

Proceedings of

MOBILE ENTERTAINMENT: User-centred Perspectives

**25-27th March, 2004
Museum of Science & Industry in Manchester**

Edited by

Karenza Moore & Jason Rutter



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Published by

ESRC Centre for Research on Innovation and Competition
University of Manchester
Harold Hankins Building
Booth Street West
Manchester
M13 9QH
UK

www.cric.ac.uk

ISBN: 1-84052-012-4

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Contents

<i>Introduction</i> Jason Rutter	v
-------------------------------------	---

Part 1: Business, Markets & Regulation

<i>Emerging and Future Mobile Entertainment Technologies: Drivers and Barriers in the Technology Evolution</i> Mika Ylianttila	3
---	---

<i>Innovative Entertainment Services in the Portuguese Mobile Communications Sector – the Examples of MobiComp and YDreams</i> Nuno Correia & Manuel Mira Godinho	19
--	----

<i>International Comparison of Mobile Entertainment</i> Sonja Kangas	32
---	----

Part 2: End Users and Consumption

<i>Understanding Consumers’ Understanding of Mobile Entertainment</i> Karenza Moore & Jason Rutter	49
---	----

<i>Consumer Perceptions Towards WAP Games</i> Eusebio Scornavacca & Clarry Shchiglik	66
---	----

<i>Mobile Entertainment Users: Headline results from an online survey</i> Jo Bryce, Karenza Moore & Jason Rutter	86
---	----

<i>The Effects of Constant Touch on Consumer Behaviour: The Case of Iranian Mobile Users</i> Ali Saeidi	100
--	-----

Part 3: Location-based Games

<i>On the Streets with Blast Theory and the MRL: ‘Can You See Me Now?’ and ‘Uncle Roy – All Around You’</i> Duncan Rowland, Martin Flintham, Steve Benford, Nick Tandavanitj, Adam Drozd & Rob Anastasi	115
--	-----

<i>‘Gangs of Bremen’: The First Prototype of a Mobile Game</i> Jochen Hahn & Katja Fahrenholz	125
<i>On the Development of a Mobile Play Mechanic</i> Barbara Grüter & Anna Mielke	133
<i>The Design History of a Geolocalized Mobile Game: From the Engineering of Displacements to the Engineering of Encounters - A case study of the development of a mobile game based on the geolocation of terminals</i> Christian Licoppe & Guillot Romain	149

Part 4: Innovative Services

<i>Stay in Contact – ‘Landlordz’ Strategy Online Gaming for Mobile Platforms</i> Michael Coldewey, Helmut Eirund, Peer-Oliver Görke, Christian Hein, Marcus Knittel, Thorsten Wittwer & Hans Voitke	183
<i>Mobile Phones and Football Fans: Technology, Services and Markets</i> James Orwell	195
<i>Designing an Auditory W-LAN based Game</i> Rikke Hadrup, Pelle Svane Jakobsen, Mathilde Schytz Juul, Dan Lings & Ásta Olga Magnúsdóttir	207
<i>C Space an adaptive, user led communication service exploiting the convergence of DVB-T and UMTS in portable devices</i> Leon Cruickshank	218
<i>A Content Personalization Engine for Mobile Device Games</i> Danielle R. D. da Silva, Alexandre L. G. Damasceno, Börje F. F. Karlsson, & Geber L. Ramalho	231
<i>The Future of Ubiquitous Gaming</i> Anxo Cereijo Roibas & Riccardo Sala	244
<i>‘Be a Freeporter!’: Enabling a Mobile News Publishing Community</i> Tom Nicolai, Nils Behrens & Heidi Thielemann	254

Part 5: Posters

Conceiving an augmented reality, through the tone of mobile data, the proximity of its users and the poetics of environmental communication

Adam Cooke

273

Mobile Entertainment Users: Headline results from an online survey¹

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Abstract:

This paper offers a preliminary analysis of a web-based questionnaire on mobile culture and entertainment. Respondents were found to value the advice of those in their informal social and knowledge networks when choosing mobile operators and ME products and services. Respondents demonstrated their reluctance to switch operators, in spite of indications of dissatisfaction with their current providers. Despite high usage levels of fixed-line Internet for entertainment purposes respondents were less than enthusiastic about mobile entertainment. Gaming, taking and sending pictures, watching video clips and listening to music on mobiles were all met with a lack of enthusiasm, with the majority of our sample emphasising the importance of the more 'traditional' communicative functions of mobiles. Evidence of conflicting views on content pricing and handset usability demonstrates the embryonic nature of the ME market. Consumer expectations are still in the process of being formed. In terms of consumer concerns, our results suggest that health worries and the protection of minors from 'inappropriate material' were minimal amongst this particular set of respondents. 'Junk text' was highlighted as the major source of concern. Respondents appeared reluctant to buy into the convergence trope of 'one device for all' although modernist notions of continuous technological progress were evident in user expectations. Given the 'early adopter' and 'high-level user' status of the majority of our respondents, their views on the future direction of mobile entertainment services are highly relevant here. Further work is needed to reach a greater understanding of the relationship between user and technology, between consumer and mobile entertainment product, as this embryonic market gradually matures.

Keywords:

mobile entertainment, users, consumer expectations, service adoption, regulation

¹ This paper is based upon work funded by the European Commission as part of contract number IST-2001-38846 and knowledge generated through that funding remains property of the European Communities. The views and opinions expressed in this paper are those of the authors and do not necessarily reflect those of the European Commission. The authors would like to thank the European Commission for permission to present this work and use project data.

Introduction

This paper presents headline figures from a web-based survey conducted by the authors as part of a European research project. It stands as a first thumbnail description of the results and an attempt to get preliminary observations from the data into the research community rather than a definitive analysis of the data. The focus and description presented in this paper is meant to complement a period of focus group research undertaken prior to the development and launch of the questionnaire. Key themes identified in the qualitative research are presented in Moore & Rutter (this volume).

The web-based questionnaire was made available online in English, Greek, Spanish and Italian during early 2004. Respondents were recruited through press releases, posting to newsgroups, consumer websites and direct mailing to individuals who has expressed an interest in the project's research. A respondent incentive of a prize draw for a PDA was offered. The analysis below makes use of the first 600 responses to the questionnaire.

This paper looks at the basic demographic constitution of users who responded, their use of fixed line and mobile services, and their option of new technology. It then explores the knowledge resources that user drawn upon when making ME purchase decisions or changing service providers. Next the paper looks at users willingness to use and pay for future and emerging services before exploring consumers concerns over possible health and social issues associated with mobile phones and ME services.

The sample

Responses came from 35 countries with the majority being made up from the UK (45%) and USA (26%). There was a notable lack of representation of Scandinavian countries (Finland 1.6%, Sweden 1.4%, Norway 0.8%, Denmark 0.5%). This is especially surprising here given the level of mobile device ownership in these countries, and that the mGain project has four partners in Finland, two in Sweden and one in Norway.

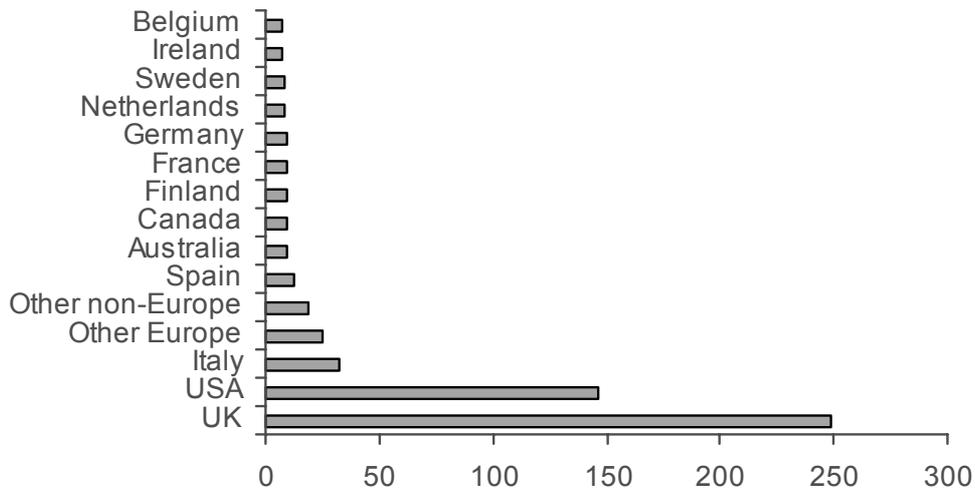


Figure 1: Country of residence

The gender divide between respondents was approximately 2/3 male and 1/3 female with 72% being below 40 years of age.²

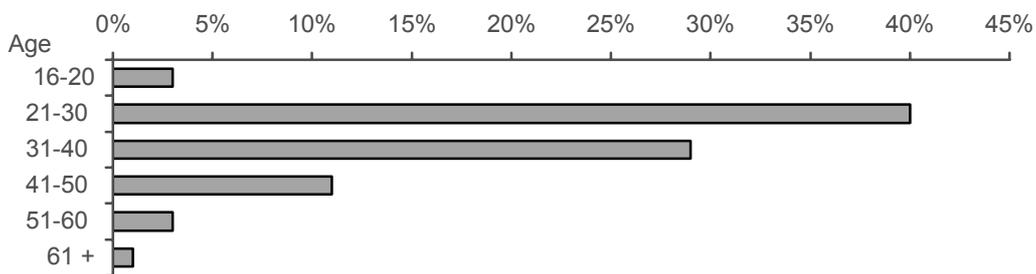


Figure 2: Age of respondents

As such, the sample is skewed from population averages but is representative of early adopters and high-level users. Not surprisingly, only 4% of respondents did not own a mobile phone but 10% owned and used more than one mobile phone on a regular basis. Only 26% of respondents disagreed with the statement that 'I like to have a mobile phone that is as up-to-date as possible.' Further, 60% of these users are subscribed to the monthly subscription schemes with their mobile service providers or enjoy the fact that someone else pays the bill, whereas less than 1/4 use the less lucrative (for service providers) pay-as-you-go schemes.

² In line with the host institutions' ethical guidelines, prior to taking the survey respondents had to affirm that they were over 16 years of age.

These consumers demonstrated a high level of technology ownership and use: 67% had Internet access both at home and at work, with 57% spending three or more hours a week using the Internet for leisure and entertainment purposes. There is a high ownership of personal technologies such as games console (PlayStation 23%, Xbox 15%, Gamecube 12%, GBA 11%), mp3 players (23%) and PDAs (18%). The level of subscription to digital cable, aerial and satellite TV services was 43%.

Entertainment uses of the fixed-line internet were encouragingly high with more than 80% of respondents using their connection for leisure shopping, finding local entertainment information (e.g. cinema times) and finding other hobby related information. The low level of adoption of adult services in this sample may be an artefact of user response, especially given that over 70% of users ‘download pictures.’

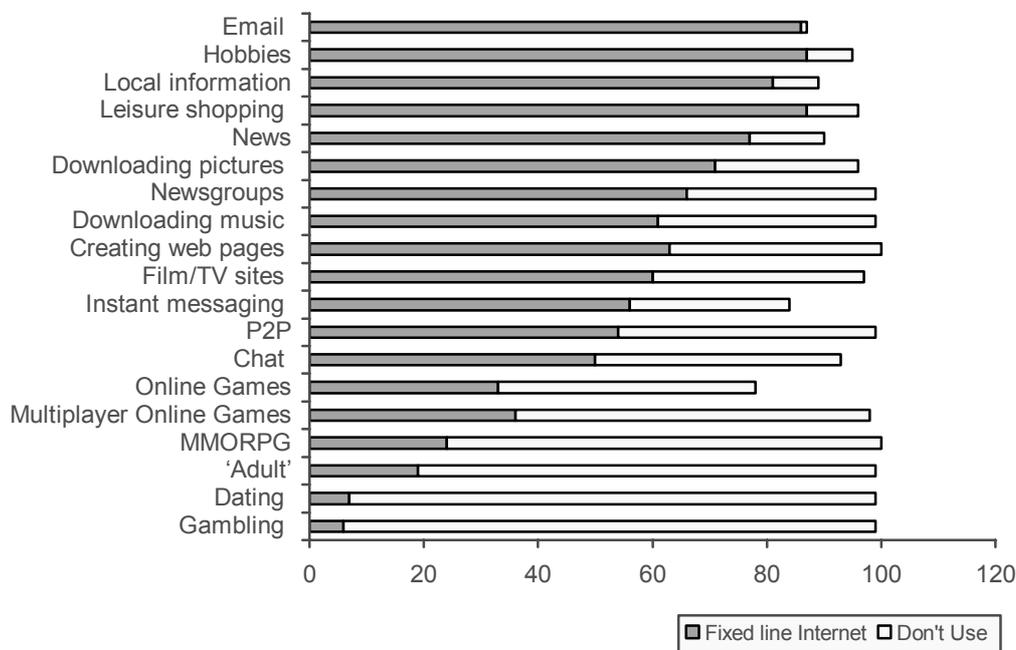


Figure 3: Use of online services using fixed line connection

However there is a notably low adoption of commercial content services. Use of pay gaming services (such as or pay-per-play websites and digital TV gaming) all had adoption rates of 2% or less. This apparent reluctance to adopt pay services and the existence of free (if, in the case of some well known P2P services, illegal) alternative options, presents a significant challenge to ME content providers – especially if encouraging migration from fixed-line services or adoption of complimentary services.

User responses support the belief that successful ME services will draw on the unique attributes of mobile technologies rather than competing with other, more

established, cheaper, and content rich alternatives. When asked which services they had accessed using a mobile device, there was a clear indication that the services with higher adoption rates are those which exploit timeliness of data delivery (e.g. instant messaging, emails, news updates) or the mobile context of service use (e.g. location-based information).

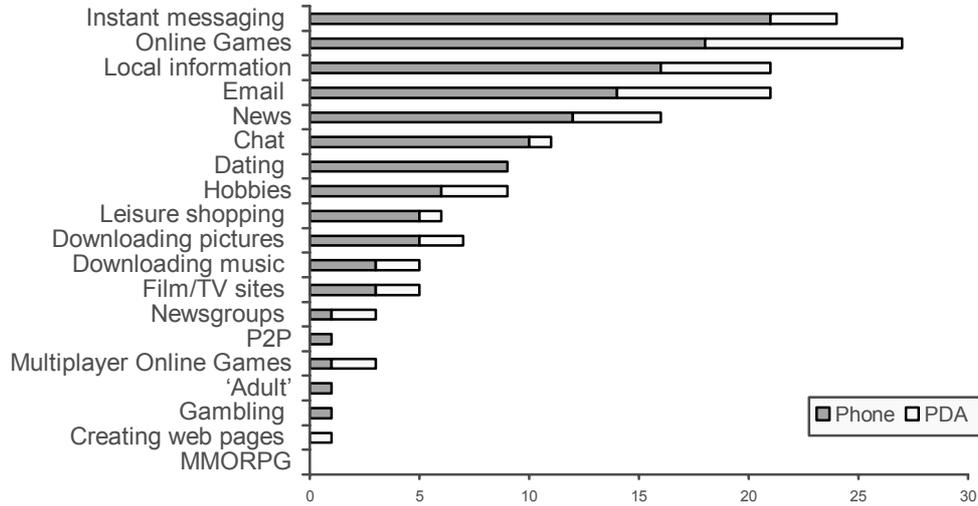


Figure 4: Use of online services using mobile devices

This is supported by the number of respondents who were attracted to mobile convenience services such as pre-booking and payment for events and queue avoidance.

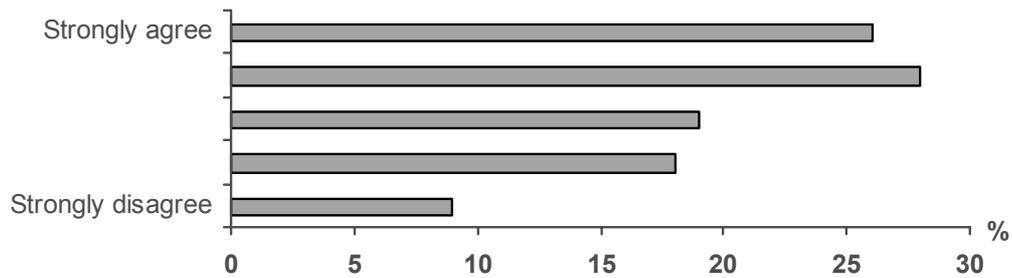


Figure 5: It would be helpful if I could pay for goods/services such as cinema tickets using my mobile phone

Capturing users

Despite the trend towards adoption of technologies amongst this user group only 2% own a third generation phone (45% of users are from the UK which has had a commercially 3G network since March 2003) although 36% were considering upgrading during the next 12 month. However, despite the hopes voiced by Hutchison 3 that the launch of their service would draw users from the incumbent UK service providers (Vodafone, Orange, T-mobile, & O₂), it appears that - like users of other services such as banking, utility supplier or land line telephony - users demonstrate inertia in moving between mobile service providers.³ Of the users questioned, 60% had been with their current (main) operator for more than 12 months with 1/5 of them remaining for more than 48 months. This is despite 1/3 of them making a complaint, mostly directly to their service provider, about their service. Almost 1/2 of those remaining unsatisfied with the response or receiving no response at all.

The lack of restlessness in this group of leading consumers makes the issue of capturing and retaining new accounts extremely important for service providers seeking to maximise this part of the market. Previous work has demonstrated national differences in consumers' purchase of mobile phone services dependant on handset or call price (Massini, 2004), and indeed cost of calls and handset were identified as key variable influencing purchase. However, the most important factor influencing operator choice was socially orientated – namely subscribing to the same network as friends or family. This may indicate the utility in service providers developing further multi-user subscription services or offering incentives such as reduced call costs to nominated, same network numbers.

³ Apathy is not the only factor behind users' reticence in changing mobile service provider. Number portability still can be laborious for users and taking a new number raises issues about remaining in contact. The battery life of 3G phone (sometimes less than 24 hours in practice) also caused user end reluctance, as was failure to see video calls as a killer communication application. Such consumer perspectives are dealt with in Moore & Rutter (this volume).

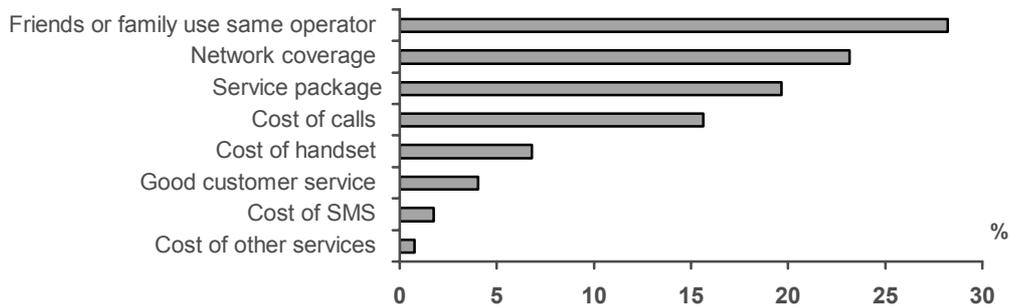


Figure 6: Please select the main reason why you chose this operator.

When asked which sources of information they placed most importance on when making decisions to buy handsets, users highlighted informal knowledge networks and resources such as friends, colleagues, family members and consumer produced websites.

However, there was a proportion of consumers who did place importance on information that reflected more clearly the interests of the service provider or retailer. The fact that websites of the operator and manufacturer, along with in store promotional information and advice offered by shop assistants were seen as important suggests an opportunity to significantly influence purchase decisions of users at the point of sale. This is especially the case given that approximately 70% of respondent bought the phone they use for themselves and a further 10% or we given it by a member of their family. This suggests that this market is heavily reliant on end user decisions, needs and discourses.

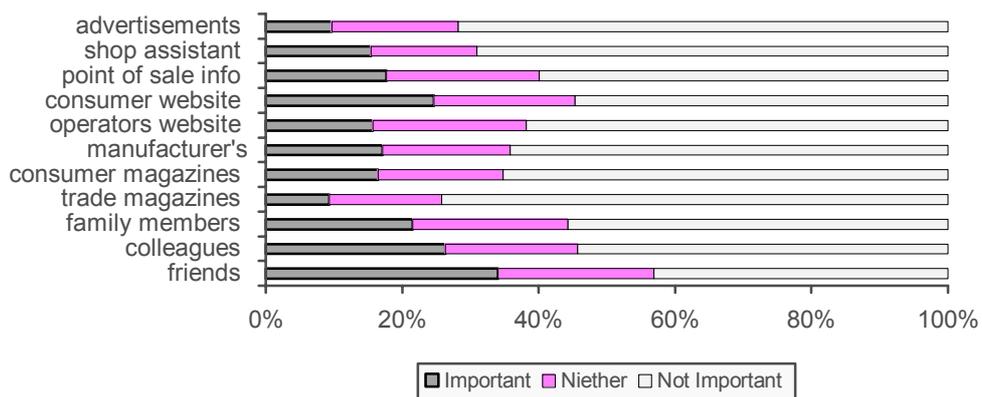


Figure 7: Rate the importance of the following sources of information influencing your decision to buy mobile devices, services and content

Other reasons given included that users worked for the operator, that the phone came as part of a job, in order to avoid using a previous service provider, to get a particular handset (e.g. O₂'s Xda II) or 'reliability as former monopolist.'

Opinions on Future Markets

The value of the market segments represented in the survey sample is not only in the view it gives of their past and current practices, but also their value as early adopters for new services and their position as lead adopters. As such these users' opinions on future end user services has special importance.

The notion of 'Mobile Entertainment' as a hook for content, service and hardware adoption has been the focus of significant amount of industry and academic interest, though there remains a general consumer indifference to it. Taking games as a key element of the mobile entertainment market, the survey asked about the level of interest consumers had in using their mobile phones for this. Asking users to say whether they thought that the games available for mobile phones were a fun way of passing the time revealed no strong enthusiasm.

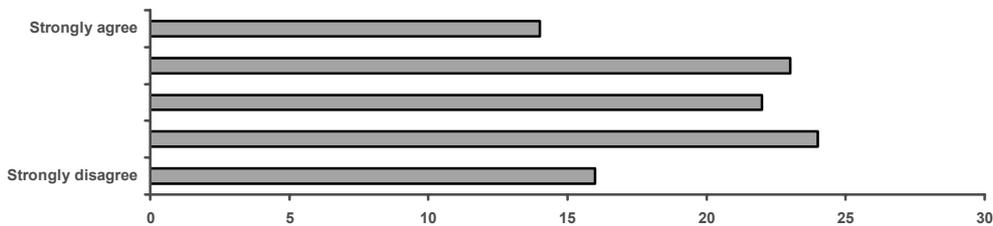


Figure 8: I think the games you can get for mobiles are a fun way of passing the time

There was a similar lukewarm reception from users when asked if they agreed that 'I'm not really bothered about playing games on my mobile phone.'

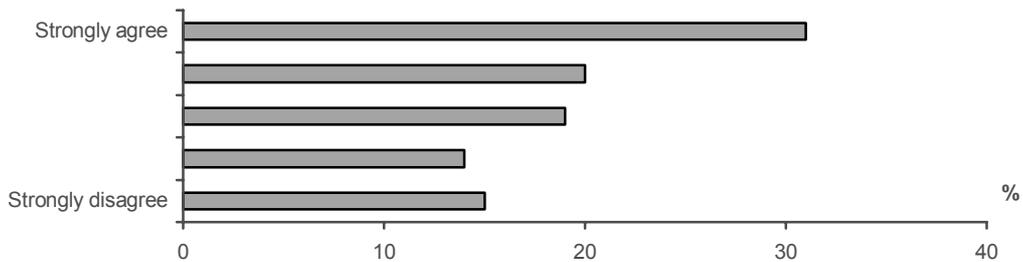


Figure 9: I'm not really bothered about playing games on my mobile phone

In the UK at least, significant marketing attention has been paid bringing the ability of 3G networks to the delivery of video content, such as football highlights and video calls, to mobile users. But once again user enthusiasm for these services is far from strong.

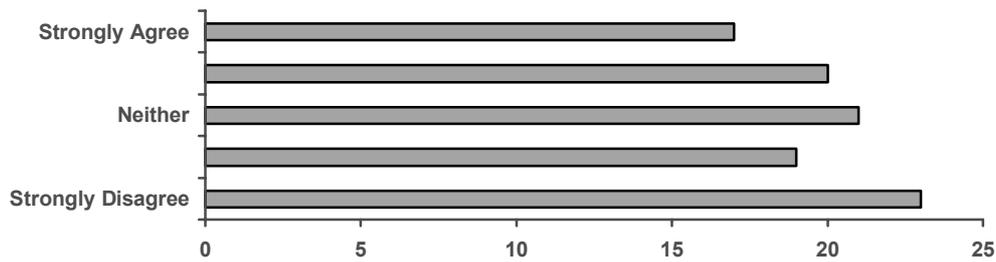


Figure 10: 'It is great that you can watch video clips, take/send pictures and listen to music on your mobile'

Such opinions will become more important when users make decisions not just about whether to play games using their mobile device, but to search them out, download new ones and pay for the content and service. Even though the respondents were used to absorbing a premium for being early adopters, divergent responses to a question concerning pricing for MMS suggested that current pricing points for new ME services and content were not attractively positioned. When users were about this pricing point again in a less abstract context, highlighting the social network rather than the technology, this had a notable effect on consumer opinion. The amount of people who found the €0.5 price point acceptable dropped from 36% to 9%.⁴

This reluctance to pay for available services also applied to alternative methods of revenue generation by content and service providers. When asked whether they would prefer to get cheaper content in return for receiving advertisements on their mobile phone, 73% disagreed or strongly disagreed and 49% suggested they did not want to receive any advertisements via their mobiles.

Moving from service use to handset preferences, users' demands for mobile devices are typically contradictory and serve to further clarify the formative nature of both the mobile entertainment industries and their foundational technologies. This immaturity is evident in two different forms: the technology that is the basis of the industry and the formation of consumer expectations.

⁴ Given the importance placed on social networks in other parts of this survey, this result is counter intuitive and seems to demand further exploration at a later point.

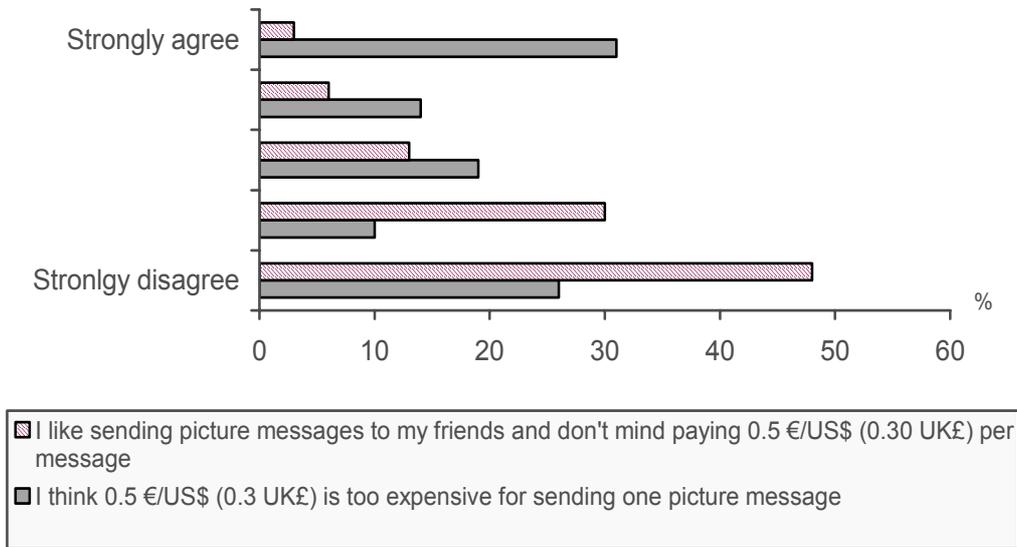


Figure 11: Attitudes towards payment for MMS

There was a general belief that a certain amount of learning time when upgrading technology was unavoidable, with only 17% of respondents disagreeing with the statement that ‘I think you have to take time to learn how to use a new mobile.’ Only the same percentage claimed never to have been frustrated when they were unable to find what they wanted on their mobile phone. That consumer views on the development of personal mobile technologies are still evolving is evident in the respondents’ ability to simultaneously hold contradictory views.⁵

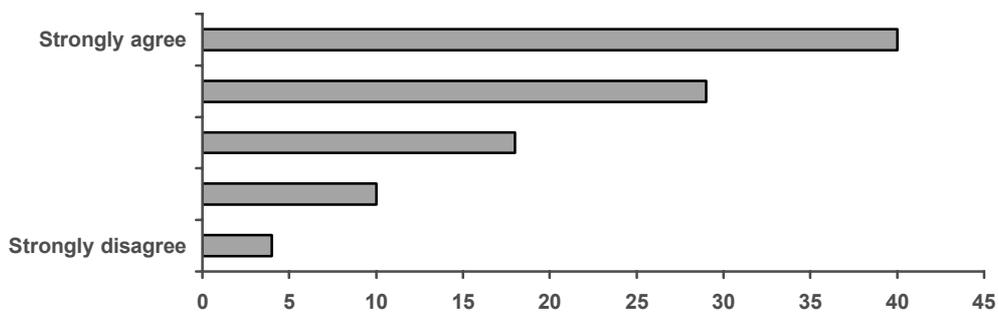


Figure 12: I like mobiles that are small and compact

⁵ The ability for people to hold contradictory opinions is, of course, not limited to opinions on mobile phones. See for example, Philo (1990) for discussion of they way audience members in the UK negotiated a variety of views concerning the 1984/5 miners’ strike and its news coverage.

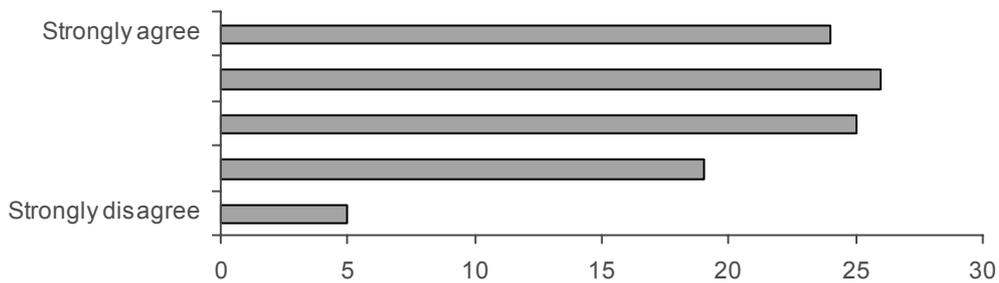


Figure 13: It is easier to use a mobile if it has a large screen and big buttons

Encouragingly, there is a strong belief that mobile entertainment is an industry whose technological development and consumer adoption within the market is inevitable. There was evidence to support the belief that users have adopted a modernist view of this technology-based industry and because of this assumed technologies development would be linear and constant move toward perfection. Only 5% of respondents did not think that in the near future mobile phones would have more memory space and a better battery life. Similarly, only 11% did not believe that in the near future mobile phone connections would get faster and not crash. 69% were so optimistic that they agreed with the statement, 'In the near future one device will do anything you want it to whilst you are on the move,' while only 17% did not believe that in the near future mobile phones will be linked to all our home entertainment devices.

This is a promising finding for providers, but it is vital that these positive expectations are capitalised on in a strategically managed fashion so that over-optimistic consumers' expectations are not encouraged, or there is (as with WAP) a notable difference between what is promised to users and their real world experiences of services.

Despite this, but in line with the focus group data presented elsewhere in the volume (Moore & Rutter), there appears to be a general reluctance of consumers to adopt the rhetoric of convergence. 74% disagreed with the statement that 'There is no need to have any other mobile device than a mobile phone', with a further 28% being undecided on the issue. Indeed, despite the high level of adoption of personal technologies by the respondents, there was little to suggest that users saw these as forming part of a portfolio of complementary technologies. Little need was apparent for devices such as mp3 players, personal DVD players, and portable game consoles to interface with mobile phones. Given the average level of technological adoption by the sample, that less than 1/3 of the respondents agreed that 'Mobile phones are best used with other mobile technologies such as an MP3 player or a PDA' is not entirely encouraging. Indeed, only 9% of users believed that the primary use of a mobile phone was anything but contacting people you already knew.

Consumer Concerns

Elsewhere the authors have systematically explored policy and regulatory aspects of the European mobile entertainment industry (Bryce, 2003) and argued that reliance on research and industry experts as a proxy for consumers is problematic (Moore & Rutter, 2003). It is notable that when respondents to the questionnaire were asked about the health, security and appropriate content issues relating to their mobile devices, their responses were fairly blasé. Despite media and regulatory interest in the possible effects of mobile radio frequencies and microwave radiation⁶, 62% would not entertain the suggestion that use of a mobile phone might have negative health consequences.

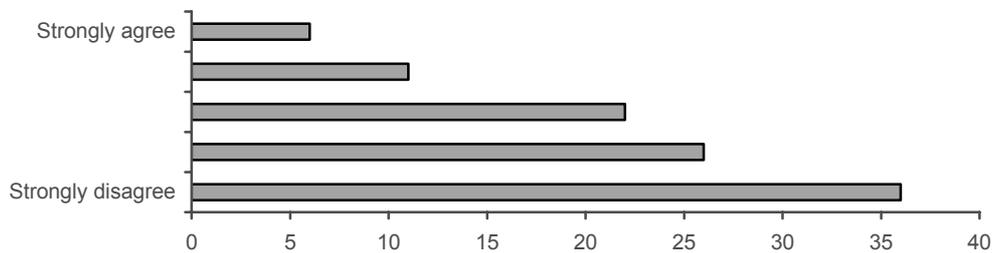


Figure 14: Using your mobile may be bad for your health

There is of course debate about what level of consumer concern should be considered significant, but discussion of this is beyond the scope of this paper. However, the pattern of significant consumer confidence is notable and remains apparent when respondents were asked about other areas of potential regulation. When asked about whether they were concerned that minors might gain access to, or be exposed to, inappropriate material there was a significant spike with 38% strongly disagreeing with the statement.

⁶ See for example the UK government’s Department of Health web site at www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/MobilePhones/fs/en?CONTENT_ID=4069598&chk=aPE6Vr (Accessed 28 January 2004).

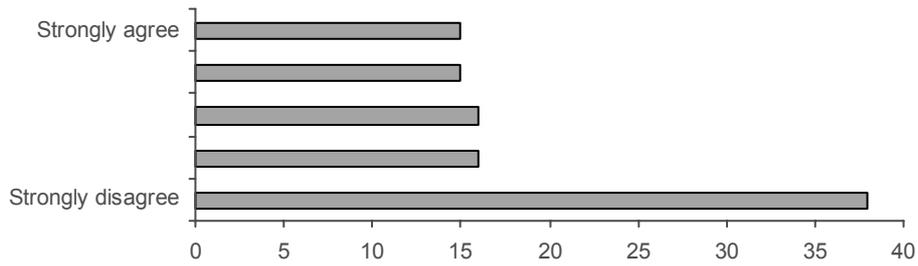


Figure 15: Children may see or be sent inappropriate or illegal material

Although concerns about the safety of credit card or identity details were less starkly defined, there was still a suggestion that the heavy Internet users represented in our sample had become accustomed to using secure services for fixed-line transactions, and had become relatively comfortable with the belief that the data they send to servers was safe and secure.

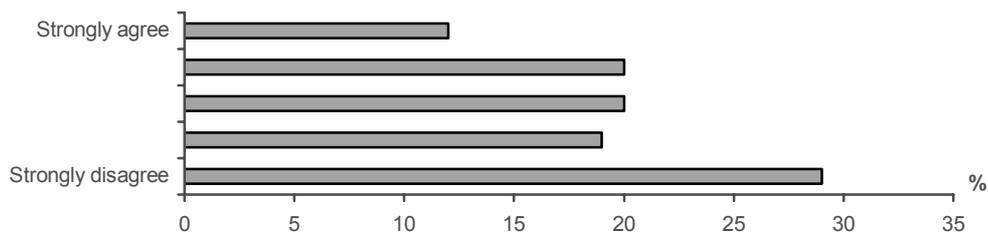


Figure 16: Paying for goods and services using my mobile phone is not secure

However, users did have reservations over the amount of spam and targeted adverts they might receive on their mobile devices. Of the respondents, 59% were worried about the level of unsolicited messages they might get, reinforcing the reticence of consumers to accept advertisements being pushed to their mobile phones discussed above.

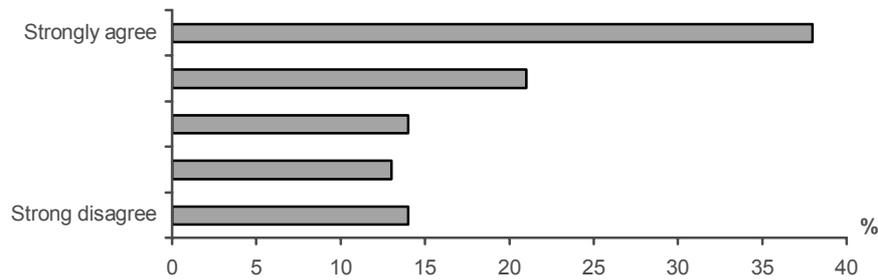


Figure 17: I may receive unsolicited marketing and communications on my mobile via SMS and MMS

Whether this acceptance of possible risks associated with the development of mobile entertainment remains as described above is uncertain. It seems as though users are applying current experience of Internet services to ME. While this may smooth users' adoption of comparable mobile services, there is a risk that a single, high profile event may have a significantly negative effect on consumer trust.

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