

# Consumer Convergence

## *Digital Television and the Early Interactive Audience in the UK*

Vivi Theodoropoulou

The concept of convergence is commonly used to refer to the blurring of boundaries of previously distinct industry sectors (broadcasting, computing, telecommunications), as well as the process of integrating different technologies and their functions into a single medium (Marsden & Verhulst, 1999). Industry and technology convergence are at the centre of current policy design and regulation around much of the world, and media analysts and scholars are keen to map economic, technological and social consequences. What is often overlooked in the debate about convergence is a critical assessment and empirical examination of potential changes in consumer behaviour.

Particularly the convergence between the TV and PC, as manifest in the introduction of interactive digital TV [DTV], is said to have major consequences such as the fragmentation of the audience, the participatory and 'empowered' interactive TV user, and consumers construed as producers and resourceful co-creators of their viewing menus. Yet, 'consumer behaviour convergence' and the prospect that "the now predominant 'passive' television viewing behaviour will be replaced by more interactive behaviour patterns" (Stipp, 1999: 11) is premised on speculation. Consumers' adoption of new media and their usage patterns and preferences have implications not only for the further design of technologies but also for the future shape of industry convergence. Hence, an examination of how people adopt and consume new media must be at the heart of any informed discussion about convergence.

This is particularly important in deliberations about the future of public service broadcasting [PSB] because most PSB operators in Europe are re-defining their role in attempts to keep up with industry and technological developments. But public service broadcasters and key industry players alike need to adopt a more 'audience centred' approach. That implies basing their strategies and schemes for further development on empirical evidence of how audiences respond to their offerings. This is vital to soon understand which of their future plans are likely to be embraced by the audience and what the social consequences of their offerings portend.

The empirical examination of convergent consumer behaviour is the subject of this chapter. The author examines the process of DTV consumption by its early audience in the UK as revealed in the adoption and use of Sky digital, the leading DTV service. I argue that audiences are one of the key factors shaping DTV and that, contrary to marketing predictions and industry hype, the 'converged' viewer has yet to become a reality. This conclusion is supported by empirical research that draws on a nation wide survey combined with in-depth interviews with Sky digital subscribers.

Adhering to a techno-sceptical line of thought, I argue that the consumption of DTV as a 'hybrid' medium – one encompassing both old and new services and thus patterns of consumption – is rather 'conservative'. The findings show not only that the use of interactive services is fairly marginal but most importantly that what consumers want from DTV is, simply put, more TV. This highlights the discrepancy between the industry's efforts to implement new technological forms in broadcasting and audiences' willingness to negotiate such forms.

After mapping the UK digital environment and discussing the methodology of the research, I present early empirical findings<sup>1</sup> to sketch a profile of the early Sky digital subscriber. The discussion proceeds by outlining the reasons why the members of the sample decided to subscribe to DTV, and then addresses their viewing preferences and use of interactivity.

## The digital landscape in the UK

The UK is currently the most advanced European DTV market with adoption rates that exceed 8 million<sup>2</sup>. It became the first country to have a satellite and a terrestrial digital broadcasting system in 1998, with BSkyB launching the digital satellite operator Sky digital in October 1998 and ONdigital launching the first digital terrestrial service in the world one month later. Telewest and NTL, the cable operators, launched their digital services in 1999. Hence, DTV was available on a subscription basis in all three platforms: satellite, cable, and terrestrial.

Since 1999, developments have changed the British digital landscape. Sky digital, the satellite operator, is still dominating the market with approximately 6.1m subscribers<sup>3</sup>. Both cable providers, with a joint subscription base of 1.6m<sup>4</sup>, are facing economic difficulties, administrative and financial restructuring<sup>5</sup>. ONdigital was re-launched as ITV digital<sup>6</sup>, but due to severe technical problems, debt, and low levels of subscriptions eventually shut down in May 2002<sup>7</sup>. ITV digital's collapse signalled the creation of a free-to-air digital terrestrial platform as its licence was granted to a consortium of the BBC, BSkyB and transmitter operator Crown Castle which launched the subscription free service Freeview in October 2002. This development is perceived to strengthen the role of the BBC in the digital era and to also preserve Govern-

ment plans for the switch off of the analogue signal by 2010. It is believed that a free-to-view service will attract sceptical viewers who do not wish to take up digital pay TV, and will therefore help create a fully digital Britain.

## Methodology

The research employed a multiple method design based on a combination of qualitative and quantitative methods to study DTV adoption and use in scope and depth. This triangulation scheme enabled portraying early DTV adopters and their media use through survey research as “a factual slice through time” (Livingstone, 2002: 25), as well as offering a more contextualised articulation of users’ experiences with DTV through the employment of qualitative interviews.

The survey was conducted in January 2001. It used a simple random sample of 1986 Sky digital subscribers who had registered for the service from its launch day until August 2000, when its subscription base was 3.8m. The postal survey achieved a response rate of 35.25%, which is considered satisfactory for academic postal surveys. In total, 700 subscribers returned completed questionnaires. Admittedly, this response cannot lead to broad generalisations concerning the whole population of Sky digital subscribers. However, the reported figures provide indicators and outline trends which, when interpreted with caution and in conjunction with other research and broader developments in the UK broadcasting context, can give a reasonably balanced overview of how DTV was consumed in its early years.

The main objective of the survey was to map the early DTV audience in its social and media characteristics. It specifically aimed to study early adopters’ patterns of viewing, emerging patterns of use and the reasons why they adopted DTV. The quantitative component of the empirical design was complemented by qualitative insight gleaned from 15 in-depth interviews with a sub-group<sup>8</sup> of the original sample. The interviews, apart from allowing the researcher to validate, challenge and expand the survey data, aimed to provide a more in-depth account of consumption and users’ domestication of DTV. Thus, the interviews explore and assess how users negotiate issues of newness and change, how they develop a relationship with the new medium and how this changes through time and use, as they grow accustomed and more familiar with it.

## Demographic and media profile

The results suggest that the average early Sky digital subscriber who participated in the research is male, around 45 years of age, of low to average

educational level, in full-time work, married and living with his family. These figures are in agreement with BMRB's research which showed that the majority of Sky digital viewers are male (55%), in full time work (46%) and in the age group of 35-54 (41%)<sup>9</sup>.

The majority of respondents are continuing customers of Sky analogue who switched to its digital platform. Only 29% of the participants had no previous experience of multichannel TV. The technology most commonly used for digital reception is the set top box (called a 'digibox'), whilst integrated DTV sets indicate a poor take up.

The overwhelming majority of Sky digital households benefited from the Sky Free Initiative promotion whereby they received the digibox and correlated reception equipment free of charge. In fact, the decoder give-aways and the 'set top box price wars' that followed between Sky digital and rival ONdigital was considered a major drive up for DTV sales (Papathanassopoulos, 2002: 50).

A distinctive characteristic of DTV households is that they are comparatively 'advanced' in terms of their in-home media equipment. This is mainly reflected in the ownership of multiple TV, telephone and music related equipment, which appears to be higher than that of the national average<sup>10</sup>. The possession of PCs and Internet links in Sky digital households is considerably high, as well, when compared to the national averages. Whereas 45% of UK households own a PC and 33% have Internet access<sup>11</sup>, 65% of all households participating in the survey have one or more PCs, and out of those 91% have Internet access.

With reference to such characteristics, then, early DTV users do not neatly fit the profile of the typical early adopter; that of a young upscale male attracted by new technologies. Early DTV users instead tend to be older and less educated, were accustomed to the multichannel experience before joining the digital world and secured a cheap entry into the digital era; yet they are also ICT rich and media literate users. This profile of an 'atypical' early adopter for DTV suggests the consumption and use of the new medium might be atypical as well. This hypothesis was verified, as discussed later in the chapter.

## Reasons for subscription

The most popular reason respondents decided to get DTV was the greater choice of channels it allows (see Table 1). Eight out of ten said the larger availability of channels was an important reason why they acquired DTV. Picture and sound quality was the second most popular reason. More than half of the respondents decided to take up DTV because it gives them access to more sports channels and events, whereas for three out of ten the greater provision of films was important. This implies not only that audiences are becoming fragmented, complex and versatile in content prefer-

ences, but also that from the outset of their digital experience consumers valued the new medium as a content and programming provider.

**Table 1.** Reasons for taking up DTV

Reasons for taking up DTV	%
Bigger choice of channels	77.3
Better picture & sound quality	67.6
More sports channels/shows	49.9
Films	31.7
Future switch off of analogue TV*	28.6
Interactive services	12.4
DTV is the future of TV	10.9
Need for new TV set	7.6

\* We refer to Governmental plans for the switch off of the analogue signal between 2006 2010.

Source: Theodoropoulou, 2001.

Interestingly, interactivity was not a common motive for participants getting DTV. Only 12.4% considered services like TV shopping, banking, e-mails and games as influential incentives for subscription. They considered interactivity as peripheral to the core of channel abundance and programme delivery of DTV and it was not central in their decision to subscribe.

Concerning the subscription to Sky digital in particular, rather than another digital provider, choice and channel variety was again prominent as the basis on which subscription decisions were made for seven out of ten participants (see Table 2). This is followed by the availability of free reception equipment, which functioned as an inducement for more than half of the respondents. For 44% of participants the fact that they were previous subscribers of Sky analogue was also important in their decision to switch to the digital service. Sky Sports was an additional motive for some (36%) to choose Sky digital, but Sky digital interactive services were highly unpopular.

**Table 2.** Reasons for taking up Sky digital

Reasons for taking up Sky digital	%
Bigger choice of channels	68.7
Free Digibox	52.0
Had Sky analogue in the past	44.0
Sports	36.0
More competitive prices	23.0
Unaware of other digital provider	19.6
Only Sky was offered at that time	13.9
Interactive TV games	6.6
Interactive TV shopping	5.6
Emails	3.1
Interactive banking	1.4

Source: Theodoropoulou, 2001.

The evidence clearly shows that 1) choice, 2) content, 3) thematic programming and 4) low-cost entry are the most compelling DTV attributes driving its take up in these early years. It is interesting that the way DTV was perceived by early adopters before it entered their households matches the image promoted by the broadcaster's advertising and marketing of that period.

During the first two years, Sky was promoting the service as mainly 'multichannel', focusing on the wide range and choice of programming and highlighting the free digibox offer. It was only in 2001 (and following) campaigns that Sky digital was consistently promoted as multi-purposed, enhanced and interactive, rather than just a multichannel service. This observation suggests that there is a possible connection between Sky advertising and adopters' perceptions of its service. However, this is by no means sufficient evidence of a straightforward influence of the former to the latter.

### Channel and content preferences

Despite the plethora of new thematic and general interest channels on DTV, the most popular channels remain the traditional terrestrial channels. PSB and private terrestrial channels were classified among the favourites for seven out of ten participants.

**Table 3.** Favourite channels

Favourite channels	%
Terrestrial free-to-air*	70.0
Film channels	60.3
Documentary/Knowledge channels	62.1
Sports channels	60.1
Entertainment channels	49.3
News channels	48.0
Music channels	39.1
Children's channels	20.1
Shopping channels	8.7
Foreign language channels	1.9

\* We refer to BBC1, BBC2, Ch4 & Ch5. Sky digital was not transmitting ITV at the time the survey was conducted.  
Source: Theodoropoulou, 2001.

As Table 3 shows, thematic channels also scored highly on viewers' preferences, with knowledge and documentary channels, movie channels and sports channels being the most popular. Entertainment channels of general interest follow, with half of the respondents categorising them among their favourites. Then we observe another shift towards thematic channels, with news and music channels attracting audience's interest, whereas children's, shopping and foreign language channels were less popular. Concerning viewers'

tastes for particular programmes and TV genres, the preference towards feature films is prevalent with 69.4% of respondents including them among the types of programmes they like to watch (see Table 4). Comedy and drama series scored second and fourth on viewers' preferences and sports were ranked third.

**Table 4.** Favourite type of content

Favourite type of content	%
Feature films	69.4
Comedy	68.6
Sports	62.3
Drama	51.3
News/current affairs	50.6
Lifestyle (cookery, travel, DIY)	46.6
History/art/culture	40.3
Music	39.6
Crime/horror	34.9
Quizzes/game shows	34.0
Soap operas	32.6
Sci-fi	29.9

Source: Theodoropoulou, 2001.

The above suggest that despite the wide programming provision of DTV, programmes and genres (like films and sports) that have traditionally been most effective in attracting audiences' attention remain the most popular content for the digital audience, as well. At the same time, however, one also should note the tendency towards customisation and focused viewers' preference in thematic programming. Interestingly, this is concurrent with the appeal of the public service broadcaster and other nationwide channels that remain a reference point for the overwhelming majority of respondents. It seems, then, that despite all the challenges brought by the digital era, PSB is capitalising on what Molsky (1999: 21-22) calls its 'assets'. These are mainly reflected in its long history and the development of a reliable brand name, which give BBC a foothold among audience members. This, along with its catering for broader audience tastes and its reputation of quality programming, help the BBC to maintain a stable share of devotees.

### Use of interactive services

The use of interactive services by early Sky digital adopters is rather limited. The participants reveal a conservative approach to DTV, mainly construed as multichannel television. Most do not actively engage with the interactive services it also provides.

Sky digital interactive services can be grouped in two categories: 'contextual' and 'non-contextual'. By non-contextual I refer to Open (renamed Sky Active), the umbrella service that features TV-banking, shopping, e-mailing, games, and information services such as travelling, going out, etc. The author suggests these are non-contextual because they function outside the TV context, independently of the TV schedule, in the sense that users must interrupt their TV viewing in order to engage them. For such services, users exit the TV environment and enter another 'space', one that is similar to the Internet.

By contextual interactive services I refer to facilities featured within TV programmes, i.e., those that are incorporated into the TV content where use does not interrupt the content flow or viewing. Viewers can still watch the programmes on smaller 'window' inserts. These are also referred to as 'enhanced' services. Sky digital services in this category include the Sky Sports Active [SSA] feature, offering instant replays, match statistics, highlights and alternative camera angles of football games and other sport events and also Sky News Active which offers background and up-to-date information on various news stories, instant weather updates, etc. There is also an enhanced pay-per-view service [PPV] and numerous other interactive features incorporated in programmes which allow for information seeking, communication with producers, voting, quizzes, use of alternative camera angles, like Big Brother Interactive, BBC's Wimbledon Interactive, etc. These, depending on the nature of the programme, may have an entertainment or informative character.

The findings suggest that non-contextual services do not attract users' interest. As shown in Table 5, TV banking is extremely unpopular, and emailing is also unwelcome. TV shopping through Open is a bit more appreciated, while gaming is the most successful Open service with 21.7% of the participants using it once a month or less and 29.3% more often. Overall though, users consider such services intrusive to their TV watching.

**Table 5.** Frequency of use of interactive services (N = 700)

Frequency of use	Non-contextual services				Contextual services	
	Banking (%)	Shopping (%)	Emailing (%)	Games (%)	SSA (%)	PPV (%)
Frequently	3.3	4.6	4.2	29.3	37.0	13.6
Rarely	2.3	16.4	7.0	21.7	12.6	35.1
Never	94.4	79.0	88.8	49.0	50.4	51.3

*Note:* 'Frequently' represents the grouping of 'every day', 'some days in a week' and 'some times in a month' categories and 'Rarely' refers to the 'once a month or less' category used in the questionnaire.

*Source:* Theodoropoulou, 2001.

The picture changes somewhat when considering the use of contextual services. These do attract a fair share of users and are gaining audiences' support<sup>12</sup>. Among these, SSA is quite popular since one in four respondents use



it on a weekly basis and an equal share on larger time intervals. About half of the respondents also take up PPV to order films or other programmes. The frequency of use is not high as yet, but indicative of audience's trend towards customisation of viewing. The interviews confirm that users prefer contextual interactivity because it does not hinder their simultaneous TV viewing, and on the contrary it enhances their viewing experience.

### Evaluation of DTV and Internet as interfaces for interactivity

One of the reasons why subscribers do not use non-contextual services is because they are used to engaging with such practices on the Internet. Even non-Internet users tend to regard interactivity as a function of the computer, rather than TV. The findings suggest that, although many respondents do not know which of the two media is better suited for interactivity, and some believe there is no difference between them, the popularity of the Internet as a tool for interactivity is nonetheless overwhelming (see Table 6).

**Table 6.** Perceptions of DTV and the Internet as interfaces of interactivity concerning appropriateness, convenience of use and security (N = 700)

		DTV (%)	Internet/PC (%)	No difference (%)	Don't know (%)
Appropriate for	Banking	4.7	31.4	9.6	54.3
	Shopping	8.9	32.7	12.0	46.4
	Emailing	2.1	51.6	6.2	40.1
	Games	12.0	29.0	15.4	43.6
Easier to use for	Banking	6.1	29.2	7.1	57.6
	Shopping	13.3	28.0	9.1	49.6
	Emailing	4.1	46.7	6.1	43.1
	Games	14.3	26.6	13.1	46.0
More secure for	Banking	8.0	13.9	18.0	60.1
	Shopping	11.3	12.0	20.7	56.1
	Emailing	6.1	20.7	20.7	52.5
	Games	11.3	11.6	23.1	54.0

Note: Rows total to 100%.

Source: Theodoropoulou, 2001.

The PC is the dominant tool for e-mailing and is considered both more secure and more convenient in that respect than DTV. Games are considered rather easy to use on DTV, as 14.3% of respondents attest, even though the Internet is still higher in their preferences for 26.6%. DTV receives a more positive response concerning the sense of security in use. Particularly for

TV shopping and games it is considered as safe as the Internet. Overall, DTV scores higher on security than on issues of convenience and ease of use for interactive services. However, the trend towards perceiving the Internet as a more appropriate tool for interactivity is ubiquitous among DTV subscribers.

### Conclusion: DTV is still TV

The findings of the research demonstrate that in the epoch of technological convergence, what technologically literate consumers want from DTV is more TV. The wide array of content options and increased choice are the most valued features of the new medium, whereas interactivity is not much appreciated. It can be argued of course that the limited use of interactivity is a temporary phenomenon that will decline as familiarization with DTV grows, as technology advances, as interactive choices increase and as new generations of DTV users develop. Yet, the fact that the early adopters, i.e. the people who are attracted to novelty and act as the gatekeepers by which it enters society (Rogers, 1962), have such a conservative view of DTV as mainly TV implies something quite important. Consumers perceive convergence in ways that differ significantly from views advanced by the industry and innovators.

Users tend to prefer entertainment-oriented services (games) and those enhancing their viewing experience (contextual), rather than administrative or work related services (banking) and other non-contextual services. They thus make a selective and qualitative use of the new features, however limited, primarily to 'upgrade' their televised experience. Yet, most do not use their TV as a PC and have clear perceptions about what functions each medium should have. Both quantitative and qualitative findings strongly suggest that for the majority of DTV users, TV and the PC/Internet are quite different media with clearly separated functions.

Swann offers a relevant observation in noting that "Consumers are more comfortable with the TV than the PC, particularly at home. The TV conveys relaxation; the PC is associated with work" (2000: 12). It has almost become a truism to argue that TV is perceived as an entertainment medium, warm and easy to use in the friendly context of the living room, whereas the PC is mainly conceived as an information medium that requires user skill and active engagement and is principally used for work and administrative purposes. However this is typically the way the two media are received by many DTV users.

So, although technological convergence between the PC and TV is happening, consumer convergence is not happening just yet. For users, the two media remain two separate devices, which they approach in different modes (Allen, 1998) and use in different contexts. As Stipp further notes, "Information, entertainment, and relaxation are different, enduring needs – they don't automatically converge because technology is converging" (1999: 11).

It is therefore crucial to observe that television is not merely a technical system. More fundamentally and importantly it is a cultural practice (Silverstone, 1994) associated with deeply established patterns of 'habitual' use (McGougan, 1999). Use habits are beginning to change as viewers are offered more choice and adopt practices to customise their viewing, but consumers' perceptions are not – TV offers entertainment and relaxation through the viewing practice. Although some DTV users are starting to manipulate TV content and use contextual interactivity, such services are celebrated for adding amusement tints and elevating the viewing practice. They are used occasionally as secondary features complementary to the programming.

In conclusion, early DTV users waver between traditional patterns of viewing and new patterns of use. They still like PSB channels, sports, and films, yet they also watch thematic content. They do not use non-contextual interactivity, yet some make use of contextual services. Early DTV users reject interactivity when it detracts from those very qualities they associate with TV – watching programmes, being entertained and being relaxed. As, a young, well-educated, wealthy interviewee and keen user of new technologies, said:

Television is for watching television. If you want to do anything else, you have other ways of doing it, whether it's the Internet, whether it's email on the computer, or even the telephone to ring somebody. If you are watching programmes, to go out of it into something interactive, really takes you away from watching the television...Television is there as a relaxing tool. You get home in the evening and it's there to entertain you. In effect, you have to actually physically do something if you're interactive, rather than the relaxing element of it, which is what television basically is. (Keith, 30)

Thus consumer convergence is not likely to take place just because the industry and technology is ready for that, and promoting it. As Livingstone puts it "which media succeed in dominating the market...depends more on their social shaping and contexts of use than on their technological capacities per se" (1999: 60). Broadcasting is changing, of course. But programming and content is still most valued by most. DTV users who use it as a multi-purposed device are slowly increasing, and yet non-interactive modes of engagement with TV are still the predominant pattern.

One important and too often neglected factor in studies about converging media is what their predecessors have bequeathed the public. In this sense further research on both traditional and new media is keenly needed if we are to understand whether and why consumer behaviour convergence will take place and, if so, how and why.

## Notes

1. The research is part of my PhD on the diffusion and adoption of digital TV among the first generation of the digital audience in the UK, at the Sociology Department, Media@lse, London School of Economics and Political Science. For more information please contact Vivi Theodoropoulou at P.Theodoropoulou@lse.ac.uk
2. UK Digital Passes 8 Million Marker, 07.08.01. Retrieved from [http://www.dtg.org.uk/news/uknews/8\\_million.htm](http://www.dtg.org.uk/news/uknews/8_million.htm)
3. Sky Now Have 6.1 Million Subscribers, 01.08.01. Retrieved from [http://www.dth.org.uk/news/uknews/-sky\\_results\\_802.htm](http://www.dth.org.uk/news/uknews/-sky_results_802.htm)
4. The Best of Years, the Worst of Years, 19.12.01. Retrieved from <http://www.dtg.org.uk/new/index.html>
5. NTL Hits Refinancing Snag, 28.03.02. Retrieved from [http://www.dtg.org.uk/news/uknews/-ntl\\_refinance.htm](http://www.dtg.org.uk/news/uknews/-ntl_refinance.htm). Buoyant Telewest Hit by Charge, 04.03.02. Retrieved from [http://www.dtg.org.uk/reference/company\\_briefs/telewest.htm](http://www.dtg.org.uk/reference/company_briefs/telewest.htm)
6. ITVDigital is Born, 11-12.07.01. Retrieved from [http://www.dtg.org.uk/news/uknews/itv\\_digital\\_launch.htm](http://www.dtg.org.uk/news/uknews/itv_digital_launch.htm)
7. ITV Digital Closes Down, 01.05.02. Retrieved from [http://www.org.uk/news/uknews/itv\\_dig\\_closes.htm](http://www.org.uk/news/uknews/itv_dig_closes.htm)
8. A stratified sample of 15 interviewees was designed based on the following criteria: length of subscription, status of subscriber (new or old to multichannel TV), use of interactive services, and household structure.
9. Source: The Digital Viewers Survey, July 2000, BMRB International. We should note here that caution is needed in the interpretation of these comparisons between the two surveys, for the reason that they used different samples. BMRB had a response base of 500 adults who have DTV in their house while our research surveyed 700 adult Sky digital subscribers. The BMRB figures reported here are for Sky digital viewers.
10. At a national level the figures for 2000 show that 99% of the UK households own a TV set (source: General Household Survey 2000, Office for National Statistics). The results of our research (2001) show that not only 100% of participating households own a TV set, but also that 90% of these are multiple TV households. The ownership of VCRs at a national level for 2000 is 88% whereas in the Sky digital households participating in the survey the figure rises to 97.3%, with 55.1% of these possessing more than one. 81.9% of Sky digital households participating in the survey have mobile phones, while the average figure for the UK population is 58%.
11. Source: General Household Survey 2000, Office for National Statistics.
12. A variety of contextual services were launched after the survey was conducted and were only discussed in the interviews. See also: Big Brother an Interactive Hit, 19.06.01. Retrieved from <http://www.dtg.org.uk/new/index.html> (UK News), and 4.5 million Tennis and Golf fans Experience Interactive TV, 13.08.01. Retrieved from <http://www.dtg.org.uk/new/index.html> (UK News).

## References

- Allen, R. (1998) This is not Television. In J. Steemers (Ed.), *Changing Channels: The Prospects for Television in a Digital World*. Luton, England: University of Luton Press, pp. 59-71.
- Livingstone, S. (1999) New Media, New Audiences? *New Media & Society*, 1 (1), pp. 59-66.
- Livingstone, S. (2002) *Young People and New Media*. London: Sage.
- Marsden, C., & Verhulst, S. (1999) Convergence: A Framework for Discussion. In C. Marsden, & S. Verhulst (eds.) *Convergence in European Digital TV Regulation* London: Blackstone Press, pp. 1-20.

## CONSUMER CONVERGENCE

- McGougan, J. (1999) The Challenge of Convergence to Audiovisual Regulation. In C. Marsden, & S. Verhulst (eds.) *Convergence in European Digital TV Regulation* London: Blackstone Press, pp. 175-190.
- Molsky, N. (1999) *European Public Broadcasting in the Digital Age*. London: FT Media and Telecoms.
- Owen, B. M. (1999) *The Internet Challenge to Television*. Cambridge, MA: Harvard University Press.
- Papathanassopoulos, S. (2002) *European Television in the Digital Age*. London: Polity Press.
- Rogers, E. M. (1962) *Diffusion of Innovations*. New York: The Free Press.
- Silverstone, R. (1994) *Television and Everyday Life*. London: Routledge.
- Stipp, H. (1999) Convergence Now? *The International Journal of Media Management*, 1 (1), pp. 10-13.
- Swann, P. (2000) *TV Dot Com: The Future of Interactive Television*. New York: TV Books.

## *Appendix*

### *Channels and Services available on Sky digital\**

Sky digital offers approximately 240 channels. Subscription prices vary between £10 and £36 per month depending on the number and type of channels included in the package. Among others, the following channels are on offer:

#### Entertainment channels

Sky One, E4, ITV2, UK Gold, UK Gold 2, Bravo, Living, Granada Plus, Challenge, Paramount Comedy, UK Drama, Discovery Home & Leisure, Sky-Fi Channel, UK Style, UK Style +, Hallmark, QVC, Granada Men & Motors, UK Travel, UK Food, Play UK, Discovery Health

#### Sports channels

Sky Sports 1, Sky Sports 2, Sky Sports 3, Sky Sports Extra

#### Movie channels

Sky Premier, Sky Cinema, Sky Movie Max, Disney channels

#### News & Documentary channels

Discovery Channel, Discovery Travel & Adventure, Discovery Civilisation, CNBC, Discovery Animal Planet, Discovery Sky-Trek, Discovery Wings, Sky News, Fox News, National Geographic, The History Channel, Biography, UK Horizons, Adventure 1, Bloomberg

#### Music channels

MTV, MTV Base, MTV Hits, VH1, VH1 Classic, MTV2, MTV Dance, The Box, Kiss, Q, Smash Hits, Magic, The Saint, Big Blue, Rampage

#### Childrens' channels

Nickelodeon, Nickelodeon Replay, Nickelodeon Junior, Cartoon Network, Cartoon Network Plus, Discovery Kids, Fox Kids, Trouble

#### Free to air channels

BBC1, BBC2, BBC Choice, BBC parliament, BBC 4, BBC News 24, CBBC, Cbeebies, ITV, Channel 4, Channel 5

#### Pay channels

FilmFour, Disney Channels, Artsworld, Music Choice Extra, Star TV, Chelsea TV

#### Radio stations

BBC, Classic FM, Classic Gold, Virgin, Capital Gold, The Mix, Planet Rock, Xfm, Heart FM, Core, Youthfm.com, WRN Euro Max

### *(Non-contextual) Interactive Services*

Sky Active (Open) offered free to all subscribers

Shopping (with retailers such as WHS, Asda, CPW, Comet, Dixons, Dominos Pizza etc.)

Banking (users how hold accounts with HSBC, Abbey National, The Woolwich or Egg can check their bank or credit card accounts, set direct debits, transfer money etc.)

Emailing

Games (classic games, action games, quizzes and puzzles. Top scorers can win prizes)

Information (provided by UpMyStreet, Yellow Pages, UK Phonebook, Cinema Listings)

Sports Betting (for users over 18)

Holidays (opportunities to book a holiday with Going Places, Thomascook.com, First choice etc.)

### *Additional services*

Other interactive features and new technological facilities introduced in the Sky digital package include: a facility that allows text messaging to mobile phones through the TV with the use of Sky remote control or keypad; the Personal Planner that allows viewers to create their own personalised TV schedules; and Sky+ (TiVo), which costs £300 and automatically records what the viewers are watching, allows them to pause and replay live programmes, automatically eliminates adverts, and stores up to 30 hours of recorded programming.

\* Source: <http://www.sky.com/skycom/getsky>

