space, Nuance builds innovative, intelligent and intuitive touch and speech interfaces to simplify and enhance the way people interact with mobile devices, applications, and services, making mobile devices and in-car systems easier to use, automating customer self-service, and optimising the access and discovery of even the most advanced mobile applications and content — regardless of technical know-how, location, environment, or physical and literacy capabilities.

In order to ensure that its customers are working as productively and efficiently as possible, it has created comprehensive partner programs or initiatives designed to provide the highest level of service and support.

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