The internet, capitalism and policy

Book section

Internet, capitalism and policy

Book section

The Internet, Capitalism, and Policy

Professor Robin Mansell
London School of Economics and Political Science
Houghton Street
London, WC2A 2AE, UK

Email: r.e.mansell@lse.ac.uk
Tel. +44 20 7955 6380/7195 or +44 1273 478930

Abstract 150 words

The role of financial capital in the development of the Internet services market is influencing the types of services that are being made available for citizens. This paper considers the implications the interests of investors in healthy financial returns. It makes a case for policy intervention to ensure that an Internet 'commons' is maintained. The empirical focus is on the development of the Internet Service Provider (ISP) market and on the implications of the main trends in this market for the development of non-commercial Internet Web sites and services. The case for policy that will foster diversity in the provision of Internet services is linked to the need to foster new media literacies to enable the majority of citizens to live their lives more effectively in intensely technologically mediated societies.

Author bio

Professor Robin Mansell holds the Dixons Chair in New Media and the Internet in the Interdepartmental Programme in Media and Communications, London School of Economics and Political Science. She is internationally known for her work on the social, economic and policy issues arising from innovations in information and communication technologies. Her work examines the integration of new technologies into society, the interaction between engineering design and the structure of markets, and the sources of regulatory effectiveness and failure. Her research benefits from work with the OECD, government ministries, firms, the European Commission and

UN and other organisations on the development of global networks for e-commerce and e-government services. Recent books include *Networking Knowledge for Information Societies: Institutions & Intervention*, Delft University Press, 2002; and *Inside the Communication Revolution: Evolving Patterns of Social and Technical Interaction*, Oxford University Press, 2002.

1. Introduction [1]

The role of financial capital in the development of the Internet is being largely ignored by policy makers and by the research community. This paper sets out how the role of financial capital is influencing several aspects of the Internet's development and why policy intervention may be needed. Castells (2000: 16; 2001) argues that networks 'process the goals they are programmed to perform'. Financial capital is playing a major role in determining what those goals are and this has serious consequences for the development of Internet-based Web sites and services. When the goals for Internet development are influenced substantially by markets and capital, this has major consequences for social and distributional issues and for the ways that the use of the Internet can be expected to contribute to the human development process (Storsul 2002).

The empirical focus of this paper is on the development of the Internet Service Provider (ISP) market and on the implications of some of the main trends in this market for the types of service that are becoming available to citizens. Section 2 considers some of the principal interests of the investors who are expecting substantial financial returns. Section 3 sets out the need for policies that will foster diversity in the provision of both non-commercial and commercial Internet-based services. In section 4, the case for policy intervention is linked to the need to foster new media literacies. Section 5 indicates why it is essential to counter the biases of market-led Internet developments. Section 6 provides a brief conclusion.

2. Internet Services and Investor Interests

Many competing visions of a new kind of 'knowledge society' are being discussed as part of a global policy agenda, especially with the momentum that is propelling the World Summit on the Information Society that will be held in 2003 and again in 2005. These visions are linked to the idea that 'the information and communication technology revolution could be a powerful driver for empowering the world's poor .. it is about information, knowledge and global identity …'.[2] The prevailing vision among many the heads of state of the industrialised countries is that all members of society will benefit when markets are open to the flow and circulation of both information and capital. Since the Internet facilitates this, the way that it is developing must also be beneficial for all people. This idea goes hand in hand with the view that emerging knowledge societies will be beneficial for economic growth and for human development. Many argue that these benefits will follow almost automatically once people secure access to the Internet (UNCTAD 2002). There is little or no need for policy intervention beyond ensuring that there are common 'rules of the game' in areas such as taxation, dispute resolution or domain name registration. The competitiveness of firms in the marketplace – and the innovative capacity of those who collaborate in scientific and other virtual communities in providing Internet-based services – will ensure that all those who wish to do so can receive the potential benefits of access to vast stocks of digital information (OECD 2002). This viewpoint is closely tied to claims that the ISP market is highly competitive and innovative (Oxman 1999). The market should therefore generate diverse services that encompass and support all the interests of citizens.

There is another view of Internet developments, however. Some Internet industry analysts argue that, in spite of the flurry of entry and exit in the ISP market in the

wealthy countries – and in some liberalising developing countries, underneath the veneer of a highly competitive Internet services market, there is a rather different market environment (Huston 1998). When the distribution of Internet traffic becomes a commodity service, it provides little opportunity for product differentiation and generates very low rates of financial return. If the ISPs are going to achieve stronger financial returns they must supply more than a commodity service. They must develop markets where there is the potential for increasing profit margins. The result in some areas of the ISP market is not a vigorously competitive marketplace, but an oligopolistic market structure. This market structure is inconsistent with the development of a network 'commons' that would favour a range of non-commercial as well as commercial services (Trebing 1998). The development of the ISP market in most industrialised countries is favouring the consolidation of ISPs in the hands of financial investors and their interests are not very consistent with the further development of a network 'commons' (Javary and Mansell 2002).

The primary interest of the financial investors is in the rapid turnover time of capital. It is not, or at least not primarily, in the long-term development of diverse and low cost Internet-based services for citizens. As the Swedish economist, Eliasson (1999) has suggested, the ISPs are linking up communication infrastructures with the 'syndication of electronic content'. To achieve this, new financial flows must be organised and conditions must be put in place to secure healthy economic returns. The ISP market in most countries is consolidating, notwithstanding the presence of many small suppliers in some segments of the market. Incumbent ISPs are acquiring many of the most successful early ISP entrants and they are forging global partnerships or merging their operations. The ISP market in the United Kingdom is a

good illustration of this process. In this case, market consolidation is occurring through the convergence of the ISPs with the telecommunication operators. This is helping to achieve the convergence of the knowledge base that is needed to support a key aspect of the new media industry, i.e. achieving greater co-ordination and control over financial flows in the ISP market (Javary and Mansell 2002). Control over financial flows is being secured as a result of the presence of key investors in the ISP market in the United Kingdom.[3] Attempts to co-ordinate knowledge flows in the ISP market through various configurations of shared directorships are also present.[4]

To achieve a strong position in the ISP market, the ISPs need to gain control over the components of the knowledge base that are needed for augmented service supply beyond the distribution of Internet traffic. Building this new industry in an uncertain environment requires massive investment. For this market to grow, there needs to be sustained large-scale capital investment and there is also a need for substantial learning time. Although high bandwidth infrastructures may provide the conditions for the delivery of a large throughput of Internet-based services, they do not necessarily generate the expected demand for revenue generating services.

There are very intense pressures for the realisation of a high short-term return on capital by the ISPs and the risk for investors is substantial. There are significant tensions between the financial expectations of most of the investors and the development of the Internet system as a 'commons'. In most of the industrialised countries, and in some of the newly industrialising countries such as South Korea or Singapore, this tension is being eased by promoting a rapid scaling up of infrastructure capacity. This is taking the form of a 'rush to broadband', however

broadband is defined (Mansell and Nikolychuk 2002; Strategy Unit 2002). The ISPs are exploiting scale economies in infrastructure supply through consolidations between themselves and the infrastructure facility providers. Once consolidation occurs, the ISPs then seek to achieve 'economies of time' through very intensive marketing of the higher value added services that they can provide.

The ISP response to the commodification of the Internet traffic distribution business is to redefine the scope of the ISP market and to integrate and systematise the learning that is necessary to further develop revenue-generating services. Despite the fact that there is a continuous stream of new entrants into the ISP market, the role of financial capital in this market means that the market dynamics are potentially inconsistent with the public interest in the provision of a diverse set of non-commercial services for citizens. Since the failure or poor performance of many of the *dot.coms* in 2000, investors have curtailed the ISP boom. To sustain a high level of capitalisation the consolidated ISPs are searching for and learning how to transform the initial prophesies of high profit margins into a reality. In this environment there is a considerable risk of reduced diversity in terms of information content, service design and service flexibility.

3. Policies to Foster Diversity

Some observers argue that ISP markets and, more generally, the new media services markets are developing in a way that is consistent with the achievement of policy goals for social inclusion and with a drive for rapid economic growth (Strategy Unit 2002). This argument is often linked to the observation that there is no need to regulate the Internet's development and that there is no need for a special policy to

foster the development of certain kinds of services. Furthermore, little if anything needs to be done to foster citizen capacities for acquiring the literacies that they must have if they are to make full use of the Internet. However, the trend towards the consolidation of the ISP market provokes many questions about the consequences of a lack of policy with respect to this market. The issue is whether there should be greater policy emphasis on encouraging diverse and low cost services for enhancing the new media literacies of citizens.

The processes of 'creative destruction' that are normally associated with technological change and innovation (Schumpeter 1942/1962), in the case of the ISP industry, are not leading to the erosion of economic power in the market. Instead, they appear to be favouring its reconstitution and this leads directly to the observation that there is a case for Internet-related policy to foster a network 'commons', i.e. public non-commercial services for citizens. As indicated above, the ISPs are mainly concerned with maximising shareholder value. The current trends in the market favour the consolidation of the ISPs in the hands of financial investors whose primary interest is in the rapid turnover time of capital and this, in turn, creates pressures for reduced service variety. This outcome is one that runs counter to the view of the Internet as an open architecture that is optimised to encourage diversity, innovation and social as well as economic, experimentation.

The trend in the ISP market is consistent with the interests of large corporations and the expectations of investors for strong revenue growth and rapid capitalisation. As Garnham (1990) has argued, it is always important to examine the dynamics of the media and communications industries in the context of the main economic pressures

that are work in the capitalist market. In the past, these pressures contributed to a market dynamic that favoured an 'industrialisation of culture' (Garnham 1990: 44). Notwithstanding today's new generation of digital technologies, in the ISP market, there arguably is a similar 'industrialisation' process that is at work.

The primary goal of the online service providers is to produce and circulate digital commodities. Internet-enabled combinations of technology, finance and digital information are being designed to encourage short-term increases in the service providers' revenue streams. The forces of capitalism, operating through the major financial investors and the larger ISPs are not encouraging the provision of the kinds of services that will be needed by the majority of citizens if they are to contribute to, and participate in, the emerging knowledge societies of the 21st century.

The present dynamic of ISP market development is influencing the design of Internet-based services (Lessig 1999). For instance, the predominant architectures of World Wide Web-based services that are being designed for citizens are rarely intended to enable citizens to contribute their own information or to learn how the information that they access should be valued or acted upon. The web sites and services offered by civil society organisations may confer a certain authority on the information they provide. However, most of these web site operators are mainly engaged in 'pushing' information out towards users (Mansell 2002). Few of these sites offer to support the majority of citizens in making their own information contributions. They generally do not help citizens to learn how to employ information in ways that might help them to choose between alternative courses of action. Commercial services based on the

Internet may provide some basis for learning and for the acquisition of new media literacies, but they do so only for those who can bear the costs of these services.

4. Fostering New Media Literacies

The relative scarcity of certain features of Internet services that would encourage the development of the marjority of citizen's capabilities for making sense of the online spaces of the Internet is arguably a threat to the majority of citizens' rights to participate effectively in an increasingly technologically mediated society. Despite the growth in the numbers of Internet users, a rather small minority of these users has the capabilities to use the Internet in ways that are creative and that augment their ability to participate effectively in today's knowledge societies (Mansell and Steinmueller 2000).

The issue for policy is how to encourage investment in Internet-based services that could help to create electronic spaces that might facilitate the acquisition of certain key capabilities. Sen (1999) has considered the need for policy intervention to foster certain capabilities in the context of citizens' entitlements and rights. His work provides a foundation for considering whether the dominant trends in the Internet-based services market are consistent with the goal of empowering the majority of citizens and ensuring that their entitlements are met. He argues that policy must favour the acquisition of capabilities that enable people to discriminate between alternative choices about their lives. These capabilities are learned and they involve the cognitive capacities to recognise and evaluate choices and alternatives. Such cognitive capacities are the foundation of the freedoms that allow various individual

needs, for instance, for remaining healthy or for social interaction, to be met. Sen argues that these are at the heart of the human development process.

Trends in the ISP market do not appear to be favouring the provision of services for citizens that enable them to learn how to discriminate between information resources or to make choices based on such information. Following Sen's argument, there is a case for public policy intervention in the market to promote such services. This does not necessarily indicate that there is a need to regulate the Internet using the conventional regulatory tools that are applied in other parts of the media and communication industry. Instead, it suggests that the key policy issue is whether the dominant trends in the design of Internet-based services are consistent with favouring the capabilities that Sen argues are a fundamental human right.

Once they are connected to the Internet, there are no grounds for simply assuming that the majority of citizens will be enabled to conduct their lives more effectively. If citizens are to acquire the cognitive capacities that will enable them to make sense of, and to act upon, growing amounts of digital information, a crucial capability is that of being able to discriminate between authoritative information and information whose provenance has become detached from its originator. Citizens increasingly must be capable of assessing the value, veracity and reliability of digital information. This capability is an essential component of the new media literacies that are required for navigating through today's knowledge societies. Policy is needed to foster greater investment in Internet-based services that will encourage the majority of people to develop these literacies.

5. Countering the Biases of the Market

Much of the research that falls broadly under the label of 'Internet Studies' is not concerned with how the different configurations of Internet service supply might strengthen the acquisition of these literacies. Sometimes it is simply assumed that access to the Internet will automatically facilitate an informed dialogue between citizens in a way that is consistent with a democratic process. However, as Thompson (1995) and Innis (1951) much earlier, have argued, the deployment of new technologies is always biased in some way to favour certain economic or social interests over others. Innis (1951: 22) observed that:

> '…[the] mechanization [of knowledge] has emphasized complexity and confusion; it has been responsible for monopolies in the field of knowledge; and it becomes extremely important to any civilization if it is not to succumb to the influence of this monopoly of knowledge to make some critical survey and report'.

The Internet offers a vast variety of new ways of 'mechanizing' knowledge and some people are clearly benefiting from their capabilities of using the digital information resources that can be accessed via the Web. However, there is a growing need for critical surveys of the extent to which the main developments in Internet services are fostering new media literacies for the majority of people. As Sen (1999: 294) suggests, '.even with the same level of income, a person may benefit from education – in reading, communicating, arguing, in being able to choose in a more informed way, in being taken more seriously by others and so on'. If the majority of people do not

have the capabilities for doing these things in the mediated Internet spaces, then we can expect little in terms of an empowering influence of the spread of Internet access.

The biases in the interests of the ISPs that favour the development of revenue generating commercial services are not very consistent with the kinds of public services and capabilities acquisition that are needed to foster new media literacies for the majority of citizens. Policy is essential to ensure that there are increasing opportunities to extend and deepen capabilities to engage in a for critical discourse within the public spaces of the Internet. One important component of these capabilities is the ability to understand the origins and validity of digital information resources.

Sen's argument is that citizens have an entitlement to acquire the cognitive capacities to recognise and evaluate choices and alternatives that they confront in their everyday lives. This means that there must be 'the substantive freedom – of people to lead the lives they have reason to value and to enhance the real choices they have' (Sen 1999: 293). If the trends in the ISP market are biasing service provision towards commercial Internet services, then there is unlikely to be sufficient emphasis on service provision that would enable the majority of citizens to acquire the cognitive capabilities that they need.

Many commercial Internet-based service providers bear little or no responsibility for providing service users with assessments of the reliability or authoritative status of the information that can be found at their sites. For instance, providers of open e-marketplaces that are intended to support electronic commerce provide very few

resources to enable users to evaluate the information that can be accessed at their sites (Humphrey et al. 2003). There are, of course, countless examples of open source movement web sites that are being developed for producing, validating and sharing information. For instance, the University of Michigan, School of Information, hosts the 'Community Connector' which, in turn, hosts the 'TechRocks' service. This is dedicated to accelerating social and political progress by building technological capacity for community collaboration.[5] Another site, Global Learning Outreach aims to provide 'open source knowledge for an open source planet'. It offers information on issues such as intellectual property rights debates, cyber sweatshops in China, and the protection of civil liberties. The origin of the information posted at the site is very clear.[6] WIKIPEDIA, which was started in 2001, uses the GNU Free Documentation License to organise open content in several languages. Tools for validating information and its provenance are being developed under this initiative.[7] There are open source directory projects on topics of many kinds including VRoma, a virtual community for teaching and learning the classics which make the provenance of information very clear.[8] SourceForge.net, the largest web site for Open Source Software development, had 586,436 users in March 2003 and 58,245 projects.[9] However, analysis of these projects shows that nearly all of these are individual's projects with little or no major funding backing them (Mateos-Garcia and Steinmueller 2003).

These examples demonstrate that there are Internet-based initiatives that are beginning to offer citizens the tools needed for making contributions to public discussions and for sharing information that has been validated by some means. Nevertheless, the funding base for these efforts is very weak as compared to the

amounts invested in commercial services. Policies to encourage investment in sites that can be used by citizens to enhance their capabilities to both contribute to, and act upon, digital information resources, are needed. Such policies could be justified on the basis of a 'rights-based' approach to the further development of the Internet.

Discussions about 'digital divides' and controversy over whether the Internet is 'regulable' (Oxman 1999; Lessig 1999) are creating 'blind spots' in our thinking about the way the Internet is likely to develop and the consequences for social development and for the rights and entitlements of citizens. A key trend is towards the construction of exclusive electronic spaces for commercial activity and these cannot support the majority of people in acquiring the new media literacies that they need.

6. Conclusion

Much greater attention needs to be given to policy favouring Internet tools and sites that encourage the acquisition of new media literacies by the majority of citizens. The Internet could serve as a means that enables people to learn more effectively and to engage in new modes of critical discourse. This is essential if the majority of citizens are to be able to participate effectively in the emerging knowledge societies. In highly technologically mediated societies, the majority of people must have a right to acquire the new media literacies that are necessary for them to participate in society. A rights-based Internet policy will require some measure of intervention in the Internet-based services market to encourage the supply of the web tools and services that can encourage more individuals to attain the required capabilities for living in the 'Internet Age'.

References

Castells, M. (2000) 'Materials for an Exploratory Theory of the Network Society', *British Journal of Sociology*, 51(1): 5-24.

Castells, M. (2001) *The Internet Galaxy: Reflections on the Internet, Business and Society*, Oxford: Oxford University Press.

Eliasson, G. (1999) 'The Internet, Electronic Business and the EURO - On Information Products, Market Transparency and Internet Economics', Royal Institute of Technology, Stockholm mimeo, 2 February.

Garnham, N. (1990) 'Contribution to a Political Economy of Mass Communication', in F. Inglis (ed) *Capitalism and Communication: Global Culture and the Economics of Information*', London: Sage, pp. 20-55.

Humphrey, J., Mansell, R., Paré, D., and Schmitz, H. (2003) 'The Reality of E-commerce with Developing Countries', Report prepared for the Department for International Development, London by London School of Economics and Institute of Development Studies, Sussex, March.

Huston, G. (1998) 'Interconnection, Peering and Settlements', INET '99 Presentation, San Jose, http://www.potaroo.net/papers/inet99/peering.htm accessed 29 November 2002.

Innis, H. A. (1951) *The Bias of Communication*, Toronto: University of Toronto Press.

Javary, M. and Mansell, R. (2002) 'Emerging Internet Oligopolies: A Political Economy Analysis' in E. S. Miller and W. J. Samuels (eds) (2002) *An Institutionalist Approach to Public Utilities Management*, East Lansing: Michigan State University Press, pp. 162-201.

Lessig, L. (1999) *Code and Other Laws of Cyberspace*, New York: Basic Books.

Mansell, R. (2002). 'From Digital Divides to Digital Entitlements in Knowledge Societies', *Current Sociology*, Vol. 50, No. 3, pp. 407-426.

Mansell, R. and Nikolychuk, L. (2002) 'The Economic Importance of Electronic Networks: Assessing the Micro-level Evidence Base', report prepared for the Prime Minister's Strategy Unit, London, 26 August, available at http://www.piu.gov.uk/2002/electronic/attachments/LSE.pdf accessed 16 March 03.

Mansell, R. and Steinmueller, W. E. (2000) *Mobilizing the Information Society: Strategies for Growth and Opportunity*, Oxford: Oxford University Press.

Mateos-Garcia, J. and Steinmueller, W. E. (2003) 'The Open Source Way of Working: A New Paradigm for the Division of Labour in Software

Development?', INK Open Source Research Working Paper No. 1, SPRU, University of Sussex, January.

OECD (2002) 'Measuring the Information Economy 2002', Paris. Available http://www.oecd.org/EN/document/0,,EN-document-0-nodirectorate-no-12-36388-0,00.html accessed 16 March 03.

Oxman, J. (1999) 'The FCC and the Unregulation of the Internet', Federal Communications Commission, Office of Plans and Policy Working Paper No 31, July, Washington D.C.

Schumpeter, J. A. (1942/1962) *Capitalism, Socialism and Democracy*, Harper Torchbooks, New York: The University Library, Harper & Row Publishers.

Sen, A. (1999) *Development as Freedom*, Oxford: Oxford University Press.

Storsul, T. (2002) 'Transforming Telecommunications: Democratising Potential, Distributive Challenges and Political Change', Thesis for the degree of dr. polit., Faculty of Arts, University of Oslo, June.

Strategy Unit (2002) 'Electronic Networks: Challenges for the Next Decade', Prime Minister's Strategy Unit, London, available at http://www.piu.gov.uk/2002/electronic/report/00.htm accessed 16 March 03.

Thompson, J. B. (1995) *The Media and Modernity: A Social Theory of the Media*, Cambridge: Polity Press.

Trebing, H. M. (1998) 'Market Concentration and the Sustainability of Market Power in Public Utility Industries', *National Regulatory Institute Quarterly Bulletin,* Vol. 19, No. 1, pp. 61-67.

UNCTAD (2002) 'Electronic Commerce Strategies for Development: The Basic Elements on an Enabling Environment for E-Commerce', Background Paper TD/B/Com.3/EM.15/2, Geneva, UNCTAD, Commission on Enterprise, Business Facilitation, and Development. Available http://r0.unctad.org/ecommerce/event_docs/geneva_strategies_issues.pdf accessed 16 March 03.

Notes

1 This paper was presented initially as a keynote speech at the Internet Research 3.0 Conference, 13-16 October 2002, Maastricht.

2 Comment by Mr Vincenzo Schioppa, Diplomatic Advisor to the Minister of Public Administration, Italy and Chair of the DOT Force during the OECD Emerging Market Economy Forum on Electronic Commerce, 16-17 January 2001, Dubai U.A.E.

3 These include the US-based FMR Corporation (also known as the Fidelity Group) and Brooks Fiber Property, a wholly-owned subsidiary of WorldCom until its downfall. The Prudential Corporation, HSBC Investment Bank, Mercury Assets Management, and Merryll Lynch & Co are also represented.

4 This section of the chapter draws substantially upon Javary and Mansell (2002).

5 See http://databases.si.umich.edu/cfdocs/community/index.cfm accessed 16 March 03.

6 See http://www.glo.org/ accessed 16 March 03.

7 See http://www.wikipedia.org/ accessed 16 March 03.

8 See http://www.vroma.org/ accessed 16 March 03.

9 See http://sourceforge.net/ accessed 16 March 03.