

Is there too much, or too little, regulation in the ICT areas(s), and why? Discuss with reference to reasons given for regulation generally, and objections to regulation. Include both supplier and user perspectives.

Today we live in a society where telecommunications and PCs are fast becoming part of a global economy, making regulation essential from both the user and supplier perspectives. This essay will investigate whether Information Communication technology (ICT) that includes computing telecomm, media consumer electronics, information services and multimedia, has been regulated too much, or too little.

Nearly everyone has a telephone, most people have televisions, and more and more people have a home computer. How these three household goods can converge into one is fast becoming the key to survival in the global telecomm industry. This is what is strengthening and making ICT prominent. Telecoms, the Internet and wireless technology are all converging, requiring major investment from all the players, just to stay in the game. Old corporate boundaries have lost their meaning as telephone, video and Internet connections are all sent through the same connection. An example of this convergence is found in the telecommunications and broadcasting sectors, which are integrating with each other to a great extent, particularly in the area of digital interactive services. This is useful to consumers because they will be able to access a greater variety of digital services over terrestrial broadcast, satellite, and telephony products such as ADSL

www.oftel.com

In exploring this phenomenon of convergence, this essay will first explain and define relevant theories related to regulation and ICT. I will make observations about the software industry, more specifically about Microsoft, to illustrate whether there is too little or too much regulation, both from the perspective of Microsoft and its users. I will then continue by discussing the telecomm industry, which has been considered the core of the ICT industry. I will discuss the process of British telecom and how OFTEL and OFCOM have regulated the company to ensure fairness from both the user and supplier perspectives. I will also question whether there is too little regulation from the current regulatory body, the Office of Communication (OFCOM), which now oversees five sectors of ICTs. I will then go on to discuss the Internet and how vast it is and difficult to control and briefly talk about the Internet Watch Foundation and determine whether it is making a difference in regulation.

Although there are narrow and broad definitions of regulation, I will use Baldwin's and Cave's which defines regulation as, '*Sustained and focused control exercised by a public agency over activities that are valued by a community*' (Baldwin & Cave 1999:2). Regulation is where actors in society help shape the control of objects, in this case, information communication technology. Regulation takes place due to a number of reasons that include ensuring fair competition, which allows markets to work. Regulation maybe carried out by a variety of bodies, and the main categories of regulator can be given as follows: self regulators, local authorities, parliament, courts and tribunals, central government departments, regulatory agencies, directors general.

Without regulation, there is bound to be market failure *“When a market left to itself does not allocate resources efficiently, interventionist politicians usually allege market failure to justify their interventions”*

(<http://www.economist.com/research/Economics/alphabetic.cfm?LETTER=M>.)

There are four main reasons for market failure. The first is external, when the market does not take into account the impact of economic activity. Second, taking the public goods example, how much defence would be provided if it were left to the market? Third, market failure occurs where there is incomplete information. The fourth reason for market failure is the abuse of market powers when a buyer or seller has a monopoly. Abuse of market power is best tackled through antitrust policies. In 1998, the United States federal government accused Microsoft of abusing its market position in order to weaken its main rival in the market for Web browsers, Netscape

(http://news.bbc.co.uk/1/hi/special_report/1998/04/98/microsoft/236869.stm).

In 1995, Microsoft was mainly contributing to the operation system sector. One could argue that it was the leaders in that market. But then Microsoft began to focus its attention on browsers. Although Netscape already had established a market with their Internet browser called the “Netscape Communicator,”

(http://news.bbc.co.uk/1/hi/special_report/1998/04/98/microsoft/236869.stm).

Microsoft created Internet Explorer, which was released to be used free of charge, unlike Netscape that charged people to use its browser. The idea not to charge for Internet

Explorer became one of the keys to Microsoft's success. From that point on, Microsoft began taking the market over from Netscape. Microsoft still dominates the market with its browser, Internet Explorer. In March 2004 the counter.com showed that the net browsers most used by its audience were Netscape (Navigator and Communicator) 1 percent, and MS Internet Explorer 74 percent

(<http://www.thecounter.com/stats/2004/March/browser.php>) Clearly Microsoft's anti-competitive behaviour gives credence to the fact that regulation is needed. Recently Microsoft admitted that they did not protect their users from hackers, viruses, worms and other malware when they produced Windows 95. Equally they did not worry about keeping personal data safe, or personal computers secure. This is unacceptable, as this means that when one is connected to the Internet, it is easy for hackers to use a customer's information fraudulently. There, it is essential for society to be protected, and now this society has to have influence on the implementation of regulations. The most obvious point is that society as a whole must help develop and create regulation. Looking from the viewpoint of a technological determinist who believes that technology runs society, the ICT industry has certainly got its grip on society.

The revolution of telecommunications, which is really the main body of ICT, has also created a digital society and equally a new economy:

"When we talk about the new economy we are talking about a world in which communications technology creates global competition"

(<http://hotwired.lycos.com/special/ene/>). And, in turn, regulation makes sure that there is access for all members of society, essential in trying to close the gap of the digital

divide. I believe that regulation must be in force if British society is to enjoy an information society where both suppliers and users are able to use ICTs without worry. We need access to information, and access to these new technologies is important.

The sceptic's view of regulation is that it is an interference and that red tape costs too much. But it would be only responsible for regulation to exist within the ICT field, even more so from the user's perspective. All this emerging ICT is developing at a rapid rate and there seems to be some sort of trend where technology is concerned. It can be fair to say that in terms of the PC industry for home users, there is a technology push, meaning that this innovation is pushed on society, then eventually becomes a demand or pull, with the society wanting more. In terms of software, it can be said that it has reached its potential. Society is content with what it has.

An example of a regulatory company, OFTEL, that has now been replaced by OFCOM, tried to insure that there was fair competition for users.

The Office of Telecommunications (OFTEL) was the regulator for the UK telecommunications industry until 2003. OFTEL was set up under the Telecommunications Act of 1984, to promote the interests of consumers, maintain and promote effective competition and make sure that telecommunications services are provided in the UK. This should be very important, as the one of the most rapid changes in the ICT area was in the area of telecommunications. In the past, British telecommunications was viewed as a natural monopoly, or at least, it was felt that the best way to prevent abuse of monopoly power was for government to operate the

telephone system. As the government owned the telecommunications and a natural monopoly that exists because of the economies of scale, it was cheaper for one firm to provide that service. But this changed into a duopoly, where BT competed with Mercury, a Cable & Wireless subsidiary.

In the 1980s when the Conservative government came into power, the BT was deregulated as a result of privatisation. Subsequently the BT started shared ownership by selling its stock. The aim was to improve the performance of BT and provide a way of raising new capital to re-invest in improvements. An additional objective of the government was laissez-faire.

But it was not until 1991 that full competition hit the British market, effectively bringing to an end the duopoly shared by BT and Mercury

(<http://news.bbc.co.uk/1/hi/business/1014978.stm>).

After a while BT started getting pressure from the telecomm OFTEL to release more of its network to other competitors. Due to this, BT prices fell further, because they had to cut prices for competitors, notwithstanding the fact that true competition in the high-speed Internet market does not exist because of BT's growing dominance and significant market power (SMP), according to OFCOM and OFTEL. This is due to the fact that in 2003 BT controlled 55 percent of the wholesale broadband market, compared to almost 31 percent for NTL, and just over 13 percent for Telecast.

(<http://www.pointtopic.com/content/operatorSource/profiles/United%20Kingdom/British>).

OFTEL has told BT to cut its wholesale prices. The price cuts could have a knock-on benefit for consumers if operators pass on the savings to Internet service providers such as AOL, Freeserve and so on. This will, or is supposed to, encourage consumers to sign up for broadband, as the high cost was blamed for their reluctance in signing up. Although cable companies can provide broadband at competitive prices, they are not so nationwide as BT (<http://news.bbc.co.uk/1/hi/business/1844357.stm>).

It seems as if BT were interested in going worldwide rather than in the British market. It is attempting to become a major player in the world's biggest telecomm market. An example of this is its attempted merger with MCI Communication, America's second-largest telephone company, but Worldcom made higher bids and was accepted by MCI Communication. This could have been because there was more encouragement from the European Union regulatory body for there to be a merger between MCI and WorldCom. BT has also tried to enter other avenues, which includes its merger with Yahoo. BT has also joined forces to boost the number of subscribers to its Internet services. Observing how telecommunication is regulated in Britain, it would seem that there is too much regulation. I believe that it's a good balance from both the supplier and the user perspective. Another sector that has been revolutionised is broadcasting. BT has finally been granted a license to broadcast TV via telephone lines and would have some advantages over Sky. Interactivity and video-on-demand are both easier to deliver, using broadband. The government is keen to have 100 percent uptake of digital TV by 2010 so that it can switch off the analogue signal completely.

The more recent talk is of the third-generation phones that include high quality graphics, broadband and video. The phones are expected to revolutionise communications. This has made sure that there is much more regulation. The third- generation phones are supposed to be the future so it is reasonable to expect OFCOM to make sure that there is more regulation. An example of the steps they have taken to insure this is being restrictive with the licences, as European telecom companies have spent a collective £60 bn on auctions to purchase 3G licences in countries across Europe.

These licences allow the winning companies to build 3G networks and provide services to their local populations. In the UK, Orange, BT, Vodafone, and One2One, and a consortium backed by Hutchison Whampoa, paid out a combined total of £22 bn to secure a UK licence. But OFTEL has insisted on cheaper call charges. Additionally, there is some question as to whether the third-generation phone can be developed in Britain as MMO2, a parent company of BT, had reported record losses of £10.2 bn after massively overpaying for third-generation licences at the height of the telecomm boom (<http://news.bbc.co.uk/1/hi/business/3147940.stm>).

This sector is an example of too much regulation, but while regulation should be welcomed, it can be too restrictive by being too controlled as is clear from the example of BT and the loss of £10.2 bn.

Technological changes may have undermined the natural monopoly in telecommunications, but an effective regulatory structure is also required for vibrant competition in this sector. Even the United States, which has the most competitive telecommunications sector in the world, is not yet at the point where there is sufficient

competition so that regulation can be put aside. In any case, a competitive telecommunications sector opens up a whole new range of economic possibilities.

Due to technological developments in computers, they have dramatically decreased in size and have become more powerful with the development of software, especially by Microsoft, and by installing user interface and putting fewer commands. Consequently, within the mid '80s, but more so from the 1990s, coupled with easy use and rapid decrease in computer prices, most households could afford a PC. Many authors have said that it's these revolutions that have encouraged the so-called digital revolution of the 1990s. "*The information technology revolution has often been used in the past decade to describe the fast development of computer technology and its diffusion through society* (Bandyo-Padhyay: 2000:p22).

Furthermore it can be said that the diffusion of computers and the telecommunications that have created the Internet, which is the backbone of e-commerce, has unarguably created one of the features of the new knowledge-based economy, and that is global competition." *When we talk about the new economy we are talking about a world in which communications technology creates global competition"*

(<http://hotwired.lycos.com/special/ene/>).

One of the most noted new features of the economy is the introduction of the Internet, which is a radical innovation that occurred as a result of clustered innovation of the PC and telephone. The internet is a collection of networks and has brought a brand new way of communication for the public, a way to communicate with other cultures, as there are

no barriers in "cyberspace" and everyone who has access to the Internet is able to share information.

For business, it has brought a chance to expand globally, not just sell to their immediate home country. But also globally with e-commerce, having an office is not essential; one needs just a PC, phone and a warehouse to store products, depending on what is being sold, of course. Whilst this may seem to bring prosperity to both society and the economy, there is not enough regulation, if any, of the World-wide Web. It is obvious that it is too huge to control. So it might be more beneficial if the Web were self-regulated.

From the viewpoint of a technological determinist who believes that technology runs society, it is true that ICT industries have transformed society. Many people now are having access to the Internet and are using it to receive information.

The Internet Watch Foundation(IFW), is another self- regulatory body that allows UK Internet users to report illegal material, and then passes on the information to the Metropolitan police, if there is a crime that has been committed in the UK, or to the National Criminal Intelligence Agency, where the alleged offence has been committed in another country (<http://www.iwf.org.uk/about/overview/index.html>).

Although, it is ideal to have a regulatory body, it could be questionable as to whether society would benefit from self- regulation. There has been the argument that self regulation is good because these bodies are regulating in an area that they know much about and that they exists for the public interest. However it can be equally argued that it is debatable what is really in the public interest. Theoretically "*in the public interest*" should mean that the regulator is acting in pursuit of the public rather than their private

interest (Baldwin and Cave: 1999). Whilst its reassuring that this regulatory body exists, sceptics argue that the Internet is about communication, a way for people to socialise and learn about other cultures outside of their countries, and also provides a different way of shopping and banking. But the Internet also provides another avenue for criminals, including sex offenders and fraudsters; the most noted case of fraud is that referred to as 419, where many people have been defrauded out of their money. Whilst it is obvious that there is little regulation available for controlling the Internet, there is much encouragement by the British government for the British society to connect to the Internet by the huge investments being made. But this rationalisation can be deemed as strange as the internet being a network that has little if any , regulation .In conclusion, after observing these sectors, it may seem reasonable to assume that there is no definitive answer as to whether or not there is too much or too little regulation. For these reasons, the scope of ICTs is broadband; therefore it would be unreasonable to judge their regulation collectively. The software industry seems to be regulated, but one can argue it is regulated too little, especially in terms of competition, and even more so for the users of software, in particular Microsoft users, a reasonable example being the lack of security in Windows 95. However, observing the telecomm industry, in particular British telecom, it can be argued that there is too much regulation as is evidenced by a loss of profits, while from the user's perspective regulation is adequate, as OFTEL and now OFCOM are trying to secure access for citizens of Britain. This is important, as under normal circumstances, broadband companies would not spend millions of pounds on cables to produce access. Finally, on the Internet, it seems as if there is no control whatsoever. Although the Internet Watch Foundation exists, it cannot control or regulate the Internet

adequately, mainly because it covers issues and websites that relate to Britain only. Many argue that the Internet should not be controlled, and this may be a reasonable assumption, not because there should be freedom, but simply because the Internet is too big to corral. One can observe in these sectors good examples of both too little and too much regulation.