The Internet: In whose image?

Responding to the ethical and moral challenges of the Internet

The Church of Scotland
Church and Society Council

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1. Introduction

1.1 The context of this report

During the past ten years the Internet has become an unremarkable part of the lives of most people in the UK. It has entered our working spaces, our schools and our living rooms, subtly modifying the way we do business, find information, learn, shop and entertain ourselves. The Office for National Statistics showed that the number of households in the UK with an Internet connection expanded by 1 million every year between 2004 and 2009. In 2008 there were over 16 million households with Internet connections, half of them broadband. Although coverage varies, Scotland started low but now has a connectivity level (65%) comparable to the rest of the UK. Around 23.5 million adults and over 76% of young people aged between 16-24 use the Internet daily. People use the Internet not only at work, but also at home, predominantly to send and receive emails (87%) and to find information about goods and services (84%). This technology is now part of our lives and it is so pervasive that we hardly stop to think about it whenever we use it.

However, the Internet did not spring miraculously into our offices and homes. It has been created, shaped and developed by scientists, software engineers, hardware and software manufacturers, international standards organisations, professional bodies, governments, telecommunications multinationals, the military, hackers, universities, industries, entrepreneurs and investors. Each of these has goals and objectives, sometimes complementary but often conflicting, for design and use of digital technology. Further, as the technology assumes a critical mass in the wider society and as open source software breaks down the old corporate models, ordinary users increasingly shape and define the interaction between the technology and society as a whole. The internet thus moves from being a mere tool to something which is both defined by, and increasingly comes to define society itself.

As Christians, we are called to live our lives responsibly, following the teaching of Jesus. Although most of us are not directly responsible for the design of digital technology, we all use it and we should therefore be aware of the role that digital technology has in shaping our culture. Like any other technology, it has the potential to affect our lives in detrimental as well as positive ways. The Church of Scotland has a long tradition through the Society, Religion and Technology Project (SRT) project of examining the ethical implications of technology and it is following this tradition, that the current report is presented.

1.2 Methodology

A group of members and staff from the Church and Society Council met in 2009 to look at the impact of the Internet on diverse aspects of Scottish society. Their initial proposals led to the establishment of a two year working group to study the ethical implications of the impact of the Internet on Scottish society, with a view to presenting the resulting report to the General Assembly in 2011.

The Internet has impacted upon every aspect of human endeavour and is now a large academic field in its own right working within the converging space of computer science, psychology, sociology media, law and communications. Due to the impossibility of covering all the research literature involved, it was decided to consult experts in the field within a participatory environment in order to understand and question their viewpoints.

Five experts were asked to participate in a “moral maze” event where they would present their views on the impact that the technology had had on the following areas: work, play, civil liberties, commerce and spirituality. The event was widely advertised and well attended by academics, doctoral students, lawyers, sociologists, computer scientists, clergy and members of the general public. Members of the working group as well as the audience in general were able to question and discuss the ideas presented with the experts and amongst themselves.

Following the moral maze event, a working group was established and met on three occasions, and communicated through the Internet. Themes were selected, presented, shared, and developed by the group and they form this report. A preliminary draft of the report was presented to the Church and Society Council in November 2010.

2. The Information Revolution - Background

2.1 Introduction - Technical and Societal revolution

The story of the Internet is one of rapid and revolutionary technical development which still continues. Sometimes it is possible to be blinded by the science to the circumstance that the Internet is, essentially, a tool: where the social challenges and moral dilemmas come is in the use that society makes of that tool. Neither should the observer be blind to the capacity of that tool in turn to shape the society which uses it.

The particular potency of the tool is that it exists both in the physical world and in the world of the mind. The hardware is solid and real. The hardware and software industries generate employment both directly and indirectly, both amongst those who create software and market it, but also amongst those who use it, often in forms of employment which could not exist without the connectivity which the Internet brings. However, at the level of abstraction, incorporeal virtual worlds are created, social networking groups where "friends" may never interact in the physical world, and peer groups which develop their own mores. Undreamed of new subcultures may arise and leak out into the wider society, both formed from and reciprocally influencing that wider culture.

A comprehensive survey in 2009 by the Oxford Internet Institute, a department within Oxford University, studied the adoption and use of the Internet, the digital divide, exclusion and inclusion, social shaping, regulation and control. It noted that “the Internet is being invented year by year, if not week by week, as users and providers tag items, create applications, blog, set up and maintain websites, and search for information as part of their everyday life and work."[1]

The capacity of such tools to redefine society itself should not be underestimated. For example, the American writer, Leonard Shlain, argues that it was the invention of alphabetic writing which encouraged the level of abstract though necessary to conceive of "an imageless Father whose authority shines through His revealed Word, sanctified in its written form." He continues: "Conceiving of a deity that has no concrete image

[1] Dutton, William H., Helsper, Ellen J. and Gerber, Monica M., *The Internet in Britain 2009*, Oxford Internet Surveys, p. 4. Available to download at http://www.oii.ox.ac.uk/research/oxis/OxIS2009_Report.pdf

prepares the way for the kind of abstract thinking that inevitably leads to law codes, dualistic philosophy and objective science, the signature triad of Western culture." [2]

Indeed, Marshall McLuhan hypothesised that a civilisation's principal means of communication moulds it more than the content of that communication."[3] Irving Fang, in *Mass Communications – Six Information Revolutions*[4] identified revolutionary changes in society, all of which were brought by revolutions in communication technologies:

1) The Writing Revolution (8th Century BC - 15th Century) – The convergence of writing and the development of writing materials such as papyrus. This revolution supplanted oral cultures, permitting the development of law codes, bureaucracy and administration as well as leading to the accrual of knowledge in substantial libraries. Postal services were created to convey messages amongst kingdoms, traders and individuals.

1.2) The Printing Revolution (15th - 19th Centuries) – The convergence of paper and printing technologies lead to the mass production of books and newspapers, greatly heightening awareness of the world around us, fuelling research and innovation and leading to the Enlightenment, the Industrial Revolution and modern society.

1.3) The Mass Media Revolution (mid 19th - mid 20th Centuries) – Advances in paper production and printing technologies lead to the development of mass circulation newspapers and ever cheaper books and literature. The early development of photography and telephony led to the foundation of modern non-print mass media.

1.4) The Entertainment Revolution (Mid 1920s) – Marked by the convergence of technologies permitting the storing of sound, affordable photography, radio and television. Very low cost replication became practical.

1.5) The Information Revolution (1980 -) – The home becomes the central location for receiving information by telephony, broadcasting and recording. This is widely available across society because of cheap universal service and improved print technologies. Office and production methods are profoundly affected.

1.6) The Information Highway (1990 -) – Digitisation and the convergence of computer, broadcasting, satellite and audio-visual technologies, bring about the profound changes in society which it is the purpose of this Report to consider.
With the increasing convergence of technologies and the ever-more rapid spread of those technologies into society there is an increasing democratisation of the information highway. The Dramatic changes that have occurred in the technology of the Internet in 2009 involved the transformation of its infrastructure, including the move to broadband by nearly all (96%) Internet households, and an increasingly flexible and omnipresent access to the Internet through the increasing use of wireless and mobile devices,

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[2] Shlain, Leonard, *The Alphabet versus The Goddess: The Conflict between Word and Image,* Viking The Penguin Group (London: 1998). Further information available at http://www.alphabetvsgoddess.com/index.html

[3] McLuhan, Marshall and Quentin Fiore, *The Medium is the Message: an Inventory of Effects*, Bantam Books (New York: 1967).

[4] Fang, Irving, *A history of Mass Communication - Six Information Revolutions*, 1997 Butterworth Heinemann, ISBN 0-240-80254-3

doubling since 2007 alone[5] The rapid diffusion of increasingly potent wireless and mobile devices amplifies the potential revolutionary impact of the new information technologies on the human race globally. 98% of Europeans have mobile phones.[6] Pictorial and textual modes of communication are now combined, accessible and transformable in a portable format.

Thus, it may be argued, we are now living through a seventh Communications Revolution - the Digitisation and Information Integration Revolution (2000 -) arising from the convergence of the Internet with related technologies such as Cloud Computing, Blogging, Social Networking, Tweeting and the 'Real Time' digitisation of images.

The outburst of information made possible by the convergence of paper and mechanised printing became a potent democratising force in putting information into the hands of the whole community; with the Internet anyone can become a publisher, a designer or a blogger-journalist. Presumably, since anyone can become a publisher on the Internet, opposing views can be openly aired, and societies potentially can become better informed and are better able to exercise their democratic rights and responsibilities.

The above analysis shows that technology transforms society, but it also shows an ever-accelerating rate of transformation. The writing revolution took over two thousand years to be accomplished, but the last three revolutions have come along once a decade. Thus, the pace of change imposes upon society new and increasing challenges and opportunities; and, as society changes ever more rapidly, so, too, the challenges to the way the Christian mission is projected into the future are awe-inspiring.

2.2 The Internet: A vision of the totally unexpected

What defines the seven Information Revolutions is the concept of communication, and at the heart of the technology that is the Internet is an ever greater and more efficient connectivity amongst IT systems.

The need for such connectivity is as old as computing itself. Despite early efforts such as the Jacquard Loom (1801) and Babbage's Analytical and Difference Engines (1830), the true pioneers of modern computing were those who were working under Alan Turing at Bletchley Park during World War II on creating computing systems to break German code traffic; but the input to these early computers was dependant on messages hand-written in coastal radio intercept stations and brought in by motorcycle couriers. It would take another twenty to thirty years before real progress was made in establishing interconnectivity.
Research for intercommunication between computers developed during the 1950 and 60's, often driven by universities collaborating on government funded research projects. Networks were limited to terminals linked to the same mainframe computer. Several research programmes began to explore and articulate principles of networking between physically separate networks, leading to the development of Arpanet, Telnet and the X-25 protocols. One of the drivers of this development was a need to ensure not only communication amongst computers but also, in the context of the Cold War, the need for the military to develop a robust diffused system with multiple redundancy of

[5] Dutton, William H, Ellen J Heloser and Monica M Gerber. *The Internet in Britain* 2009, Oxford Internet Institute. http://www.oii.ox.ac.uk/downloads/index.cfm?File=research/oxis/OxIS2009_Report.pdf

[6] The world in 2009: ICT facts and figures. International Telecommunication Union. http://www.itu.int/net/pressoffice/backgrounders/general/pdf/3.pdf

interconnections, such as might survive a nuclear attack on any part of the physical network.

Alongside the development of network interconnections came suites of applications or services (email, file transfer and voice traffic) which could be run jointly on a single host computer. However, the major computer suppliers continued the development of proprietary networking systems which were generally incompatible with each other until the International Organisation for Standardisation (ISO) began to develop an Open Systems architecture. The spread of inter-networking began to form into the idea of a global network that would be called the Internet.

2.3 The World Wide Web

As has been seen, the Internet is both a physical system and a protocol governing a series of interconnections amongst computers upon which might in turn be built other systems and protocols. Sir Tim Berners-Lee working with Robert Cailliau at CERN in Geneva, Switzerland, worked on the development of the Word-Wide Web which is a system of interlinked hypertext documents accessed via the Internet. The world-wide-web is the most visible part of the Internet but by no means its totality.

2.4 The Changing Ethos of the Internet

The early pioneers of the Internet were academics in whose shared values the Internet's *zeitgeist* was defined. These were values of openness, mutual trust, and the sharing of knowledge, unsullied by mere commerce. There was a sense of a community which could be left to regulate itself without recourse to external controls: spamming did not happen as it was not socially acceptable. With greater communication would come greater understanding.

Yet, even in those early days, there was an inherent tension between this optimism and idealism on the one hand and those who would come to see that information might be commoditised and monetised. That tension is no new thing. Concerning the invention of the telephone, Dostoyevsky wrote:

> *"We are assured that the world is becoming more and more united, is being formed into brotherly communion, by the shortening of distances, by the transmitting of thoughts through the air. Alas, do not believe in such a union of people. Taking freedom to mean the increase and prompt satisfaction of needs, they distort their own nature, for they generate many meaningless and foolish desires, habits, and the most absurd fancies in themselves. They live only for mutual envy, for pleasure-seeking and self-display."* [7]

It may be argued that the whole of the continuing development of the Internet can be seen as the playing out of these opposing tensions. As the Internet spread beyond its original narrow base, especially with the growth of the world wide web, it became increasingly useful as a tool of economic as well as academic activity, and, at the same time, it also became unrealistic to see it as something which could safely be left to regulation by the mores of a group with shared values. Indeed, the more that the Internet grew, the wider and more diverse the groups and subcultures that used it, the more difficult it became to detect values which could truly be seen to be shared amongst all

[7] Dostoevsky, Fyodor, *The Brothers Karamazov*, 1880

users. As the business opportunities became apparent, there rapidly followed a scramble to colonise hyperspace, in some ways not unlike the nineteenth century scramble by the Great Powers to colonise Africa.

The problem with a gold rush is that regulation may be weak or altogether absent, and though over-regulation may not be desirable there is need for some regulation - economic relations are not possible without a basic level of trust and confidence, which it is the role of regulation to provide; and, without some measure of regulation, how are the weak and the vulnerable to be protected?

That is easier said than done, given the Internet's extraterritoriality, yet, however imperfectly, there has been some establishing of order sufficient to establish a basic level of trust and to fuel the massive expansion of e-commerce on the web. This is considered more fully in section 7 of this Report.

And so, with a kind of historical inevitability, the ethos of the Internet changes from a *gemeinschaft*, a brotherhood of shared values, to a *gesellschaft,* a society regulated by external constraints.

In no way is the Internet set apart from the real world: money transmitted by Paypal or credit card is money spent as much as it would have been in note or coin; financial losses incurred by responding to spam emails offering rewards for facilitating the transmission of funds from Nigeria are every bit as real as if a cheque had been handed over in person to a fraudster; friendships made on Facebook may mature and develop as well a wither and die; social alienation may be no less real for existing in a virtual environment. Behind every avatar is a real person who may feel joy or pain.

But the leakage of the Internet into society may go wider than this, affecting society as a whole. It can take the tendencies of society, amplify them and reflect them back. For example, economic activity is susceptible to the economic cycle of boom and bust and people may be caught up in bubbles which inevitably burst, whether they be tulip bulbs in the Netherlands in the 17th century, dotcoms in the 1990's or the property boom of the early 21st century, but the difference is that without the connectivity brought by the Internet (tulip bulbs were still being traded at inflated prices in Leiden days after the bottom had fallen out of the market in Amsterdam as the news had not yet travelled) the collapse of the tulip market wrecked only the economy of the Netherlands.
The increased connectivity that the Internet brings can also lead to fundamental changes in the way that companies and other bodies conduct their processes, leading to the flattening of traditional hierarchical structures, such as is described by Thomas L Freedman, in *The World is Flat: The Globalised World in the Twenty-first Century*[8] and posited also by Michael Lewis in the chapter 'Pyramids and Pancakes' in his book *The Future Just Happened.*[9] Thus, the Internet has made organisations flatter and more flexible. For example, since anyone potentially has access to the same information in real time, work-teams can be set up in a flexible manner across geographical boundaries and creative collaboration ensues. Companies can therefore be organised under more flexible, less hierarchical forms. This has brought about a subcontracting of a number of services which can now be done offshore. Companies have become leaner internally and

[8] Friedman, Thomas L, *The World is Flat: The Globalised World of the Twenty-first Century*, London: 2006, Penguin

[9] Lewis, Michael, *The Future Just Happened,* London: 2001, Hodder & Stoughton

keener adopters of the newest technologies in order to promote their products and services online.

More than this: the Internet may change the very structure of society itself. For example, individuals tend to be influenced by their peer groups, not least in the way that the peer group relates to outsiders. In a real world setting, followers of some activities may find that no peer group is established - the numbers of jam jar label collectors or of paedophiles or of racists in a village may be extremely small, but once the Internet enables the gathering of world wide communities of such persons, there can be created a peer group of sufficient critical mass that the group establishes its own mores. This may not matter very much in the case of jam jar label collectors, but it is much easier to be a racist when one is surrounded by a virtual community of racists, each validating and encouraging one's racism.

The more the Internet pervades society and the more society becomes digitised, the greater the danger of creating a new underclass in society, the digitally disadvantaged, who, through education, geographic location or other circumstance, do not have ready access to the Internet or the ability to use it. Thus, not only may the Internet with one hand, tend to flatten the society, but, with the other, it may create and deepen divisions, effectively disenfranchising the digitally disadvantaged.

Finally, it may be observed that change is neither inherently good nor inherently bad. Some of the changes wrought by Internet technology in the real world may be positive, and some negative, and even the negative changes may provoke a positive reaction. The near-collapse of the international banking system in the autumn of 2008 was not directly related to the use of the Internet, although the globalisation of markets, the connectivity amongst financial systems and the speed of financial transactions around the globe, all facilitated by the Internet may well have contributed to the rapid rate and global scale of the collapse. Financial analysts are still examining the almost unbelievably sudden loss of solvency by the global financial services firm, Lehman Brothers Holdings Inc. This was the single largest bankruptcy in US corporate history and the overnight collapse of this financial giant in September 2008 demonstrated that the benefits of global trading have to be managed with far greater care and sensitivity.

Whether a similar disturbing sequence of events could ever be repeated is not clear this close to the event, but there is certainly a need for gradual restoration of trust and integrity in international financial markets to avoid traumas of this unprecedented kind. To achieve this will require intergovernmental co-operation on a scale that has not been previously attempted, and may take years to achieve.

Further, this period of comparative enlightenment about the vulnerability of the new technology is now leading to a more organised resistance to corporate domination of the Internet by multinational companies and others with a global reach. Even Governments are not immune to the power of these highly efficient communication media, and both China and the USA are starting to express their reservations about the longer-term consequences of such an entirely unregulated system. Undoubtedly there are considerable weaknesses in international law governing traffic across the range of electronic media, and it is possible that some form of an international regulatory framework could be introduced to counter many of the worst excesses. This prospect also lies very much in the future.

It seems that most people will be confronted sooner or later by the global working assumption that ‘There is no alternative!’ – and we shall all be obliged to live with the consequences of that. For the time being at least, we should continue to enjoy and participate freely in the use of the Internet but with a growing awareness of the need for increasing protection and security of our personal digital data. It is the purpose of this Report to address those issues.

3. A Contested Space

3.1 Inherent Tensions

The Internet is a contested space. It is an arena for the playing out of inherent tensions. An initial conflict was already mentioned in the previous section between idealism and reality, academic and commercial values in the early development of the Internet.

Currently, the Internet is now so diverse and varied that there is no longer any clear single set of values on which all its different users would agree, yet there still remains a contest between different paradigms of control – controls which influence the values, behaviour and forms of use of different groups of internet users. Cultures and subcultures of Internet users and usage develop. The values that govern their behaviour either as supporters of the “status quo” or the “moral majority” clashes with the culture of those that see the Internet as a technology that liberates them from precisely those values.

This is best expressed in a comment by Stewart Brand in *The Media Lab: Inventing the Future at MIT*:

"Information Wants To Be Free. Information also wants to be expensive. Information wants to be free because it has become so cheap to distribute, copy, and recombine - too cheap to meter. It wants to be expensive because it can be immeasurably valuable to the recipient. That tension will not go away. It leads to endless wrenching debate about price, copyright, 'intellectual property', the moral rightness of casual distribution, because each round of new devices makes the tension worse, not better." [10]

Thus, a persistent feature of the Internet is the readiness of ordinary, otherwise law-abiding people to infringe intellectual property by file-sharing and by illegally downloading music, film or games without seeing anything morally wrong in that. For example, the BBC originally intended to show the current series of *Mad Men* starting in January 2011, some eight weeks behind the US transmission, but had to bring the date forward when it was discovered that literally tens of thousands of the show's fans were unlawfully downloading it. These attitudes then spill over even more widely into the real world: a 1998 Price Waterhouse Report, commissioned by the Business Software Alliance estimated that over 40% of European business software was illegally copied.[11]

This leads to an increasing pressure to regulate and control, but the issue with any form of regulation is whose standards rule, and whether it is effective**.**

3.2 Who rules?

[10] Brand, Stewart, *The Media Lab: Inventing the Future at M.I.T.* Viking Penguin (1987)

[11] PricewaterhouseCoopers: *The Contribution of the Packaged Software Industry to the European Economies*, commissioned by the Business Software Alliances (1998).

Whilst it is far from the case that the Internet is unregulated, it is certainly the case that it can be difficult to regulate effectively. For example, the fact that the European Union's e-commerce directive seeks to eliminate spam does not mean that spam has, by any means, eliminated.

Though the Internet exists in a frontierless cyberspace, nonetheless ISPs and their servers are located in the real world within the jurisdiction of real world legal systems, as also are content providers and Internet users. In theory, the Internet would be easy to regulate if all of the regulations in all of the legal jurisdictions were the same (though there would still exist the tension over whether, and to what extent, the Internet *should* be regulated). The problem is that different legal jurisdictions have different regulatory codes.

Thus, a resident in Scotland might be defamed on a website. The downloading of the website in Scotland constitutes publication in Scotland, wherever in the world the author of the defamatory material, the publisher of the website, the ISP or the physical server may be situated, so the short legal answer is that the victim has a legal remedy in Scotland. However, that is no use to him if none of the author, publisher or ISP is subject to the territorial jurisdiction of the Scottish Courts. The victim might have some difficulty in tracing the whereabouts of any of those possible defenders, and, even if he does, he might find that the law of the jurisdictions where they are physically situated do not afford a remedy, or do so at a cost which is prohibitive. It is likely that each of the several jurisdictions will have its own regulatory regime, so lots of regulation, but little good it does the victim.

To be effective, regulation thus needs to be international.

To some extent, the technical structure of the Internet imposes a degree of International control as regards the policing of the technical standards. For example, for the Internet to function requires the use of domain names. Such names often tend to be similar to the real people, companies or products to which they relate. Thus, it can be important to prevent what is known as cybersquatting - a rival appropriating as his own domain name, the name of a manufacturer's product and using it either as a means of diverting business, or holding the manufacturer to ransom to have the name transferred. The regulation of domain names was originally the function of the United States Government (which had substantially funded the development of the Internet protocols) but was devolved by them on 30th September 1998 to a private entity, ICANN (the Internet Corporation for Assigned Names and Numbers) which remains responsible for allocation of top-level domains (as in .uk, .fr .ca etc.) and for the policing of domain names within the top level domains of .com, .gov, .org etc.) Each of the national top level domains have a similar control body. In the United Kingdom, this function is carried out by Nominet, a private not-for-profit Company, As a result there has been developed an international code which provides the required consistency and trust in domain names.

What is significant about this is, first, that it came about largely without any form of government regulation, second that the bodies involved are private entities, third that the code which has been developed is entirely extra-legal, and fourth, that the system actually works, and does so effectively.

In other areas, national governments have concluded international treaties to govern particular aspects of the use of the Internet, for example the WIPO Treaties governing the protection of Intellectual Property, though because different governments implement the

treaties differently there are often interesting discrepancies. For example, what in the European Union would be a civil wrong exposing the culprit to a liability to pay compensation may in the USA be a crime bringing with it a prison term of up to 10 years.

Finally, it may often happen that the regulatory regime of a particular legal jurisdiction may gain the upper hand through force of circumstance. For example a business situated in the European Union, but doing a significant part of its business with the United States may find itself defaulting to a position where, to be safe, it conducts itself according to the US regulatory requirements.

3.3 Canute and the Tide

Effective government requires either the overwhelming force of a tyrant or the consent of the governed. Tyrannies generally fail when the tyrant can no longer sustain the levels of coercion required to impose his will. In Scotland, the courts recognised the principle that when no one observed any longer the Acts of the old pre-union Parliament, those Acts were to be regarded as having fallen into desuetude and no longer to be law. Thus there remains on the statute book an Act prohibiting the playing of golf (which was leading people to neglect their archery practice) yet it no longer has any effect.

That is a lesson often forgotten in the headlong rush to regulate the Internet. It is most tellingly apparent in the field of intellectual property.

Copyright has always been a balancing of interests. Ever since the Statute of Anne, the state has accorded the owners of intellectual property the right to exploit that property for a period before it becomes part of the patrimony of all mankind by passing into the public domain. At first, that monopoly existed for 14 years, but has been progressively lengthened since. It is the role of the legislature to balance the private and the public interests, but all legislatures are susceptible to lobbying, and it is at least arguable that the balance has been skewed away from the public interest as a result of lobbying by the entertainment industry.

In any event, the WIPO Treaties mandate tough regulation of the Internet to prevent infringement of Intellectual Property. In theory, such regulation ought to work - its is, after all an international code that is implemented by governments around the whole world, and, indeed, sometimes it does work: for example, rightsholders scored an early success against the illegal file-sharing site, Napster, but, in the final analysis, what renders the "big stick" approach problematic is the sheer scale of the infringements set against the limited resources available to enforce the legal regime, or, looked at another way, the inevitable problems which arise when there is a discontinuity between the legal regime and public perceptions of morality.

This disparity is at its most extreme in connection with illegal file sharing – sites which are set up to allow personal computers to transfer amongst themselves MP3 and similar files containing music, films and other material. Notwithstanding the early success against Napster, the number of bit torrent sites (from which files might unlawfully be downloaded) has continued to proliferate. Some, like Rapidshare (which has several hundred million visitors a month) have been able with varying degrees of success to overcome legal challenges, whilst others have proven remarkably resilient: The Pirate Bay, which, in 2008, had at least 25 million peer users and is financed through advertising and donations, has continued to sail on despite a £2,800,000 fine and 12 months in prison for its four principals.

Because of the ineffectiveness of the simple legal prohibition against copyright infringement, the industry has tended to implement technical measures (such as copy protection encoded on DVDs) to prevent such infringement, but when such measures fail, as they always do, the industry turns back to the legislators to fence their technical measures with legal sanctions. Thus, the WIPO Treaties mandate the imposition of legal regulation to prevent the overcoming of "effective measures" - technical control measures which are, by definition, not effective, or else there would be no need of the legislation.

At the end of the day, the core of the problem is that such enforcement attempts go against the prevailing mores of the very significant proportion of Internet users who see nothing wrong in copyright infringement. Several hundred million Rapidshare customers every month, most of whom would never dream of doing anything which they would think of as wrong, is a figure which speaks for itself. Thus, the law is brought into disrespect, a disrespect which is deepened by draconian legislation. As any criminologist would observe, it is not the severity of the punishment which deters, but the certainty of detection. Indeed, the taking of draconian punishment may often offend against wider issues of fairness and proportionality. For example, the provisions of the Digital Economy Act 2010 mandating the slowing down of the Internet Connection and, ultimately the disconnection of copyright infringers may be seen as disproportionate in a society where the digitally disadvantaged form a new underclass, and the surveillance and reporting obligations which are imposed upon ISPs raise profound questions about civil liberties.

If the law on Copyright infringement is brought into disrepute, that may serve to bring people to question the law as a whole, with uncomfortable consequences for society.

Such concerns are very much entering the mainstream of political discourse. The Swedish Pirate Party was founded in 2006 with an agenda of reducing the term of copyright to 5 years (at present the copyright term in the EU extends to 70 years following the death of the author), abolishing patents and legalising file-sharing. Elements of that platform (notably the legalisation of file sharing) have been adopted by mainstream parties in Sweden. Though not formally linked to the Pirate Bay, there are close associations: one of the jailed Pirate Bay founders was for a time a member of the Pirate Party's board, and, significantly, during the course of the Pirate Bay trial, party membership increased from about 5,000 to over 50,000, gaining 9,000 members alone on the day that the verdict was pronounced; and the Party now hosts the Pirate Bay website and provides free hosting and technical support to Wikileaks, which is the site responsible for publishing the vast amount of classified material concerning US operations in Iraq and Afghanistan. The party is no "lunatic fringe": it is, in terms of membership, the third largest political party in Sweden; it has the largest political youth organisation in Sweden and has three Members of the European Parliament, who sit with the Greens. Other Pirate Parties have been formed throughout the world, and are linked through Pirate Parties International. In January 2011 a Pirate Party activist was appointed Secretary of State for Youth and Sport in the new Tunisian Government.

By contrast, the Pirate Party UK is tiny, though it did field nine Candidates at the 2010 General Election (including one in Glasgow Central), all of whom lost their deposits. It may be that the distinction between Sweden and the UK is that in Sweden the Pirate Bay felt the full weight of the law, provoking an equal and opposite reaction, whereas there have been no similar high profile prosecutions in the UK. It will be interesting to observe whether the full implementation of the more draconian measures in the Digital Economy Act will precipitate a similar politicisation amongst British file sharers.

What the example of the Pirate Party shows is the way that, the technology of the Internet can change public attitudes, and, under certain circumstances, unleashing a tide which can challenge received power structures. There is created a critical mass of the governed, which, in turn, ought to compel a rethink of the law and of the economic model which it reflects.

The solution may lie in some moderation of the law to a level which the public would find acceptable. For example, most people would see nothing wrong in the taking of a single copy for private use of a work which had been purchased by them (and, indeed this is lawful in most European countries) but it is not lawful in the United Kingdom. By providing a fair use exception for such copying, much might be done to restore respect for the law.

Another approach is to accept as a *fait accompli* the clear change which has occurred in public mores and for copyright proprietors to work change their business models, for example by adopting the lawful downloading model of sites such as *Spotify,* and by using recordings as essentially a marketing tool for live concerts.
However all this plays out, it is clear that the Internet has led to a power shift in society from the producers and the legislators to the wider public.

4. Ethical Principles of the Internet

4.1 A founding ethical principle - Don't be evil

Google is by any standards a huge corporation, generating in 2009, annual revenue of $23,651,000,000. At its core is its search engine, which processes over a thousand million search requests every day. It is globally involved in the advanced development and application of multinational public cloud computing, Internet search and advertising technologies and its declared mission from the outset has been ‘to organise the world’s information and make it universally accessible and useful’.

However, what is remarkable about this huge corporation is that its founders, Larry Page and Sergey Brin, decided to adopt the statement *‘Don’t be evil’* as the key working reference for the initial constitution of their organisation in 1998, and it is a working reference which has been maintained ever since, and all employees of Google are required to accept and follow the overall approach of *Don't be evil* and to behave accordingly. By strongly advocating an open ethos of ideals and ethics, Page and Brin have succeeded in encouraging loyalty, trust and working integrity amongst their labour force and have continued to promote this important dimension of corporate life as both the public and the private face of Google.

However, Google's position of increasing global dominance and economic power is beginning to reveal a few cracks in the facade: first, its flirtation with the Chinese Government's censorship regime (though, to Google's credit, it subsequently disengaged from these censorship controls at the cost of the virtual destruction of its business in China); second, its policy on adwords which some see as an encroachment on intellectual property; and, third, its denial of responsibility as a publisher for the excerpts reproduced by its search engine (although the provider of a search engine has no responsibility for search results, the law is nothing like as clear when the search engine reproduces material from the destination site). As the power and global reach of the company continues to increase it remains to be seen whether the founding ethos can be retained without diluting the impact of the company as a positive influence on the Internet.

Behind the slogan, there is, however, an important moral and ethical issue. We can all salute the intent of "Don't be evil", *but evil according to whose lights?* In a connected world, where there is no single prevalent moral philosophy, one man's evil may be another man's good. A ready example of that is the formalised political discourse between the Pirate Party and the supporters of Intellectual Property Rights, which might be crudely, but by no means inaccurately be characterised as dispute between two sides, each of which sees itself as good and the other as evil.

There is little doubt that Google is not evil according to its own lights, but there have been public demonstrations outside the company's headquarters in California in protest against the possibility of two-track access to the Internet, arising from the introduction of a financial tariff for fast-track broadband access to the Internet, which is being proposed by Google and other Internet service-providers. Google justifies this as assisting industrial, commercial and financial applications, but others may see it as a threat to the neutrality of the Internet, for information and other applications would be immediately available only at a price and those unable to pay the ongoing access charges would be placed at a considerable disadvantage. This would potentially present a major difficulty for developing countries anxious to enhance and develop Internet access for their indigenous populations. It would be argued that, in order to protect access to all Internet sites on a fair and equitable basis, including the growing range of social networking sites used on a regular basis by many hundreds of thousands of people across the world, it is essential that the neutrality of the Internet should be protected as far as possible from the intrusion of commercial interests exercised by the increasingly powerful and influential service-providers.

Similar issues of "what is evil?" arise acutely in relation to privacy issues, and these are discussed more fully below.

The question is, therefore, how do we develop common ethical standards, how do we agree upon what is "evil"? Is merely a reflection of the prevailing *zeitgeist*, a kind of Darwinian survival of the fittest amongst ethical systems, rather than dinosaurs? Which culture or subculture may seize the moral high ground? Is it purely relative, so that what is evil one day may be good the next, as attitudes to issues such as file-sharing change, or as internet use by individuals which have cultures based in non-western value systems (such as China) increases and begins to swamp users who subscribe to Western values? Might Christians be, to any significant extent, "leaven in the dough"?

These are intractable questions, unsusceptible of easy answers, but they will not go away.

There is no question that the dependency of most people on use of the Internet for a wide range of personal transactions increases their vulnerability to charging and to sales and marketing manipulation, and by the use of persuasive technologies, as discussed below, the very shaping of their world view, so does that imperative compel a model of increasing external control in the form of Government or other external regulation?

4.2 Formal Standards

At present, there are no legally authorised codes of practice or safeguards for the use of the Internet, although some professional bodies, such as the British Computer Society, have insisted that wherever possible their members should adhere to methods of good

practice and a formalised net-discipline when conducting any form of transaction on the Internet. It may be difficult to conceive of a mechanism which, at a technical level, could enforce compliance on members of the groups which had adopted such codes of practice, and it would certainly be very difficult, and probably impracticable, to attempt either to impose such standards upon the wider public or to carry out any form of general monitoring of Internet usage so as to ensure that good practice was adhered to.

The best that can be hoped for is better co-ordination of national standards and legal controls such as those discussed in section 3 of this Report. Within the UN family of intergovernmental agencies, UNESCO (United Nations Educational, Scientific and Cultural Organisation) carries a formal responsibility for providing guarantees of access to existing and evolving technologies for developing countries. However, with only limited resources at its disposal, UNESCO is only able to offer a meeting place for the resolution of potential disputes over the application of new ICT (Information and Communications Technology) media across the world. The chances of UNESCO being able to do more than this would depend on an intergovernmental initiative or a similar approach that currently is not even visible on the far horizon.

Perhaps the most realistic hope of the creation of a code of standards can be seen in the model of the development of internationally accepted *de facto* standards by ICANN (the Internet Corporation for Assigned Names and Numbers), Nominet (the Internet registry for .uk domain names) and similar bodies. Are those lessons capable of being transferred to other aspects of the Internet? This is a question which, like many of the other questions we address, may have to be left hanging.

4.3 Broader Principles of the Internet

There are however, other positive influences at work within the Internet community. Google has already been discussed, and there is the Open Source movement which uses copyright law not to close down but to open up copyright works so as to promote a worldwide collaborative approach to the development of software. Although the software is sometimes described as "free software" this is free as in "free speech" and not as in "free beer".

As a result, free software can be a perfectly viable business model, all as explained by Iain G. Mitchell QC (a member of the working party) in the introductory editorial of the *International Free and Open Source Software Law Review*[12]

Typical of this community way of working is Wikipedia, which, ten years after its creation is used by on average over 380 million people per month. As Wikipedia itself points out[13], this is almost a third of the Internet connected world:

"It is the 5th most popular website in the world. The other four have been built and maintained with billions of dollars in investment, huge corporate staffs and relentless marketing. But, Wikipedia isn't anything like a commercial website. It is a community creation, written by volunteers making one entry at a time. You are part of our community.....

[12] See *Foreword and Statement of Purpose,* (2009) 1 IFOSS L Rev pg. 1. http://www.ifosslr.org/ifosslr/article/view/13/3

[13] At http://wikimediafoundation.org/wiki/Appeal22/en accessed 26th October 2010

"Wikipedia is about the power of people like us to do extraordinary things. People like us write Wikipedia, one word at a time. People like us fund it, one donation at a time. It's proof of our collective potential to change the world."

Thus, new codes of ethics and new ways of doing things may begin to emerge from within cyberspace itself. The rub is that quite what will emerge from this universal network of differing and even opposing ethical and moral standards is extremely difficult to predict.

5. Social Networking Sites

5.1 A Microcosm of the Internet

By no means all of the online activity of Internet users is for relaxation, for research or in the e-commerce economy. One of the most notable features of the Internet Age has been the proliferation of online communities, whether blogs, wikis, tweeting (everyone can be famous for 140 characters), or above all, social networking sites such as *Facebook, Bebo, LinkedIn* and a host of others. These communities cover an ever-growing spectrum of interests, philosophies, belief systems, and hobbies. In short they reflect the diversity of the societies in which their members are rooted.

They have a huge potential to act as an engine of social change, mobilising and capturing the public's imagination, for example Barack Obama's presidential campaign in which he increased grassroots financial contributions and voting support through *Facebook*, and the similar campaign of political mobilisation run by the Tea Party in the recent Congressional elections. Further, the Internet in general and Facebook and Twitter in particular were a significant as a means of communication and co-ordination for citizens in the Tunisian and Egyptian revolutions, to the extent that at one stage the Egyptian Government sought to close down Internet connections in the country.

In this way, the same issues of persuasive technologies, shaping of behaviours and conflicts of values as characterise the Internet as a whole may be seen in social networking sites, and they can provide a useful picture of the Internet in miniature.

5.2 Communicating with the real world

Some evolutionary psychologists postulate that it is precisely our need and ability to communicate with others that lies at the basis of our being human.[14] It is therefore not surprising that technologies that facilitate the exchange of ideas, information, feelings and emotions are vastly popular. Most computers have integrated small video cameras, as well as Internet connectivity thereby making it possible for anyone to communicate to friends and family on a one to one basis and in real time through Internet telephony, using services like *Skype* or the chat facility on social networking sites or to delay the communication by using social networking sites to make wall posts which broadcast to one's friends in a single post.

A survey by the Office for National Statistics in 2009 showed that most people prefer to use the Internet at home, predominantly to send and receive emails (87%), and to find

[14] See, for example, Spink, A., and Cole, C., "Information Behaviour: A Socio-Cognitive Ability", in *Evolutionary Psychology* Volume 5, Issue 2 (2007) available at http://www.epjournal.net/filestore/EP05257274.pdf

information about goods and services (84%). Communication and information gathering seem therefore to be the key uses. However, these activities are being carried out more and more within the context of social networking sites as opposed to individually checking out emails and then going on to a messaging service.[15] Applications such as *Facebook* and other social networking sites that integrate in one place text, images, films, links to websites etc. which one individual wishes to share with other people, have made social networking sites a very useful medium whereby to stay in touch with friends and family irrespective of geographical distances.

Social networking sites not only integrate photographs etc. in one place, but give users an opportunity to "have their say" and comment on everything that is being collectively shared. Inevitably, what is being shared is not only information, but pieces of the lives of people. Social networking sites allow individuals to place information about themselves to be read and accessed by anyone within their network of online friends. In terms of personal visibility, *Facebook* can be seen as the equivalent of having excerpts of your life published in *Hello* Magazine. Through the sharing of wedding pictures, holiday snaps, pictures of home improvements, pets, etc, the lives of ordinary people are showcased on a digital platform for every online friend to contemplate, admire and comment. They also form part of the collective memory of the Internet.

Social networking sites are not restricted to personal communications. They are also highly used to promote professional connections. *LinkedIn* is only one example where professionals use Internet technologies to share expertise, meet virtually, exchange information, and work together. There is a rise of self-help books on how to market yourself more effectively through the use of social networking sites.

Rice[16]goes as far as to suggest that the popularity of Facebook and by implication other social networking sites stems from the fact that this application integrates in one place a suite of facilities that allow us to establish and/or maintain meaningful communication at a variety of levels both for play and work.

Social networking sites such as *MySpace, Bebo*, or *Facebook* are very popular with children and young people. The technology allows them to interact with friends and to experiment and explore issues of identity, peer grouping and sexuality. The technology allows users to create and share their own content therefore giving young people the opportunity to express themselves in an environment that is away from parental supervision. Studies on the use of social networking sites by young people stress the locality of the network of friends and family and that most young people using these technologies interact face-to-face- with the people on their online network.[17] In this case, social networking sites supplement face-to-face contacts.

However, social networking sites have been used in an exploitative manner to bully individuals or to establish contact with young people for illegal and/or exploitative purposes. Studies on the abusive use of social networking sites disclose that young

[15] Gibs, Jon and Sean Bruich, *Nielsen/Facebook Report: The Value of Social Media Ad Impressions*. Nielsen wire. April 2010. Available at http://blog.nielsen.com/nielsenwire/online_mobile/nielsenfacebook-ad-report/ consulted on 10 November 2010.

[16] Rice, Jesse. (2009). *The Church of Facebook: How the Hyperconnected Are Redefining Community.* Colorado Springs: David Cook.

[17] Livingstone, Sonia (2008) *Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression.* New Media and Society 10: 393-411.

people who fit a profile of problems with parents, who suffer from sadness, who have bouts of depression or histories of sexual abuse, who frequent chat rooms and post personal information about themselves on social networking sites are more likely to be picked out by Internet predators.[18]

Parents are concerned as to where to draw the line between control and *laissez-faire* in Internet activity. Some approaches favour controlling-type software. For example, *Togetherville* is designed as a "safe" social networking site where parents have a large measure of control over the activities of their children within the website[19]. There are also software solutions that block access to certain websites or spyware that alerts parents on the Internet use of their children. Other approaches favour a media-literacy savvy based on information dissemination. There are a number of information packs designed to inform and guide children, young people, and their parents in the potential perils of the use of Internet in general and of social networking sites. Another programme of note is *Think Now* deployed by the Child Exploitation and Online Protection Centre (CEOP).

Children are also interacting with Internet applications at school. A suite of applications, known as virtual learning environments is being deployed throughout Scotland. GLOW is the virtual learning environment deployed across Scottish schools by Learning and Teaching Scotland. Proponents of the incorporation of these technologies into the classroom propose a new form of teaching, where discovery, collaborative learning, and learning to learn are the main objectives of education as opposed to an accumulation of facts. The 2007 report by HM Inspectorate of Education in Scotland, reported that the use of information and communication technologies (ICT) had broadened and deepened learning in subject areas. However, it was also reported that learners needed to improve their information and media literacy skills. Media literacy skills are not just concerned with the technical issues of using the application, but with making children aware of guidelines for remaining safe Internet users. Specific guidelines can be found on the GLOW website.

Children and young people are therefore using Internet applications and social networking sites in particular both at school and at home. There is understandable concern as to the amount of time children are spending in front of screens. Research in this area, stemming from the USA, Europe, the UK[20] and Australia however point out that although there are individual children who seem to be addicted to their computers, on the whole, families seem to be able to handle children's use of these technologies effectively, providing a balance of outdoor activities, family life and Internet use.[21] It is important to stress the need for a balance of leisure activities between media use and other forms of entertainment that give young people the opportunity to develop physically, emotionally and socially**.**

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[18] Wolak, Janis, David Finkelhor, Kimberly J. Mitchell and Michele L. Ybarra, *Online "Predators" and Their Victims: Myths, Realities, and Implications for Prevention and Treatment* (2008). *American Psychologist*, 63: 111-128

[19] Boehret, Katherine. (2010). *A Social Network to Grow on*. The Wall Street Journal May 18th. http://online.wsj.com/article/SB10001424052748703957904575252382067847548.html

[20] Livingstone, Sonia, Leslie Haddon, Anke Görzig and Kjartan Ólafsson, with members of the EU Kids Online network (2011). *Risks and safety on the Internet: The perspective of European children*. Available at http://www2.lse.ac.uk/media@lse/research/EUKidsOnline/Initial_findings_report.pdf Consulted on 18 Jan. 2011.

[21] *Children's use of the Internet and Mobile Phones in South Australia*. Australian Bureau of Statistics. Available at http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/1345.4Feature%20Article1July%202010. Consulted on Nov. 5, 2010.

5.3 Feedback in the amplifier

Some of the virtual communities which exist either on Social Networking sites or in chat rooms may be communities of interest, such as communities of fans (indeed Facebook users can become fans of particular pages). On the whole that may be innocuous, but some of those communities may serve to isolate their members from the real world, reinforcing and amplifying their mores and obsessions. For example, research on the use of social networking sites in shaping the mores of a community shows that racial attitudes and responses to visually racists images are more readily expressed in social networking sites than otherwise. This suggests that online interaction and the sharing of ideas within a circle of "friends" might allow people to express viewpoints or to agree with viewpoints that might otherwise be repressed.[22] Virtual worlds might be particularly attractive because they offer certain users the possibility to break free from social conventions supported by the "moral majority" and explore alternative views of identity or sexuality within a circle of like-minded virtual friends. These communities of users, share values and interests irrespective of their physical location enforce their codes of behaviour upon their members. For example, an online community called LambdaMoo banned the access of the site to one of its members after its online character "Mr Bungle" raped within a shared virtual space another online character. The rape was virtual, but the responses of the community against such behaviour, and the feelings expressed by the raped online character were very real.[23]

At a more subtle level, even sites like *Facebook, LinkedIn* and *Bebo* can transmit and inculcate their values in their users. For example, LinkedIn thrives on a culture of business relationships, recommendations and mutual back-scratching, whereas Bebo places emphasis on the superficiality of how people look. It may be that these sites merely respond to the requirements of their users, but it may also be that the users find themselves unconsciously inculcated with the values of the sites. Thus, the answer to the questions posited above as to how common moral and ethical standards come to be established may be as a result of the application of persuasive technologies by the sites, in an attempt to model the behaviour of the users in a way that is beneficial to the site owners. The behaviour and values of users are being persuasively moulded by the specific platform, which constraints their choices and forces users to comply with requirements embedded within the platform's design.[24]

Facebook provides a useful example. Envisaged by its founder, Mark Zuckerberg as a means of replicating in the virtual world the sort of social networks which exist in the real world, it is carefully constructed so as to maximise revenue. For example, the process of posting on walls, tagging of photographs, provision of news feeds with links to friends' pages, are all designed to promote a constant churning by the user from page to page, each page bearing advertisements tailored to the digital identity of the user as to age, proclivities, place of residence etc., all as garnered by sophisticated cookie technology.

Thus, the commercial model is used to influence and manipulate user behaviour for the commercial purpose of the platform or website. Targeted advertising is in itself not

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[22] *Color-Blind Racial Ideology Linked to Racism, Both Online and Offline*. ScienceDaily Apr. 21, 2010. Available at http://www.sciencedaily.com/releases/2010/04/100421162611.htm. Consulted on Nov. 5 2010.

[23] Dibbell, Julian. *My Tiny Life: crime and Passion in a Virtual world*. London, Fourth Estate. 1998.

[24] Owen, I. *Freedom and Constraint in Second Life: Towards anthropology of virtual communities*. M. Phil. Dissertation, Jesus College. University of Cambridge. 46pgs.

exceptionable, for it is how websites are commercially sustained, and the information from the advertisements may be perceived by the user as being useful, but at a deeper level there is some interesting manipulation going on: first, the manipulation of user behaviour through links, tagging and other means and, second, the wider manipulation of the target market by psychology, rather than technology. In particular, when Facebook started, it did not carry advertising. As it began to grow, there was pressure from its then CFO, Eduardo Saverin, to carry advertising, but this was resisted by Zuckerberg, who realised that if advertising were carried at that stage, it would make Facebook like any number of other competing social networks. The strategy was not to carry advertising, which would make Facebook "cool" to its target market of young people, and thereby increase the number of subscribers. It was only when Facebook achieved a position of absolute market dominance that advertising was to be introduced.

But Zuckerberg is a man with a mission which extends beyond the purely commercial. His public statements[25] reflect a passionate belief in the virtues of an open society where there is no privacy, believing it will lead to what he characterises as a healthier society, a more transparent world, where people will be held to the consequences of their actions and be more likely to behave more responsibly. At times he will say that he is merely reflecting the mores of the Facebook generation, but there is a real question of how far he is actually shaping those supposed mores. Facebook has frequently come under criticism for constantly changing its privacy settings, with the default always being set for the minimum level of privacy. It is, of course possible to select a higher level of privacy, but to do so is not straightforward, and this is not helped by the fact that every change of privacy settings is accompanied by an increasing opacity in Facebook's written privacy policy, which has grown from 1,004 words at its inception to 5,830 words now. In short, Facebook is inertia-selling the erosion of privacy, and the perceived benefits that the site brings may be seen by many users as worth the loss of privacy, rather as Edmund sold his soul in The Lion the witch and the Wardrobe for the White Queen's Turkish Delight. This creates an interesting tension, for are society's accepted norms of privacy really being changed? We have commented above on the rise of the Pirate Party, but one of its policy planks is a fierce opposition to the invasion of privacy. It would be interesting to know how many Pirate Party members and supporters are also users of Facebook on the default settings. How far are the changes in privacy norms wrought by Facebook "below the radar" of public attention?

5.4 The Creation of virtual worlds

In one sense, the communities created through Social Networking sites are virtual communities. Some, at least, of the "friends" may not be friends in the real sense, rather than slight acquaintances, nor be friends in the real world.

However, there are other virtual social networks which are further removed from reality, such as *Second Life*, a vivid digital re-imagining of the real world where people can fly, where everyone is an avatar, and where no-one can have his or her real-world identity, yet it is also a world which has a currency, where there is property, both buildings and goods, where corporations, law firms, banks and other institutions from the real world have offices, real world churches have places of worship, avatars fall in love, "marry" and separate, do business, make money (both the Linden dollars of Second Life and real

[25] See Kirkpatrick, David, *The Facebook Effect* London: Virgin Books 2010; and *Privacy no longer a social norm says Facebook Founder* The Guardian Newspaper 11th January, 2010. http://www.guardian.co.uk/technology/2010/jan/11/facebook-privacy

world currency) and where real world people, living through their avatars feel joy and pain, and even go so far as to try to litigate with each other.

Second Life promotes itself as a virtual space where freedom and creativity can be fully expressed without the constraints of the real world. The notion of freedom from constraints remains one of the primary attractions as users are able to rename themselves, chose an avatar, select clothes for it, buy land and build upon it. People are therefore free to experiment with different identities, meet people and perform activities that they would never do in the real world; however, this experimentation goes beyond a role playing game; the technology has become so engaging that people relate to their avatar identity perhaps even more vividly than to their real life identity because the avatar is a self-crafted expression of their dreams, aspiration and choices in shaping an idealized existence.[26] Virtual life is perceived as limitless whilst real life is perceived as full of imposed constraints.[27] Although it is noted that platforms life *Second Life*, do in fact impose financial and cultural constraints in that players has to buy in real money clothes, gadgets and privileges for their avatars the allure of a life of almost limitless freedom can be very tantalizing for those whose existence might seem grey and dull.

The question can be asked whether assiduous role players live in a parallel reality where the distinctions between real and virtual become blurred. Is it possible for players to ascertain the end of the game? According to researcher on avatars identity crises,[28] the game never ends because the human being behind the avatar is affected by the experience of playing, just as much as everyone is affected by working out at a gym, or attending a concert. The virtual world is therefore informing and transforming our experiences of the real world and both the real and the virtual feed on each other.

6. The Contested Self - Digital Identity and Virtualisation

6.1 The nature of changing relationships

In a helpful book entitled *'Information Technology and Cyberspace: Extra-connected Living'* published in 2001, David Pullinger, a former SRT director, refers to the way in which interpersonal relationships could be potentially influenced by the increasingly widespread use of the Internet:

"Internet communication does not seem to change the number of our good friends; it does, however, change who they are. Most people have an average of around thirteen friends and this has not changed since research began in the 1930s. Friendships are built on contact, but this need not be exclusively face to face, and need not have been initiated by meeting in this way. Indeed, first meetings happen in every way imaginable, but in continuing the relationship, three things usually have to happen: frequency of contact increases, content of discussion broadens and a wide variety of media is used to

[26] Yee, Nick. *Avatar and identity in MMORPGS* available at http://www.nickyee.com/daedalus/gateway_identity.html. Consulted on Jan 18th 2011.

[27] Boellstorff, Tom, *Coming of Age in Second Life: An Anthropologist explores the virtually human*. Princeton, Princeton University Press. (2008).

[28] Sihvonen, Tanja: *Modding The Sims – Blurring the boundaries between fantasy worlds and real life?* European Science Foundation. Available at http://www.esf.org/index.php?eID=tx_nawsecuredl&u=0&file=fileadmin/be_user/ew_docs/05-286_Report.pdf&t=1287316406&hash=26e7eb9c3773c0526ad6b3161037a2ee. Consulted on 18th Jan. 2011

communicate. Contact frequency normally grows to a point where each person in the friendship knows what to expect from the other – then either it remains at that level or diminishes again."

The use of the Internet through e-mail messaging and social networking web-sites, such as *Facebook, YouTube or MySpace*, facilitates the range of contacts that any individual can maintain on a regular basis and can lead to a range of complicated daily interactions that cannot be easily described as 'friendships' per se. Indeed some people assume an idealised or revised personal identity in many of these transactions which, in turn, can give rise to a different kind of cultural persona or to an *'alternative self'.* The translation of this self into an ongoing virtual reality can lead to disturbing fantasies, convey misleading impressions, and create distortions or half-truths that take the individual far away from the social and economic context of their day-to-day existence. These shifts can become very confusing if a number of these different identities give rise to a multiplicity of *'selves'*, which then have to be retained for purposes of credibility while interacting with others on the Internet.

Young people are especially vulnerable to such a complex matrix of social interactions. And further policy initiatives will be required to ensure that young people are afforded adequate protection without unnecessarily inhibiting their access to the websites that reinforce their networks of personal contacts and valuable information. Whether the challenging Google maxim of *'Don't be evil'* is upheld in the longer term, and can be seen to prevail in all reasonable circumstances, remains to be seen.

6.2 Construction and manipulation of digital identities

Given the lack of legal rights to ownership of personal data held on various web-sites, Governmental, financial, commercial and the more informal social networking sites, it is hardly surprising that many people are apprehensive about the security and accuracy of their own digital records. It is presumed that much of these data could become vulnerable to misuse by third parties. Indeed the absence of regulatory protocols for most web-sites on the Internet, and some recent failures of social networking sites to provide an appropriate degree of risk management, has already resulted in penetration by hackers and potential abuse of the stored personal data for criminal and other illicit purposes.

The problem of holding personal digital data will rapidly compound as H M Government insists on the digitisation of access to taxation, financial benefits and a range of social services in order to achieve efficiency savings across the public sector. Encryption of data may eventually be necessary to achieve an official wall of defence but the maintenance and costs of a historically secure system could prove to be significant. These are early days but the Government in its declared strategy for Digital Britain appears to suggest no alternative line of approach. The public policy debate on this issue needs to be opened up by politicians at Westminster and Holyrood, academic analysts and other assessors of personal freedom and human rights, in order to judge the urgency of protective measures that will be needed.
Political assumptions have already been made about access and use of digital media. The fact that no-one is considered to own their identity in any legal sense is worrying to say the least. There appears to be a too ready assumption that because access to the Internet is from a computer with an Internet address which matches the address of an individual's computer, the access must have been had by that individual. There is also the further complication that many people acknowledge the creation of multiple Internet

identities for various purposes. As a result, the tracking and validation of a person's 'real identity' for practical purposes may become an ongoing dilemma for the state and for all of its security services, as well also as in the realm of e-commerce over the years ahead.

6.3 Virtual identity versus real identity - you are where you have been

As it was first put by New Yorker cartoonist, Peter Steiner, "On the Internet, nobody knows you're a dog"[29] or, as David Pullinger points out in his book, when people are online they don't know whom they are meeting:

"Anonymity, imagined personal backgrounds and alternative identities all hide reality. Although for some people this is an opportunity to work through some personal issues, for others it is a means of concealment for illegal or immoral purposes."

Not only may individual users create alternative virtual identities for themselves, but also the Internet itself creates multiple identities for users, often without the user knowing anything about it. We leave a footprint wherever we go on the Internet, and tracking cookies are capable of telling not only where we have been, but what we did when we were there. From these data can be constructed multiple identities for the user of the particular Internet address. In other words, as far as the widening span of Internet usage is concerned, *'You are … where you have been".*

6.4 The Spiritual Search

There are many prevailing orthodoxies and assumptions about the future of this new digital age. There are clearly limitations on the control of information in digital formats. It is not comforting to be told by experts that your personal identity is being constantly reviewed and re-recorded without reference to the individual for any form of validation and that we may be no more than the sum total of where we have been.

The day-to-day creation of this individual footprint should not be taken lightly as it is unlikely that these footprints are going to be erased. They already contain a great deal of information that is important for marketing purposes and for other more critical aspects of our lives. The Internet is both unforgiving and unforgetting.

Consequently, we have to find a suitable way of accepting this displacement of the 'self', and any virtual identities that may have been consciously or inadvertently created, into the care of the regular service-providers and managers of Internet web-sites that continue to proliferate around the globe on a daily basis.

In many individual cases, there is a further spiritual dimension to this apparent search for identity. Those who may feel disenfranchised by their experience of mainstream religion will be inclined to explore and discover new pathways available on the Internet to restore and refresh their belief systems. Adopting a virtual identity which allows access to more exotic religious practices and beliefs that are not grounded in the reality of their immediate cultural background and experience can lead to psychological problems and dependencies that are not easily resolved.

[29] *The New Yorker*, 5th July, 1993. See http://www.cartoonbank.com/1993/on-the-internet-nobody-knows-youre-a-dog/invt/106197/

Yet, at the same time, this search represents an opportunity for the churches and faith communities to explain and articulate themselves more clearly, to develop new methods and means of communication that are compatible with the needs and desires of these 'new seekers' on the Internet. A good number of faith groups have made creative use of the Internet in the field of prayer and spirituality, and a glance at this section of *iTunes*, for instance, shows how many have seized the opportunity offered by pod-casting to help people grow in their relationship with God through prayer.

It would be helpful and constructive for the churches and faith communities to remain open to the possibility of using the new technology of the Internet for the development of ethical decision-making, for advocacy of UN Millennium Development Goals and associated economic objectives, such as Fair-trade, together with the drive for progressive elimination of poverty and disease in developing countries, particularly in sub-Saharan Africa. Underpinning Christian belief with practical solutions to large-scale problems is an essential task that will need to be addressed with urgency over the coming decade.

6.5 Virtualisation – the theological challenge

When we investigate and reflect upon God's presence and activity in our lives, and ask what that means for us, we are engaged in the task of theology. Examining the subject of virtualisation, it clear that there is a significant theological challenge which is worthy of investigation. In this section, it will only be possible to identify the scope of the investigation bearing in mind that each of us will respond to this subject differently as our own theological perspective becomes concerned with virtualisation. When this happens, the theological task is broadened as more of us embark upon a shared exercise. As we investigate virtualisation theologically, we shall also allow ourselves to be challenged by God. For theology invites us, as God invites us, to meet the challenge, respond and be prepared for transformation. If virtualisation is transforming all our lives, then it may be demanding from us theological imagination and creativity as well as a critical theological appraisal of this subject.

The encounter with virtualisation has only just begun but already there are several theological challenges which are displayed against the background of our contemporary and traditional theological landscape.

Undeniably in Christian theology, God has a saving interest in the profound matters of our existence; creation, life and its relationships, the economic order and our cultural structures. Jesus identified this as the Kingdom or Reign of God. The challenge, that virtualisation poses for us, is whether such a phenomenon offers the freedom and fulfilment at the personal, communal and structural level recognised within the saving interest of God. Earlier in this report extensive discussion of this comparatively new phenomenon of the internet and the introduction of a virtual contested space leads us, as we have read, to ask sociological, legal and ethical questions, but we are faced with theological questions too.

Does virtualisation engage active human participation, enabling life to flourish in accordance with the liberating freedom and redemptive healing of the divine will? Subsequently, is virtualisation a moment in our human development, blessed by a creative gracious Spirit, that offers individuals and communities the opportunity for freedom and expression? And as we explore further, does virtualisation support or oppose the oppression that is currently endured by many under the burden of human history? Is virtualisation a mechanism or vehicle for oppression, denying the freedom and liberation God would have us all enjoy and celebrate?

Considering the initial implications of virtualisation on human behaviour, as already illustrated in this report, also leads us to think about the intention God has for humanity. If we have no point of reference then this new world simply demands humanity to make its own way. Some will seek an idealised sharing of values underpinned by mutual trust whilst others will engage in a conquest to dominate, control and overpower.

The heritage of the Christian faith rests upon the pivotal event of the Incarnation. This particular historic event of Christ's incarnation allows Christian theology and the Church to proclaim that humanity and personhood are central to the engagement of God's will in Creation. Christ's embodied experience is specific to a particular context and history which allows humanity's encounter with God to be understood with similar purposefulness. Christian theology states that our history, our identity and embodiment, our context as an individual and community, actually matters to a creative God. It is this physical experience that gives rise to the spiritual acknowledgement that we are in relationship with God's loving purposes throughout time and history. Such recognition allows all who believe with faithfulness to offer their thanksgiving, prayer and praise in worship. Further this recognition places humanity's own will under the authoritative will of God. It is a will that loves, creates, and liberates and it asks that all human endeavour should anticipate God's promise and blessing upon all those who live with the same intention and under such authority.

For some, virtualisation reduces or negates this important foundational theological point of the Incarnation. Indeed, it is often argued, that the impact of virtualisation removes this sense all together; especially the place of context and history, and the reality of personhood, identity and embodiment. The conclusion can be drawn that none of these are necessary to engage within the virtual world. If such a world is devoid of these characteristics, then is it a complete void within the intentional purpose of God, as traditionally understood? Yet, it may also be argued that virtualisation offers to its credit a redemptive possibility. For here is an available space, free from regular historical constraint, open to expression and creativity, an infused but contested space for working out new revealing possibilities. By removing context and history, virtualisation may provide the opportunity for new experiences and imaginative responses to issue forth into our reality. We may have on offer a fertile space for the nomad or new community to wander in; both challenged by its potential as much as by the fear of the unknown.

Virtualisation, then, presents to some a new world of exploration, opportunity and discovery, but to others a place of nihilism, despair, further encouraging the sinful and prodigal.

This brings us to the place of engagement or action, and to redemptive history itself. Theology is a participative exercise coming from within a community, the Church, and explains why so much profound theology has been generated from within worship, and the sacramental experience, in relation to the God who relates to us creatively and with grace. Christian theology depends on an active involvement with the world as it is, including its suffering and pain, because it is believed that this is where God in Christ is present and alive. Christ has been resurrected; death is no more because of God's faithfulness and love. And as we engage in the world around us, and reflect on the experience of those acted out signs of God's grace, lives are changed, transformed and imbued with that which lends itself to engagement and action: the properties of faithfulness and love.

The critique of virtualisation demands whether this space can create the realism of an engaged and active community living by the faith which grace demands. Can faithfulness and love empower and transform a virtual world to make it part of the reign or kingdom of God? In other words, what would the Church look like in this virtual possibility?

Strangely, the examples that exist, such as the Cathedral of Second Life or St Pixels employ imitation to suggest Church rather than exhibiting anything active within that realm. Virtualisation, in terms of Christian witness and presence, will be judged by the faithful and loving lives it can generate. This is still to be evaluated but perhaps the virtual world could be an exciting place for the intentional body of Christ to be found. Already some places of Christian gathering and worship are beginning to use the internet as a means of communicating and relating to a wider audience in very creative ways.

The virtual world could be a powerful place to meet the God who transforms and creates; with some irony then, no longer a virtual world but one with a real presence! What would this real presence of grace look like in the virtual world? Perhaps, in the example offered during the discussion on the *Moral Maze on Virtualisation and Society* we gain insight. A woman severely disabled after a road accident and affected by a serious loss of esteem, leading to total withdrawal from friends and the world around her after such a trauma, created a disabled avatar representing her new altered image. She found in this new alternative virtual world an acceptance and friendship that eventually led her to facing the reality of her real situation with confidence and resilience. Here, then, the experience of virtualization has been creative and transformative. The reality of personhood, identity and embodiment is regained. The situation of suffering is redeemed by engagement and action in a space provided for new relationship, hope and possibility.

As we have read in this report, virtualisation raises serious questions about the use and abuse of power.

When it comes to power and the exercise of authority and presence, Christian theology teaches that all power and authority stems from God. It is an authority and power that expresses the statement that “God is Love”: for love opens itself to vulnerability, suffering and risk rather than control and dominance. Our theological reference points are the dramatic events of Christ’s crucifixion and resurrection, and the doctrine of the Holy Trinity. All resonate with the issue of loving power and authority.

The Godhead is pictured as a dynamic, intimate and loving relationship of equitably shared power and identity. God chooses to suffer with Creation rather than dominate it, working with the medium; so to speak, to express and engender love, beauty and faithfulness. Through the Cross and the personal faith of Jesus we understand the suffering servitude of God’s faithfulness, prepared to turn sin back on itself by the free offering of self sacrifice and forgiveness. God is offended by the injustice, yet in solidarity with all who suffer for all time. It is this remarkable act that brings the world back to its senses, redeems, saves us from ourselves and through his resurrection offers the possibility of a new creation.

If virtualisation raises serious questions about the use and abuse of power, can a corrective be found, especially in a created and used space where, as some understand, there is no necessity for forgiveness, renewal or moral engagement and consequently, the autonomous self revels only in the possibility of play, thought and action without responsibility? Nevertheless, virtualisation like any other contested space in life will only be and become what we make of it. Maybe forgiveness and healing can enter in? In this respect it is, perhaps, no different from our current understanding of reality. We are to use our reason, the resources of our heritage and history, and with theological insight encourage this virtual world into a place of hope, value and purpose knowing that it, too, belongs under the reign of a gracious and loving God.

7. Commercial use of the Internet

"If there were 3 million customers on the Web, I should have 3 million stores on the Web" - Jeff Bezoz, Amazon's CEO (cited in Schafer, et al 1999).

7.1 E-Commerce

Governments in most developed countries have heavily invested in the development of virtual superhighways and related infrastructure because of the competitive advantage available both to ordinary people and to companies operating in an e-commerce friendly environment. The Internet therefore allows commercial transactions to be established from business to consumers as well as from business to business. It is outside the of the scope of this report to examine fully the economic implications of e-commerce but the European E-Business Market Watch 2009-10 report does presents an up-to-date overview of the economic implications of e-commerce within a European context.

The ability to sell and buy online has globalised the shopping experience. A quick perusal of the virtual shopping arcades of E-Bay or Amazon presents the shopper with a vast array of goods made anywhere in the world, ready to be delivered anyplace. The Internet delivers product information as well as facilitates purchasing transactions. This means increased markets, increased availability of products and also increased competition. As a consumer we have the choice whether to order goods from a shop around the corner or from the other side of the earth. As a supplier of goods and services we can choose to knock on doors to offer my products or to develop a website. The choice rests in the hands of the user of the technology.

From a consumers' standpoint, e-commerce is immensely attractive offering the supply of corporeal goods from anywhere in the world and at the best price, and the instant gratification of downloading to the consumer's computer of incorporeal goods such as software, online games or videos and MP3 audio files. However, these advantages come at a cost beyond the mere monetary consideration: the loss of privacy over our activities on the Internet.

7.2 Privacy and memory issues

How can a search engine know the interests of its users? Online searches leave a trail and this trail can be used by online retailers to personalise their offer to suit the interests of online searchers. The Internet has a memory and this memory can be used for personalisation purposes.

Personalisation attempts to simplify searching the Internet by customising the interactions between a website and a user based on the "*user's explicit and/or implicit interests and desires"*.[30] It is based on the principle of data mining which is the process of finding out what users are searching on the Internet through an analysis of their browsing histories as recovered through "cookies" installed on the consumer's computer. This history is then accessed by a web-server and used to greet the returning user. Browsing history is accessed and analysed automatically by the server through an algorithm. Further personalisation (such as name, address, credit card data or ratings of products) is achieved through information the user provides by filling in forms etc. in order to access the service.

[30] Nasraoui, Olfa World Wide Web Personalization. Available at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.66.1744&rep=rep1&type=pdf. Consulted on Nov. 10th 2010.

Within the online shop another level of personalisation is achieved through recommendations from hyperlinks that seem to be relevant to the user's interests. This information is also derived from the browsing history. In the words of Wel and Royakkers: "*Web log data do not actually identify a person, but they do identify a web user: a user who has characteristics like an IP-address, date and time of entering and leaving the site, path of followed hyperlinks (click-stream), type of browser used, and so on. So they do not know his name or what he looks like. But, the next time he visits the web site, he will be recognized as a regular visitor.*" [31]

Personalisation by itself might not seem to be a particularly contentious concept. Many argue that it provides a benefit both to users and online retailers since it simplifies the problems of searching and finding relevant goods and services. It might open the door to unsolicited marketing but that might not be seen as a serious issue. Problems however might arise when users experience price discrimination based on their profile. Similarly, users sharing the same computer might unknowingly disclose information about themselves to other users of the same computer. Despite these consumer reservations, data mining is now a standard technique in most off-the-shelf software for online retailers, enabling them to increase the number of hits to their websites, tailor the offers and prices based on user's profiles and increase sales.

Personalisation raises the important issue, explored in part 6.3 of this report, of ownership of search-history and other personal data, and, indeed, ownership of the constructed virtual personality itself. However that question falls to be answered, the reality is that the data sits in the supplier's computer and whatever the rights under data protection legislation of the data subject, any such rights cannot be exercised, nor can the data subject even give properly informed consent if he is not aware of the way information about his search history will be used. Web-log data are not publicly available, so individuals cannot find out what information is being kept on their usage by different online retailers.

The problem of personalisation is compounded through the creation of a virtual identity for an individual. Data-mining has been used to combine data published on the Internet, with other usage data in order to create a picture of the virtual identity of an individual without the latter's consent. In this case, published data is taken out of context and combined with web-server logs which are not public, and combined for a secondary purpose. This raises genuine concerns as to civil liberties.

These civil liberty concerns are exacerbated when it is considered that there is at least the potential for governments to make use of the same techniques and (under less strict data protection regimes than apply in Europe) even the same data to create a means of social control.

In these circumstances, it is interesting that a head of steam is building up behind a strengthening of data protection, extending even as far as an initiative by the European Commission, announced in November, 2010, to create a "right to be forgotten" under which individuals are given the right to require the complete removal of all of their data from social network sites and other electronic fora when they no longer wish to participate.

[31] van Wel, Lita and Lambèr Royakkers. *Ethical issues in web data mining*. (2004). Ethics and Information Technology 6: 129-140. http://www.springerlink.com/content/m13883x465627814/

It will be interesting to see how such a right plays out against the equal and opposite tension coming from Mark Zuckerberg's ever more open society.

7.3 Persuasive technology

B.J. Fogg [32]coined the term "persuasive technologies" which he defined as *"a computer system, device, or application intentionally designed to change a person's attitudes or behaviour in a predetermined way."*

The use of technology to guide and shape consumer behaviour is not new. Advertisements in radio, TV and cinemas are examples of such usage. However, the use of digital technologies to persuade and shape consumer behaviour is fundamentally different from other forms of advertisement. Advertisements in traditional media are segmented to desired audiences, whereas online advertisements are frequently tailored to suit the detailed profile of a consumer, seductively presenting products and services in such a way as to be calculated to appeal to a person having that profile, and even changing and adapting as that profile changes, the offer being dynamically modified based on the changing demands of the user and the richness of the profile. Data-mining coupled to dynamic interactivity has produced persuasive technologies.

Persuasive technology uses a variety of cues that elicit human responses. The techniques are not different from what another human being would use when trying to persuade a potential customer, using techniques such as recognition, praise, reciprocation or authority. Some of these techniques are more appropriate within the context of e-commerce than others. For example, the fact that the Amazon website greets users by name is not incidental: it is part of a marketing strategy to develop a relationship of trust with the customer. The "wish list" option which makes it easy for customers to buy desirable gifts both increases the richness of the customer profile and makes the customer feel that the website is providing added value compared to a simple bookstore.

Persuasive technologies entice customers constantly to return for further visits by offering time-sensitive deals or auctions, thereby tapping into hunter-gatherer instincts or taking advantage of the very real need to feel rewarded or praised. Persuasive technologies will offer "*selected valued customers"* rewards in the form of special deals or preferential treatment.
Most of these are standard techniques of persuasion but they have become very powerful techniques when they are combined with specific consumer behaviour information. These techniques are currently used to entice online users to shop, or to engage in online gambling or gaming, or to visit websites of a sexually explicit nature. In all cases, online users are enticed to consume services and/or products.

7.4 Shopping Addiction

[32] Fogg, B.J. (1999). *Persuasive technologies*. Communications of the ACM 42 (5): 27-29. http://delivery.acm.org/10.1145/310000/301396/p26-fogg.pdf?key1=301396&key2=3778612031&coll=DL&dl=ACM&ip=172.16.2.192&CFID=15362376&CFTOKEN=85357852

According to the Centre for Retail Research, UK 2010 online sales were £40 billion , 10.7% of UK retail trade (+16% on 2008).[33] In the words of the popular press[34], "*the UK has become a nation of shopaholics.*"
Oniomania, compulsive buying behaviour, has been included in the diagnostic manual DSM-IV-TR of the American Psychological Association[35] as an impulse control disorder. From this perspective, compulsive buying is seen as a means to deal with identity issues, attachment issues, mood problems[36] and as a manifestation of other psychiatric disorders.[37] Compulsive shopping brings about financial and relationship difficulties and can bring about family break-ups and insolvency. Compulsive shopping as a life-style has been linked as one of the major causes of personal financial insolvency across Europe.[38]

The possibility of shopping 24/7 fits a busy lifestyle but it has also opened the door to unstoppable shopping and personal ruin. It also creates some risk of credit card fraud and identity theft, though with greater technical security controls and with the sufficient degree of regulation to engender trust (as discussed in section 3 of this Report), this is less of a problem than it might otherwise have been.

7.5 Gaming and Gambling

Online gaming offers the possibility of individual play, but also of playing in a wider virtual community of online gamers from around the world. Not only personal computers but, now, most gaming terminals, such as play-stations can connect to the Internet to play within such a virtual group or community. Nielsen Gameplay Metrics[39] reported that the average US user of *Xbox 360* played for 30.2 hours in the month of August alone. Nielsen Games[40] also researched the games industry in Europe and extrapolated that 37% of the UK population between 16-49 would consider themselves active gamers. In the same study 78% of those between 16-19 years of age reported themselves as active gamers making the UK the top country for consumption of games by young Europeans.

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[33] Centre for Retail Research (2010). *Online Retailing: Britain and Europe* accessed on 8 April 2011: http://www.retailresearch.org/onlineretailing.php

[34] McDonough, Melanie. (2008). "Financial Crisis: UK Can't Control its Shopping Addiction Anymore". Daily Telegraph 20 Nov 2008. Available at http://www.telegraph.co.uk/finance/recession/3492142/Financial-crisis-UK-cant-afford-its-shopping-addiction-anymore.html. Consulted on August 12th 2010.

[35] American Psychological Association (2000). *Diagnostic and Statistical Manual for Mental Disorders* (4th edition). Washington DC: American Psychiatric Association. DSM-IV-TR.

[36] Dittmar, Helga (2005). *Compulsive buying-a growing concern? An examination of gender, age, and endorsement of materialistic values as predictors.* British Journal of Psychology 96:467-491.

[37] Black , D. (2004). *Compulsive Buying*. In Clinical Manual of Impulse-control Disorders. Eric Hollander and Dan J. Stein (Eds.) American Psychiatric Press Inc

[38] *Personal Debt Management and Debt Enforcement*. Law reform Commission 2009. Available at http://www.lawreform.ie/_fileupload/consultation%20papers/Consultation%20Paper%20on%20Personal%20Debt%20Management%20and%20Debt%20Enforcement_FINAL%20DRAFT.pdf. Consulted on Nov. 5th 2010.

[39] *Everything you wanted to know about video game usage for consoles*. The Nielsen Company (2009). Available at http://nielsen.com/content/dam/nielsen/en_us/documents/pdf/Fact%20Sheets/Nielsen%20GamePlay%20Metrics.pdf. Consulted on Nov. 5th 2010.

[40] Nielsen Games (2008). *Video Gamers in Europe*. IFSE Consumer Research Available at http://www.isfe-eu.org/index.php?oidit=T001:662b16536388a7260921599321365911. Consulted on August 23rd 2010.

Games are rated according to age suitability and although children and young people primarily play games on their own, it is common for families to play games together and there is a predicted increase in the social aspects of game playing.[41]

Playing games whether in isolation or within a group can be relaxing, entertaining fun and provides great personal satisfaction and a sense of achievement. Gaming allows young people to interact with others, and to develop computer and even social skills. The playing of video games has been used therapeutically to relax children and patients during chemotherapy for cancer or treatment for sickle cell disease.[42] Similarly, there have been numerous instances where computer games have been within a school or pedagogical context.[43] However, playing games can also become addictive. Wood consider that " *at a psychological and behavioural level, slot machine gambling, video lottery terminal gambling and video game playing share many of the same features"*. [44] Both gaming and gambling can be highly addictive behaviours. So far as gambling is concerned, the British Medical Association report on gambling addiction[45] expresses concern about remote gambling as a clear form of addiction. Particular problems with remote gambling include the availability of "virtual cash", unlimited access and anonymity, and the personalising the gambler's experience through tracking software, thereby allowing the gambling operators to access data about a particular consumer's gambling behaviour. The Gambling Commission [46] published the results of a survey amongst 8000 people concerning their gambling habits in 1 month. It clearly shows that remote gambling, particularly over the Internet, is on the increase. In 2009, both the US and the UK opened rehabilitation clinics for the treatment of Internet addiction related to gaming.[47] The Internet gives both privacy and ease of access to individuals and has increased opportunities to play and gamble since the online casino never closes. These opportunities carry both positive and negative societal costs.

Economically, the online gaming market is extremely profitable. It is currently worth more that 15 billion US dollars and subscriptions for multiplayer online playing was worth 1.4 billion US dollars in the USA alone.[48] In addition, there is the growth of the online

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[41] Byron review (2008). *Safer Children in the Digital World*. Available at http://education.gov.uk/publications/eOrderingDownload/DCSF-00334-2008.pdf. Consulted on August 20th 2010.

[42] Griffiths, Mark (2005). *Video Games and Health*. British Medical Journal 331: 122-123. http://www.bmj.com/content/331/7509/122.full.pdf

[43] Ang, Chee Siang, Einav Avni and Panayiotis Zaphiris, (2008). *Linking Pedagogical Theory of Computer Games to Their Usability*. International Journal on E-Learning*, 7*: 533-558. http://www.editlib.org/p/24229

[44] Richard T. A., Rina Gupta, Jeffrey L. Derevensky and Mark Griffiths (2004) *Video Game Playing and Gambling in Adolescents: Common Risk Factors*. Journal of Child and Adolescent Substance Abuse 14: 77- 100. http://www.informaworld.com/smpp/content~db=all~content=a903837786~frm=abslink

[45] BMA (2007) *Gambling addiction and its treatment within the NHS*. Available at http://www.bma.org.uk/images/gambling_tcm41-146741.pdf

[46] The Gambling Commission (2009). *Industry statistics 2008/09*. Available at http://www.gamblingcommission.gov.uk/pdf/Industry%20statistics%202008-2009%20-%20August%202009.pdf.pdf

[47] Problem gambling soars. Daily Telegraph Nov. 3rd 2010. Available at http://www.telegraph.co.uk/news/newstopics/politics/5012624/Problem-gambling-soars-following-growth-of-internet-games.html

[48] BBC News (2009). *Online Games Market Still Growin*g. Available at http://news.bbc.co.uk/1/hi/technology/7960785.stm . Consulted on 25 August 2010

gambling industry where the Internet is used for sports betting, online poker, casino games, online bingo, and online lottery. KPMG International, in their 2010 online gaming report estimate a growth of 42% for the online gambling by 2012. Their report considers investments in this sector *"may have less risk than it appears, despite political and legislative hurdles in many countries".* The online gaming and gambling industry also provides jobs within the software and computer industry, as well as banking and credit card industry; however, it also entails negative social and financial consequences related to gaming and gambling addictions. The Church of Scotland in its Addictions report[49] has expressed its position against the gambling industry and its incursion into the online environment.

[49] Church of Scotland (2009). *Addictions* report. Available at http://www.churchofscotland.org.uk/__data/assets/pdf_file/0017/3860/addictions_ga09.pdf

7.6 The Online Adult Entertainment Industry

The pornography industry has been considered one of the earliest adopters of the World Wide Web. This industry seized upon the opportunity of to sending images and erotic material to subscribers, which contributed to the commercialisation of online services including France's *Minitel* and later the World Wide Web.[50] Since then the Internet has continued to be an effective and profitable means of distributing sexually explicit material. Viewing "soft porn" material is not against the law and until recently was considered rather harmless when accessed by adults. As the distinction between soft and hard porn becomes ever more blurred, the availability of this type of material is staggering. In 2006, twelve percent of all websites were devoted to sexually explicit content and the growth of hardcore material is on the increase. This amounted to 4.2 million websites and 420 million web-pages. It generated $2.84 billion in the US alone and $1.97 billion in the UK [51] The Internet has been described as the "crack cocaine of pornography addiction"[52] and more recently Cooper[53] considers this type of Internet use a "hidden public sex hazard exploding".

The Internet gives affordability, accessibility and anonymity to users of adult-content materials as websites can be accessed without having to compromise the identity of the user and without the knowledge of parents or friends.[54] The content within the websites makes full use of the convergence of media: there are sex chat rooms, webcams, videos and pictures where most of these facilities are integrated within a website address. Samples of most of this material can be accessed without having to spend any money, therefore making it easily accessible for everyone. Service providers make full use of personalisation facilities to entice paying members to remain online, and consume even more services. When does a recreational cybersex user become an addict? Cooper[55] identified four criteria to differentiate a casual user from a cybersex addict: a) denial b) repeated unsuccessful attempts to stop the behaviour c) negative impact of the behaviour on social, professional and family functioning and d) repeated use of cybersex despite experiencing negative consequences.

The number of cybersex addicts is hard to estimate. It is claimed that the US alone has over 200,000 and it has been estimated that between 6-10% of male surfers in the USA are addicted to cybersex. This figure is comparable in the few Internet studies done on the subject in Europe[56] Meetings of Sex Addicts Anonymous and Sexaholics Anonymous

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[50] Coopersmith, J. "The Role of the Pornography Industry in the Development of Videotape and the Internet," in Women and Technology: Historical, Societal, and Professional Perspectives. IEEE International Symposium on Technology and Society 1999, pp 175-82.

[51] Pornography Time Statistics. Available at http://internet-filter-review.toptenreviews.com/internet-pornography-statistics.html

[52] Singel, R, "Internet Porn: Worse than Crack?", in *WIRED* magazine (United States) published 19 November 2004. Available at http://www.wired.com/science/discoveries/news/2004/11/65772 (accessed 8 April 2011)

[53] Cooper, Al, Irene P. McLoughlin and Kevin M. Campbell. (2000). *Sexuality in Cyberspace: Update for the 21st Century.* CyberPsychology and Behaviour, 3: 521-536. http://www.liebertonline.com/doi/abs/10.1089/109493100420142?prevSearch=allfield%253A%2528sexuality%2Binternet%2Bcooper%2529&searchHistoryKey=

[54] Cooper (2000) *Op Cit*

[55] Cooper (2000) *Op cit*

[56] Cavaglion, Gabriel (2009). *Cyber-porn Dependence: Voices of Distress in an Italian Online Self-help Community*. International Journal of Mental Health and Addiction 7: 295-310.

in the UK have seen an increased attendance from Internet users whilst professional counselling bodies have seen an increase in demand for specialist training for counsellors in the area of Internet-sex addiction. In 2003, accessing pornography on the Internet was the biggest cause of disciplinary action at work in Britain, and one in four British companies fired an employee for this reason.[57] This type of Internet use is affecting security in employment as well as family life. Schneider[58] reported that cybersex is a major contributor to divorce or separation and impacts negatively on the wife or partner as well as the children within the family of the sex addict.[59]

Furthermore, there should not be underestimated the abuse towards and detrimental effect on workers in this growing industry , many of whom are vulnerable both financially and socially, as well as those vulnerable individuals such as children whose images appear on child pornography sites. Behind the virtual identity is a human being who is being violated.

7.7 A Neutral Technology?

The Internet undoubtedly has modified our approaches to leisure activities. It has made the world smaller and communication is now virtually instant. An enormous economic and social benefit has already been reaped and will continue to arise at the technology expands and delves further into the mobile telephony and the virtualisation sphere. Like any other technology, the Internet has the power to affect our lives in both positive and detrimental ways. Greenfield[60]presents clear indication that *"the Internet can be used and abused in a compulsive fashion… with features that drive the potency of the Net which are potentially habit forming."* Thus, the Internet provides opportunities for people to delve into addictive or unhealthy lifestyles.

The question which is posed is whether it is possible to speak of the use of this type of technology as neutral. Can an online user be totally responsible to self-monitor and make informed decisions on his/her use of technology? Or do the diverse actors who shape the technology to make it ever more persuasive to the consuming public have a responsibility to bear? The research literature is uncertain as to whether the Internet has caused people to adopt addictive behaviours or whether it merely provides the opportunity for already present behaviours to manifest themselves more forcefully.

The Internet environment created by software developers, hardware manufacturers, and online retailers has succeeded in making our daily interactions on the web a highly persuasive experience: an ordinary Internet surfer experiences an array of incitements to shop; online retailers bombard the surfing experience, breaking the surfer's flow. One of the latest trends is to use social networking sites as a recommendation point from friends

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[57] Adams, Stephen (2007) *Nearly 10% of men viewed pornography at work*. Available at http://www.telegraph.co.uk/news/uknews/1553655/Nearly-10pc-of-men-download-porn-at-work.html. Accessed on Nov. 5th 2010.

[58] Schneider, Jennifer P. (2000). *Effects of cybersex addiction on the family: Results of a survey*. Sexual Addiction & Compulsivity, *7,* 31-58

[59] Manning, Jill C. (2006). *The impact of internet pornography on marriage and the family: A review of the research*. Sexual Addiction &Compulsivity, 13: 131-165.

[60] Greenfield, David N., (1999). *Virtual Addiction: Sometimes New Technology Can Create New Problems*. Available at http://www.virtual-addiction.com/pdf/nature_internet_addiction.pdf Consulted on Nov. 10th 2010.

and family, to attract potential shoppers into a cyber-shopping experience.[61] Once inside the virtual shop, personalisation software programmes tailor offers based on past purchases; alert the shopper to bargains alluring the surfer into becoming a repetitive online shopper.

According to the latest IMRG/British Population Survey Report into Internet shopping 91.9% of people in the UK using online search engines have also shopped online. The report is based on twenty thousand face-to-face interviews. The report estimates that 67.3% of the UK population has shopped online. The personalisation of software is now carried out not just in retail, but also in gaming and the online sex industry.

The software "remembers" who you are, what you have seen and uses that knowledge to incite you to consume and might be shaping your addictions.

8. Rising to the Challenge

The Internet has, arguably, changed every aspect of our lives. It is so ubiquitous that we have come to take it for granted although we use it every day to communicate and to do all that communication facilitates, such as to work, learn, shop and play. It has become a tool which is essential to our daily living.

Like any other tool, the Internet is morally neutral, but the uses we make of it and our choices in connection with it are not. What is more, our uses of the Internet not only reflect, but may have the capacity to change society for the better or for the worse. Aspects of the design of the Internet may themselves serve to facilitate these society-changing tendencies. For example, an integral feature of the Internet is Cookie technology which serves to increase the functionality of the browsing experience and to unlock the system's full communication potential, yet which also forms the backbone of persuasive technologies which can often lead the vulnerable into addiction.

This underlines how it is that Internet technology creates a potential for many different uses and how it is that, as in so many other areas of the public realm, the moral and ethical ground may find itself contested. But contests which, in the past, may have been purely local, or waged over extended time scales are now potentially global and instant. Of all of the technological revolutions which, throughout history, have shaped our society, it is the digitisation and information integration revolution which presents the greatest, or at any rate, the most pressing challenges.

In its early days, the Internet was a place of shared values, but so global has the Internet become that those who share such values have long since become but one voice struggling to be heard amongst competing voices in a world which more and more is sought to be subjected to external restraints yet where those who would impose the restraints are brought up against the impossibility of governance without the consent of the governed. What start as issues in cyberspace, such as illegal filesharing, spill out into the real world with the growing electoral strength of the Pirate Party; the power of free information can challenge established authority as in the Wikileaks affair and the connectivity of the joined-up Internet world can even help lend impetus to the fall of governments, as in Tunisia and Egypt.

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[61] *How to use Social networking Sites for Marketing and PR* Available at http://www.nytimes.com/allbusiness/AB11702023_primary.html. Consulted on Nov. 10th 2010.

In this wise, the Internet has the capacity to upset the old power balances. So, this space is one of competing power bases as well as of competing sets of ethical values and competing moral visions.

The cyberworld of the Internet unleashes also conflicts within the self, as virtual identities are constructed by an unforgiving and unforgetting technology from our footsteps in the electronic sand: we become the sum total of where we have been. Nor does one person have but one of these virtual personalities: rather there may be multiple personalities, some carefully constructed, as in Facebook profiles and Second Life avatars, some known, as in an Amazon profile, and some, it may be, entirely unknown, confected beyond the knowledge of the individual by cookie technology from transient footsteps on diverse websites - unknown, and lacking proper legal protection, for even if there is introduced in the European Union a "right to be forgotten", what use is that beyond the Union's borders, or in respect of constructed identities of which the individual is entirely unaware?

These virtual personalities raise profound questions as to the integrity and the authenticity of the self, questions which begin to cause us to question our relationship with God. Our vision of that relationship has grown and developed in a world of real people, where the footsteps were left in the sands of Sinai and not of cyberspace. It is a vision which is both relational and incarnational. Now, when the self fractures, when we form "friendships" with others who might likewise be presenting to us a virtual simulacrum of the self, it causes us to reflect upon how an incarnational faith can have continuing relevance in a disembodied space. It challenges us to use our reason, the resources of our heritage and history, and with theological insight, encourage this virtual world into a place of hope, value and purpose, knowing that it, too, belongs under the reign of a gracious and loving God.

In short, many and diverse are the currents which flow in the Internet, which is, in a real sense, a conflicted space: conflicts between the impulse for freedom and the need to regulate, the human search for liberty and the urge of those wielding power to control, the struggle amongst competing mores, the intractable issues of real and virtual identity, the conflicted self, exclusion and, indeed our very understanding of the incarnational nature of our faith.

All of these present challenges, but also provide opportunities. To meet those challenges and to take advantage of those opportunities, it is not enough for the Churches to sleepwalk unknowing and without reflection into a space in the shaping and development of which they have played no part, nor is it appropriate merely to stand on the sidelines railing impotently at the darkness as the battle for the contested space is waged by others.

Rather, there is an imperative for the Churches, and the Church of Scotland in particular, to seek to engage with these issues and to develop policies to meet the challenges and to take advantage of the opportunities presented by this new world. For example, a modest starting point might be to explore, with other partners, the development of an ethical code for software developers, manufacturers and all Internet users in order to promote the creation and use of innovative technologies, not only for commercial gain but also for the greater good of society. Perhaps through such work, if it is sufficiently broadly based, there might be a created a powerful consensus towards international self-regulation, an aim which may offer more hope for the future than is offered by the

fragmented nature of international regulation by national governments which often have conflicting and mutually inconsistent objectives.

Like any other technology, digital technology has the potential to affect our lives for the good or for the bad. As Christians we are called to live our lives responsibly, following the teachings of Jesus. Although most of us are not directly responsible for the design of digital technologies we all use these technologies and therefore we should be aware of the role that they have in shaping our culture, in order that we might engage creatively with the digital world represented by the Internet, seeking always to fulfil our calling to become leaven in the dough.

To fail to engage with the world of cyberspace is to maintain a wilful blindness to profound changes which are increasingly coming to affect all of humanity, not only in that virtual space, but in the real world, where we live and breathe and have our being.

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Glossary

Adwords – words which trigger an advertisement or web link to appear during an internet search. (e.g. a search for “Ben Nevis” will generate Adword links for holiday cottages in Glen Coe, adventure holidays, charity sponsored walks and Highland guidebooks).

Avatar – a virtual character or personality created by an individual who is represented in the form of a picture or animated body.

Browser – a piece of software that allows an Internet user to ‘browse’ the World Wide Web.

Cloud Computing – using information technology as an external service, rather like telephones or electricity. Instead of having to house and maintain databases, servers and software, a third party hosts them in server ‘farms’, which an individual or business accesses through the Internet. Cloud Computing can be private (for example, limited to one business) or public (allowing paying customers to access computer applications or books).

Cookie – a piece of text stored on an Internet user’s computer by their web browser enabling interaction with the host site.

Cyber- – a prefix relating to computing or the Internet, for instance -bullying, -sex, -space –squatting etc.

Data Mining – the gathering of statistics and information which is then analysed by a computer linked to the website in question, often used by businesses to seek to promote advertisements and special offers in order to generate custom

Digital – the technology whereby real information is transferred into numeric form, for instance in digital cameras, radios and televisions etc It is central not only to the creation and storage of data, but to the operation of all computers and computer programs.

e-Commerce – commercial transactions conducted through the Internet and electronic systems

e-Government – state or governmental activities conducted electronically, for instance online tax return filing,

Facebook – a networking website which allows individuals to create a free account and connect and interact with real life friends who are also members of the site.

Filesharing – the process of sharing access to digital information contained in files (such as MP3 music files, digitally encoded films and the like)

Hardware – the corporeal, tangible elements of computer technology, including the components of a computer system (such as the silicon chips, processors, disk drives and memory cards)

ICANN – the ***Internet Corporation for Assigned Names and Numbers,*** the body which registers and regulates the top-level domain names in the Internet's naming system**.**

Inertia-Selling – a commercial transaction when the business will typically offer a reward to new subscribers, but if the customer wants to keep the reward but avoid paying a subscription fee then the onus is on the customer to cancel the contract within a limited time period. It is the 'inertia' of customers who do not cancel and are then locked into a contract that they may not want which is what has raised some concerns.

Intellectual Property – a species of incorporeal property, the product of intellectual endeavour, which is accorded legal protection as property, for example, patents, music, art, literature, database rights, and registered industrial designs.. This principle is criticised by supporters of filesharing and the Pirate Party, whose basic philosophy is that ideas and creative works should be able to be accessed by everyone, for the benefit of all people. The proponents of intellectual property argue that, without the legal protections afforded to such property and the ability to transact with the property, for example by selling or licensing it for a cash consideration, there would be no incentive for the intellectual works to be produced in the first place, or, in any event, no basis for developing an economy making use of such property.

LinkedIn - a networking website which allows individuals to create a free account and connect and interact with colleagues and business associates who are also members of the site.

MySpace - a networking website which allows individuals to create a free account and connect and interact with others who are also members of the site, particularly based around fans of the same music, film or other creative work.

Nominet – the registration authority for .uk domain names.

Open Source – a particular form of licence of Intellectual Property (primarily of Copyright in software) which seeks to encourage the practice of developing and producing works (commonly of software) by all potential developers collaboratively. The mechanism is the granting by the first developer of a licence which has contained within it obligations binding upon the first and all subsequent licensees to keep open the source code so that others might modify and further develop it and imposing such obligations on those who carry out such modifications and developments both in relation to the original code and the modifications and developments. It is often described by its proponents as software which is free (as in free speech) rather than free (as in free beer). Open Source is both a methodology as well as a philosophy, which argues that more ideas and information should be shared in order for it to be developed for the good of Society. It has also become very widely used in mainstream business with vigorous support from developers such as IBM and SUN Microsystems as well as by governments and public agencies, gaining support from, amongst others, the European Commission and the UK Office for Government Commerce

Persuasive Technology – a system which analyses how an individual uses the Internet in order to target advertising and other information more likely to appeal to the individual (such as internet bookseller Amazon's *you may also like…*recommendations, based on previous purchases)

Pirate Party – an international political party standing on a platform largely opposed to all forms of Intellectual Property. The Swedish Pirate Party won three seats in the European Parliament in the 2009 Elections and in January 2011 a Pirate Party activist was appointed Secretary of State for Youth and Sport in the Tunisian Government.

Privacy Settings – controls on social networking websites, such as Facebook, which limit (or permit) access by others to the information an individual chooses to publish.

Rapidshare – a popular website that facilitates the easy sharing of data files.

Rights-holders – the individual or organisation that legally owns intellectual property.

Second Life – a virtual world created on the Internet which individuals can access and in which they can interact with one another in the form of avatars in an extensive virtual world. It has developed its own currency (Linden Dollars) and is a place where there is extensive economic activity as well as providing a virtual presence for real world bodies and enterprises, including also some churches.

Software – digital instructions recorded upon a suitable storage medium data which give computers instructions on how to execute tasks (for example, a computer program). Unlike hardware, software is incorporeal

Source Code - The digital code in which a computer program is written

Spotify – a popular (and legal) music-sharing website which pays rights-holders royalties and is funded by advertisements. A premium service without advertisements is available for a subscription.

Spyware – a malicious software program which monitors internet use on an individual computer and uses information about web browsing to alter the way the computer works. Anti-spyware software is now very common.

Twitter – a networking website which allows individuals to create a free account to share with other users of the site short messages, known as Tweets.

Virtual – something which does not physically exist, but is made to appear as though it does exist by software.

Wall Posts – On Facebook, messages left by one user on another's personal web page.

Wiki – a website that allows the creation and editing of web pages by more than one user, producing a collaborative project. As in Wikipedia, a collaborative encyclopaedia, and Wikileaks (unrelated to Wikipedia), a website which allows whistle-blowers to share information anonymously. Wiki is the Hawaiian word for 'fast'.

YouTube - a video-sharing and networking website which allows individuals to create a free account and to interact with others.

Proposed Deliverances:

- Instruct the Church and Society Council to work in partnership with others to facilitate discussion of the issues raised in the report on the Internet.
- Note in particular the capacity of the Internet to shape as well as reflect society.
- Instruct the Church and Society Council to consider the conflicts inherent in the use of the Internet amongst freedom, liberty, regulation and control, the existence of competing *mores*, and issues of real and virtual identity; and to develop policies to reflect a Christian response to these conflicts.
- Encourage the Church and Society Council to explore, with appropriate partners, the development of an ethical code for software developers, manufacturers and all Internet users to promote the use of Internet technologies for the good of society, not just for commercial gain.

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